MD-304 FINAL

TREATABILITY STUDY REPORT

Martin State Airport: Middle River, Maryland



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Section 1
Introduction

On behalf of Lockheed Martin Corporation, Tetra Tech, Inc. has prepared the following Treatability Study Report documenting the implementation of three treatability studies conducted in the southeast portion of Martin State Airport in Middle River, Maryland. Specifically, this report documents the methodologies and results of the studies and provides conclusions and recommendations for future remedial activities at the site. The three treatability studies were recommended in the Screening Evaluation of Remedial Technologies (Tetra Tech, August 2004); based on the initial screening, three in-situ remedial approaches [electron donor addition, bioaugmentation, and zero valent iron (ZVI) injection] were chosen for treatability studies to evaluate their site-specific effectiveness. Therefore, the following three treatability studies were performed on-site in order to support final selection of the remedial technologies and design of the remedial action plan:

- Soluble electron donor injection coupled with bioaugmentation;
- Nanoscale zero valent iron (NZVI) injection; and
- Slow release electron donor injection coupled with bioaugmentation.

1.1 OBJECTIVE

The scope of this treatability study is primarily focused on source reduction with secondary dissolved phase treatment. The purpose of these treatability studies is to determine which of these technologies can significantly reduce chlorinated organic mass and concentrations in the

saturated zone located at the MSA site. The comparison of the results from each of these studies is the basis for selection of one or more of these remedial technologies for potential full scale implementation.

1.2 TREATABILITY STUDY REPORT ORGANIZATION

This report is organized as follows:

- Section 2 – Site Background: Presents a brief description of the site, soil and groundwater conditions, and summary of site characteristics for the area evaluated in the proposed studies;
- Section 3 – Technology Implementation: Presents a summary of each of the technologies and summarizes field implementation activities;
- Section 4 – Technology Performance: Describes the performance of each of the technologies based on field observations and baseline and performance monitoring;
- Section 5 – Conclusions and Recommendations: Provides a summary of the conclusions drawn from the data presented and recommendations regarding future remedial actions at the site.
- Section 6 – References: Cites references used to compile this report.

Section 2
Site Background

2.1 SITE LOCATION

Martin State Airport is located at 701 Wilson Point Road in Middle River, Maryland, and is bounded by Frog Mortar Creek to the east and Stansbury Creek to the west. Both creeks join into Middle River, a tidal tributary of Chesapeake Bay, at the south side of the airport. With large surface water bodies surrounding most of the perimeter, the setting can be considered a small peninsula. The project site is located at the southeast portion of the Martin State Airport and is bounded by Frog Mortar Creek to the east, and the main airport runway to the west. The site location is shown in Figure 2-1 in Appendix A.

2.1.1 TREATABILITY STUDY LOCATION

Each of these three treatability studies was performed within Plume No. 1 which originated from the Drum Area. The localized area for the treatability studies is shown in Figure 2-2 in Appendix A. The three treatability studies were located side-by-side to allow for direct comparison of the results. Based upon a review of the sources and resultant plumes located at the MSA site (Tetra Tech, May 2004), it appears that performance of these treatability studies in this area is a good measure of their performance for potential full scale implementation at other locations and depth intervals at the southeast portion of Martin State Airport.

2.2 SUBSURFACE CONDITIONS

As identified in Section 2.1.1, the treatability studies were performed in the Plume No. 1 area. More specifically, all of the treatability studies were performed in the vicinity of MW-5 and DMW-7S in the Upper Surficial Aquifer of Plume No. 1 – see Figure 2-2 in Appendix A. As a result, this section will summarize the information on this specific location and depth interval. Please refer to the Data Gap and Modeling Report (Tetra Tech, May 2004) and Screening Evaluation of Remedial Technologies (Tetra Tech, August 2004) for more information regarding the Plume No. 1 area and the site in general.

2.2.1 Geology and Hydrogeology

Based on lithologic logging of soil borings within the project site, the subsurface soils are highly heterogeneous, consisting of gravels, sands, silts, and clays. While some soil zones were consistently observed throughout the project site, generally the soil lithology varied considerably between soil borings. The soils consist of an upper layer of fill materials that overlies native soils. A site map showing the cross section locations is presented in Figure 2-3 in Appendix A. Cross section Z-Z′ showing the treatability study area is presented in Figure 2-4 in Appendix A. The remaining cross-section locations as depicted in Figure 2-3 were presented in Appendix A of the Screening Evaluation of Remedial Technologies Report (Tetra Tech, August 2004).

Based on lithologic data as shown in the cross sections noted above, the shallow subsurface was divided into three layers: Upper Surficial Aquifer, Intermediate Surficial Aquifer, and Lower Surficial Aquifer. In general, the Upper Surficial Aquifer consists of fill that occurs within the uppermost 10 to 20 feet below ground surface (bgs), and native soils beneath the fill materials. The uppermost native soils are heterogeneous sands, silts, and clays. Based upon boring logs MW-5, DMW-7S, and DMW-7, it appears that a heterogeneous mixture of clay, silt and some silty sand is predominant down to approximately 25 feet bgs. Below this interval is poorly graded fine sand with occasional silt lenses down to approximately 31 to 42 feet bgs. At DMW-7S and DMW-7

this material (below 31 feet bgs) is underlain by silt and clay to 39 feet bgs. This 8 foot thick low permeability material is likely acting as a poorly defined aquitard separating the Upper Surficial Aquifer from the Intermediate Surficial Aquifer below. It is noted that this aquitard is not likely to be uniform in horizontal extent as it was not encountered at MW-5 (adjacent to this location). At MW-5, poorly graded fine sand was encountered down to 42 feet bgs at its termination point. Thus, at this location no evidence of an underlying aquitard was encountered.

Groundwater flow direction in the surficial aquifer is northeast toward Frog Mortar Creek. Overall, the lateral groundwater linear velocity was estimated at 0.1 ft/day across the site. The calculation is based on a horizontal groundwater gradient of 0.003, hydraulic conductivity of 10 ft/day, and soil porosity of 0.3.

2.3 CHEMICALS OF CONCERN

Based on concentration and frequency of detection, three chlorinated volatile organic compounds (CVOCs) (trichloroethene [TCE], cis-1,2-dichloroethene [cis-1,2-DCE], and vinyl chloride) and one metal (dissolved cadmium) are considered the primary chemicals of concern (COCs). These four primary COCs were detected throughout the investigation area with the highest concentrations in the Upper and Intermediate Surficial Aquifers.

2.4 CVOC PLUME CHARACTERISITCS AND MIGRATION PATHWAYS

Chemical concentrations in groundwater indicate that three potential source areas are present at the site contributing to three primary groundwater plumes. These source areas and plumes are as follows:

1) Plume No. 1, originating from the Drum Area
2) Plume No. 2, originating from the Petroleum Hydrocarbon and Pond #1 Area
3) Plume No. 3, originating from the Taxiway Tango median area

Plume No. 1 has resulted from suspected releases at the former Drum Area. This source has resulted in elevated CVOCs in groundwater, primarily within the Upper Surficial Aquifer. Figure 2-2 illustrates the distribution of TCE in the wells in the Upper Surficial Aquifer as of September 2003. TCE and cis-1,2-DCE concentrations greater than 100,000 µg/L were reported in groundwater samples collected from Upper Surficial Aquifer wells located to the northeast (immediately down-gradient) of the Drum Area.

Cadmium was detected at low concentrations in the Upper and Intermediate Surficial Aquifers at the Drum Area.

The treatability study baseline sampling round conducted in November/December 2004 indicated that elevated concentrations of the primary COCs have been detected in existing wells MW-5 and DMW-7S as well as the monitoring wells installed for the treatability study. The maximum groundwater concentrations for the COCs observed during the baseline sampling event are presented below. Table 2-1 illustrates the historical data collected from wells MW-5 and DMW-7S in the treatability study area. The baseline data collected appears to be consistent with the historical data.

Section 3
Technology Description and Implementation

3.1 DESCRIPTION OF TECHNOLOGIES

The following section summarizes the technologies evaluated in the treatability studies conducted at this site. The following technologies were evaluated:

- Biostimulation with bioaugmentation (two plots); and
- NZVI injection (one plot).

3.1.1 Biostimulation Coupled with Bioaugmentation

The following section summarizes the biostimulation / bioaugmentation technologies used in the treatability studies, including soluble electron donor and the slow release electron donor injection.

3.1.1.1 Biostimulation

Anaerobic reductive dechlorination (ARD) is the primary biological degradation process by which CVOCs are transformed to innocuous compounds such as carbon dioxide, ethene, ethane, and chloride. In the presence of a suitable electron donor (e.g., hydrogen), the appropriate microbial consortia, and favorable geochemical conditions, a hydrogen atom can replace a chlorine atom on a chlorinated ethene molecule. This rigorously studied microbial process occurs under anaerobic

conditions. Hydrogen is typically generated when organic carbon is fermented. This organic supply can come from natural organic carbon, anthropogenic carbon such as hydrocarbon contaminants (e.g., benzene, toluene), or injected carbon substrates.

It is recognized that, in the presence of hydrogen, CVOCs such as TCE can be reduced to DCE. Cis-1,2-DCE is the primary degradation product of TCE along with other DCE isomers (e.g., 1,1-DCE and trans-1,2-DCE). DCE is then reduced to vinyl chloride (VC), which, in turn, can be reduced to ethene and ethane, or via mineralization, to carbon dioxide, water, and chloride.

One of the requirements for ARD is having a sufficient supply of electron donor. Biostimulation is a remedial technology which involves the enhancement of the natural biodegradation of contaminants by supplying a carbon substrate (electron donor) which in turn supplies hydrogen. Carbon substrates fall into two general categories: soluble and slow-release electron donors (EDs):

- Soluble EDs include lactate, ethanol, and other short-chain hydrocarbons. These materials dissolve in water and are typically used quickly by the microorganisms. An advantage of soluble EDs is that delivery and distribution is more easily achieved in a heterogeneous environment and the injection from a given point can cover a larger area than with slow release EDs. These two advantages are expected to be helpful at the site where the geologic environment and depth of many of the plumes suggest that lactate should be cost-effective. The disadvantage of soluble EDs is that they are generally consumed within one to six months depending on a number of factors.
- Slow release EDs include Hydrogen Release Compound (HRC), vegetable oil, and chitin. These compounds slowly release fatty acids into the groundwater which in turn are metabolized and utilized by microbes for ARD. Many of these EDs persist for months or years before being exhausted. Emulsified vegetable oils are now available commercially that have been engineered to exhibit soluble ED transport properties while slowly releasing carbon. An added benefit of these oils is that they can preferentially

partition CVOCs from the dissolved phase into the oil. These advantages are expected to be helpful at the site where the presence of dense non-aqueous phase liquids (DNAPLs) is likely.

Injection of lactate (soluble ED) and injection of emulsified vegetable oil (slow release ED) were each evaluated in treatability study plots at this site.

3.1.1.2 Bioaugmentation

As noted earlier, the appropriate microbial consortia are essential for biodegradation. While several bacterial groups are involved in partial reductive dechlorination (e.g., *Dehalobacter, Desulfuromonas, etc*), *Dehalococcoides* (*Dhc*) is the only known consortia involved in complete reductive dechlorination to ethene to date. However, the *Dhc* organism is not ubiquitous and, if present, may be at insufficient quantities for complete ARD. Bioaugmentation is the process of supplementing the existing microbial population with an innoculum consisting of *Dhc* along with other dechlorinating microorganisms. This has been successfully applied in the field by practioners including Tetra Tech and has been successful to prohibit "DCE/VC stall". Bioaugmention is typically implemented with biostimulation to create favorable conditions and continue to provide a food source for the bacteria for complete, efficient, and rapid ARD. Bioaugmentation via the addition of *Dhc* was studied in both the lactate and emulsified vegetable oil injection plots.

3.1.2 Nanoscale Zero Valent Iron Injection

Nanoscale iron particles (both with and without a noble metal catalyst) have been shown to effectively treat groundwater contaminated with numerous CVOCs under saturated conditions in both laboratory and field based studies (Wang and Zhang, 1997; Lien and Zhang, 2001; Elliott and Zhang, 2001; Glazier et. al, 2003; Zhang, 2003; Mallouck, 2003). For this study, nanoscale iron

particles are defined as zero valent iron (Fe^0) particles that are within 50 to 300 nanometers (nm or 10-8 to 10-9 meter) in diameter. Smaller in diameter than colloids or bacteria, the nanoscale iron particles are approximately the same size as viruses or large molecules (Stumm and Morgan, 1981) and are approximately 1000 times smaller than the diameter of a human hair. These laboratory synthesized particles may or may not contain a trace coating of noble metal catalyst [generally palladium (Pd), or other metal]. With one of these catalysts, the particles are commonly referred to as bimetallic nanoparticles (BNPs). Nanoscale particles provide an extremely versatile remediation tool due to their extremely small particle size, which allows an iron-water suspension (typically 0.1 percent by volume of BNPs) to be injected into the subsurface where contaminants are present. It has been shown that some particles flow with groundwater and remain in suspension for extended periods of time, while others are filtered out and adhere to the soil matrix to establish an in situ treatment zone. In addition, nanoscale particles are highly reactive with a range of contaminants, particularly chlorinated alkenes such as tetrachloroethene (PCE) and TCE but also contaminants such as 1,1,1-trichloroethane (TCA) and carbon tetrachloride (CT). A substantial body of research on Fe^0 destruction of chlorinated alkenes suggests that the reactions are surface-mediated. The high reactivity of the particles is directly related to their extremely high specific surface area. The presence of Fe^0 also induces strongly reducing conditions within the treatment zone, providing an environment favorable for biodegradation.

There are two primary mechanisms utilized in the destruction of CVOCs via NZVI, an abiotic process with the same degradation products as ARD and the reductive beta-elimination process (Roberts et al, 1996 and Arnold and Roberts, 2000). This process occurs where chlorinated compounds in the presence of a hydrogen ion form a sequence of degradation products in the acetylene group including dichloroactylene (C_2Cl_2), chloroacetylene (C_2HCl), and acetylene (C_2H_2) gases and then low chain carbon (C_4 hydrocarbon) products such as methane, propane, propene, butane, and 1-butene. It is similar to the ARD process, however, two chlorine ions are replaced with a hydrogen ion and a triple carbon bond is created; then, in a subsequent reaction, the remaining chlorine ion is replaced by hydrogen via a hydrogenolysis reaction.

Nanoscale iron technology is a relatively immature and emerging technology. At this time, it is estimated that this technology has been or is undergoing field scale testing at less than 20 sites across the United States. Based upon the numerous publications on these studies (Elliott and Zhang, 2001, Glazier et. al, 2003, Zhang, 2003, Mallouck, 2003) and Tetra Tech's own experience with this technology at other sites (Tetra Tech NUS, 2005), implementation has shown very promising results to date.

Nanoscale iron particles were evaluated in one of the three treatability study plots at the site.

3.2 FIELD IMPLEMENTATION

The treatability study sample location map is shown in Figure 2-2 in Appendix A. This figure illustrates the location of the three treatability study plots (Plots A, B, and C), existing wells, and wells installed for this treatability study. The plots were utilized for the study as follows:

- Plot A: Biostimulation using lactate coupled with bioaugmentation;
- Plot B: Chemical reduction using nanoscale zero valent iron; and
- Plot C: Biostimulation using emulsified vegetable oil coupled with bioaugmentation.

The following sections provide details on the field implementation in each of the three study plots. A chronology of the events is presented in Table 3-1 in Appendix B.

3.2.1 Plot A: Lactate Coupled With Bioaugmentation

3.2.1.1 Well Installation

A total of seven wells were installed in Plot A for the purposes of the treatability study. The wells included four monitoring wells, MWA-1 through MWA-4. These wells were installed via hollow stem auger (HSA) drilling with screened intervals from 20 to 30 feet bgs, with the exception of

MWA-2 which had a screened interval of 22 to 32 feet bgs. Two injection wells (IWA-1 and IWA-2) and one extraction well (EWA-1) were also installed via HSA and had screened intervals from 22 to 32 feet bgs.

The well locations are included in Figure 2-2 in Appendix A and the well information is summarized in Table 3-2 in Appendix B.

3.2.1.2 Baseline Sampling

On December 1 and 2, 2004, baseline groundwater samples were collected from monitoring wells MWA-01 through MWA-04 via the protocol detailed in the Treatability Study Work Plan (TetraTech, 2004). These groundwater samples were analyzed for the following parameters:

- CVOCs, including chlorinated ethanes, chlorinated ethenes, and chlorinated methanes;
- Benzene, toluene, ethylbenzene, and xylenes (BTEX);
- Dissolved and total cadmium;
- Parameters indicating ARD including ethene and ethane;
- Beta-elimination parameters including acetylene, butane, isobutene, propane, and propylene;
- Geochemical parameters including dissolved oxygen (DO), nitrate, nitrite, iron, ferrous iron, sulfate, sulfide, hydrogen sulfide, methane, alkalinity, and carbon dioxide;
- Miscellaneous parameters including pH, oxidation/reduction potential (ORP), chloride, orthophosphate, phosphate, and total organic carbon (TOC); and
- Select samples were analyzed for volatile fatty acids (VFAs) hydrogen, and *Dhc*.

3.2.1.3 Injection Activities

In December 2004, a sodium lactate solution was injected into the newly-installed injection and extraction wells and eight direct push technology (DPT) points installed to a similar depth. A total of 1,700 pounds of lactate were injected in a 15 percent lactate/water solution. Additional amendments, including phosphorus (0.28 pounds as sodium phosphate), yeast extract (2.2 pounds), and sodium bicarbonate (16 pounds) were injected with the lactate to create favorable conditions for microbial growth. The sodium bicarbonate was added in an attempt to raise the naturally low pH levels at the site to levels more favorable to dechlorinating microbiota. Note that the background well to the site, MW-7, had a pH of 5.75 in August 2005. Based on empirical calculations, only 4 pounds of sodium bicarbonate were required; the additional mass was added to account for uncertainties in the calculations and to account for acids released from the fermenting lactate and subsequent biomass growth.

Following the December injection, the geochemistry of the aquifer was periodically monitored to determine if the pH was adequately buffered and to determine if sufficient reducing conditions were achieved. Based on this monitoring data, it was determined that additional buffering capacity was required and approximately 15 additional pounds of sodium bicarbonate were added to the aquifer in February 2005. Additional field monitoring indicated that this second field buffering attempt was effective in achieving favorable pH conditions (pH>6.0) throughout the study plot.

Once favorable pH conditions were achieved and anaerobic and moderately reducing conditions were present, bioaugmentation was conducted. The injected microbial innoculum contained a consortium of non-pathogenic and non-hazardous dechlorinators [*Dhc* and *Dehalobactor*]. A total of approximately 10 liters of the innoculum (containing a *Dhc* cell count of $1x10^{10}$ to $1x10^{11}$ cells per liter) was injected into the two injection wells and one extraction well. Then, water from adjacent wells was circulated through the extraction and injection wells to ensure adequate

flushing of the innoculum from the well bore into the formation and to assist in the transport and distribution of the bacteria in the aquifer.

Based upon data from this site, it was determined that the lactate was being depleted as expected; therefore, a second lactate injection event was conducted in April 2005. Approximately 1,760 pounds of lactate were injected via the extraction and injection wells and three DPT borings at a concentration similar to the first event. During this injection event, an additional 16 pounds of sodium bicarbonate were added with the lactate solution based upon results of the monitoring conducted immediately prior to injection. No additional amendments or innoculum were added at that time.

Based upon field data collected, the pH was below optimal levels for efficient dechlorination; therefore, additional buffering with the injection of 25 pounds of sodium bicarbonate aquifer took place on July 14, 2005. Following this buffering event, the measured pH was elevated to levels favorable for dechlorination.

3.2.1.4 Performance Monitoring

Three rounds of performance monitoring were conducted at the site. These rounds of sampling were conducted in February, May, and August 2005 (Table 3-3). These sampling events were conducted based on the Treatability Study Work Plan (TetraTech, 2004). Wells MWA-1 through MWA-4 were sampled during each event; the samples were analyzed for the parameters detailed in Section 3.2.1.2. Additionally, injection well IWA-1 was sampled during the final event.

3.2.2 Plot B: Nanoscale Zero Valent Iron

3.2.2.1 Well Installation

A total of five wells were installed in Plot B for the purposes of the treatability study. The wells included two monitoring wells, MWB-1 and MWB-2. These wells were installed via HSA drilling with screened intervals of 23 to 33 feet bgs and 22 to 32 feet bgs, respectively. Two injection wells (IWB-1 and IWB-2) and one extraction well (EWB-1) were also installed via HSA and had screened intervals from 23 to 33 feet bgs. Additionally, two existing wells, MW-5 and DMW-7S are located in the Plot B area. These wells were co-named MWB-3 and MWB-4, respectively, for the purposes of this study. MWB-3 is screened from 21 to 31 feet bgs and MWB-4 is screened from 18 to 38 feet bgs.

The well locations are included in Figure 2-2 in Appendix A and the well information is summarized in Table 3-2 in Appendix B.

3.2.2.2 Baseline Sampling

On November 30 and December 1, 2004, baseline groundwater samples were collected from monitoring wells MWB-1, MWB-2, MWB-3/MW-5, and MWB-4/DMW7S via the protocol detailed in the Treatability Study Work Plan (TetraTech, 2004). These groundwater samples were analyzed for the parameters detailed in Section 3.2.1.2 with the exception of VFAs and *Dhc*.

3.2.2.3 Injection Activities

The NZVI was injected into Plot B in December 2004. A total of 450 pounds of non-catalyzed NZVI was injected under pressure into the injection and extraction wells and 10 DPT borings.

Prior to injection the iron had been mixed with a combination of site and potable water such that it was injected at a concentration between 16 and 21 grams per liter (equivalent to an iron:water ratio of 1:16 to 1:20). During the mixing process, care was taken to minimize contact between the iron and oxygen; contact with oxygen causes corrosion of the iron prior to injection, and can significantly reduce its effectiveness. No additional amendments were included with the NZVI solution.

3.2.2.4 Performance Monitoring

Three rounds of performance monitoring were conducted at the site. These rounds of sampling were conducted in February, May, and August 2005 (Table 3-4). These sampling events were conducted based on the Treatability Study Work Plan (TetraTech, 2004). Wells MWB-1 through MWB-4 were sampled; the samples were analyzed for the parameters detailed in Section 3.2.2.2.

3.2.3 Plot C: Emulsified Vegetable Oil Coupled With Bioaugmentation

3.2.3.1 Well Installation

A total of seven wells were installed in Plot C for the purposes of the treatability study. The wells included four monitoring wells, MWC-1 through MWC-4. These wells were installed via HSA drilling with screened intervals from 23 to 33 feet bgs, with the exception of MWC-3 which had a screened interval of 22 to 32 feet bgs. Two injection wells (IWC-1 and IWC-2) and one extraction well (EWC-1) were also installed via HSA and had screened intervals from 23 to 33 feet bgs.

The well locations are included in Figure 2-2 in Appendix A and the well information is summarized in Table 3-2 in Appendix B.

3.2.3.2 Baseline Sampling

On December 2 and 3, 2004, baseline groundwater samples were collected from monitoring wells MWC-1 through MWC-4 via the protocol detailed in the Treatability Study Work Plan (TetraTech, 2004). These groundwater samples were analyzed for the parameters detailed in Section 3.2.1.2 with the exception of *Dhc*.

3.2.3.3 Injection Activities

The emulsified vegetable oil was injected into Plot C in December 2004. A total of 1,440 pounds of oil solution were received from the vendor; the solution contained 50 percent soybean oil and 4 percent sodium lactate by volume. It also contained a combination of food grade proprietary ionic and non-ionic various surfactants to enhance transport and to foster dissolution of contaminants adsorbed on the soil matrix. A combination of site water and potable water were mixed with the oil at an approximate ratio of 4:1. The solution was then injected into the subsurface under pressure via the injection and extraction wells and 8 DPT borings. Like Plot A, additional amendments, including phosphorus (0.28 pounds as sodium phosphate), yeast extract (2.2 pounds), and sodium bicarbonate (16 pounds) were injected with the oil solution to create favorable conditions for microbial growth.

Following the December injection, the geochemistry of the aquifer was periodically monitored to determine if the pH was adequately buffered and to determine if sufficient reducing conditions were achieved as a result of the oil injection. Based on this data, additional buffering was required to raise the pH to conditions favorable for ARD and an additional 15 to 20 pounds of sodium bicarbonate was added in February 2005. Additional field monitoring indicated that this buffering attempt was effective in achieving favorable pH (pH>6.0) for efficient biological reductive dechlorination.

Once favorable conditions were achieved, bioaugmentation was conducted in Plot C. A total of 10 liters of the same innoculum as described for Plot A was injected into the injection and extraction wells. The innoculum was circulated through the aquifer via pumping; then, water from adjacent wells was pumped through the extraction and injection wells to ensure adequate flushing of the innoculum from the well bore and to assist in the transport and distribution of the bacteria in the aquifer.

Because the emulsified vegetable oil is a slow release donor, a second injection event was not conducted. However, concurrent with the second injection at Plot A, an additional 20 pounds of sodium bicarbonate were added to Plot C based upon results of the monitoring conducted immediately prior to injection. No additional amendments or innoculum were added at that time.

Based upon field data collected, the pH was below optimal levels for efficient dechlorination, therefore, an additional buffering event was conducted on July 14, 2005. During this event, an additional 25 pounds of sodium bicarbonate were injected into the aquifer.

3.2.3.4 Performance Monitoring

Three rounds of performance monitoring were conducted at the site. These rounds of sampling were conducted in February, May, and August 2005 (Table 3-5). These sampling events were conducted based on the Treatability Study Work Plan (TetraTech, 2004). Wells MWC-1 through MWC-4 were sampled during each event; the samples were analyzed for the parameters detailed in Section 3.2.3.2. Additionally, injection well IWC-1 was sampled during the final event.

Section 4
Technology Performance

The performance of the three technologies was gauged through visual observation during injection and analyses of chemical parameters in groundwater during baseline and performance sampling events. This section summarizes the data evaluation process and assesses the performance of the Study and its influence on the groundwater in the test plots.

4.1 INJECTION PERFORMANCE

In each of the three plots, the injection of the amendments via recirculation was augmented by the injection of the amendments via DPT borings. This injection protocol was successful in injecting the appropriate volume of amendment in each plot. Based upon visual observation of water collected from the monitoring wells and the VOC and geochemical results collected and analyzed in these wells it appears that the amendments in each of the three plots was adequately distributed throughout each of the respective plots. The VOC and geochemical data is discussed further in Section 4.2.

4.2 GROUNDWATER SAMPLING RESULTS AND DISCUSSION

This section provides a detailed discussion of the baseline and performance sampling data collected from each of the three test plots. The discussion for each plot includes the physical, geochemical, miscellaneous parameter data, and CVOC data and the relevance of that data as it relates to the processes occurring in each plot.

4.2.1 Plot A: Lactate Coupled With Bioaugmentation

This section details the results of baseline and performance groundwater analysis in Plot A and provides a discussion of the data relative to biotic degradation of CVOCs. Groundwater data for Plot A is summarized in Appendix B, Table 4-1. Selected data from Plot A is shown graphically in Appendix A, Figures 4-1 and 4-2.

Physical, Geochemical, and Miscellaneous Data.

- The DO and ORP data indicate that the addition of lactate in Plot A created and sustained anaerobic, reducing conditions that were sufficient for biotic dechlorination of CVOCs. The baseline average DO in the four Plot A wells was 0.8 milligrams per liter (mg/L); during the first post-injection round of sampling, the average DO concentration was 0.25 mg/L; in the final round of sampling, the average DO concentration was 0.19 mg/L. Similarly, ORP was quickly reduced and the reductions were sustained; the average during baseline sampling was 90 millivolts (mV), the first round of post-injection sampling had an average reading of -16 mV (not including an anomalous reading of 225 mV at MWA-2), and the final round of sampling had an average reading of -203 mV. During this final event, all wells had ORP readings of -159 mV or lower. The lowest value (-328 mV) was observed in IWA-1. The lowest ORP readings were collected during the second post-injection sampling period with an average reading of -277 mV (Figure 4-1).

- As would be expected with a lactate injection event that provided good distribution, TOC concentrations in each of the four Plot A monitoring wells increased significantly following injection. These concentrations decreased following their peak, but in three of the four wells remained much greater than the concentration generally considered adequate for biotic dechlorination (50 mg/l).

- Also as expected with the injection of lactate, VFA concentrations increased. In the two wells for which VFAs were analyzed (MWA-2 and MWA-4), significant increases were observed following injection. The largest increases were observed in acetic acid, lactic acid, and propionic acid. For example, in MWA-2, the baseline concentration of acetic acid was 0.31 mg/L; the maximum concentration was 1,130 mg/L, and the concentration at

the final sampling was 590 mg/L. These concentrations are well above the concentration considered necessary for biotic dechlorination (20 mg/L).

- As expected, the TOC and VFAs both achieved their maximum concentrations during the third sampling round (May 2005), which took place after the second lactate injection. While those concentrations decreased in the final sampling round (August 2005), these values suggested adequate donor was present nearly 4 months after injection. Therefore, the longevity of the lactate is estimated to be at least 4 months.

- With significant buffering via the addition of sodium bicarbonate, the pH in the plot was maintained in the appropriate range (between 6 and 8).

- Evidence of ARD can be observed in the ethene and ethane data. Ethane increased from baseline concentrations in all four wells; ethene increased in three of the four wells. The greatest increases were observed in MWA-2; between the baseline and first round of post-injection sampling events, the ethane concentration increased from 2.7 μg/L to 250 μg/L and the ethene concentration rose from 12 μg/L to 1,400 μg/L. These concentrations quickly decreased to below the baseline conditions indicating that complete dechlorination of CVOCs may have occurred rapidly in this plot.

- Some evidence of reduction of CVOCs via the beta-elimination pathway can also be observed in the data. In all four wells, there was a substantial increase in one or more of the beta-elimination parameters between the baseline and performance monitoring rounds. For example, concentrations of both propane and propylene more than two times the baseline concentrations were observed during at least one sampling round in all four wells. These reactions may have been caused by the presence of NZVI in this plot.

- Results suggest that *Dhc* was not detected in baseline or Round 2 sampling events. In the last sampling round a sample collected from IWA-01 also was non-detect for *Dhc*. However, a positive detection for *Dhc* in MWA-2 (7.7×10^5 gene copies/liter) in the last sample round indicated that *Dhc* was present at moderate concentrations suggesting that complete ARD (e.g., TCE to ethane) is possible. These mixed results suggest that Dhc is non-uniformly present after the innoculum injection. Based upon empirical calculations and experience it was expected that the microbial population should have grown up to a larger number (10^7 gene copies/liter) and should have been more uniformly

distributed by the end of the study. There is evidence of growth, however, it appears that more time is needed to achieve a more favorable number of microbes in this plot. As this population grows the ARD efficiency is expected to also increase.

- Nitrate concentrations decreased sharply after the second round of sampling and then moderated to a consistent level; ferrous iron concentrations increased and then moderated to a consistent level; sulfate concentrations decreased throughout the treatability study; and methane concentrations increased from baseline concentrations in three of the four wells (in MWA-4 methane increased up to four times the baseline concentration). These data, in combination with the ORP results, suggest that increasingly reducing conditions were created at the site as a result of the lactate injection. More specifically, sulfate reducing/methanogenic conditions, the conditions under which ARD is most efficient, were present throughout Plot A during the last two sample rounds.

- The carbon dioxide and alkalinity concentrations increased to more than 3 times baseline concentrations. It is likely that this increase is due to the addition of sodium bicarbonate, but it may also be attributed to increases in biotic respiration.

- Chloride and salinity data were inconclusive; no significant increases in concentration were observed.

CVOC Data. Table 4-1 summarizes the baseline and final CVOC concentrations in the Plot A groundwater. The table shows an overall reduction of 89 percent in TCE concentrations, a reduction of 66 percent in cis-1,2-DCE concentrations, and an increase of 14 percent in VC concentrations. TCE concentrations were reduced by more than 99 percent in three of the four wells (the exception was MWA-2 with a 25 percent reduction).

When analyzing this data to determining the effectiveness of lactate addition, it is important to determine if the concentration reductions were caused by ARD. The best evidence that ARD is taking place can be observed in the well with the lowest overall reduction, MWA-2, which is located near the center of the plot. In the first post-injection sampling round, a significant reduction of TCE was observed (24,000 µg/l to 950 µg/L). There is substantial evidence that this

was caused by the ARD of TCE (Appendix A, Figures 4-1 and 4-2):

- The concentrations of the dechlorination products of TCE, cis-1,2-DCE and VC, increased to at least ten times their baseline concentrations; cis-1,2-DCE increased from 9,900 μg/l to 190,000 μg/l and VC increased from 100 μg/l to 1,000 μg/l. This was then followed by significantly reductions in cis-1,2-DCE (9,300 μg/l) and VC (170 μg/l) concentrations in subsequent sampling rounds, indicating destruction of contaminant mass and complete dechlorination to non-toxic end products (see below).

- As stated above, the final dechlorination products from ARD, ethane and ethene, increased significantly in the same period; ethane concentrations increased from 2.7 μg/L to 250 μg/L and the ethene concentration increased from 12 μg/L to 1,400 μg/L.

- Following the initial reduction, TCE concentrations rebounded to within 25 percent of initial values, potentially indicating continued desorption from the soil and/or migration of more highly contaminated groundwater from outside of the plot.

The concentrations of ethene and ethane do not account for all of the CVOC reductions on a stoichiometric basis. This is not surprising due to the unstable nature of these compounds and difficulties in obtaining timely, accurate data on them. These trends, however, are sufficient evidence that substantial ARD is taking place. It should also be noted that the second addition of lactate in April 2005 did not have a similar effect on the data.

CVOC reductions in the other three Plot A wells exhibit more straightforward downward trends, without associated spikes in the concentrations of the dechlorination products. This could indicate that dilution effects were present or that the sampling schedule did not coincide with spikes in the concentrations of the dechlorination products (including cis-1,2-DCE, VC, ethene, and ethane).

Cadmium Data. Due to the reducing conditions created, it was expected that cadmium a secondary contaminant of concern would be reduced in the pilot studies. The cadmium (total and filtered)

data supports this theory in that the baseline concentrations (maximum of 32 μg/L in this plot) were reduced in all wells in Plot A below 5 μg/L. The total cadmium was reduced to as low as 0.7 μg/L from 22 μg/L (MWA-04) and the filtered cadmium was reduced to as low as 1 μg/L from 31 μg/L (MWA-3). In many cases cadmium was not detected due to the 5 μg/L detection limit.

Summary. The data from all four wells provide substantial evidence that anaerobic, reducing conditions were created throughout the area of Plot A. Additionally, there were substantial reductions of CVOCs in three of the four Plot A monitoring wells. Data from the fourth well, MWA-2 (located in the center of Plot A), exhibited clear indications of dechlorination by ARD. Therefore, it can be concluded that lactate addition can successfully reduce the mass of CVOCs in the subsurface at this site. More information on recommendations for future activities at the site related to this technology is presented in Section 5.

4.2.2 Plot B: Nanoscale Zero Valent Iron

This section details the results of baseline and performance groundwater analysis in Plot B and provides a discussion of the data relative to abiotic degradation of CVOCs. Groundwater data for Plot A is summarized in Appendix B, Table 3-4. Selected data from Plot B is shown graphically in Appendix A, Figures 4-3, 4-4, and 4-5.

Physical, Geochemical, and Miscellaneous Data.

- The DO data indicate that the addition of NZVI in Plot B created and sustained anaerobic conditions. In the final round of sampling, the DO measured at each of the four wells was less than the detection limit of the test kit (0.05 mg/L).

- Following injection, ORP levels were reduced sharply by the first post-injection sampling round, but not to the levels observed in Plots A and C by the second round of post-injection sampling. The average ORP reading during the baseline sampling event was 206 mV, significantly higher than the baseline readings in Plots A and C; the average at the final sampling event was -17 mV. This includes well MWB-4 which had a significant rebound

of ORP in the second and third post-injection sampling events. The average for the other three wells, which sustained the reducing conditions, was -77 mV.

- The pH in Plot B ranged from 4.16 to 6.86. In general, the pH at each of the wells increased following injection; however, it is expected that the pH increase would have been more than observed. During the final round of sampling, the pH in three wells was above 6. The pH in MWB-4 was 5.06.

- Evidence of the abiotic reduction of CVOCs can be observed in the ethene and ethane data. Ethene and ethane increased from baseline concentrations in all four wells. Increases of at least one order of magnitude were observed in MWB-1, MWB-2, and MWB-3. MWB-1 and MWB-3 showed the greatest increases in the first post-injection event. MWB-2 had its greatest increase in the second post-injection event.

- Evidence of reduction of CVOCs via the beta-elimination pathway can also be observed in the data. Significant increases in the beta-elimination parameters were observed in MWB-1 and MWB-2. Similar to ethene and ethane, the concentrations at MWB-1 increased in the first post-injection sampling event, while the concentrations in MWB-2 increased in the second post-injection sampling event.

- Chloride data was inconclusive; no significant increases in concentration were observed.

CVOC Data. Table 3-4 summarizes the baseline and final CVOC concentrations in the Plot B groundwater. The table shows an overall reduction of 59 percent in TCE concentrations, 35 percent in cis-1,2-DCE concentrations, and an increase of 10 percent in VC concentrations. TCE concentrations decreased in all four wells; cis-1,2-DCE concentrations decreased in two of the four wells.

Despite the fact that strongly reducing conditions were not established in this plot, there is evidence that abiotic degradation was occurring:

- In all four wells, TCE concentration decreased between 18 and 93 percent. In three of these wells, reductions were between 64 and 93 percent.

- Cis-1,2-DCE concentrations increased more than 50 percent in two of the plot wells. The decreases in TCE and corresponding increases of cis-1,2-DCE is direct evidence of ARD.

- Between the baseline sampling event and the first post-injection sampling event, the TCE concentration in MWB-1 decreased from 18,000 μg/L to 2,800 μg/L. There was a corresponding increase in DCE (23,000 μg/L to 120,000 μg/L) and VC (460 μg/L to 870 μg/L). This was then followed by significantly reductions in cis-1,2-DCE (from 120,000 μg/L to 63,000 μg/l and then to 37,000 μg/l) and VC (from 870 μg/l to 820 μg/l then to 420 μg/l) concentrations in subsequent sampling rounds, indicating destruction of contaminant mass and complete dechlorination to non-toxic end products (see below).

- As illustrated in Table 2-1 evidence of mass destruction due to the NZVI is clear when comparing the historical elevated concentrations of cis-1,2-DCE at MWB-03/MW-05 since 2002 (ranging from 110,000 to 140,000 μg/l) to the final result detected in this well (23,200 μg/l). Conversely, the impact of NZVI on downgradient well MSA-MWB-04/DMW-07S was not as significant.

- As stated above, there were also significant increases in ethene, ethane, and the beta-elimination parameters in this time period, indicating that each step in the degradation of the CVOCs was occurring (Appendix A, Figure 4-4).

- Between the first and second post-injection sampling event, the TCE concentration in MWB-2 decreased from 26,000 μg/L to 14,000 μg/L. There was a corresponding increase in DCE (26,000 μg/L to 56,000 μg/L) and VC (250 μg/L to 800 μg/L). As stated above, there were also significant increases in ethene, ethane, and the beta-elimination parameters during this period, indicating that each step in the degradation of CVOCs was occurring (Appendix A, Figure 4-5).

Cadmium Data. Due to the reducing conditions created, it was expected that cadmium, a secondary contaminant of concern, would be reduced in the pilot study. The cadmium (total and filtered) data supports this theory in that the baseline concentrations (maximum of 13 μg/L in this plot) were reduced in all but one well in Plot B below 5 μg/L. The only value above 5 μg/L is the filtered sample in well MWB-01 (this value is suspect because it is higher than the total cadmium). The

total cadmium was reduced to as low as 1.3 μg/L from 13 μg/L (MWB-3) and the filtered cadmium was reduced to as low as 0.9 μg/L from 11 μg/L (MWB-2). In many cases cadmium was not detected due to the 5 μg/L detection limit.

Summary. The data above indicate that abiotic degradation of CVOCs was occurring in at least a portion of Plot B as evidence of TCE reductions and DCE increases and subsequent reductions were observed. The data suggests that the NZVI continued to be reactive for a period of at least 7 months in the subsurface. Because the NZVI causes a very rapid reaction with half lives of less than one day, it is possible that significant reductions occurred between the time the NZVI was injected and the first performance sampling round (approximately 6 weeks after injection). The sampling plan was designed to capture this rapid change, however based upon a rigorous study recently conducted by Tetra Tech at a site in Florida, the most significant reductions were observed within 3 to 5 weeks after the NZVI injections followed by period of slower reactions up to 6 to 9 months after the injections (Tetra Tech, 2005). Therefore, while the sampling schedule adequately monitored the performance of the NZVI, it is possible that additional evidence of mass destruction may have been observed if additional monitoring took place soon after the NZVI injection. More information on recommendations for future activities at the site related to this technology is presented in Section 5.

4.2.3 Plot C: Emulsified Vegetable Oil Coupled With Bioaugmentation

This section details the results of baseline and performance groundwater analysis in Plot C and provides a discussion of the data relative to biotic degradation of CVOCs. Groundwater data for Plot A is summarized in Appendix B, Table 3-5. Selected data from Plot C is shown graphically in Appendix A, Figures 4-6 and 4-7.

Physical, Geochemical, and Miscellaneous Data.

- The ORP data indicate that the addition of emulsified oil created moderately reducing

conditions at Plot C. The average ORP during baseline sampling was 110 mV; over the next three sampling events, the average ORP was -42 mV, -156 mV, and -140 mV. The values from the last two rounds of sampling are slightly higher than those observed with lactate addition, indicating that emulsified oil was slightly less effective in creating the proper conditions for biotic dechlorination.

- DO levels were reduced in three of the four wells, from an average of 0.4 mg/L to an average of less than 0.1 mg/L. In MWC-4, a reading of 2 mg/L was recorded in the final sampling event; this is not consistent with the previous readings of 0.0 mg/L and 0.1 mg/L and may be considered anomalous. The data, in general, show that anaerobic conditions were present in the aquifer.

- As would be expected with an emulsified oil injection event that provided good distribution, TOC concentrations in each of the four Plot C monitoring wells increased significantly post-injection. Each well had its high concentration in the second sampling event following injection, but even in the final sampling event, they remained much greater than the concentration generally considered adequate for biotic dechlorination (50 mg/l).

- By the second post-injection sampling event, acetic acid concentrations in both wells sampled for VFAs (MWC-2 and MWC-4) were well above the concentration considered necessary for biotic dechlorination (20 mg/L). Significant increases between the first post-injection sampling event and subsequent events indicate the slow release nature of the oil.

- Significant buffering was conducted via the addition of sodium bicarbonate, to achieve the optimal pH in the plot (between 6 and 8) by the fourth sampling round. In the baseline sampling and in each of the first two sampling events, the pH in each of the four wells was below 6, with a minimum post-injection pH of 5.25. By the final round of sampling, the pH in all wells was in the optimal range, indicating that buffering was successful.

- MWC-4 is the only well in which evidence of complete ARD can be observed in the ethene and ethane data. The increase in this well is substantially less than the increases observed in Plot A. Ethane increased from a baseline concentration of 4.4 mg/L to a maximum of 9.8 mg/L and ethene concentrations increased from a baseline concentration of 17 mg/L to a maximum concentration of 32 mg/L. These increases were not sustained

for either compound.

- The data indicate that *Dhc* was not detected in baseline or Round 2 sampling events. However, in the last sampling round positive detections for *Dhc* in IWC-01 (1.3 x 10^4 gene copies/liter) and MWC-2 (8.4 x 10^5 gene copies/liter) indicating that *Dhc* was present at moderate concentrations. This suggests that complete ARD is possible. Based upon empirical calculations and experience it was expected that the microbial population should have grown up to a larger number (10^7 gene copies/liter) and should have been more uniformly distributed by the end of the study. There is evidence of growth, however, it appears that more time is needed to achieve a more favorable number of microbes in this plot. As this population grows the ARD efficiency is expected to also increase.

- Ferrous iron and sulfate data are inconclusive; no trends in the data can be determined. Nitrate levels consistently decreased in wells MWC-3 and MWC-4, indicating that conditions may be favorable for biotic dechlorination.

- With the exception of one well (MWC-1) no trends could be observed for methane in Plot C. These data suggest, that unlike Plot A, the aquifer at Plot C is under only slight to moderate reducing conditions and that the environment is less than optimal for efficient ARD.

- Chloride data was inconclusive; no significant increases in concentration were observed.

CVOC Data. Table 3-5 summarizes the baseline and final CVOC concentrations in the Plot C groundwater. The table shows the overall reduction of 7 percent in TCE concentrations, an increase of 63 percent in cis-1,2-DCE concentrations, and a decrease of 17 percent in VC concentrations.

There is evidence that ARD is occurring in Plot C; however it is not as clear as that from Plot A. First, the significant increase in cis-1,2-DCE concentrations (100 percent or greater) in two wells indicates ARD of TCE. Also, there is evidence that dechlorination began to occur at MWC-2 between the second and final rounds of post-injection sampling. Between these two events, TCE

concentrations decreased from 57,000 μg/L to 32,000 μg/L, with a corresponding increase in cis-1,2-DCE (9,000 μg/L to 50,000 μg/L). The increase in cis-1,2-DCE is approximately two times what would be expected stoichiometrically, but this could be related to increases in the TCE concentration via desorption from the saturated soil. It should be noted that these concentrations were not accompanied by increases in VC, ethane, or ethene concentrations in that time period. The lack of increases in these parameters for any of the wells in this plot may indicate that the conditions were not favorable for reduction past cis-1,2-DCE. This is expected as the detections of *Dhc* were at moderate levels suggesting less than optimal conditions for complete ARD. While no baseline samples were collected at injection well IWC-1, the data from the final round of sampling suggests complete ARD and strong reducing conditions. Therefore, despite rigorous efforts, distribution of the oil may not be uniform, the oil's slow release properties have resulted in a slowly change in geochemistry and slow biological reduction process, or the oil is simply inefficient at this site.

Cadmium Data. Due to the reducing conditions created, it was expected that cadmium, a secondary contaminant of concern, would be reduced in the pilot study. The cadmium (total and filtered) data supports this theory in that the baseline concentrations (maximum of 10 μg/L in this plot) were reduced in all wells in Plot C below 5 μg/L. The total cadmium was reduced to as low as 0.6 μg/L from 10 μg/L (MWC-3) and the filtered cadmium was reduced to as low as 1 μg/L from 10 μg/L (MWC-3). In many cases cadmium was not detected due to the 5 μg/L detection limit.

Summary. The data from all four wells provide evidence that anaerobic, moderately reducing conditions were created throughout the area of Plot C. The reductions of CVOCs were limited, however, some evidence that ARD to cis-1,2-DCE was occurring in a portion of the plot. Due to the slow release nature of this amendment, further reduction may be observed in future groundwater sampling events. More information on recommendations for future activities at the site related to this technology is presented in Section 5.

Section 5
Conclusions

The following conclusions can be drawn from the data presented in Section 4:

- Injection of amendments to the subsurface via a combination of recirculation and direct injection yielded direct reductions of groundwater contaminant concentrations in the treatability study plots.

- The results of the sampling in each plot showed that all amendments were successful to some degree in the reduction of CVOC mass at the site.

- All of the amendments (lactate, NZVI, and emulsified oil) created at least slightly reducing conditions in the aquifer. Lactate was the most effective amendment in creating moderately to strongly reducing conditions.

- The lactate plot showed the best overall CVOC reduction and the best evidence that dechlorination was taking place. There was evidence that complete dechlorination of TCE was taking place via ARD. The data also indicate that the longevity of the lactate in the aquifer was at least 4 months.

- NZVI showed significant reductions in CVOC concentrations and evidence of abiotic dechlorination without evidence of strongly reducing conditions. However, the significant TCE reductions, evidence of abiotic dechlorination, and the short half lives of the NZVI reaction may indicate that strongly reducing conditions were achieved in the period between injection and the first round of post-injection sampling.

- The emulsified oil generated moderately reducing conditions and very minor TCE reductions. Although increases in cis-1,2-DCE indicated that ARD was occurring, it appeared that the conditions are not optimal for complete ARD. However, due to the slow release characteristics of this amendment and geochemistry data collected over time, there is evidence that efficient ARD conditions are developing and the most efficient ARD conditions have yet to be achieved at the end of this study. However, this theory cannot be confirmed without additional sampling at the site.

- The increases in ethene and ethane concentrations in some wells provide some evidence of the dechlorination of VC. However, because there was neither a significant increase or decrease in VC concentrations in any of the plots, there is still a question as to how effective the amendment addition will ultimately be in providing complete dechlorination of the CVOCs.

- Cadmium (total and filtered) concentrations were reduced in all three plots due to the strong reducing conditions generated. Concentrations were reduced in all but one well in Plot B below 5 μg/L.

- The effect of bioaugmentation on the success of the test was inconclusive at the conclusion of the treatability study. However, evidence suggests that the microbial community is growing, albeit at a slower than expected rate. Assuming the observed trend continues and the microbial community increase in the population over time, more efficient complete ARD to ethane is expected. Conversely, it is also likely that once the electron donor is consumed and the geochemistry returns to oxidizing conditions, the VC will be degraded via direct oxidation or consumed via abiotic degradation as a result of iron sulfide minerals generated as a secondary process of these remedy implementations.

- Regardless of which amendment is used for full-scale implementation, a greater quantity of amendment will be required to reach the remedial goals. Since a greater volume of solution will be added, care must be taken during injection to minimize the forced migration of CVOCs.

- If bioremediation is utilized, substantial buffering of the aquifer will be required throughout the process to maintain an adequate pH.

- There were no impacts on the aquifer significantly downgradient of the treatability study and adjacent to Frog Mortar Creek. Results from downgradient well MSA-DMW-05S (Table 3-6) depicted little to no change in geochemistry parameters between samples taken before and after the injection of the amendments in this study.

5.1 CONSIDERATIONS FOR FULL SCALE IMPLEMENATION

The results of this treatability study will be utilized to determine the best technology for source area remediation at the site, and its corresponding design parameters. Based on the results of the treatability study, the most efficient amendment for source area remediation is lactate addition

with sufficient buffering to maintain an adequate pH for ARD. The lactate plot exhibited the greatest reductions in CVOC concentrations, the strongest evidence of biotic degradation, and the most strongly reducing conditions. Because multiple lactate and buffering agent injections will be required, it is likely that injections via temporary wells rather than DPT points would be effective for full scale implementation (a large scale recirculation system is not considered feasible due to the variability and relatively impermeable nature of the site geology). An extensive well network will be required to address each of the aquifers in the three source areas. Based on the data obtained following the initial lactate addition, the need for bioaugmentation during full scale implementation will be evaluated carefully. The injection well network design, mass of lactate required, injection sequencing, and bioaugmentation decision structure will be determined as part of the Remedial Action Plan (RAP) to be prepared for this site.

As part of the RAP development, options to enhance the remediation using lactate in combination with other amendments will be evaluated. For example, following the creation of reducing conditions in some injection locations via addition of the less expensive lactate, NZVI addition, which is more expensive but fosters rapid reductions, will be considered. In an area that already exhibits strong reducing conditions and favorable degradation, the effectiveness of the NZVI may be significantly enhanced and could provide fast, efficient destruction of CVOCs fostering both biotic and abiotic processes in these areas. Another option to be considered is the injection of emulsified vegetable oil following lactate addition. This may provide both short- and long-term availability of electron donor in the aquifer, potentially reducing the number of injection events with a corresponding decrease in cost.

Finally, based upon the data collected it is anticipated that lactate addition with buffering in combination with other amendments discussed above are applicable and should be successful for source area remediation in Plume 1 as well as Plumes 2 and 3. Further, these remediation technologies will be applicable to the Upper Surficial Aquifer (as demonstrated) as well as the Intermediate and Deep Surficial Aquifers. The RAP will provide a more detailed evaluation and recommendation on how these technologies will be applied for full scale remediation at this site.

Section 6
References

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APPENDIX A

FIGURE 2-1
SITE LOCATION MAP

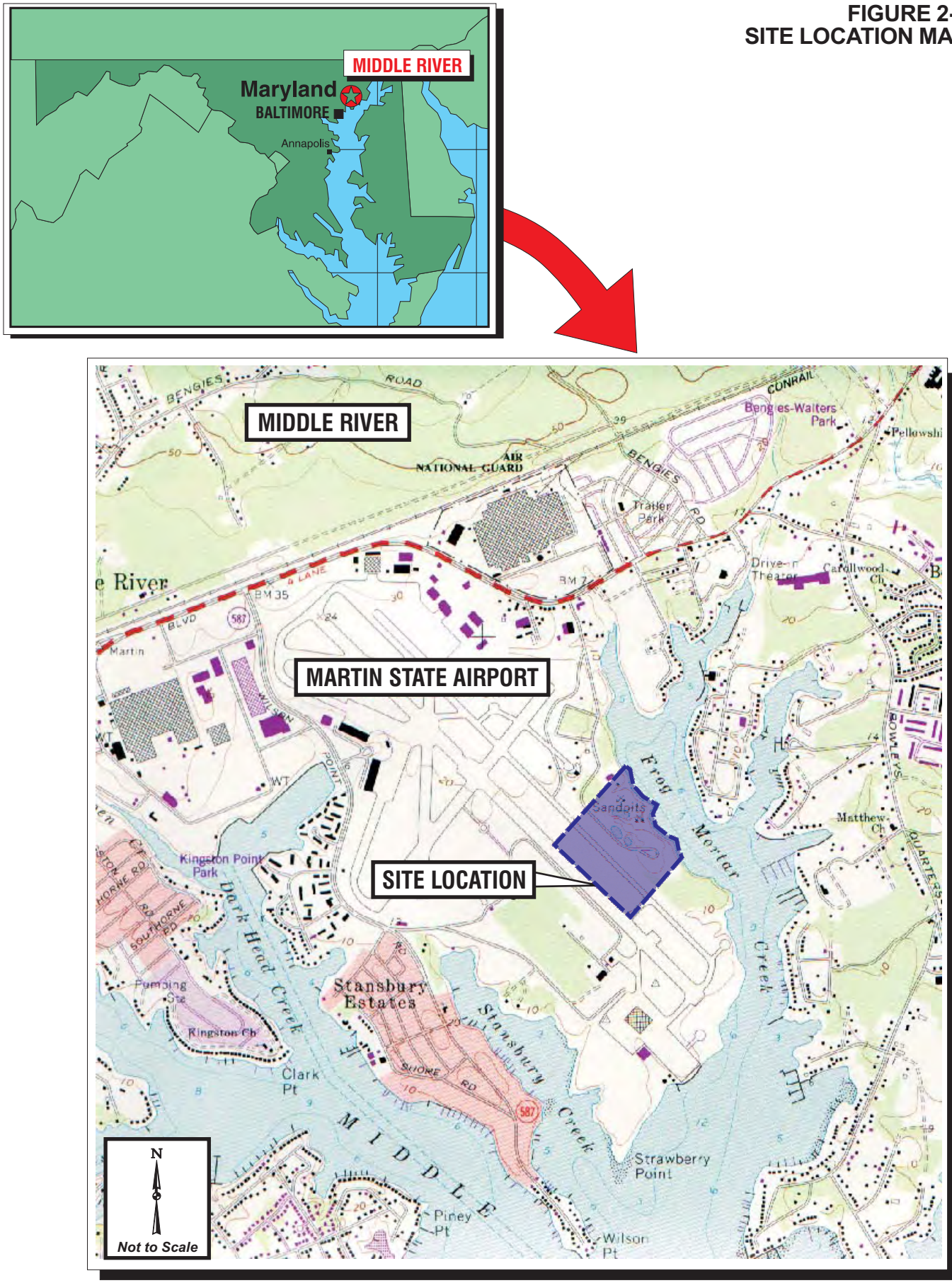
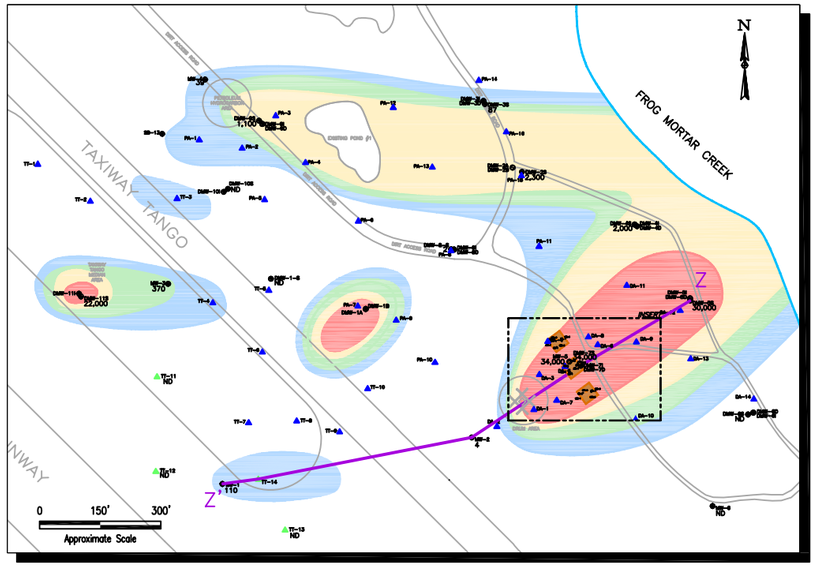


FIGURE 2-2
TREATABILITY STUDY LOCATION MAP



LEGEND

- Permanent Groundwater Monitoring Well Locations
- Temporary Groundwater Monitoring Well Locations
- Former Groundwater Sampling Locations
- Approximate Locations of Treatability Plots
- Injection Well
- Monitoring Well
- Extraction Well
- Z——Z' Cross-Section Z-Z' Line
- TCE Concentration <100 µg/L
- TCE Concentration 100 µg/L – 1,000 µg/L
- TCE Concentration 1,000 µg/L – 10,000 µg/L
- TCE Concentration >10,000 µg/L

NOTE: The placement of proposed wells are approximate and their locations may be adjusted in the field. TCE Concentrations are based on Groundwater Sampling in Sept. 2003

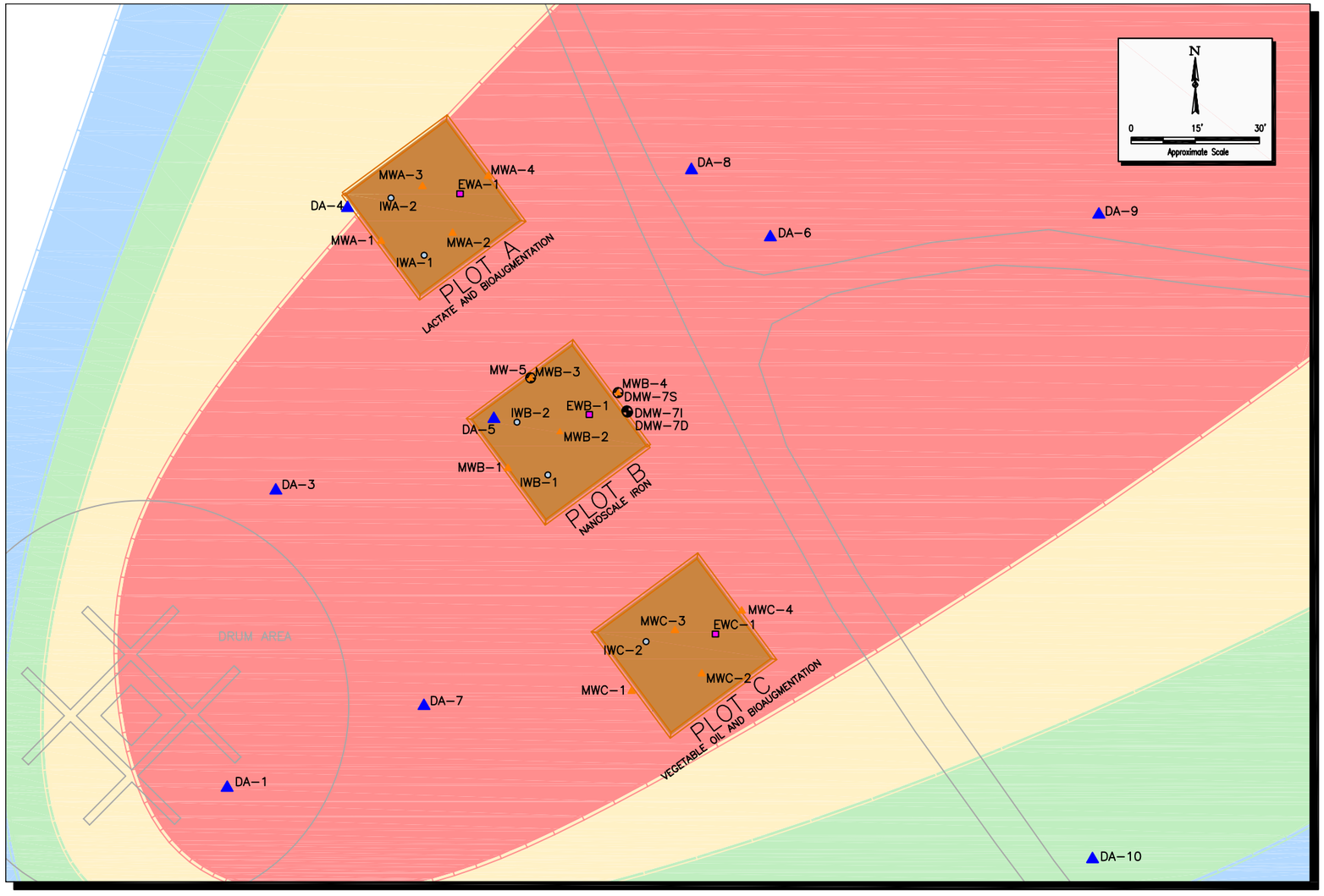


FIGURE 2-3
BORING LOCATIONS AND CROSS SECTION LAYOUT

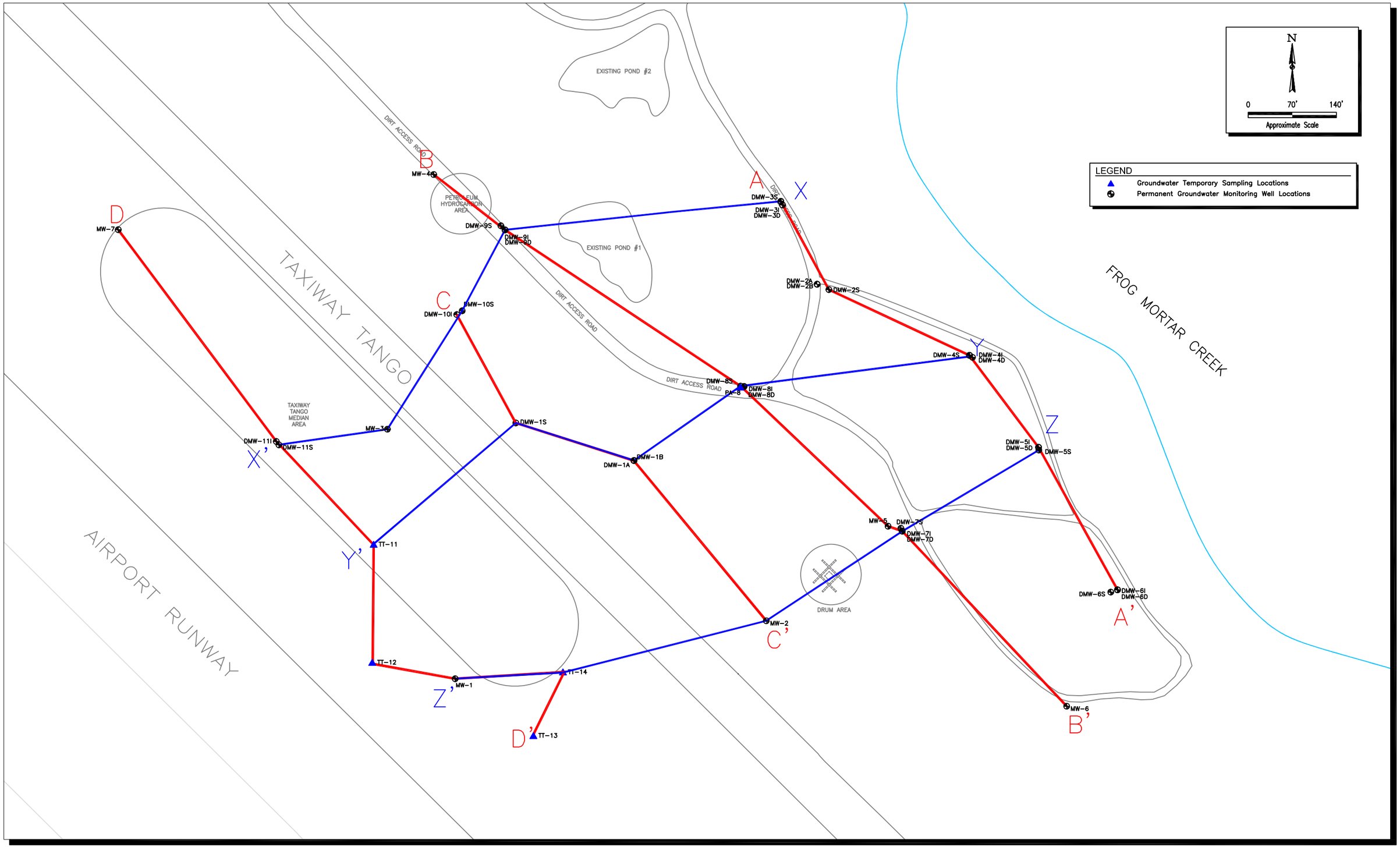


FIGURE 2-4 CROSS SECTION Z-Z'

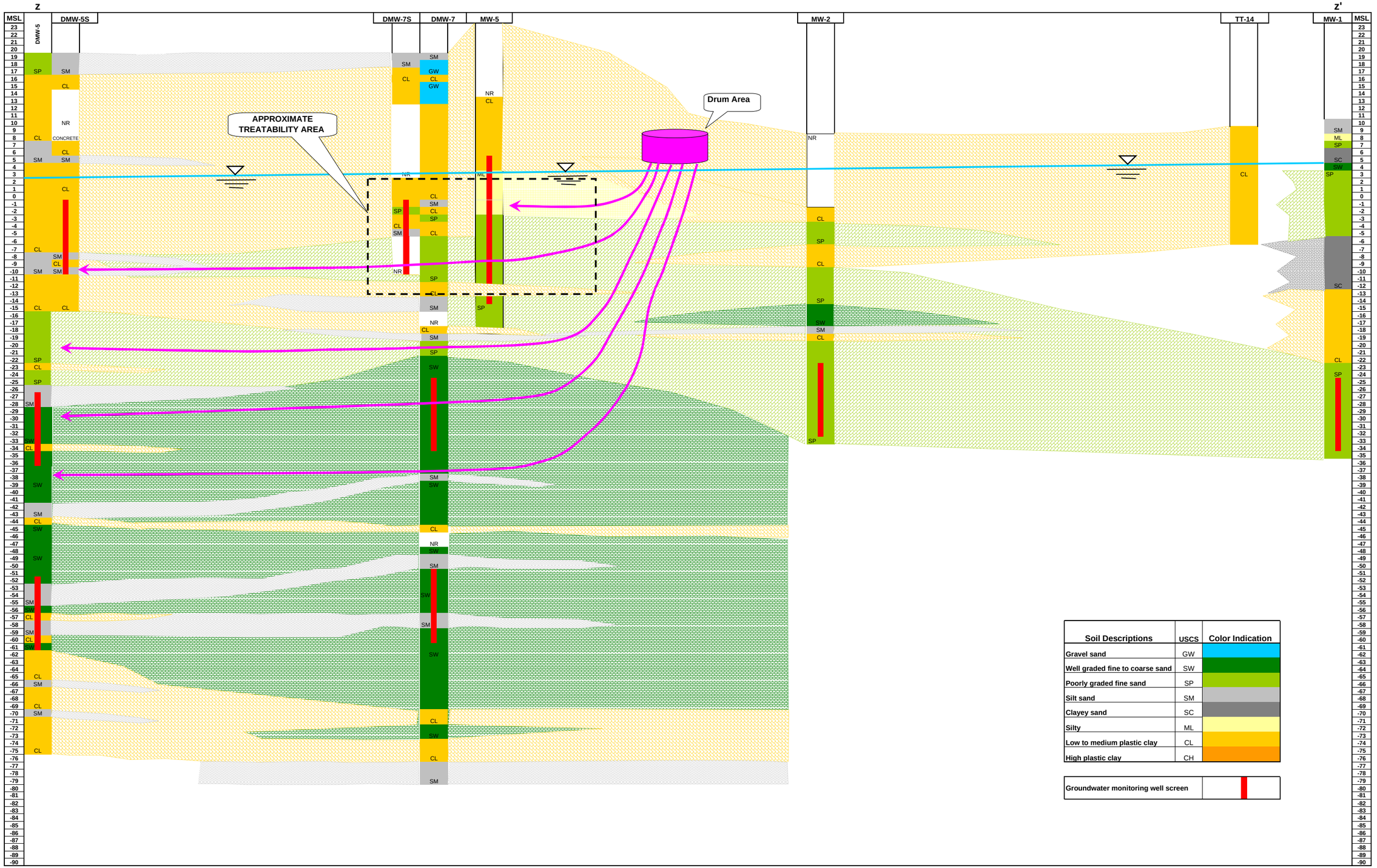
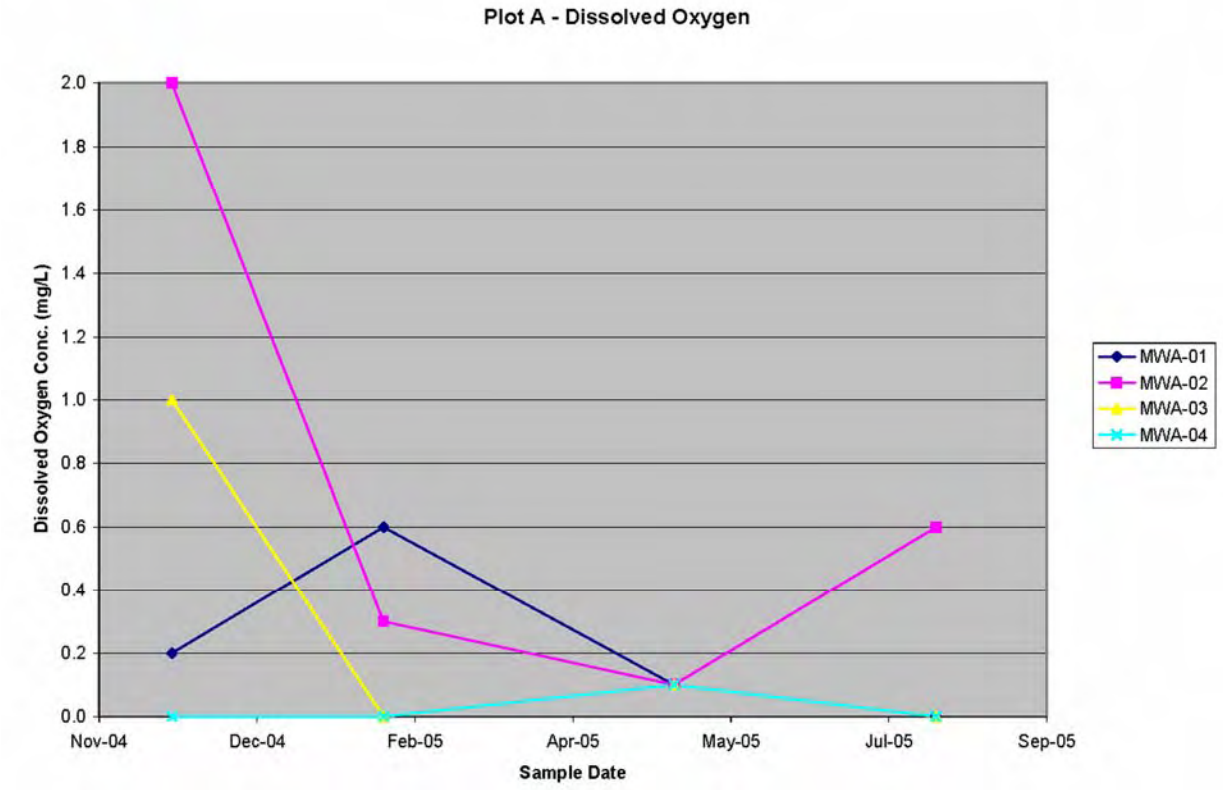


FIGURE 4-1

PLOT A – DISSOLVED OXYGEN AND OXIDATION REDUCTION POTENTIAL GRAPHS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND



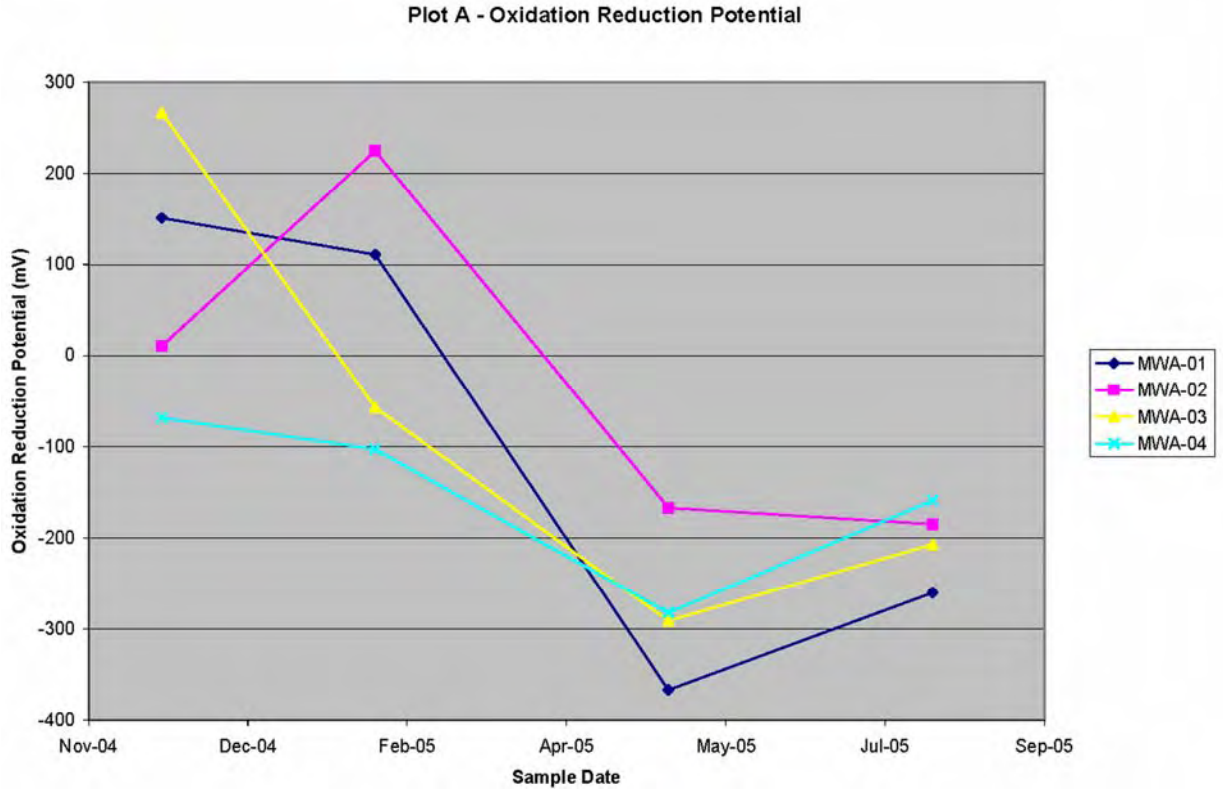
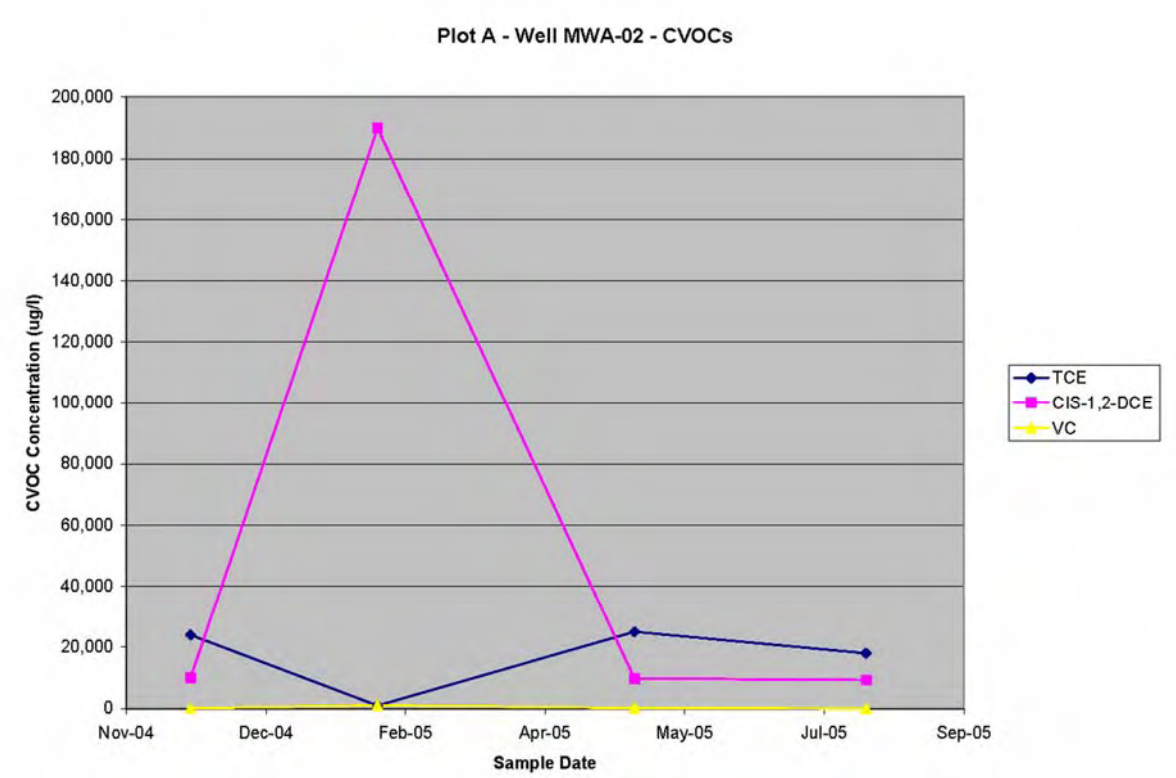


FIGURE 4-2

PLOT A – MWA-2 – CVOC AND ETHENE/ETHANE GRAPHS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND



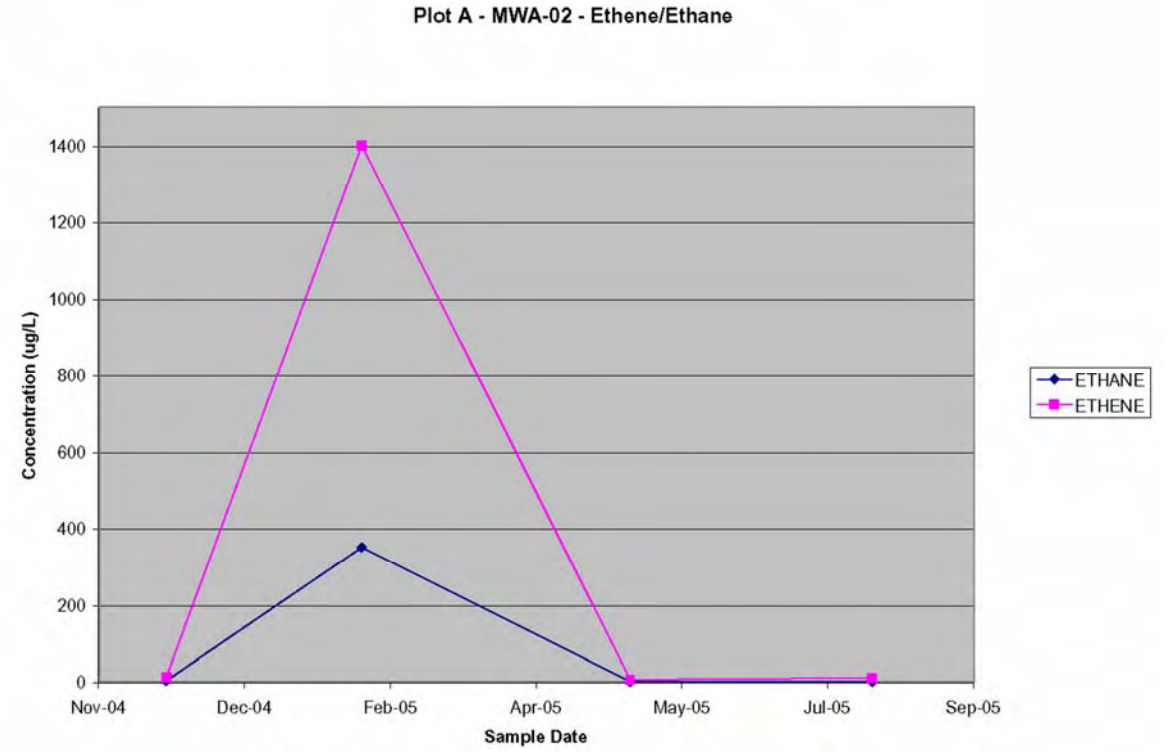
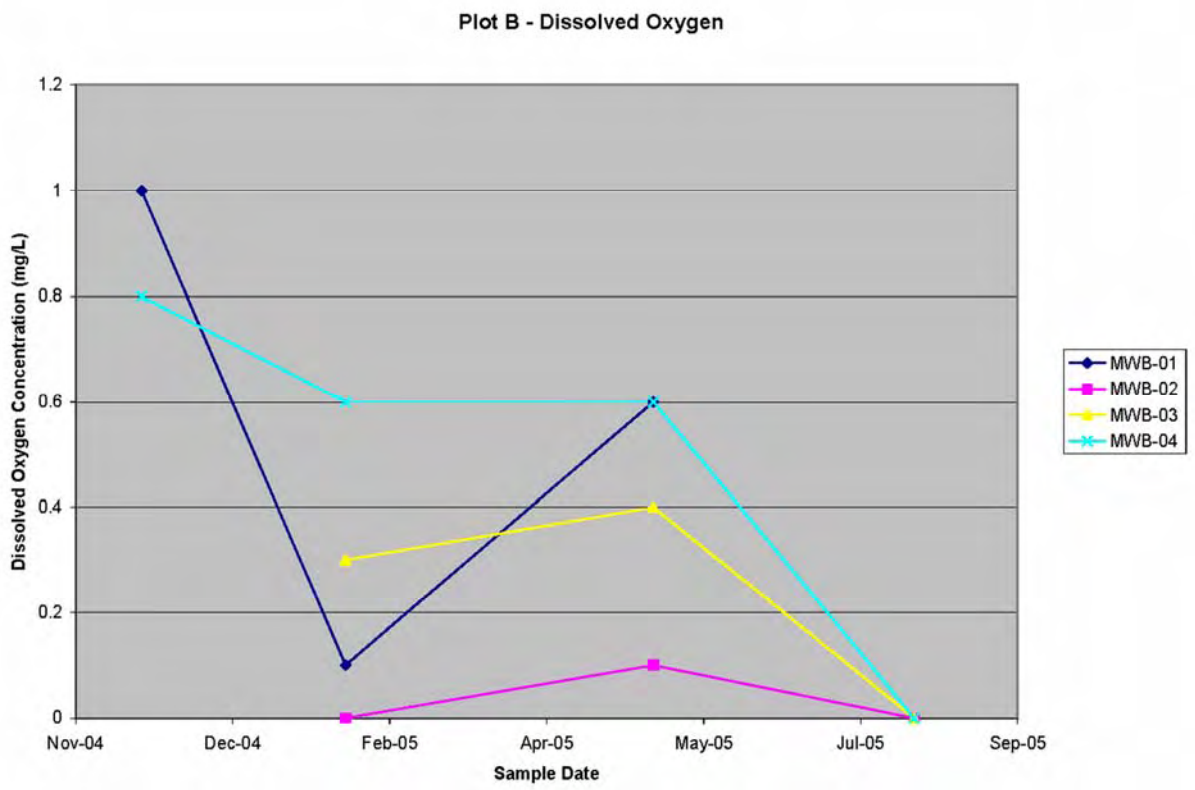


FIGURE 4-3

PLOT B – DISSOLVED OXYGEN AND OXIDATION REDUCTION POTENTIAL GRAPHS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND



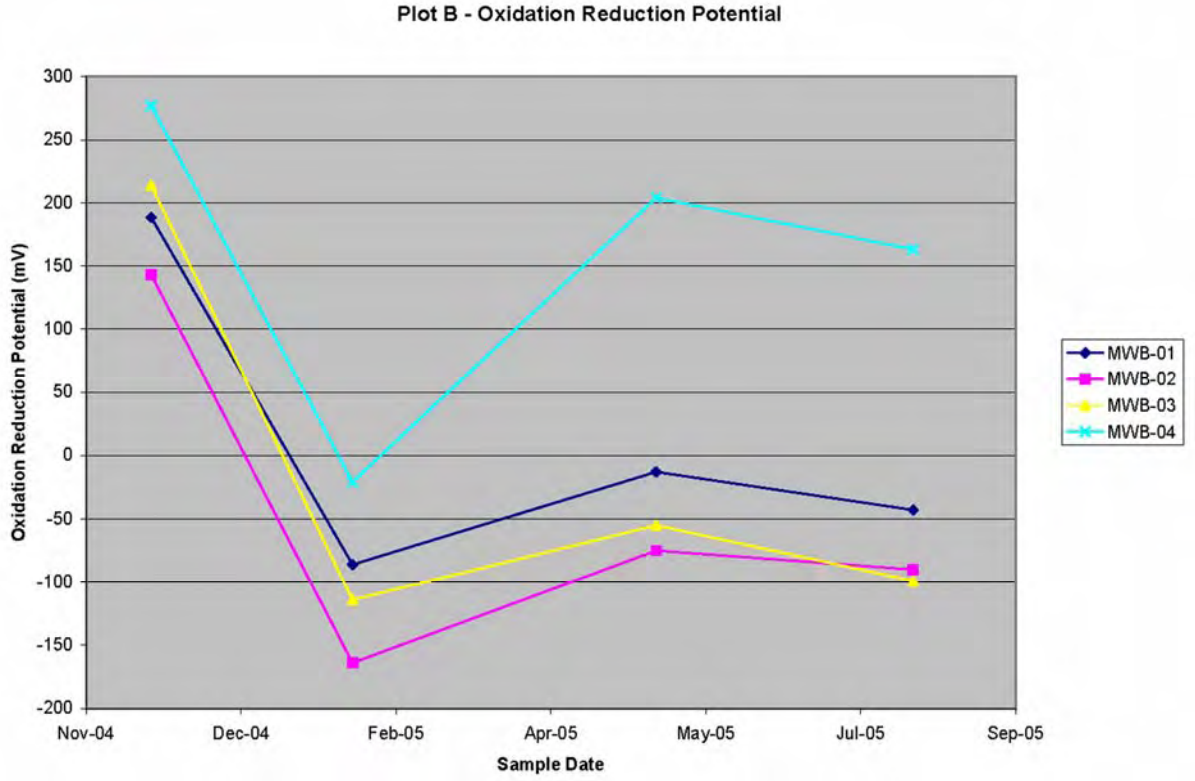
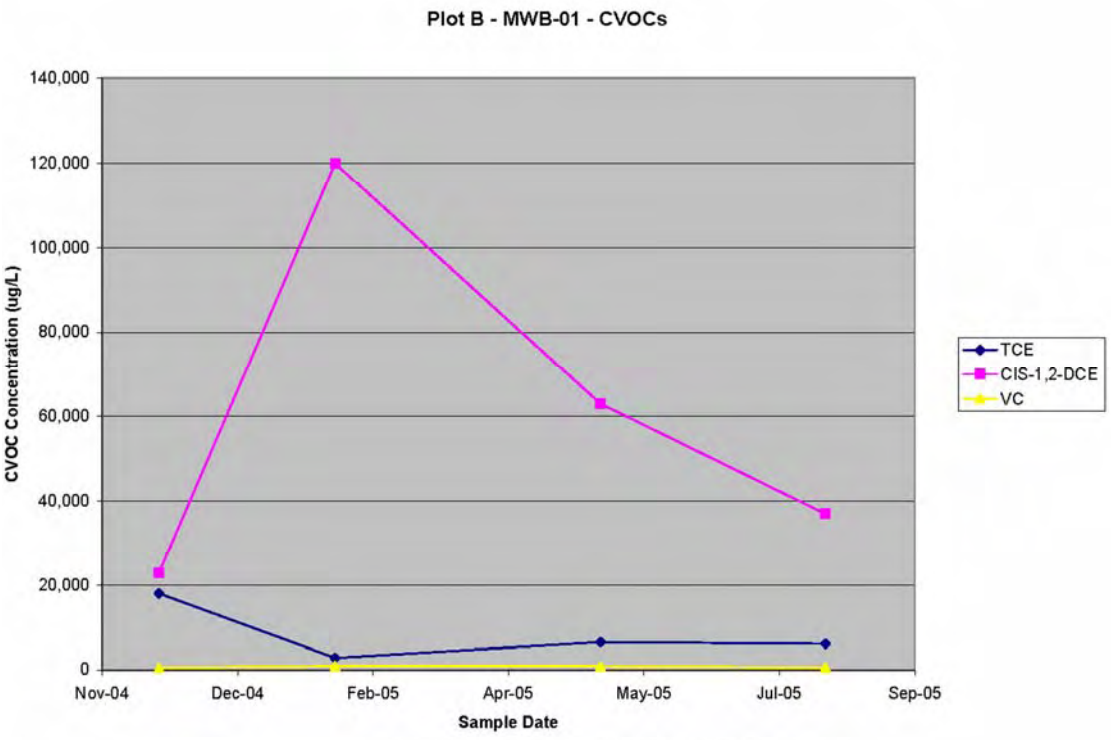


FIGURE 4-4

PLOT B – MWB-1 – CVOC AND DECHLORINATION PRODUCTS GRAPHS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND



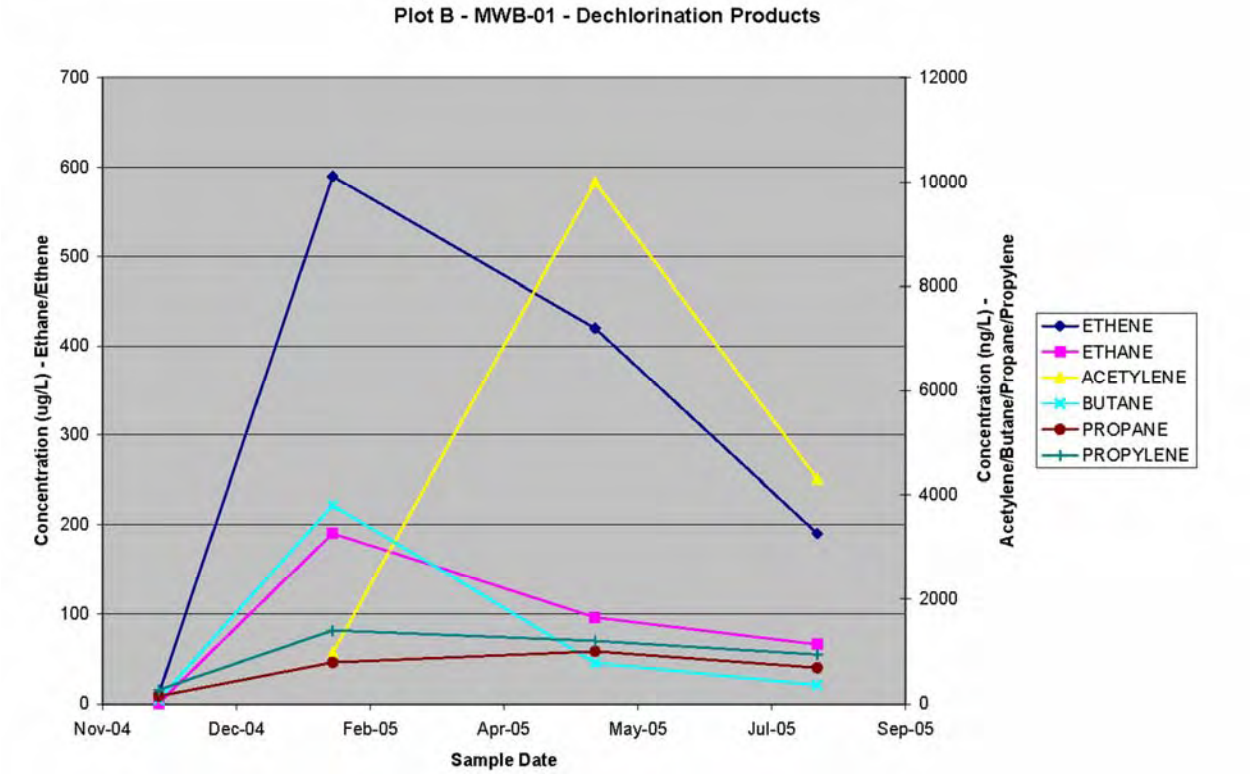
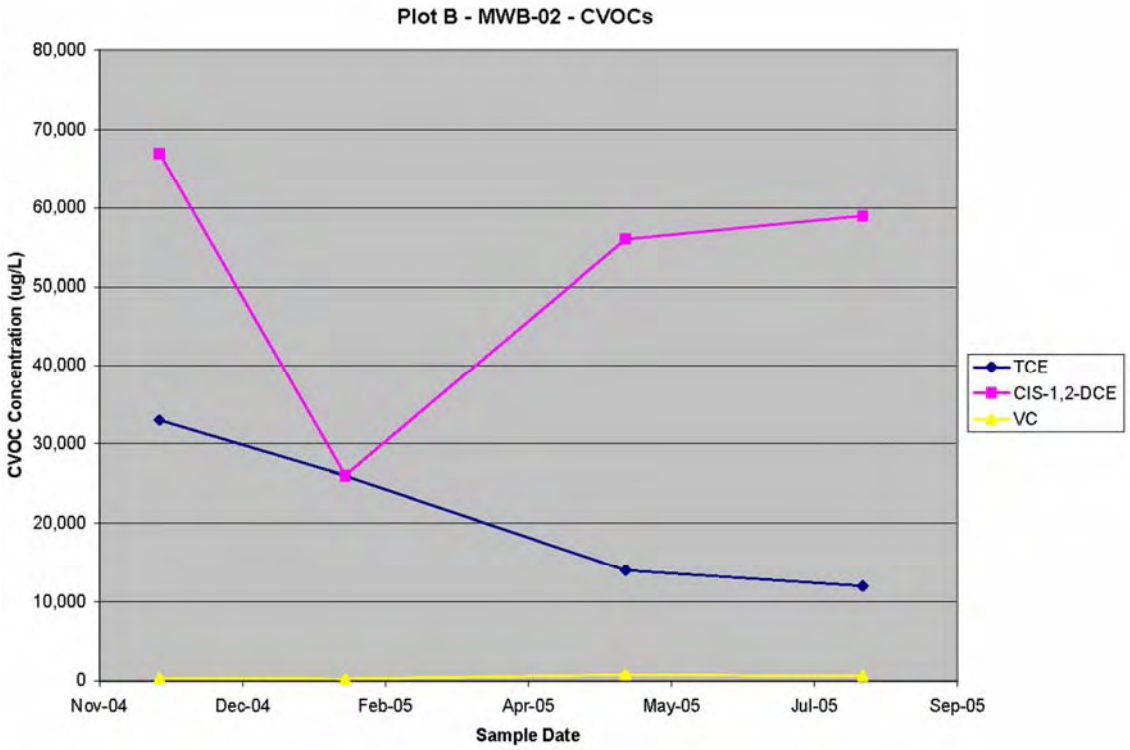


FIGURE 4-5

PLOT B – MWB-2 – CVOC AND DECHLORINATION PRODUCTS GRAPHS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND



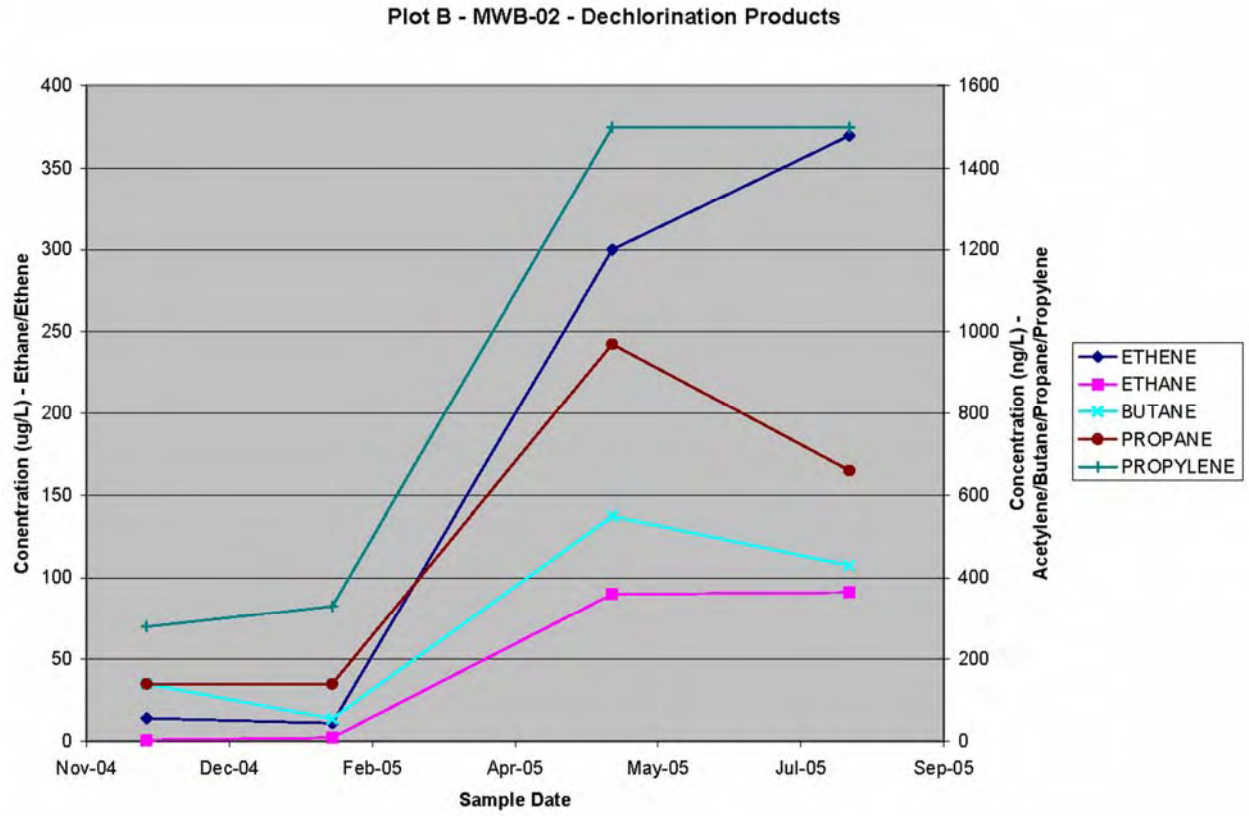
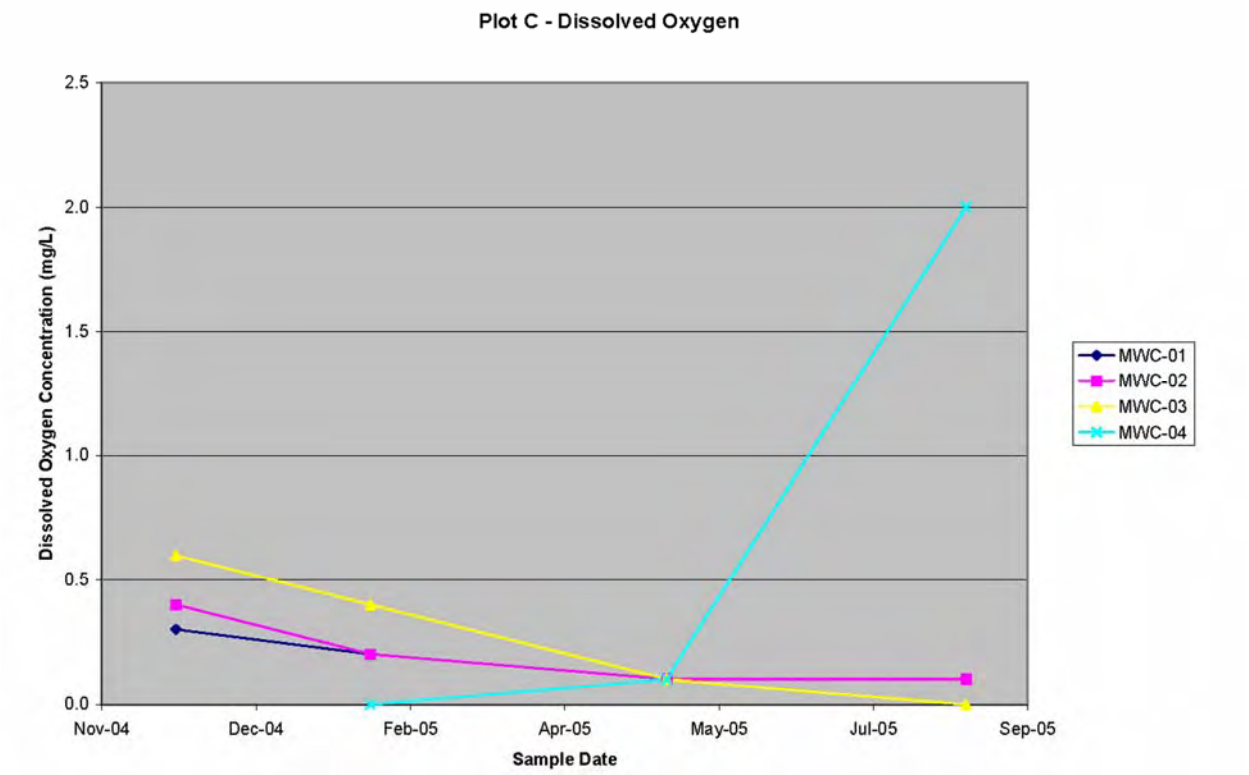


FIGURE 4-6

PLOT C – DISSOLVED OXYGEN AND OXIDATION REDUCTION POTENTIAL GRAPHS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND



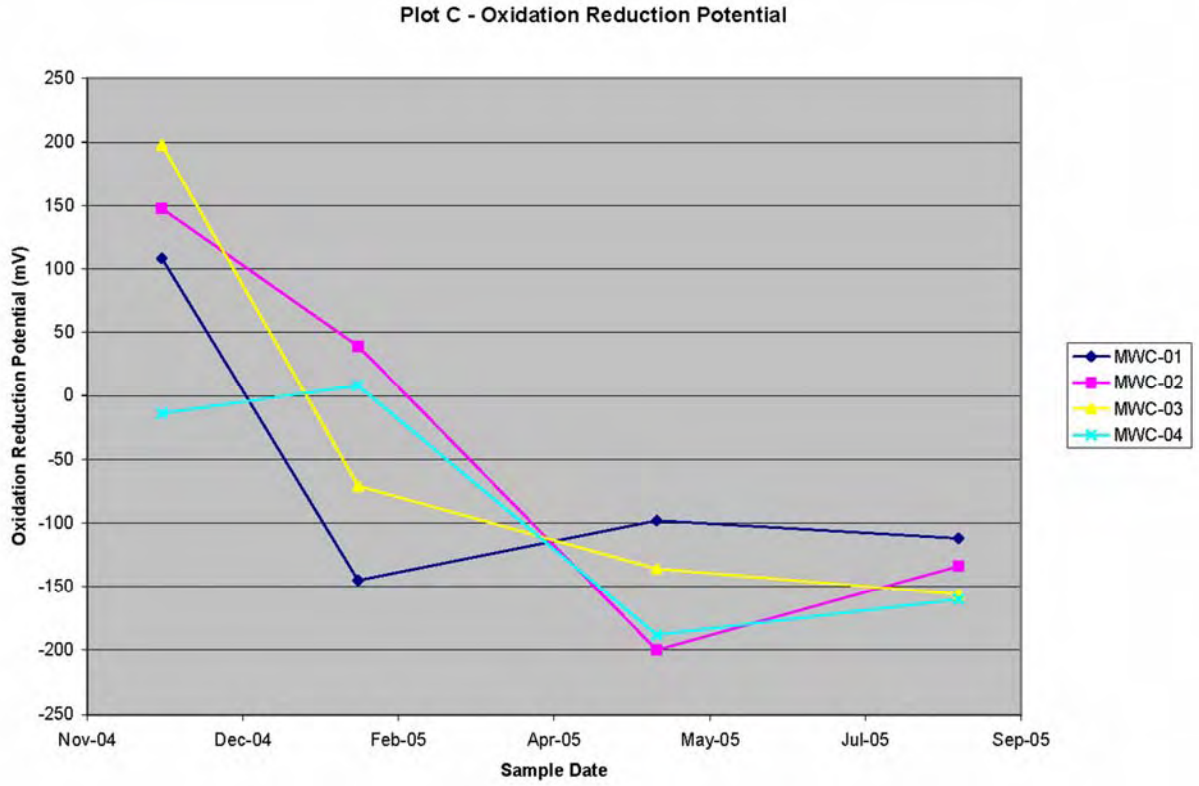
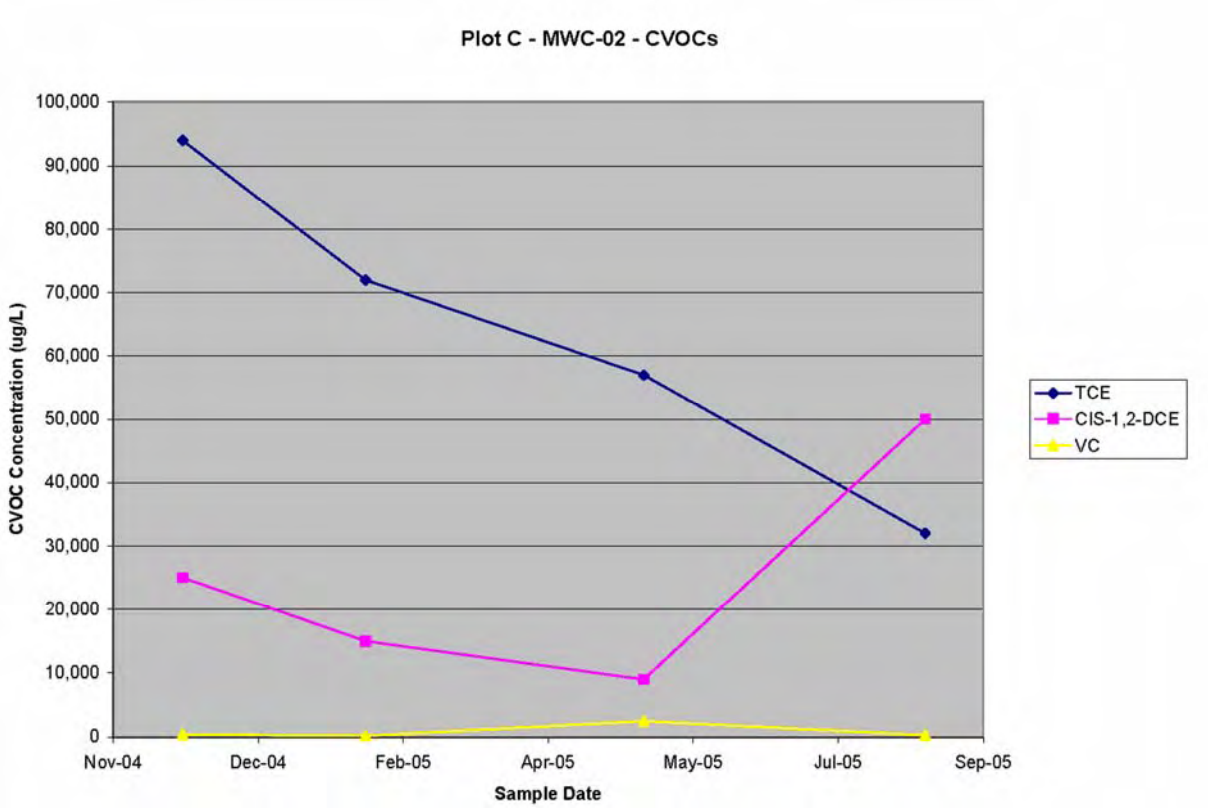
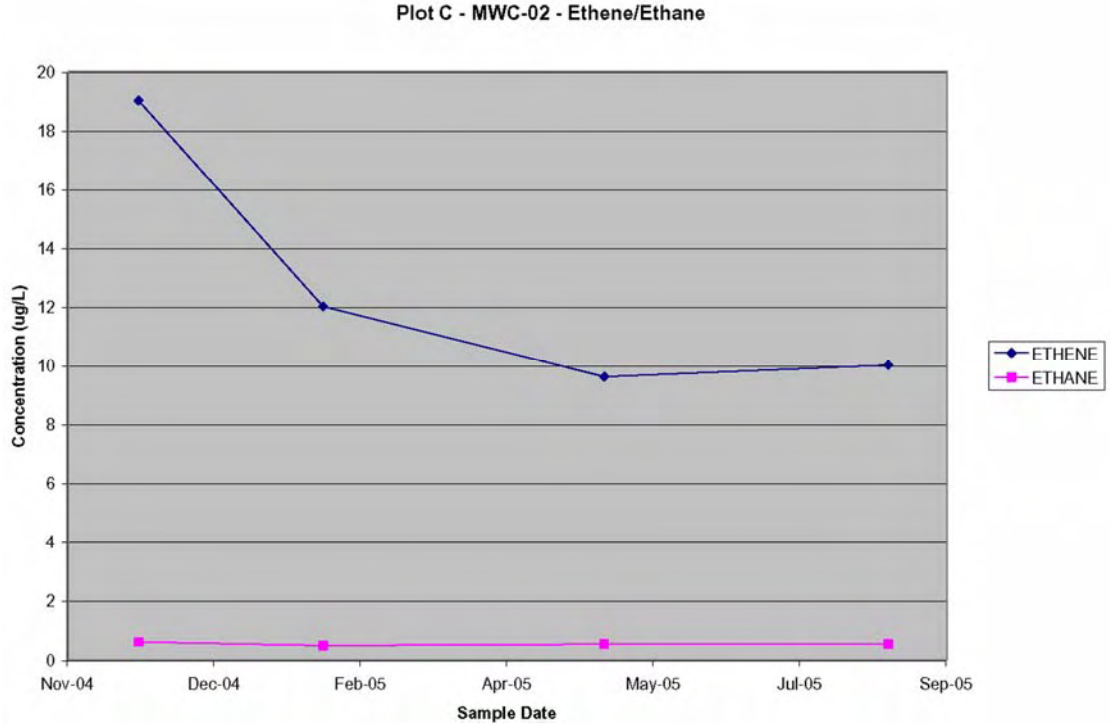


FIGURE 4-7

PLOT C – MWC-2 – CVOC AND ETHENE/ETHANE GRAPHS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND





APPENDIX B

TABLE 2-1

SUMMARY OF SELECT HISTORICAL ANALYTICAL RESULTS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

LOCATION	MSA-MWB-03/MW-05														MSA-MWB-04/DMW-07S								
SAMPLE ID	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	MSA-MWB-03-01	MSA-MWB-03-02	MSA-MWB-03-03	(1)	MSA-MWB-03-04	(1)	(1)	(1)	(1)	MSA-MWB-04-01	MSA-MWB-04-02	MSA-MWB-04-03	MSA-MWB-04-04	(1)
SAMPLE DATE	2/1996	3/1999	6/2002	9/2003	12/2003	3/2004	6/2004	9/2004	12/2004	11/30/2004	2/3/2005	5/12/2005	7/2005	8/3/2005	9/2003	12/2003	3/2004	6/2004	12/1/2004	2/3/2005	5/12/2005	8/3/2005	7/2005
VOLATILE ORGANIC COMPOUNDS																							
Chlorinated Ethanes (ug/L)																							
1,1,1-TRICHLOROETHANE	3,600	3,000	520 E	5 U	20 U	840 E	100 U	500 E	1 U	1200	4.3 J	1.5 J	100 U		3,000 E	4,400 E	2,000 E	100 U	2100	1800	1200 J		100 U
1,1,2,2-TETRACHLOROETHANE	500 U	2,500 U	ND	5 U	20 U	1 U	100 U	1 U	1 U	0.32 J	5 U	5 U	100 U		5 U	10 U	1 U	100 U	0.85 J	5 U	0.60 J		100 U
1,1,2-TRICHLOROETHANE	500 U	2,500 U	27	27	20 U	16	100 U	11	2	20	5 U	5 U	100 U		38	54	23	100 U	24	20	17		100 U
1,1-DICHLOROETHANE	1,300	2,500 U	310 E	890	20 U	510 E	1,200	290 E	1 U	700	5 U	5 U	100 U		990	1,300	600 E	810	690	450	420 J		343
1,2-DIBROMOETHANE	500 U	NA	5 U	5 U	20 U	1 U	100 U	1 U	I U	5 U	5 U	5 U	100 U		5 U	10 U	1 U	100 U	5 U	5 U	5 U		100 U
1,2-DICHLOROETHANE	500 U	2,500 U	170	5 U	20 U	270	600	190	51	380 J	16	8.1	100 U		5 U	290	1 U	150	99	120	99		100 U
CHLOROETHANE	500 U	5,000 U	5 U	5 U	20 U	1 U	100 U	1 U	I U	5 U	5 U	5 U	100 U		5 U	10 U	1 U	100 U	5 U	5 U	5 U		100 U
ETHANE	NA	NA	NA	NA	NA	NA	NA	15 U	11 U	0.49	29	13	NA	11	NA	NA	NA	12 U	1.8	12	17	16	
Chlorinated Ethenes (ug/L)																							
TETRACHLOROETHENE	140 E	2,500 U	21	41	20 U	28	100 U	17	3	31	60	34	100 U		61	87	39	100 U	39	47	26		
TRICHLOROETHENE	63,000	56,000	34,000	34,000	6,100 E	31,000	35,000	19,000	4,100	28000	4600	2700	1,870		34,000	41,000	45,000	36,000	31000 M	40000	28000		25,700
CIS-1,2-DICHLOROETHENE	38,000	55,000	110,000	110,000	140,000	120,000 E	110,000	100,000	140,000 E	120000	90000	43000	23,200		31,000	30,000	29,000	26,000	21000	52000	31000		32,000
TRANS-1,2-DICHLOROETHENE	360 E	2,500 U	1,100E	1,500 E	1,400	1,100 E	1,800	850	970	1400	1300	360	228		1,300 E	1,100	430 E	470	410 J	1400	430 J		556
1,1-DICHLOROETHENE	1,700	2,500 U	690 E	1,400 E	240	950 E	1,700	490	210 E	1100	100	83	23 J		1,700 E	2,200 E	990 E	100 U	1000	770	700 J		663
VINYL CHLORIDE	100 E	5,000 U (4)	260 E	490	360	350 E	550	300 E	450 E	600	220 J	210	131		480	420	190	180	320 J	520	560 J		336
ETHENE	NA	NA	NA	NA	NA	NA	NA	18	11 U	13	120	37	NA	34	NA	NA	NA	12 U	9.4	46	67	61	
Chlorinated Methanes (ug/L)																							
CHLOROFORM	500 U		5 U	21	20 U	11	100 U	7	1	5 U	0.34 J	5 U	100 U		32	41	15	100 U	16	15	14		
METHYLENE CHLORIDE	1,000 B	2,500 U	270 EB	690	60 B	500 EB	1,300 B	240 EB	33 B	640	0.55 J	3.1 J	200 U		600	890 B	390 EB	940 B	440 J	310	460 J		77.4 J
BTEX (ug/L)																							
BENZENE	500 U	2,500 U	81	130	94	85	160	68	66	92	49	32	100 U		82	95	40	100 U	33	36	37		28.1 J
ETHYLBENZENE	250 E	2,500 U	350 E	330	520	240 E	430	250 E	350	250	710	790	723		270	340	150	170	110	230	110		77.9 J
M+P-XYLENES	670 E[4]	5,000 U[4]	380[4]	410	150	300	610	220	200	310	530	350	82.5 U		530	680	330	350	220	230	210		159 J
O-XYLENE				170	22 J	110	230 J	72	21	120	36	3 J	100 U		190	290	140	150 J	120	100	98		63.5 J
TOLUENE	6,900	5,800	2,800	4,600	280	4,00	9,900	2,600	330	5000	340	50	100 U		2,400 E	4,300 E	2,500	3,100	1500	2200	1400 J		723
Miscellaneous Analytes (ug/L)																							
CHLOROBENZENE	500 U	2,500 U	9	9	20 U	6	100 U	7	11	7.5	13	13	100 U		7	10 U	3	100 U	3 J	3.7 J	3.6 J		100 U
METALS																							
Metals (ug/L)																							
CADMIUM-FILTERED (UG/L)	NA	23	24	8.2	5 U	6.8	6.6	5.3	5 U	6.7	2.5 J	5 U	1 U	1	6.2	8.9	12	13	1.3	7.5	4.6 J		5.9
CADMIUM-TOTAL (UG/L)	100 U	21	18	5.5	5 U	7	7.4	7.5	5 U	6.9	2.6 J	5 U	1 U	1.3	7	11	12	13	1.3	7.8	5.0 J		5.8

Notes:
No information available for cells that are blank.
1. Data collected as part of the site wide sampling events.
2. total dichloroethene
3. total cadmium
4. total xylenes
E = Estimated Value, Exceeds Calibration Range
B = Found in the Method Blank
NA - not analyzed.
NA - not analyzed.
J - estimated value
U - value not detected above reporting limit

TABLE 3-1

SUMMARY OF FIELD CHRONOLOGY
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

Date		Days After Injection[(1)]	Event	Description
Begin	End			
10/18/2004	11/11/2004	-	Monitoring Well Installation	Well Installation and Development
11/29/2004	12/3/2005	-	Round 1 Groundwater Sampling Event	Baseline Sampling
12/6/2004	12/22/2004	**0**	Injection Event 1	Nanoscale Fe, Emusified Oil, and Lactate (First Injection)
2/3/2005	2/7/2005	47	Round 2 Groundwater Sampling Event	Post-injection Performance Monitoring
12/23/2004	2/22/2005	62	Interim Performance Monitoring and pH Buffering	Post-injection Field Parameter Monitoring and pH Buffering in Plot A & C Only
2/23/2005	2/23/2005	63	Bioaugmentation	Plot A & C Only
4/14/2005	4/14/2005	113	Injection Event 2	Plot A (Lactate Injection Only)
5/9/2005	5/13/2005	137	Round 3 Groundwater Sampling Event	Post-injection Performance Monitoring
7/14/2005	7/14/2005	225	Interim Performance Monitoring and pH Buffering	Post-injection Field Parameter Monitoring and pH Buffering in Plot A & C Only
8/1/2005	8/16/2005	253	Round 4 Groundwater Sampling Event	Post-injection Performance Monitoring

Notes:
1. The time scale was set at zero after the initial amendment injections were completed on December 22, 2004.

TABLE 3-2

SUMMARY OF WELLS IN THE TREATABILITY STUDY AREA
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

Well	Well type	Top of Casing (ft-msl)	Screen Interval (ft-bgs)	Screen Interval (ft-thickness)
Test Plot A (Biostimulation Using Lactate coupled with bioaugmentation)				
MWA-1	MW	20.01	20-30	10
MWA-2	MW	19.76	22-32	10
MWA-3	MW	19.93	20-30	10
MWA-4	MW	20.07	20-30	10
IWA-1	IW	20.00	22-32	10
IWA-2	IW	19.66	22-32	10
EWA-1	EW	20.06	22-32	10
Test Plot B (Chemical Reduction using Nanoscale Zero Valent Iron)				
MWB-1	MW	20.18	23-33	10
MWB-2	MW	19.86	22-32	10
MWB-3 / MW-5	MW	23.77	21-31	10
MWB-4 / DMW-7S	MW	22.79	18-38	20
IWB-1	IW	19.75	23-33	10
IWB-2	IW	19.86	23-33	10
EWB-1	EW	19.96	23-33	10
Test Plot C (Biostimulation using Emulsified Oil coupled with bioaugmentation)				
MWC-1	MW	19.71	23-33	10
MWC-2	MW	19.78	23-33	10
MWC-3	MW	19.83	22-32	10
MWC-4	MW	20.05	23-33	10
IWC-1	IW	19.84	23-33	10
IWC-2	IW	19.91	23-33	10
EWC-1	EW	19.72	23-33	10

Notes:
BGS - below ground surface
EW - Extraction Well
ft - Feet
IW - Injection Well
msl - mean sea level (Datum NAVD 1988)
MW - Monitoring well

TABLE 3-3

SUMMARY OF ANALYTICAL RESULTS
PLOT A: BIOSTIMULATION USING LACTATE COUPLED WITH BIOAUGMENTATION
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

LOCATION	MSA-MWA-01				MSA-MWA-02				MSA-MWA-03				MSA-MWA-04				MSA-IWA-01
SAMPLE ID	MSA-MWA-01-01	MSA-MWA-01-02	MSA-MWA-01-03	MSA-MWA-01-04	MSA-MWA-02-01	MSA-MWA-02-02	MSA-MWA-02-03	MSA-MWA-02-04	MSA-MWA-03-01	MSA-MWA-03-02	MSA-MWA-03-03	MSA-MWA-03-04	MSA-MWA-04-01	MSA-MWA-04-02	MSA-MWA-04-03	MSA-MWA-04-04	MSA-IWA-01-01
SAMPLE DATE	12/2/2004	2/7/2005	5/10/2005	8/1/2005	12/2/2004	2/7/2005	5/10/2005	8/15/2005	12/1/2004	2/7/2005	5/10/2005	8/1/2005	12/2/2004	2/7/2005	5/10/2005	8/4/2005	8/15/2005
VOLATILE ORGANIC COMPOUNDS																	
Chlorinated Ethanes (ug/L)																	
1,1,1-TRICHLOROETHANE	6000	930	10	3 J	1200	250 U	690 J	600 J	2600	37	55	2.3 J	1700	65	3 J	5.8	390 J
1,1,2,2-TETRACHLOROETHANE	2 J	250 U	5 U	5 U	5 U	250 U	0.70 J	1000 U	7.5	1.7 J	0.90 J	5 U	5 U	5 U	5 U	5 U	1000 U
1,1,2-TRICHLOROETHANE	15	250 U	1.8 J	0.6 J	11	250 U	11	1000 U	40	8	6.1	5 U	18	5 U	5 U	5 U	1000 U
1,1-DICHLOROETHANE	720	120 J	9.1	4.8 J	460	70 J	250 J	300 J	680	16	41	1.4 J	650	41	21	28	180 J
1,2-DIBROMOETHANE	5 U	250 U	5 U	5 U	5 U	250 U	5 U	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1000 U
1,2-DICHLOROETHANE	85	400	18	15	130	72 J	160	98 J	380 J	140	49	4.7 J	130	47	9.6	8.8	280 J
CHLOROETHANE	5 U	250 U	5 U	5 U	5 U	250 U	0.90 J	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1000 U
ETHANE	0.3	0.99	1.2	1.2	2.7	350	0.84	0.71	0.41	0.87	1.1	1.4	0.22	1.2	1.3	1.3	0.20
Chlorinated Ethenes (ug/L)																	
TETRACHLOROETHENE	74	78 J	1.5 J	5 U	30	250 U	21	1000 U	140	87	8.9	5 U	43	6.8	5 U	5 U	1000 U
TRICHLOROETHENE	64000	25000	360	21	24000	950	25000	18000	52000 M	5600	2800	73	33000	2800	350	140	16000
CIS-1,2-DICHLOROETHENE	5600	5200	1100	750	9900	190000	9800	9300	6000	980	1800	40	10000	1300	990	590	8100
TRANS-1,2-DICHLOROETHENE	120	70 J	9.5	9.2	120	530	190	1000 U	77	120	16	4.5 J	120	89	9.2	6.9	1000 U
1,1-DICHLOROETHENE	2200	360	9.8	6.8	710	32 J	610 J	590 J	1800	39	80	3.2 J	990	75	19	14	260 J
VINYL CHLORIDE	130	350	29	210	100	1000	170	1000 U	180	100	98	20	110	66	26	250	150 J
ETHENE	9	15	3.7	11	12	1400	5.5	10.0	13	3.8	12	7.5	6.4	3.5	3.2	110	6.6
Chlorinated Methanes (ug/L)																	
BROMODICHLOROMETHANE	5 U	260	3.6 J	5 U	5 U	250 U	5 U	160 J	3.4 J	5 U	25	0.7 J	5 U	5 U	3.3 J	1.5 J	140 J
BROMOFORM	5 U	250 U	5 U	5 U	5 U	250 U	5 U	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1000 U
BROMOMETHANE	5 U	250 U	5 U	5 U	5 U	250 U	5 U	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1000 U
CARBON TETRACHLORIDE	5 U	250 U	5 U	5 U	5 U	250 U	5 U	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1000 U
CHLORODIBROMOMETHANE	5 U	250 U	5 U	5 U	5 U	250 U	5 U	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1000 U
CHLOROFORM	13	250 U	5 U	5 U	16	12 J	10	1000 U	19	0.71 J	0.50 J	5 U	14	0.71 J	5 U	5 U	1000 U
CHLOROMETHANE	5 U	250 U	5 U	5 U	5 U	250 U	5 U	1000 U	5 U	5 U	5 U	0.8 J	5 U	5 U	5 U	5 U	1000 U
METHYLENE CHLORIDE	720	160 J	1.5 J	2 U	450	250 U	530 J	1000 U	1000	20	9.5	0.7 U	470 J	18	5 U	1.3 U	1000 U
BTEX (ug/L)																	
BENZENE	25	10 J	0.80 J	2.2 J	15	48 J	14	1000 U	23	2.4 J	1.9 J	0.2 J	18	1.7 J	0.80 J	0.9 J	1000 U
ETHYLBENZENE	130	30 J	2.2 J	0.8 J	39	190 J	31	1000 U	130	9.1	7.4	0.3 J	31	3.6 J	1.8 J	1.9 J	1000 U
M+P-XYLENES	290	94 J	7 J	2.2 J	62	94 J	55	2000 U	320	30	22	0.6 J	28	5.6 J	2.9 J	2.9 J	2000 U
O-XYLENE	130	32 J	3.2 J	1.2 J	43	250 U	31	1000 U	120	14	8.7	0.3 J	67	2.4 J	1.2 J	1.1 J	1000 U
TOLUENE	3600	440	16	3.6 J	50	500	98	1000 U	460 J	77	44	0.6 J	26	2.6 J	2 J	5 U	1000 U
Miscellaneous Analytes (ug/L)																	
1,2-DICHLOROBENZENE	5 U	250 U	5 U	5 U	5 U	250 U	0.55 J	1000 U	5 U	0.02 J	5 U	5 U	5 U	0.03 J	5 U	5 U	1000 U
1,2-DICHLOROPROPANE	13	94 J	1.4 J	5 U	7.9	250 U	0.60 J	1000 U	4.8 J	5 U	8.6	0.5 J	5 U	5 U	1.2 J	0.9 J	1000 U
1,3-DICHLOROBENZENE	5 U	250 U	5 U	5 U	5 U	250 U	0.22 J	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	0.05 J	5 U	1000 U
1,4-DICHLOROBENZENE	5 U	250 U	5 U	5 U	5 U	250 U	0.22 J	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	0.05 J	5 U	1000 U
2-CHLOROETHYL VINYL ETHER	20 U	1000 U	20 U	20 U	20 U	1000 U	20 U	4000 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	4000 U
CHLOROBENZENE	5.3	250 U	5 U	5 U	1.6 J	250 U	1.4 J	1000 U	4.1 J	0.33 J	0.20 J	5 U	2 J	5 U	5 U	5 U	1000 U
CIS-1,3-DICHLOROPROPENE	5 U	250 U	5 U	5 U	5 U	250 U	5 U	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1000 U
METHYL TERT-BUTYL ETHER	5 U	250 U	5 U	5 U	5 U	250 U	5 U	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1000 U
TRANS-1,3-DICHLOROPROPENE	5 U	250 U	5 U	5 U	5 U	250 U	5 U	1000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1000 U
METALS																	
Metals (MG/L)																	
CADMIUM-FILTERED	0.023	0.012	0.005 U	0.005 U		0.016	0.005 U		0.031	0.0013 J	0.005 U	0.001	0.022	0.0018 J	0.005 U	0.005 U	
CADMIUM-TOTAL	0.024	0.012	0.005 U	0.005 U		0.012	0.005 U		0.032	0.0016 J	0.005 U	0.005 U	0.022	0.002 J	0.005 U	0.0007	
PHYSICAL AND GEOCHEMISTRY PARAMETERS																	
Geochemistry Parameters																	
DISSOLVED OXYGEN - METER (MG/L)	1.67	0.61	0.36	9.22	3.52	0.78	0.44	8.49	1.33	3.75	0.37	3.9	2.16	4.98	0.39	5.6	6.29
DISSOLVED OXYGEN - TEST KITS (MG/L)	0.2	0.6	0.1	0.05 U	2	0.3	0.1	0.6	1	0	0.1	0.05 U	0.4	0	0.1	0.05 U	0.2
NITRATE (MG/L)	3.8	38	0.5 U	1	33	0.5 U	1.3	2.4	120	6.1	1	1	57	0.5 U	0.5 U	0.5 U	0.5 U
NITRITE (MG/L)	0.5 U	0.76	0.80	0.5 U	0.61	0.5 U	0.5 U	0.5 U	0.5 U	1	1	0.5 U	0.54	0.5 U	1.5	0.5 U	2.7
IRON-FILTERED (MG/L)	80 M	160 M	10 M	0.52	0.013 JM	20 M	120 M		42 M	120 M	31 M	3.1	7.8 M	210 M	11 M	68	
IRON-TOTAL (MG/L)	82	160 M	10 M	20	20	24 M	86 M		42	110 M	30 M	40	7.8	210 M	9.6 M	46	
FERROUS IRON (MG/L)	3.3 >	5	1.5	3.6	2.95	2	2	3.4	3.3	10	1.5	4.4	3.3 >	8	1.5	1.6	2
SULFATE - FIELD (MG/L)	80 >				80 >				80				80 >				
SULFATE (MG/L)	1800	2600 M	730	620	1200	2000 M	3300	1700	2500	1400 M	590	1200	2200	1600 M	130	170	1400
SULFIDE(MG/L)	1.9 JM	2 U	7.6	4.4	1.9 JM	2 U	1.4 J	1.6 J	2.6	2 U	2.4	1.2 U	1.6 JM	2 U	6.7	0.9 U	41.0
HYDROGEN SULFIDE (MG/L)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
METHANE (UG/L)	87	170	200	160	29	100	11	21.0	100	140	150	140	43	99	160	190	11.0
ALKALINITY (MG/L)	10 U	10 U	300	200	10 U	10 U	700	500	40	120	400	300	10 U	200	400	600	350
CARBON DIOXIDE (MG/L)	40	500	180	400	80	120	700	400	100	260	350	250 U	80	250	250	325	500

TABLE 3-3

SUMMARY OF ANALYTICAL RESULTS
PLOT A: BIOSTIMULATION USING LACTATE COUPLED WITH BIOAUGMENTATION
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

LOCATION	MSA-MWA-01				MSA-MWA-02				MSA-MWA-03				MSA-MWA-04				MSA-IWA-01
SAMPLE ID	MSA-MWA-01-01	MSA-MWA-01-02	MSA-MWA-01-03	MSA-MWA-01-04	MSA-MWA-02-01	MSA-MWA-02-02	MSA-MWA-02-03	MSA-MWA-02-04	MSA-MWA-03-01	MSA-MWA-03-02	MSA-MWA-03-03	MSA-MWA-03-04	MSA-MWA-04-01	MSA-MWA-04-02	MSA-MWA-04-03	MSA-MWA-04-04	MSA-IWA-01-01
SAMPLE DATE	12/2/2004	2/7/2005	5/10/2005	8/1/2005	12/2/2004	2/7/2005	5/10/2005	8/15/2005	12/1/2004	2/7/2005	5/10/2005	8/1/2005	12/2/2004	2/7/2005	5/10/2005	8/4/2005	8/15/2005
HYDROGEN (NM)	47					71000		2.5									
Miscellaneous Parameters (mg/L)																	
AMMONIA-N (MG/L)		5.3				3.6				0.36 J				1.1 J			
AMMONIUM (MG/L)																	
BIOCHEMICAL OXYGEN DEMAND (MG/L)																	
CHLORIDE (MG/L)	160	200 M	17	18 U	170	190 M	310	250	330 M	41 M	33	12	250	53 M	30	32	280
DEHALOCOCCOIDES (GC/ML)	25 U							770									22 U
ORTHOPHOSPHATE (MG/L)		1 UM				1 UM			1 UM	1 UM				1 UM			
PHOSPHATE (MG/L)	1 U			1 U	1 U			1.0 U				1 U	1 U			1 U	1.0 U
TOTAL ORGANIC CARBON (MG/L)	11	490	420 M	170	13	14	1700 M	541	18	150	550 M	13	11	160	640 M	120	1690
OXIDATION REDUCTION POTENTIAL (MV)	151.1	111	-367	-260	10.5	225	-167	-185	266.8	-57	-291	-207	-68.6	-103	-282	-159	-328
PH	4.58	4.88	6.69	6.8	5.18	4.96	6.3	7.25	4.33	6.07	6.57	7.3	4.18	6.46	6.53	7.21	6.47
SALINITY (%)			0.2	0.2			0.5	0.8		0.2	0.2	0.2		0.2	0.2	0.1	0.5
SPECIFIC CONDUCTANCE (MS/CM)	2.134	5.230	3.5	3.21	2.241	4.56	9.17	15.2	2.564	3.42	3.84	3.15	2.271	3.71	3.22	2.48	8.78
TEMPERATURE (C)	13.59	13.15	13.9	16.77	13.14	12.32	15.1	16.31	13.18	13.05	14.1	16.52	12.91	13.32	14	14.89	17
TURBIDITY (NTU)	6.79	4.3	8.2	12	6.98	1.6	80	33	5	1.2	45	6.3	5.05	0	2.7	25	7.6
Beta-elimination Parameters (NG/L)																	
ACETYLENE		500 U	500 U	500 U			1900	3900		500 U	500 U	500 U		500 U	500 U	500 U	7500
BUTANE	72	330	270	190	220	1300	110	59	380	210	190	380	84	74	410	190	48 J
ISOBUTANE	11 J		120	78	32 J	250	500 U	12 J	44 J	30 J	500 U	130		19 J	160	90	20 J
PROPANE	22 J	130	1000	630	410	1000	130	72	100	360	590	1300	43 J	330	690	700	64
PROPYLENE	33	87	82	250	720	2900	220	140	100	77	500 U	250	82	81	200	230	110
Volatile Fatty Acids (mg/L)																	
ACETIC ACID					0.31	0.476	1130	590					0.207	140	1230	1210	
BUTANOIC ACID					0.092 J	0.096	35 U	12.8					0.1 U	3.5 J	3.5 U	7 U	
HEXANOIC ACID					0.2 U	0.1 U	5 U	0.451					0.2 U	0.1 U	0.1 U	0.1 U	
I-HEXANOIC ACID					0.1 U	0.631	5 U	0.108					0.1 U	0.1 U	0.274	0.1 U	
I-PENTANOIC ACID					0.07 U	0.07 U		0.70 U					0.07 U	0.07 U	3.5 U	0.07 U	
LACTIC ACID					0.253	0.1 U	854	100 U					0.07 U	50 UJ	50 U	100 U	
PENTANOIC ACID					0.07 U	0.07 U	3.5 U	8.34					0.07 U	0.07 U	0.114	0.07 U	
PROPIONIC ACID					0.07 U	0.357	2240	510					0.07 U	180	212	329	
PYRUVIC ACID					0.07 U	0.07 U	35 U	7.0 U					0.07 U	0.07 U	3.5 U	7 U	

Notes:

1. No information available for where cells are blank.

J - estimated value

U - value not detected above reporting limit

B = Found in the Method Blank

M - recovery/RPD poor for MS/MSD, sampl/dup

E = Estimated Value, Exceeds Calibration Range

NA - not analyzed.

TABLE 3-4

SUMMARY OF ANALYTICAL RESULTS
PLOT B: CHEMICAL REDUCTION USING NANOSCALE ZERO VALENT IRON
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

LOCATION	MSA-MWB-01				MSA-MWB-02				MSA-MWB-03/MW-05					MSA-MWB-04/DMW-07S				
SAMPLE ID	MSA-MWB-01-01	MSA-MWB-01-02	MSA-MWB-01-03	MSA-MWB-01-04	MSA-MWB-02-01	MSA-MWB-02-02	MSA-MWB-02-03	MSA-MWB-02-04	MSA-MWB-03-01	MSA-MWB-03-02	MSA-MWB-03-03	(1)	MSA-MWB-03-04	MSA-MWB-04-01	MSA-MWB-04-02	MSA-MWB-04-03	(1)	MSA-MWB-04-04
SAMPLE DATE	11/30/2004	2/3/2005	5/12/2005	8/3/2005	11/30/2004	2/7/2005	5/11/2005	8/16/2005	11/30/2004	2/3/2005	5/12/2005	7/2005	8/3/2005	12/1/2004	2/3/2005	5/12/2005	7/2005	8/3/2005
VOLATILE ORGANIC COMPOUNDS																		
Chlorinated Ethanes (ug/L)																		
1,1,1-TRICHLOROETHANE	880	8.3	26	25	2600	1100	8.2	250 U	1200	4.3 J	1.5 J	100 U		2100	1800	1200 J	100 U	
1,1,2,2-TETRACHLOROETHANE	0.34 J	0.45 J	5 U	5 U	0.46 J	250 U	5 U	250 U	0.32 J	5 U	5 U	100 U		0.85 J	5 U	0.60 J	100 U	
1,1,2-TRICHLOROETHANE	6.6	4.4 J	5.4	4.1 J	30	250 U	1 J	250 U	20	5 U	5 U	100 U		24	20	17	100 U	
1,1-DICHLOROETHANE	320 J	53	25	26	1000	380	5 U	18 J	700	5 U	5 U	100 U		690	450	420 J	34300%	
1,2-DIBROMOETHANE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	100 U		5 U	5 U	5 U	100 U	
1,2-DICHLOROETHANE	210	230	150	110	310 J	220 J	41	34 J	380 J	16	8.1	100 U		99	120	99	100 U	
CHLOROETHANE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	100 U		5 U	5 U	5 U	100 U	
ETHANE	0.8	190	96	66	0.85	2.2	90	91	0.49	29	13		11	1.8	12	17		16
Chlorinated Ethenes (ug/L)																		
TETRACHLOROETHENE	18	14	14	14	55	250 U	44	31 J	31	60	34	100 U		39	47	26		
TRICHLOROETHENE	18000 M	2800	6500	6100	33000 M	26000	14000	12000 J	28000	4600	2700	1,870		31000 M	40000	28000	2570000%	
CIS-1,2-DICHLOROETHENE	23000	120000	63000	37000	67000	26000	56000	59000 J	120000	90000	43000	23,200		21000	52000	31000	3200000%	
TRANS-1,2-DICHLOROETHENE	310 J	970	440	270 J	960	220 J	380 J	410	1400	1300	360	228		410 J	1400	430 J	55600%	
1,1-DICHLOROETHENE	490 J	110	100	82	1300	640	110	48 J	1100	100	83	23 J		1000	770	700 J	66300%	
VINYL CHLORIDE	460 J	870	820	490 J	380 J	250 U	800 J	620	600	220 J	210	131		320 J	520	560 J	33600%	
ETHENE	11	590	420	190	14	11	300	370	13	120	37		34	9.4	46	67		61
Chlorinated Methanes (ug/L)																		
BROMODICHLOROMETHANE	5 U	5 U	46	5 U	5 U	250 U	0.70 J	120 J	5 U	5 U	24	100 U		11	5 U	5 U		
BROMOFORM	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	200 U		5 U	5 U	5 U		
BROMOMETHANE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U			5 U	5 U	5 U		
CARBON TETRACHLORIDE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	100 U		5 U	5 U	5 U		
CHLORODIBROMOMETHANE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	723		5 U	5 U	5 U		
CHLOROFORM	14	0.81 J	1 J	0.9 J	5 U	250 U	1.5 J	250 U	5 U	0.34 J	5 U	82.5 U		16	15	14		
CHLOROMETHANE	5 U	5 U	5 U	5 U	5 U	250 U	1 J	250 U	5 U	5 U	5 U	100 U		5 U	5 U	5 U		
METHYLENE CHLORIDE	95	40	26	22	460 J	450	17	34 J	640	0.55 J	3.1 J	100 U		440 J	310	460 J	77.4 J	
BTEX (ug/L)																		
BENZENE	21	62	43	32	63	250 U	47	50 J	92	49	32	100 U		33	36	37	28.1 J	
ETHYLBENZENE	43	140	130	100	230	25 J	280 J	380	250	710	790			110	230	110	77.9 J	
M+P-XYLENES	80	120	140	74	370	500 U	340	260 J	310	530	350			220	230	210	159 J	
O-XYLENE	35	31	36	17	160	250 U	8.5	250 U	120	36	3 J	1 U		120	100	98	63.5 J	
TOLUENE	570	540	500	280 J	4100	36 J	120	130 J	5000	340	50	1 U		1500	2200	1400 J	72300%	
Miscellaneous Analytes (ug/L)																		
1,2-DICHLOROBENZENE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U			5 U	0.44 J	0.32 J		
1,2-DICHLOROPROPANE	5 U	5 U	18	5 U	4.6 J	83 J	5 U	54 J	4.7 J	5 U	9			4.4 J	5 U	5 U		
1,3-DICHLOROBENZENE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U			5 U	0.26 J	0.12 J		
1,4-DICHLOROBENZENE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U			5 U	0.27 J	0.13 J		
2-CHLOROETHYL VINYL ETHER	20 U	20 U	8.5 J	20 U	20 U	1000 U	4.7 J	1000 U	20 U	20 U	8.6 J			20 U	20 U	5.5 J		
CHLOROBENZENE	2.4 J	7.8	7	5 J	5.4	250 U	12	9.5 J	7.5	13	13			3 J	3.7 J	3.6 J	100 U	
CIS-1,3-DICHLOROPROPENE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U			5 U	5 U	5 U		
METHYL TERT-BUTYL ETHER	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U			5 U	5 U	5 U		
TRANS-1,3-DICHLOROPROPENE	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U			5 U	5 U	5 U		
METALS																		
Metals (MG/L)																		
CADMIUM-FILTERED	0.011	0.005 J	0.005 U	0.023	0.011	0.0034 J	0.0009 J		0.0067	0.0025 J	0.005 U		0.001	0.013	0.0075	0.0046 J	0.0059	0.004
CADMIUM-TOTAL	0.011	0.0048 J	0.006	0.0018	0.011	0.0035 J	0.001 J		0.0069	0.0026 J	0.005 U		0.0013	0.013	0.0078	0.005 J	0.0058	0.0035
PHYSICAL AND GEOCHEMISTRY PARAMETERS																		
Geochemistry Parameters																		
DISSOLVED OXYGEN - METER (MG/L)	1.48	3.83	0.49	4.56	1.15	0.62	0.5	6.55	1.36	4.28	0.64		6.28	1.05	8.86	0.6		7.79
DISSOLVED OXYGEN - TEST KITS (MG/L)	1	0.1	0.6	0.05 U		0	0.1	0		0.3	0.4		0	0.8	0.6	0.6		0
NITRATE (MG/L)	43 M	1	1.5	2.3	360 M	18	0.50 U	1.1	460 M	0.5 U	1.1		1.1	240	220	210		180
NITRITE (MG/L)	1.3	0.74	1.3	0.5 U	0.5 U	0.8	0.50 U	1.1	1	0.5 U	1		0.5 U	0.5 U	0.5 U	1.4		0.5 U
IRON-FILTERED (MG/L)	88	480 M	200 M	160	110	360 M	260 M		140	270 M	140 M		110	50 M	100 M	42 M		29
IRON-TOTAL (MG/L)	84	480 M	200 M	180	110	350 M	260 M		140	250 M	140 M		110	48	100 M	42 M		40
FERROUS IRON (MG/L)	3.3	10	2.0	5.8		8	2	5.2		10	1.5		2.4	2.97	8.1	2		3.4
SULFATE - FIELD (MG/L)	80													80				
SULFATE (MG/L)	2300 M	3000 M	2400 M	2100	3400 M	2200 M	2100 M	1500	4300 M	1300 M	1200 M		870	2400	2000 M	2800 M		2000
SULFIDE(MG/L)	2 U	2 UM	2.4	1.2 U	2 U	2 U	1.7 J	0.6 J	2 U	2 UM	2.4		1.2 U	2 U	2 UM	2 J		0.9 U
HYDROGEN SULFIDE (MG/L)	0	0	NA	0			0	0		0	0		0	0	0	0		0
METHANE (UG/L)	44	150	170	140	68	27	270	150	48	130	95		130	60	84	120		130
ALKALINITY (MG/L)	40	180	120	100 U		170	250	140		260	250		180	70	10 U	1000 >		100 U
CARBON DIOXIDE (MG/L)	90	350	300	425		200	250	325		240	250		275	70	240	300		450
HYDROGEN (NM)						8		400										
Miscellaneous Parameters (mg/L)																		

TABLE 3-4

SUMMARY OF ANALYTICAL RESULTS
PLOT B: CHEMICAL REDUCTION USING NANOSCALE ZERO VALENT IRON
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

LOCATION	MSA-MWB-01				MSA-MWB-02				MSA-MWB-03/MW-05					MSA-MWB-04/DMW-07S				
SAMPLE ID	MSA-MWB-01-01	MSA-MWB-01-02	MSA-MWB-01-03	MSA-MWB-01-04	MSA-MWB-02-01	MSA-MWB-02-02	MSA-MWB-02-03	MSA-MWB-02-04	MSA-MWB-03-01	MSA-MWB-03-02	MSA-MWB-03-03	(1)	MSA-MWB-03-04	MSA-MWB-04-01	MSA-MWB-04-02	MSA-MWB-04-03	(1)	MSA-MWB-04-04
SAMPLE DATE	11/30/2004	2/3/2005	5/12/2005	8/3/2005	11/30/2004	2/7/2005	5/11/2005	8/16/2005	11/30/2004	2/3/2005	5/12/2005	7/2005	8/3/2005	12/1/2004	2/3/2005	5/12/2005	7/2005	8/3/2005
AMMONIA-N (MG/L)						1.1 J												
AMMONIUM (MG/L)		3.6								9.2					7.5			
BIOCHEMICAL OXYGEN DEMAND (MG/L)																		
CHLORIDE (MG/L)	260 M	260 M	260 M	220	410 M	270 M	170 M	100	620 M	86 M	65 M		69	250 M	190 M	270 M		210
DEHALOCOCCOIDES (GC/ML)																		
ORTHOPHOSPHATE (MG/L)	1 UM	1 UM	1 U		1 UM	1 UM	1 U		1 UM	1 UM	1 U			1 UM	1 UM	1 U		
PHOSPHATE (MG/L)			1 U	1 U			1 U	1 U			1 U		1 U			1 U		1 U
TOTAL ORGANIC CARBON (MG/L)	18	43	120 M	26	27	78	120 M	20.1	35	37	110 M		20	18	28	120 M		26
OXIDATION REDUCTION POTENTIAL (MV)	188.4	-86	-13	-43	143	-164	-75	-90	213.7	-114	-55		-99	277.2	-21	204		163
PH	4.74	6.33	5.75	6.26	4.83	6.86	6.18	6.28	4.53	6.19	6.28		6.76	4.16	5.63	4.75		5.06
SALINITY (%)		0.3	0.2	0.2			0.2	0.1		0.2	0.1		0.1		0.2	0.2		0.2
SPECIFIC CONDUCTANCE (MS/CM)	2.326	5.76	3.81	3.5	3.456	17.2	3.25	3	4.413	3.53	2.4		2.24	2.851	4.48	4.05		3.72
TEMPERATURE (C)	13.05	11.74	13.8	14.97	13.24	12.35	14.7	15.24	12.88	10.61	14.6		18.05	13.46	12.42	14.3		16.37
TURBIDITY (NTU)	20	10	13	24	10	3.5	8.2	7.2	110	100	55			1	17	6.8		13
Beta-elimination Parameters (NG/L)																		
ACETYLENE		970	10000	4300			4700	14000		1100	500 U		500 U		3100	7900		5600
BUTANE	84	3800	780	360	140	55	550	430	80	180	210		230	79	150	200		100
ISOBUTANE		560	240	82	24 J	3.3 J	500 U	87		19 J	500 U		59			62		36 J
PROPANE	150	790	1000	690	140	140	970	660	75	350	210		430	61	140	230		110
PROPYLENE	270	1400	1200	940	280	330	1500	1500	170	630	500 U		340	120	320	420		170
Volatile Fatty Acids (mg/L)																		
ACETIC ACID							1.05											
BUTANOIC ACID							0.073											
HEXANOIC ACID							0.1 U											
I-HEXANOIC ACID							0.1 U											
I-PENTANOIC ACID							0.07 U											
LACTIC ACID							1 U											
PENTANOIC ACID							0.07 U											
PROPIONIC ACID							0.07 U											
PYRUVIC ACID							0.07 U											

Notes:
No information available for where cells are blank.
1. Data collected as part of the site wide sampling events.
B = Found in the Method Blank
E = Estimated Value, Exceeds Calibration Range
M - recovery/RPD poor for MS/MSD, sampl/dup
NA - not analyzed.
U - value not detected above reporting limit
J - estimated value

TABLE 3-5

SUMMARY OF ANALYTICAL RESULTS
PLOT C: BIOSTIMULATION USING EMULSIFIED OIL COUPLED WITH BIOAUGMENTATION
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

LOCATION	MSA-MWC-01				MSA-MWC-02				MSA-MWC-03				MSA-MWC-04				MSA-IWC-01
SAMPLE ID	MSA-MWC-01-01	MSA-MWC-01-02	MSA-MWC-01-03	MSA-MWC-01-04	MSA-MWC-02-01	MSA-MWC-02-02	MSA-MWC-02-03	MSA-MWC-02-04	MSA-MWC-03-01	MSA-MWC-03-02	MSA-MWC-03-03	MSA-MWC-03-04	MSA-MWC-04-01	MSA-MWC-04-02	MSA-MWC-04-03	MSA-MWC-04-04	MSA-IWC-01-01
SAMPLE DATE	12/2/2004	2/4/2005	5/11/2005	8/16/2005	12/3/2004	2/4/2005	5/11/2005	8/16/2005	12/3/2004	2/4/2005	5/11/2005	8/3/2005	12/3/2004	2/4/2005	5/11/2005	8/11/2005	8/11/2005
VOLATILE ORGANIC COMPOUNDS																	
Chlorinated Ethanes (ug/L)																	
1,1,1-TRICHLOROETHANE	2900	20 J	2400 J	4700 J	42	30	11	26 J	17	22 J	20	57	5.4	8.6	2.5 J	1000 U	100 U
1,1,2,2-TETRACHLOROETHANE	0.48 J	250 U	1 J	0.7 J	2.2 J	1.9 J	1.2 J	250 U	0.31 J	250 U	0.60 J	0.5 J	5.2	7	2.3 J	1000 U	100 U
1,1,2-TRICHLOROETHANE	6.8	250 U	24	5 U	7.1 B	5 J	5.1	250 U	4.4 JB	250 U	11	8.2	16 B	23	16	1000 U	100 U
1,1-DICHLOROETHANE	300 J	32 J	360 J	700 J	33	16	26	23 J	24	35 J	56	73	10	12	15	1000 U	8.4 J
1,2-DIBROMOETHANE	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	1000 U	100 U
1,2-DICHLOROETHANE	150	10 J	19	310 J	19	20	12	250 U	10	16 J	14	11	180	250	110	1000 U	100 U
CHLOROETHANE	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	1000 U	100 U
ETHANE	4.1	1.3	1.1	1.1	0.6	0.48	0.53	0.52	0.62	0.61	0.38	0.55	4.4	9.8	6.2	4.1	1.6
Chlorinated Ethenes (ug/L)																	
TETRACHLOROETHENE	41	250 U	24	37	71	56	24	250 U	54	250 U	11	9.1	40	79	33	1000 U	100 U
TRICHLOROETHENE	33000	45000	49000	88000 J	94000 M	72000	57000	32000 J	39000 M	37000	50000	35000	52000 M	90000	68000	47000	1300
CIS-1,2-DICHLOROETHENE	9000	19000	13000	23000 J	25000	15000	9000	50000 J	20000	30000	23000	21000	7200	11000	5600	5600	3600
TRANS-1,2-DICHLOROETHENE	57	340	2500 U	170	330	350	2500 U	320	100	390	2500 U	100	270	540	200 J	190 J	16 J
1,1-DICHLOROETHENE	370 J	68 J	460 J	850 J	100	48	41	90 J	78	80 J	100	99	47	64	46	1000 U	8 J
VINYL CHLORIDE	330 J	320	2500 U	300 J	410	180	2500 U	290	420	340	480	320 J	91	100	120	130 J	84 J
ETHENE	19	19	12	17	19	12	9.6	10	17	20	17	15	17	32	28	20.0	19.0
Chlorinated Methanes (ug/L)																	
BROMODICHLOROMETHANE	1.6 J	390	2.7 J	3.5 J	5 U	5 U	3.1 J	270	5 U	460	2.6 J	6.2	3.8 J	4.7 J	5 U	500 J	12 J
BROMOFORM	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	1000 U	100 U
BROMOMETHANE	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	1000 U	100 U
CARBON TETRACHLORIDE	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	1000 U	100 U
CHLORODIBROMOMETHANE	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	1000 U	100 U
CHLOROFORM	8.7	12 J	23	14	17	9.1	1.7 J	250 U	13	11 J	9.8	8.4	23	18	1.5 J	1000 U	100 U
CHLOROMETHANE	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	1000 U	100 U
METHYLENE CHLORIDE	11	250 U	34	24	880	410	120	92 J	89	32 J	47	72	290	310	300 J	1000 U	100 U
BTEX (ug/L)																	
BENZENE	7.8	18 J	27	20	35	20	15	22 J	16	20 J	26	21	28	36	25	32 J	100 U
ETHYLBENZENE	210	100 J	170	260 J	770	280	200 J	340	550	120 J	150	120	170	230	160	240 J	14 J
M+P-XYLENES	460 J	160 J	380	190 J	1400	550	5000 U	700	1100	220 J	260	200	390	490 J	380	2000 U	200 U
O-XYLENE	200	72 J	150	220 J	440	200	160	240 J	430	87 J	120	88	150	200	160	270 J	13 J
TOLUENE	7200	7200	6400	14000 J	15000	6800	6000	8700	8200	7800	9100	9400	4800	6600	5300	4800	370
Miscellaneous Analytes (ug/L)																	
1,2-DICHLOROBENZENE	5 U	250 U	5 U	5 U	5 U	1.3 J	0.82 J	250 U	5 U	250 U	0.20 J	5 U	5 U	0.95 J	0.78 J	1000 U	100 U
1,2-DICHLOROPROPANE	4.4 J	130 J	3.1 J	9.1	1.6 J	5 U	3.2 J	110 J	4.1 J	150 J	2.9 J	5 U	3.4 J	5 U	5 U	190 J	100 U
1,3-DICHLOROBENZENE	5 U	250 U	5 U	5 U	5 U	0.18 J	0.13 J	250 U	5 U	250 U	5 U	5 U	5 U	0.13 J	0.11 J	1000 U	100 U
1,4-DICHLOROBENZENE	5 U	250 U	5 U	5 U	5 U	0.17 J	0.13 J	250 U	5 U	250 U	5 U	5 U	5 U	0.13 J	0.06 J	1000 U	100 U
2-CHLOROETHYL VINYL ETHER	20 U	1000 U	0.49 J	20 U	20 U	20 U	0.18 J	1000 U	20 U	1000 U	20 U	20 U	20 U	20 U	20 U	4000 U	400 U
CHLOROBENZENE	2.3 J	250 U	2.6 J	2.8 J	0.5 J	0.36 J	0.20 J	250 U	0.51 J	250 U	0.40 J	0.3 J	1.3 J	2.1 J	1.3 J	1000 U	100 U
CIS-1,3-DICHLOROPROPENE	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	1000 U	100 U
METHYL TERT-BUTYL ETHER	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	2.7 J	250 U	0.30 J	5 U	4.6 J	5 U	0.80 J	1000 U	100 U
TRANS-1,3-DICHLOROPROPENE	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	1000 U	100 U
METALS																	
Metals (MG/L)																	
CADMIUM-FILTERED	0.0015 J	0.0016 J	0.0008 J	0.002 J		0.0015 J	0.005 U		0.01	0.0011 J	0.005 U	0.001	0.0092	0.0017 J	0.005 U	0.005 U	
CADMIUM-TOTAL	0.0016 J	0.0018 J	0.001 J	0.0013 J		0.0026 J	0.005 U		0.01	0.0016 J	0.005 U	0.0006	0.0096	0.0018 J	0.005 U	0.005 U	
PHYSICAL AND GEOCHEMISTRY PARAMETERS																	
Geochemistry Parameters																	
DISSOLVED OXYGEN - METER (MG/L)	1.62	0.65	0.42	6.9	0.81	5.61	0.4	7.06	1.3	6.98	0.45	4.52	0.98	5.89	0.61	4.96	4.27
DISSOLVED OXYGEN - TEST KITS (MG/L)	0.3	0.2	0.1	0.1	0.4	0.2	0.1	0.1	0.6	0.4	0.1	0.05 U		0	0.1	2	
NITRATE (MG/L)	0.5 U	0.5 U	0.50 U	0.9	1.9	1.1	0.50 U	0.5 U	3.4	1	0.50 U	1.1	8	1	0.50 U	0.50 U	1.0
NITRITE (MG/L)	0.5 U	0.86	0.50 U	0.5 U	1.4	0.5 U	0.50 U	0.5 U	1.3	1	0.50 U	0.5 U	1.3	0.83	0.50 U	0.50 U	2.5 J
IRON-FILTERED (MG/L)	54 M	190 M	230 M	180	54 M	50 M	76 M		33 M	130 M	95 M	76	7.3 M	51 M	110 M	64.0	
IRON-TOTAL (MG/L)	56	180 M	230 M	170	58 M	54 M	78 M		34 M	140 M	100 M	110	8.1 M	54 M	100 M	59.0	
FERROUS IRON (MG/L)	3.3	10	2	3	3.3 >	2.5	3	2.4	3.3 >	4	2	3.4		4.8	1.5	2.5	2.2
SULFATE - FIELD (MG/L)	80				80 >				80 >								
SULFATE (MG/L)	1300	1800 M	2400 M	1400	1 UM	1600 M	970 M	1200	1300 M	2000 M	1300 M	1100	1300 M	2000 M	1500 M	1300	2.3
SULFIDE(MG/L)	1.6 JM	2.7 M	3	1.2 J	2 U	2 UM	7	1.9 J	2 U	5 M	6.3	1.8 U	2 U	2 UM	5.3	2.0 U	9.7
HYDROGEN SULFIDE (MG/L)	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
METHANE (UG/L)	64	90	120	120	38	35	31	21	22	32	22	18	14	34	17	17.0	1100
ALKALINITY (MG/L)	40	135	250	375	10 U	10 U	250	375	10 U	20	300	600		50	250	1000 >	
CARBON DIOXIDE (MG/L)	70	300	400	250	80	170	300	180	70	250	500	750		140	250	100 U	
HYDROGEN (NM)								3.3									

TABLE 3-5

SUMMARY OF ANALYTICAL RESULTS
PLOT C: BIOSTIMULATION USING EMULSIFIED OIL COUPLED WITH BIOAUGMENTATION
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

LOCATION	MSA-MWC-01				MSA-MWC-02				MSA-MWC-03				MSA-MWC-04				MSA-IWC-01
SAMPLE ID	MSA-MWC-01-01	MSA-MWC-01-02	MSA-MWC-01-03	MSA-MWC-01-04	MSA-MWC-02-01	MSA-MWC-02-02	MSA-MWC-02-03	MSA-MWC-02-04	MSA-MWC-03-01	MSA-MWC-03-02	MSA-MWC-03-03	MSA-MWC-03-04	MSA-MWC-04-01	MSA-MWC-04-02	MSA-MWC-04-03	MSA-MWC-04-04	MSA-IWC-01-01
SAMPLE DATE	12/2/2004	2/4/2005	5/11/2005	8/16/2005	12/3/2004	2/4/2005	5/11/2005	8/16/2005	12/3/2004	2/4/2005	5/11/2005	8/3/2005	12/3/2004	2/4/2005	5/11/2005	8/11/2005	8/11/2005
Miscellaneous Parameters (mg/L)																	
AMMONIA-N (MG/L)		2.5				5.3				5.3				6.8			
AMMONIUM (MG/L)																	
BIOCHEMICAL OXYGEN DEMAND (MG/L)																	
CHLORIDE (MG/L)	81	92 M	160 M	89	160	120 M	160 M	140	140	120 M	170 M	200	200	170 M	180 M	130	43.0
DEHALOCOCCOIDES (GC/ML)								840									13 J
ORTHOPHOSPHATE (MG/L)		1 UM	1 U		1700 M	1 UM	1 U		0.81 JM	1 UM	1 U		0.67 JM	1 UM	1 U		
PHOSPHATE (MG/L)	1 U		1 U	1 U			1 U	1 U			1 U	1 U			1 U	1.0 U	7.6
TOTAL ORGANIC CARBON (MG/L)	13	200	460	168	21	39	340	139	12	270	680	360	15	27	370	127	865
OXIDATION REDUCTION POTENTIAL (MV)	108.3	-145	-98	-112	147.6	39	-200	-134	198	-71	-136	-156	-14	8	-188	-160	-191
PH	5.51	5.86	5.64	6.35	5.08	5.25	5.83	6.55	4.91	5.33	5.6	7.12	5.42	5.26	5.88	7.38	6.83
SALINITY (%)			0.2	0.2			0.1	0.2		0.2	0.2	0.4		0.2	0.2	0.4	0.2
SPECIFIC CONDUCTANCE (MS/CM)	1.876	4.09	4	4.56	2.434	3.32	2.74	4.58	1.947	4.47	3.69	7.2	2.309	4.27	3.57	6.94	3.27
TEMPERATURE (C)	12.56	12.53	14.1	14.76	13.51	11.92	14.3	14.9	12.69	11.82	15.1	15.93	13.16	11.58	14.4	16.44	16.7
TURBIDITY (NTU)	10.09	65	7.2	11	34.8	30	11	11	9.37	70	9.2	25	32.2	0.95	15	18	999 >
Beta-elimination Parameters (NG/L)																	
ACETYLENE		3200	2000	3800		820	2300	2000		500 U	2100	9500		23000	72000	160000	1600
BUTANE	190	33 J	500 U	130	66		150	32	58	720	500 U	50 U	250	480	340	300	200
ISOBUTANE	30 J		500 U	50 U	29 J		160	25 U		23 J	500 U	50 U	21 J	21 J	68	50 J	50 U
PROPANE	160	67	62	57	120	82	78	27	140	53	60	50 U	500	590	370	290	130
PROPYLENE	230	180	500 U	50 U	300	150	500 U	46	350	130	500 U	50 U	1100	920	750	590	50 U
Volatile Fatty Acids (mg/L)																	
ACETIC ACID					66600 M	14	411	303					0.769 JM	0.81	659	195	
BUTANOIC ACID					0.1 UM	1.38	3.5 U	7 U					0.1 UM	0.236	3.5 U	7.0 U	
HEXANOIC ACID					0.2 U	0.388	0.1 U	0.1 U					0.2 U	0.1 U	0.1 U	0.148	
I-HEXANOIC ACID					0.1 U	0.1 U	0.1 U	0.1 U					0.1 U	0.151	0.1 U	0.148	
I-PENTANOIC ACID					0.092	0.12	0.07 U	7 U					0.07 U	0.094	0.07 U	0.07 U	
LACTIC ACID					0.7 UM	6.4	5 U	100 U					0.7 UM	0.948	5 U	100 U	
PENTANOIC ACID					0.07 U	0.577	0.07 U	7 U					0.07 U	0.07 U	0.07 U	0.07 U	
PROPIONIC ACID					0.07 UM	9.7	3.5 U	7 U					0.07 UM	0.14	35 U	7.0 U	
PYRUVIC ACID					0.07 UM	0.07 U	3.5 U	0.07 U					0.07 UM	0.07 U	3.5 U	7.0 U	

Notes:
1. No information available for where cells are blank.
B = Found in the Method Blank
E = Estimated Value, Exceeds Calibration Range
J - estimated value
M - recovery/RPD poor for MS/MSD, sampl/dup
NA - not analyzed.
U - value not detected above reporting limit

TABLE 3-6

SUMMARY OF ANALYTICAL RESULTS
DOWNGRADIENT WELLS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-05S		
SAMPLE ID	MSA-DMW-05S-01	MSA-DMW-05S-02	MSA-DMW-05S-03
SAMPLE DATE	12/7/2004	5/12/2005	8/11/2005
VOLATILE ORGANIC COMPOUNDS			
Chlorinated Ethanes (ug/L)			
1,1,1-TRICHLOROETHANE		0.70 J	
1,1,2,2-TETRACHLOROETHANE		5 U	
1,1,2-TRICHLOROETHANE		11	
1,1-DICHLOROETHANE		0.90 J	
1,2-DIBROMOETHANE		5 U	
1,2-DICHLOROETHANE		14	
CHLOROETHANE		5 U	
ETHANE		0.25	0.19
Chlorinated Ethenes (ug/L)			
TETRACHLOROETHENE		24	
TRICHLOROETHENE		14000	
CIS-1,2-DICHLOROETHENE		2500 J	
TRANS-1,2-DICHLOROETHENE		32	
1,1-DICHLOROETHENE		9.5	
VINYL CHLORIDE		76	
ETHENE		3.6	1.9
Chlorinated Methanes (ug/L)			
BROMODICHLOROMETHANE		5 U	
BROMOFORM		5 U	
BROMOMETHANE		2.1 J	
CARBON TETRACHLORIDE		5 U	
CHLORODIBROMOMETHANE		5 U	
CHLOROFORM		2.3 J	
CHLOROMETHANE		5 U	
METHYLENE CHLORIDE		11	
BTEX (ug/L)			
BENZENE		3.1 J	
ETHYLBENZENE		3 J	
M+P-XYLENES		6.5 J	
O-XYLENE		11	
TOLUENE		10	
Miscellaneous Analytes (ug/L)			
1,2-DICHLOROBENZENE		5 U	
1,2-DICHLOROPROPANE		5 U	
1,3-DICHLOROBENZENE		5 U	
1,4-DICHLOROBENZENE		5 U	
2-CHLOROETHYL VINYL ETHER		20 U	
CHLOROBENZENE		0.50 J	
CIS-1,3-DICHLOROPROPENE		5 U	
METHYL TERT-BUTYL ETHER		5 U	
TRANS-1,3-DICHLOROPROPENE		5 U	
METALS			
Metals (ug/L)			
CADMIUM-FILTERED (UG/L)		0.0015 J	0.003
CADMIUM-TOTAL (UG/L)		0.002 J	0.0021
PHYSICAL AND GEOCHEMISTRY PARAMETERS			
Geochemistry Parameters			
DISSOLVED OXYGEN - METER (MG/L)		0.54	5.51
DISSOLVED OXYGEN - TEST KITS (MG/L)		1	0
NITRATE (MG/L)		1	1.0
NITRITE (MG/L)		0.5 U	0.50 U
IRON-FILTERED (MG/L)		12 M	10.0
IRON-TOTAL (MG/L)		12 M	10.0
FERROUS IRON (MG/L)		1.5	5.2
SULFATE - FIELD (MG/L)			
SULFATE (MG/L)		1200 M	720
SULFIDE(MG/L)		1.7 J	2.0 U
HYDROGEN SULFIDE (MG/L)		0	0
METHANE		92	79.0
ALKALINITY (MG/L)		1000 >	100 U
CARBON DIOXIDE (MG/L)		150	100 U
HYDROGEN (NM)			
Miscellaneous Parameters (mg/L)			
AMMONIA-N (MG/L)		1.8 J	2.0 U
AMMONIUM (MG/L)	1.4 J		
BIOCHEMICAL OXYGEN DEMAND (MG/L)	1.7 J	3 J	0.36 U
CHLORIDE (MG/L)		240 M	140
DEHALOCOCCOIDES (GC/ML)			
ORTHOPHOSPHATE (MG/L)		1 U	
PHOSPHATE (MG/L)		1 U	1.0 U
TOTAL ORGANIC CARBON (MG/L)		26 M	5.1
OXIDATION REDUCTION POTENTIAL (MV)		214	126
PH		4.68	4.76
SALINITY (%)		0.1	0.1
SPECIFIC CONDUCTANCE (MS/CM)		1.83	1.69
TEMPERATURE (C)		13.8	16.09
TURBIDITY (NTU)		15	15
Beta-elimination Parameters (mg/L)			
ACETYLENE		500 J	360 J
BUTANE		190	160
ISOBUTANE		53	28 J
PROPANE		84	73

Notes:
1. No information available for where cells are blank
J - estimated value
U - value not detected above reporting limit
M - recovery/RPD poor for MS/MSD, sampl/dup

TABLE 4-1

SUMMARY OF CVOC CONCENTRATION REDUCTIONS
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

Well	Trichloroethene			cis-1,2-dichloroethene			Vinyl Chloride		
	Baseline Conc. µg/L	Final Conc. µg/L	Reduction %	Baseline Conc. µg/L	Final Conc. µg/L	Reduction %	Baseline Conc. µg/L	Final Conc. µg/L	Reduction %
Test Plot A (Biostimulation Using Lactate Coupled with Bioaugmentation)									
MWA-1	64,000	21	99.97%	5,600	750	87%	130	210	-62%
MWA-2	24,000	18,000	25%	9,900	9,300	6%	100	<1000	-
MWA-3	52,000	73	99.9%	6,000	40	99%	180	20	89%
MWA-4	33,000	140	99.6%	10,000	590	94%	110	250	-127%
Total (1)	173,000	18,234	**89%**	31,500	10,680	**66%**	420	480	**-14%**
Test Plot B (Chemical Reduction using Nanoscale Zero Valent Iron)									
MWB-1	18,000	6,100	66%	23,000	37,000	-61%	460	490	-7%
MWB-2	33,000	12,000	64%	67,000	59,000	12%	380	620	-63%
MWB-3 / MW-5	28,000	1,870	93%	120,000	23,200	81%	600	131	78%
MWB-4 / DMW-7S	31,000	25,400	18%	21,000	32,000	-52%	320	336	-5%
Total (1)	110,000	45,370	**59%**	231,000	151,200	**35%**	1,760	1,577	**10%**
Test Plot C (Biostimulation Using Emulsified Vegetable Oil Coupled with Bioaugmentation)									
MWC-1	33,000	88,000	-167%	9,000	23,000	-156%	330	300	9%
MWC-2	94,000	32,000	66%	25,000	50,000	-100%	410	290	29%
MWC-3	39,000	35,000	10%	20,000	21,000	-5%	420	320	24%
MWC-4	52,000	47,000	10%	7,200	5,600	22%	91	130	-43%
Total (1)	218,000	202,000	**7%**	61,200	99,600	**-63%**	1,251	1,040	**17%**

µg/L - micrograms per liter

(1) Total concentration refers to the sum of the values for each parameter in that test plot.

Note: A negative value in the reduction column indicates a concentration increase.

APPENDIX C

MICROSEEPS

Case Narrative
Tetra Tech NUS, Incorporated

Date: January 19, 2005

Project Number:	7464127E
Project Manager:	Mr. Keith Henn/Nisha Bansal
Site Name:	Martin State Airport
Laboratory Project Manager:	Rebecca Hans
SDG:	MWB-2

Sample Name	Lab ID	Date Sampled	Date Received
MWB-2	P0412024-01	11/30/04	12/1/04
MWB-1	P0412024-02	11/30/04	12/1/04
MWB-3	P0412024-03	11/30/04	12/1/04
TB113004	P0412024-04		12/1/04

Samples in MWB-2 were received at Microseeps on December 1, 2004. COC records indicated that the samples were to be analyzed for TCL Volatiles, Phosphate, Light Hydrocarbons TOC, Anions, Sulfide, Total and Dissolved Iron and Cadmium.

Sample Receiving

All samples for SDG MWB-2 were received intact and at 4 degrees C.

Metals

Metal results are reported in mg/L rather than ug/L on all metals forms. This is due to the constraints of Microseeps' LIM system.

Form 11a was not used in the metals data package. The ICP instrument that Microseeps employs for this method does not produce the information needed for the ICP Interelement Correction Factor form.

Volatiles

The percent recovery for TCE was outside of control limits for the LCSD. The recovery for TCE in the LCS, as well as the RPD for both analyses were within limits. Therefore no further action was taken.

The surrogate Toluene-d8 was outside of control limits on samples P0412024-01 and –03 due to a matrix interference.

Wet Chemistry

The percent recoveries for Chloride, Nitrate, and Sulfate were outside of control limits for the batch MS/MSD. The unspiked concentration was greater than 10 times the spike added. The percent recoveries were also outside of control limits for Phosphate. All other QC analyses were acceptable. No further action was taken.

Risk Analysis

No anomalies were encountered.

Chain-of-Custody Forms

P0412024 2217 C

CHAIN - OF - CUSTODY RECORD

Phone: (412) 826-5245 **Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238** Fax No. : (412) 826-3433

Company : TetraTech NUS
Co. Address : Pittsburgh, PA
Proj. Manager: Nisha Bansal (916-276-7846)
Proj. Location: Martin State Airport
Proj. Number: 7464127E
Phone # : 6263514664 **Fax # :** 6263515291

Sampler's signature : [signature]

Results to :

Invoice to :

Cooler ID	Cooler Temp.
	4°C

Parameters Requested

	Sample ID	Sample Description	Date	Time	Comp.	Grab	# Cont.	VOC (40mL Clear glass)	Ortho Phosphate (L. Plastic)	Lt. hydrocarbons (40mL glass clear)	TOC (250mL plastic)	Anions (40mL Amber) Chloride, Nitrate, Nitrite, Sulfate	Sulfide (125mL plastic)	Total Iron (250 plastic)	Diss Iron (250 plastic) Not Filtered	Remarks
01	MWB-2	Monitoring Well	11/30/04	1225		X	16	4	1	2	1	2	4	1	1	
02	MWB-1	Monitoring Well	11/30/04	1500		X	16	4	1	2	1	2	4	1	1	Diss. Cadmium and Tot. Cadmium included with Diss and Tot. Iron
03	MWB-3	Monitoring Well	11/30/04	1705		X	16	4	1	2	1	2	4	1	1	Cadmium included with diss and Tot. Iron
~~04~~	~~MWB-4~~	~~Monitoring Well~~	~~11/30/04~~			~~X~~	~~16~~									~~Cadmium included with diss and Total Iron.~~
04	TB113004	Trip Blank					2	2								

Diss Iron needs to be lab filtered. No preservative in container. NOT FIELD FILTERED!
(and Cadmium)

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
[signature]	TTNUS	11/30/04	1900	[signature]	Micro	12/1/04	1405

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

MWB-2

Sample Log-In Forms

Lab Project Summary

Lab Project Num: P0412024 **Received:** 12/1/2004 **Report Due:** 12/15/2004 **Lab** 12/14/200

Client: TetraTech NUS Inc
661 Anderson Drive
Pittsburgh, PA 15220
Phone: 412-921-7090
Fax: 412-921-4040
E-mail:

Report Level: Standard QC Level 1
Quote #: Q04120001
Proj Mgr Amy Thomson

Client Project Martin State Airport

Lab Project Comment: CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format

Client Sample Name: MWB-2
Sample Number: P0412024-01A
Sample Date/Time: 11/30/2004 12:25:00PM
Sampled By:
Container Description: 1L
Container Color: Amber
Container Composition: Glass

Container Volume: 1,500.00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/11/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:

Comment CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format.

Test Pkg Name	Method	Lab	Subcontract(or)
Anions by IC	9056	Pittsburgh	None
Dissolved TAL Metals	3010/6010B	Pittsburgh	None
Phosphate/phosphorous	365.3	Pittsburgh	None
RA LHC Plus in Water	PM01G/AM20GAX	Pittsburgh	None
RA Methane in water	PM01G/AM20GAX	Pittsburgh	None
Sulfide	376.1	Pittsburgh	None
TAL Metals	3010/6010B	Pittsburgh	None
TOC	9060	Pittsburgh	None
VTCL	5030B/8260B	Pittsburgh	None

Lab Project Summary

Lab Project Num: P0412024 **Received:** 12/1/2004 **Report Due:** 12/15/2004 **Lab** 12/14/200

Client Sample Name: MWB-1
Sample Number: P0412024-02A
Sample Date/Time: 11/30/2004 3:00:00PM
Sampled By:
Container Description: 1L
Container Color: Amber
Container Composition: Glass
Container Volume: 1,500.00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/11/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:
Comment CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format.

Test Pkg Name	Method	Lab	Subcontract(or)
Anions by IC	9056	Pittsburgh	None
Dissolved TAL Metals	3010/6010B	Pittsburgh	None
Phosphate/phosphorous	365.3	Pittsburgh	None
RA LHC Plus in Water	PM01G/AM20GAX	Pittsburgh	None
RA Methane in water	PM01G/AM20GAX	Pittsburgh	None
Sulfide	376.1	Pittsburgh	None
TAL Metals	3010/6010B	Pittsburgh	None
TOC	9060	Pittsburgh	None
VTCL	5030B/8260B	Pittsburgh	None

Client Sample Name: MWB-3
Sample Number: P0412024-03A
Sample Date/Time: 11/30/2004 5:05:00PM
Sampled By:
Container Description: 1L
Container Color: Amber
Container Composition: Glass
Container Volume: 1,500.00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/11/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:
Comment CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format.

Test Pkg Name	Method	Lab	Subcontract(or)
Anions by IC	9056	Pittsburgh	None
Dissolved TAL Metals	3010/6010B	Pittsburgh	None
Phosphate/phosphorous	365.3	Pittsburgh	None
RA LHC Plus in Water	PM01G/AM20GAX	Pittsburgh	None
RA Methane in water	PM01G/AM20GAX	Pittsburgh	None
Sulfide	376.1	Pittsburgh	None
TAL Metals	3010/6010B	Pittsburgh	None
TOC	9060	Pittsburgh	None
VTCL	5030B/8260B	Pittsburgh	None

Lab Project Summary

Lab Project Num: P0412024 **Received:** 12/1/2004 **Report Due:** 12/15/2004 **Lab** 12/14/200

Client Sample Name: TB113004
Sample Number: P0412024-04A
Sample Date/Time: 11/30/2004 12:00:01AM
Sampled By:
Container Description: 125 ml
Container Color: Amber
Container Composition: Glass
Comment

Container Volume: 80 00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/11/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:

Test Pkg Name	Method	Lab	Subcontract(or)
VTCL	5030B/8260B	Pittsburgh	None

Cooler Receipt Form

Client: TetraTech NUS Inc **Client Code:** TetraTechP **LabProject #:** P0412024

Project: Martin State Airport

Cooler ID: 1

A. **Preliminary Examination Phase:** **Date cooler opened:** 12/1/2004

Cooler opened by: CW

1. **Was airbill Attached?** Yes **Airbill** 847966267405 **Carrier** FedEx
2. **Custody Seals?** Yes **How many?** 1 **Location:** cooler top **Seal** tetra
3. **Seals intact?** Yes
4. **Screened for** N/A
5. **COC Attached?** Yes **Properly Completed?** Yes **Signed by employee?** Yes
6. **Project Identification from custody paper:** Martin State Airport
7. **Preservative:** Yes **Temperature:** 4

Comments:

B. **Log-In Phase: Samples Log-in** 12/1/2004 **Log-in By:** CW

1. **Packing Type:** Bubble Wrap
2. **Were samples in separate** Yes
3. **Were containers intact?** Yes **Labels agree with COC?** Yes
4. **Number of bottles** 48 **Number of samples received:** 4
5. **Correct containers used?** Yes **Correct preservatives added?** Yes
6. **Sufficient sample volume?** Yes
7. **Bubbles in VOA samples?** No
8. **Was Project manager called and status discussed?** Yes

Comments:

Have designate person initial here to acknowledge receipt of cooler: CW Washlaski **Date:** 12/1/04

Metals Data

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil / water): Water Lab Sample ID: P0412024-01A

Level (low/med): Date Received: 12/1/2004

% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.011			P
7439-89-6	Iron	110			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2
Matrix (soil / water): Water Lab Sample ID: P0412024-01A
Level (low/med): Date Received: 12/1/2004
% Solids: Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium-dissolved	0.011			P
7439-89-6	Iron-dissolved	110			P

ColorBefore: ClarityBefore: Texture:
ColorAfter: ClarityAfter: Artifacts:

Comments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWB-1

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil / water): Water Lab Sample ID: P0412024-02A
Level (low/med): Date Received: 12/1/2004
% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.011			P
7439-89-6	Iron	84			P

ColorBefore: ClarityBefore: Texture:
ColorAfter: ClarityAfter: Artifacts:

Comments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWB-1

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2
Matrix (soil / water): Water Lab Sample ID: P0412024-02A
Level (low/med): Date Received: 12/1/2004
% Solids: Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium-dissolved	0.011			P
7439-89-6	Iron-dissolved	88			P

ColorBefore: ClarityBefore: Texture:
ColorAfter: ClarityAfter: Artifacts:

Comments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil / water): Water Lab Sample ID: P0412024-03A
Level (low/med): Date Received: 12/1/2004
% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.0069			P
7439-89-6	Iron	140			P

ColorBefore: ClarityBefore: Texture:
ColorAfter: ClarityAfter: Artifacts:

Comments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2
Matrix (soil / water): Water Lab Sample ID: P0412024-03A
Level (low/med): Date Received: 12/1/2004
% Solids:
Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium-dissolved	0.0067			P
7439-89-6	Iron-dissolved	140			P

ColorBefore: ClarityBefore: Texture:
ColorAfter: ClarityAfter: Artifacts:

Comments:

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	P
Iron	0.0015	U	0.0015	U	0.0019	B	0.0015	U	0.0020	B	P

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No : MWB-2

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium			0.0001	U							P
Iron			0.0021	B							P

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium-dissolved	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0050	U	P
Iron-dissolved	0.0015	U	0.0021	B	0.0020	B	0.0030	B	0.0061	B	P

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Iron	0.0015	U	0.0028	B	0.0024	B			0.0039	B	P

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Iron-dissolved	0.0015	U	0.0028	B	0.0024	B	0.0012	U	0.0026	B	P

MWB-2

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

ICP ID Number: EL99063568 ICS Source: SCP Sci

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Cadmium		0.9930	0.0021	0.9107	91.7			
Iron	200		216	218	109			

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

ICP ID Number: EL99063568 ICS Source: SCP Sci

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Cadmium-dissolved		0.9930	0.0021	0.9107	91.7			
Iron-dissolved	200		216	218	109			

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

ICP ID Number: EL99063568 ICS Source: SCP Sci

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Iron	200		197	201	98.5			

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

ICP ID Number: EL99063568 ICS Source: SCP Sci

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Iron-dissolved	200		197	201	98.5			

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (mg/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Cadmium	0.50	0.507	101						
Iron	5.00	5.26	105						

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (mg/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Cadmium-dissolved	0.500	0.490	98.0						
Iron-dissolved	5.00	5.02	100						

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (mg/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Iron	5.00	4.93	98.6						

MWB-2

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (mg/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Iron-dissolved	5.00	4.88	97.6						

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Method: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (ml)
PBW	12/3/04		50
LCSW	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
MWB-2	12/3/04		50
MWB-1	12/3/04		50
MWB-3	12/3/04		50

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Method: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (ml)
PBW DISS	12/3/04		50
LCSW DISS	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
MWB-2	12/3/04		50
MWB-1	12/3/04		50
MWB-3	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument ID Number: EL99063568 Method: P

Start Date: 12/7/04 End Date: 12/7/04

EPA Sample No.	D/F	Time	%R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	IL	V	ZN	CN			
BLK	1	08:20							X					X	X		X													
STD 1	1	08:23							X					X	X		X													
STD 2	1	08:26							X					X	X		X													
STD 3	1	08:29							X					X	X		X													
ICV	1	08:31							X					X	X		X													
ICB	1	08:34							X					X	X		X													
CRI	1	08:37							X								X													
ICSA	1	08:40							X						X		X													
ICSAB	1	08:43							X						X		X													
ICSA	20	08:46												X																
ICSAB	20	08:49												X																
CCV	1	08:52							X					X	X		X													
CCB	1	08:54							X					X	X		X													
CCV	1	10:01							X					X	X		X													
CCB	1	10:04							X					X	X		X													
ZZZZZZ	1	10:07							X					X	X		X													
ZZZZZZ	1	10:10							X					X	X		X													
PBW	1	10:12							X					X	X		X													
LCSW	1	10:15							X					X	X		X													
ZZZZZZ	1	10:18							X					X	X		X													
ZZZZZZ	1	10:21							X					X	X		X													
ZZZZZZ	1	10:24							X					X	X		X													
ZZZZZZ	1	10:27												X			X													
ZZZZZZ	1	10:30							X					X																
ZZZZZZ	1	10:33							X					X																
CCV	1	10:36							X					X	X		X													
CCB	1	10:38							X					X	X		X													
MWB-2	1	10:41							X																					
MWB-1	1	10:44							X					X																
MWB-3	1	10:47							X																					
ZZZZZZ	1	10:50													X															
ZZZZZZ	1	10:53													X															
ZZZZZZ	1	10:56													X															

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument ID Number: EL99063568 Method: P

Start Date: 12/7/04 End Date: 12/7/04

EPA Sample No.	D/F	Time	%R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
ZZZZZZ	1	10:59							X					X																
ZZZZZZ	1	11:02							X					X																
ZZZZZZ	1	11:05							X					X																
ZZZZZZ	1	11:07							X					X																
CCV	1	11:10							X					X	X		X													
CCB	1	11:13							X					X	X		X													
ZZZZZZ	1	11:16												X																
ZZZZZZ	1	11:19												X																
ZZZZZZ	1	11:22												X																
ZZZZZZ	1	11:25												X																
ZZZZZZ	1	11:28												X																
ZZZZZZ	1	11:31												X																
PBW DISS	1	11:34							X					X			X													
LCSW DISS	1	11:37							X					X			X													
ZZZZZZ	1	11:40															X													
ZZZZZZ	1	11:42							X					X			X													
CCV	1	11:45							X					X			X													
CCB	1	11:48							X					X			X													
ZZZZZZ	1	11:51							X					X			X													
ZZZZZZ	1	11:54							X					X			X													
ZZZZZZ	1	11:57							X					X																
ZZZZZZ	1	12:00							X					X																
MWB-2 DISS	1	12:03							X																					
MWB-1 DISS	1	12:06							X					X																
MWB-3 DISS	1	12:09							X																					
ZZZZZZ	1	12:11							X					X																
ZZZZZZ	1	12:14							X					X																
ZZZZZZ	1	12:17							X					X																
CCV	1	12:20							X					X	X		X													
CCB	1	12:23							X					X	X		X													

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument ID Number: EL99063568 Method: P

Start Date: 12/8/04 End Date: 12/8/04

EPA Sample No.	D/F	Time	%R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
BLK	1	09:59												X			X				X						
LL STD 1	1	10:02																			X						
LL STD 2	1	10:05																			X						
STD 1	1	10:08												X			X				X						
STD 2	1	10:11												X			X				X						
STD 3	1	10:14												X			X				X						
ICV	1	10:17												X			X				X						
ICB	1	10:20												X			X				X						
CRI	1	10:24															X										
ICSA	1	10:27															X				X						
ICSAB	1	10:30															X				X						
ICSA	20	10:32												X													
ICSAB	20	10:35												X													
CCV	1	10:38												X			X				X						
CCB	1	10:41												X			X				X						
PBW	1	10:44												X													
LCSW	1	10:47												X													
ZZZZZZ	1	10:50												X													
ZZZZZZ	1	10:53												X													
ZZZZZZ	1	10:55												X													
MWB-2	5	10:58												X													
MWB-3	5	11:01												X													
PBW DISS	1	11:04												X													
LCSW DISS	1	11:07												X													
MWB-2 DISS	1	11:10												X													
CCV	1	11:13												X			X				X						
CCB	1	11:15												X			X				X						
ZZZZZZ	1	11:18												X													
ZZZZZZ	1	11:21												X													
ZZZZZZ	1	11:24												X													
MWB-3 DISS	1	11:27												X													
ZZZZZZ	1	11:30												X			X										
ZZZZZZ	1	11:33												X			X										

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument ID Number: EL99063568 Method: P

Start Date: 12/8/04 End Date: 12/8/04

EPA Sample No.	D/F	Time	%R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1	11:36												X			X										
ZZZZZZ	1	11:38												X			X										
ZZZZZZ	1	11:41												X			X										
ZZZZZZ	5	11:44																									
CCV	1	11:47												X			X				X						
CCB	1	11:50												X			X				X						

12-3-04 Method: SOP-P3 Flame ACK Time: 09:20 Temp: 11:40

Sample#	Volume	Batch#
PBW	50mls	4120627
LCSW		
411582		
2		
3		
4		
5		
6		
412010-1TK		
1TK DUP		
1TK MS		
2TK		
412041-01AN		
02AN		
412022-01AA		4120803
412024-01ATM		
02ATM		
3ATM		4120627
412037-01ATK		4120803
2ATK		4120803
PBW		4120625
LCSW		
412012-02AA		
02AA DUP		
02AA MS		
412007-01AA		
2AA		
412033-01AC		
02AC		
412049-01AC		
412050-01AC		
412054-01AA		
02AA		
03AA		
04AA		4120625
PBW		4120628
LCSW		
412010-01ADL		
02ADL		
412041-01ADM		
02ADM	50mls	4120628

Sample#	Volume	Batch#
412024-01ADN	50mls	4120628
02ADN		
03ADN		
412032-01ADL		
02ADL		
412042-01ADK		
02ADK		
03ADK		
04ADK		
05ADK		
06ADK		
412010-01ADL DUP		4120628
01ADL MS		4120627
412044-1ATG		4120628
412022-01ADA		4120802
PBW		
LCSW		
412002-01ADD		
1ADD DUP		
1ADD MS		
412035-01ADB		
02ADB		
412040-01ADE		4120802
PBW		4120803
LCSW		
412042-01ATJ		
2ATJ		
3ATJ		
4ATJ		
5ATJ		
6ATJ		
1ATJ DUP		
1ATJ MS	50mls	4120803

2-6-04 Method: SOP-B5 Flame AA Time: 09.15 Temp:

Sample#	Volume	Batch#
PBLO	50mls	
LCSW		
412066-01F:		4120602
2F:		4120602
412063-1C:		4120602S
412057-1A:		
412080-1C:		
412081-1C:		
412082-1C:		
412076-SB:		
412064-1A:		4120602S
412077-2M:		4120602
3M:		
4M:		
SM:		4120602
412063-1BD		4208002
412082-1BD		4208002
412077-2ND:		4120602S
3ND:		
4ND:		
SND:		4120602S
412077-1B		4120800 3
2B		
3B		
4B		
SB		4120800 3
PBW		4120800 4
LCSW		
12067-1D		
2D		
3D		
4D		
SD		
6D		
7D		
2074-1ND		
2ND		
3ND		
2090-1LD		

Sample#	Volume	Batch#
PBLO	50mls	4120800S
LCSW Furn		
LCSW Furn Rep		
412077-3B		
SB	50mls	4120800S

ANALYST: ARK FILE: ICP120704

12/7/2004 8:18:29 AM	Analysis started.
12/7/2004 8:20:28 AM	Measured Blank
12/7/2004 8:23:20 AM	Measured Standard 1(I2-121-6)
12/7/2004 8:26:11 AM	Measured Standard 2(I2-121-5)
12/7/2004 8:29:02 AM	Measured Standard 3(I2-121-4)
12/7/2004 8:31:53 AM	Measured Initial Calib Verif(I2-121-8)
12/7/2004 8:34:45 AM	Measured Initial Calib Blank
12/7/2004 8:37:40 AM	Measured CRI(I2-121-9)
12/7/2004 8:40:31 AM	Measured Interf Check A(I2-120-9)
12/7/2004 8:43:23 AM	Measured Interf Check AB(I2-121-1)
12/7/2004 8:46:15 AM	Measured ICSA 1/20
12/7/2004 8:49:07 AM	Measured ICSAB 1/20
12/7/2004 8:52:00 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 8:54:52 AM	Measured Cont Calib Blank
12/7/2004 8:57:44 AM	Measured PBW
12/7/2004 9:00:37 AM	Measured LCS-W(I2-102-2)
12/7/2004 9:03:29 AM	Measured P0412012-02A
12/7/2004 9:06:22 AM	Measured P0412012-02A - DUP
12/7/2004 9:09:14 AM	Measured P0412012-02A - MSPK(I2-107-5)
12/7/2004 9:12:07 AM	Measured P0412049-01A
12/7/2004 9:14:59 AM	Measured P0412050-01A
12/7/2004 9:17:53 AM	Measured P0412057-01A
12/7/2004 9:20:45 AM	Measured P0412080-01A
12/7/2004 9:23:53 AM	Measured P0412081-01A
12/7/2004 9:26:44 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 9:29:36 AM	Measured Cont Calib Blank
12/7/2004 9:32:28 AM	Measured P0412082-01A
12/7/2004 9:35:20 AM	Measured P0412007-01A
12/7/2004 9:38:12 AM	Measured P0412007-02A
12/7/2004 9:41:05 AM	Measured P0412033-01A
12/7/2004 9:44:02 AM	Measured P0412033-02A
12/7/2004 9:46:58 AM	Measured P0412054-01A
12/7/2004 9:49:49 AM	Measured P0412054-02A
12/7/2004 9:52:40 AM	Measured P0412054-03A
12/7/2004 9:55:33 AM	Measured P0412054-04A
12/7/2004 9:58:26 AM	Measured P0412076-05A
12/7/2004 10:01:20 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 10:04:13 AM	Measured Cont Calib Blank
12/7/2004 10:07:07 AM	Measured P0412063-01A
12/7/2004 10:10:00 AM	Measured P0412064-01A
12/7/2004 10:12:53 AM	Measured PBW
12/7/2004 10:15:46 AM	Measured LCS-W(I2-102-2)
12/7/2004 10:18:38 AM	Measured P0412010-01T
12/7/2004 10:21:33 AM	Measured P0412010-01T - DUP
12/7/2004 10:24:27 AM	Measured P0412010-01T - MSPK(I2-107-5)
12/7/2004 10:27:21 AM	Measured P0412010-02T
12/7/2004 10:30:15 AM	Measured P0412041-01T
12/7/2004 10:33:08 AM	Measured P0412041-02T
12/7/2004 10:36:03 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 10:38:58 AM	Measured Cont Calib Blank
12/7/2004 10:41:53 AM	Measured P0412024-01T
12/7/2004 10:44:48 AM	Measured P0412024-02T
12/7/2004 10:47:40 AM	Measured P0412024-03T
12/7/2004 10:50:33 AM	Measured P0412044-01T
12/7/2004 10:53:28 AM	Measured P0412066-01A

12/7/2004 10:56:23 AM	Measured P0412066-02A
12/7/2004 10:59:18 AM	Measured P0412077-02A
12/7/2004 11:02:12 AM	Measured P0412077-03A
12/7/2004 11:05:06 AM	Measured P0412077-04A
12/7/2004 11:07:59 AM	Measured P0412077-05A
12/7/2004 11:10:54 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 11:13:48 AM	Measured Cont Calib Blank
12/7/2004 11:16:44 AM	Measured P0411587-01A
12/7/2004 11:19:37 AM	Measured P0411587-02A
12/7/2004 11:22:33 AM	Measured P0411587-03A
12/7/2004 11:25:25 AM	Measured P0411587-04A
12/7/2004 11:28:33 AM	Measured P0411587-05A
12/7/2004 11:31:26 AM	Measured P0411587-06A
12/7/2004 11:34:18 AM	Measured PBW
12/7/2004 11:37:11 AM	Measured LCS-W(I2-102-2)
12/7/2004 11:40:04 AM	Measured P0412010-02D
12/7/2004 11:42:58 AM	Measured P0412010-01D
12/7/2004 11:45:55 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 11:48:49 AM	Measured Cont Calib Blank
12/7/2004 11:51:44 AM	Measured P0412010-01D - DUP
12/7/2004 11:54:37 AM	Measured P0412010-01D - MSPK(I2-107-5)
12/7/2004 11:57:30 AM	Measured P0412041-01D
12/7/2004 12:00:23 PM	Measured P0412041-02D
12/7/2004 12:03:15 PM	Measured P0412024-01D
12/7/2004 12:06:08 PM	Measured P0412024-02D
12/7/2004 12:09:00 PM	Measured P0412024-03D
12/7/2004 12:11:54 PM	Measured P0412077-02D
12/7/2004 12:14:48 PM	Measured P0412077-03D
12/7/2004 12:17:42 PM	Measured P0412077-04D
12/7/2004 12:20:36 PM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 12:23:30 PM	Measured Cont Calib Blank
12/7/2004 12:26:24 PM	Measured P0412077-05D
12/7/2004 12:29:17 PM	Measured P0412022-01D
12/7/2004 12:32:10 PM	Measured P0412037-01D
12/7/2004 12:35:04 PM	Measured P0412037-02D
12/7/2004 12:37:58 PM	Measured P0412042-01D
12/7/2004 12:40:53 PM	Measured P0412042-02D
12/7/2004 12:43:47 PM	Measured P0412042-03D
12/7/2004 12:46:41 PM	Measured P0412042-04D
12/7/2004 12:49:35 PM	Measured P0412042-05D
12/7/2004 12:52:29 PM	Measured P0412042-06D
12/7/2004 12:55:23 PM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 12:58:17 PM	Measured Cont Calib Blank
12/7/2004 12:59:35 PM	Analysis stopped by user.

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Blank (Blk) **12/7/2004, 8:20:28 AM** **Rack 2, Tube 1**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	0.0000	ppm	1.597	90.3	1.770
Fe 261.187	0.0000	ppm	4.843	12.8	37.76
Mn 257.610	0.0000	ppm	2.635	3.6	72.47
Pb 220.353	0.0000	ppm	1.906	27.1	7.024

Standard 1 (Std) **12/7/2004, 8:23:20 AM** **Rack 2, Tube 2**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	0.2500	ppm	10.505	0.2	5904
Fe 261.187	5.000	ppm	334.673	0.5	69269
Mn 257.610	0.6000	ppm	628.001	0.5	136307
Pb 220.353	0.2500	ppm	3.167	0.9	371.8

Standard 2 (Std) **12/7/2004, 8:26:11 AM** **Rack 2, Tube 3**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	1.250	ppm	217.299	0.8	28382
Fe 261.187	25.00	ppm	3036.185	0.9	334132
Mn 257.610	3.000	ppm	3387.777	0.5	657778
Pb 220.353	1.250	ppm	11.944	0.7	1802

Standard 3 (Std) **12/7/2004, 8:29:02 AM** **Rack 2, Tube 4**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	2.500	ppm	82.866	0.2	54710
Fe 261.187	50.00	ppm	1800.540	0.3	630388
Mn 257.610	6.000	ppm	2208.623	0.2	1268680
Pb 220.353	2.500	ppm	12.894	0.4	3457

Cd 214.439 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999809**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		1.770	0.0000	0.0000	-	-
Standard 1		5904	0.2500	0.2618	0.0118	4.7
Standard 2		28382	1.250	1.259	0.0086	0.7
Standard 3		54710	2.500	2.426	-0.0738	-3.0

Curve Type: Linear Equation: y = 22548.8 x + 1.76956

Fe 261.187 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999516**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		37.76	0.0000	0.0000	-	-
Standard 1		69269	5.000	5.360	0.3603	7.2
Standard 2		334132	25.00	25.87	0.8672	3.5
Standard 3		630388	50.00	48.80	-1.195	-2.4

Curve Type: Linear Equation: y = 12915.8 x + 37.758

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Mn 257.610 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999816**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		72.47	0.0000	0.0000	-	-
Standard 1		136307	0.6000	0.6376	0.0376	6.3
Standard 2		657778	3.000	3.078	0.0780	2.6
Standard 3		1268680	6.000	5.937	-0.0630	-1.1

Curve Type: Linear Equation: y = 213680 x + 72.4732

Pb 220.353 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999775**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		7.024	0.0000	0.0000	-	-
Standard 1		371.8	0.2500	0.2605	0.0105	4.2
Standard 2		1802	1.250	1.282	0.0322	2.6
Standard 3		3457	2.500	2.464	-0.0362	-1.4

Curve Type: Linear Equation: y = 1400.26 x + 7.02428

Initial Calib Verif (ICV) **12/7/2004, 8:31:53 AM** **Rack 2, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5172	ppm	0.0056	1.1	11664	103.4
Fe 261.187	1.065	ppm	0.0060	0.6	13790	106.5
Mn 257.610	1.058	ppm	0.0050	0.5	226175	105.8
Pb 220.353	1.061	ppm	0.0074	0.7	1492	106.1

Initial Calib Blank (ICB) **12/7/2004, 8:34:45 AM** **Rack 2, Tube 6**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	17.1	4.950	-
Fe 261.187	0.0015	ppm	0.0003	20.5	56.77	-
Mn 257.610	0.0000uv	ppm	0.0000	765.4	73.65	-
Pb 220.353	-0.0023uv	ppm	0.0003	11.9	3.754	-

CRI (CRI) **12/7/2004, 8:37:40 AM** **Rack 2, Tube 7**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0107	ppm	0.0000	0.2	243.1	107.0
Fe 261.187	0.0006	ppm	0.0003	42.2	45.54	-
Mn 257.610	0.0330	ppm	0.0001	0.4	7120	110.0
Pb 220.353	-0.0012uv	ppm	0.0028	231.0	5.297	-

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Interf Check A (ICSA) **12/7/2004, 8:40:31 AM** **Rack 2, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0021	ppm	0.0002	11.5	48.37	-
Fe 261.187	181.2x	ppm	0.7506	0.4	2340351	-
Mn 257.610	0.0096	ppm	0.0001	1.2	2123	-
Pb 220.353	0.0177	ppm	0.0034	19.0	31.82	-

Interf Check AB (ICSAB) **12/7/2004, 8:43:23 AM** **Rack 2, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.9107	ppm	0.0099	1.1	20536	91.1 -
Fe 261.187	179.9x	ppm	0.3053	0.2	2323328	
Mn 257.610	0.4822	ppm	0.0005	0.1	103108	96.4 -
Pb 220.353	0.9222	ppm	0.0023	0.2	1298	92.2 -

ICSA 1/20 (Samp) **12/7/2004, 8:46:15 AM** **Rack 1, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	-0.0001uv	ppm	0.0001	80.7	0.1897
Fe 261.187	10.78	ppm	0.0449	0.4	139267
Mn 257.610	0.0004	ppm	0.0000	3.0	156.1
Pb 220.353	-0.0025uv	ppm	0.0009	37.1	3.573

ICSAB 1/20 (Samp) **12/7/2004, 8:49:07 AM** **Rack 1, Tube 2**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0533	ppm	0.0004	0.7	1204
Fe 261.187	10.90	ppm	0.0934	0.9	140780
Mn 257.610	0.0272	ppm	0.0002	0.8	5880
Pb 220.353	0.0521	ppm	0.0019	3.6	79.93

Cont Calib Verif (CCV) **12/7/2004, 8:52:00 AM** **Rack 1, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6549	ppm	0.0106	1.6	14770	104.8 -
Fe 261.187	13.28	ppm	0.3155	2.4	171577	106.2 -
Mn 257.610	1.612	ppm	0.0394	2.4	344599	107.9 -
Pb 220.353	0.6599	ppm	0.0123	1.9	931.1	105.6 -

Cont Calib Blank (CCB) **12/7/2004, 8:54:52 AM** **Rack 1, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	59.3	3.309	-
Fe 261.187	0.0015	ppm	0.0004	29.9	57.19	-
Mn 257.610	-0.0000uv	ppm	0.0000	28.5	64.90	-

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Pb 220.353	-0.0018uv	ppm	0.0009	50.4	4.477	-

Cont Calib Verif (CCV) **12/7/2004, 10:01:20 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6307	ppm	0.0029	0.5	14222	100.9 -
Fe 261.187	13.02	ppm	0.0495	0.4	168160	104.2 -
Mn 257.610	1.595	ppm	0.0062	0.4	340925	106.3 -
Pb 220.353	0.6389	ppm	0.0034	0.5	901.7	102.2 -

Cont Calib Blank (CCB) **12/7/2004, 10:04:13 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001uv	ppm	0.0001	116.9	3.993	-
Fe 261.187	0.0019	ppm	0.0009	48.7	62.93	-
Mn 257.610	0.0000	ppm	0.0000	104.7	80.08	-
Pb 220.353	-0.0013uv	ppm	0.0015	121.3	5.253	-

PBW (PBLK) **12/7/2004, 10:12:53 AM** **Rack 3, Tube 15**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001uv	ppm	0.0001	102.4	3.616	-
Fe 261.187	0.0020	ppm	0.0005	25.0	63.91	-
Mn 257.610	-0.0000uv	ppm	0.0000	124.3	67.93	-
Pb 220.353	-0.0016uv	ppm	0.0008	50.6	4.843	-

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LCS-W (LCS) **12/7/2004, 10:15:46 AM** **Rack 3, Tube 16**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5071	ppm	0.0017	0.3	11437	101.4 -
Fe 261.187	5.256	ppm	0.0164	0.3	67924	105.1 -
Mn 257.610	2.571	ppm	0.0048	0.2	549363	102.8 -
Pb 220.353	0.5009	ppm	0.0027	0.5	708.4	100.2 -

P0412010-01T (Samp) **12/7/2004, 10:18:38 AM** **Rack 3, Tube 17**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0004	ppm	0.0001	26.8	10.30
Fe 261.187	24.59	ppm	0.0821	0.3	317653
Mn 257.610	0.6932	ppm	0.0022	0.3	148187
Pb 220.353	0.3878	ppm	0.0034	0.9	550.1

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P0412010-01T - DUP (DUP) 12/7/2004, 10:21:33 AM Rack 3, Tube 18
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0002	ppm	0.0001	68.8	5.991	-*
Fe 261.187	24.43	ppm	0.1255	0.5	315599	-
Mn 257.610	0.6882	ppm	0.0033	0.5	147131	-
Pb 220.353	0.3854	ppm	0.0010	0.3	546.7	-

P0412010-01T - MSPK (MSPK) 12/7/2004, 10:24:27 AM Rack 3, Tube 19
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0485	ppm	0.0002	0.4	1096	96.2 -
Fe 261.187	25.38	ppm	0.0889	0.4	327791	99.0 -
Mn 257.610	1.203	ppm	0.0042	0.3	257135	102.0 -
Pb 220.353	0.8850	ppm	0.0069	0.8	1246	99.4 -

P0412010-02T (Samp) 12/7/2004, 10:27:21 AM Rack 3, Tube 20
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0003	ppm	0.0001	28.2	9.041
Fe 261.187	22.88	ppm	0.0510	0.2	295581
Mn 257.610	0.6226	ppm	0.0018	0.3	133119
Pb 220.353	-0.0000uv	ppm	0.0010	7204.6	7.005

P0412041-01T (Samp) 12/7/2004, 10:30:15 AM Rack 3, Tube 21
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0131	ppm	0.0002	1.4	296.1
Fe 261.187	47.64	ppm	0.0640	0.1	615324
Mn 257.610	15.71x	ppm	0.0270	0.2	3356739
Pb 220.353	0.0197	ppm	0.0010	5.0	34.60

P0412041-02T (Samp) 12/7/2004, 10:33:08 AM Rack 3, Tube 22
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0321	ppm	0.0001	0.2	726.3
Fe 261.187	41.57	ppm	0.1723	0.4	536925
Mn 257.610	16.14x	ppm	0.0475	0.3	3449306
Pb 220.353	0.0131	ppm	0.0032	24.6	25.35

Cont Calib Verif (CCV) 12/7/2004, 10:36:03 AM Rack 2, Tube 10
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6107	ppm	0.0042	0.7	13772	97.7 -
Fe 261.187	12.64	ppm	0.0678	0.5	163344	101.1 -
Mn 257.610	1.557	ppm	0.0068	0.4	332788	103.8 -

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Pb 220.353	0.6178	ppm	0.0068	1.1	872.1	97.8

Cont Calib Blank (CCB) **12/7/2004, 10:38:58 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	54.2	3.689	-
Fe 261.187	0.0015	ppm	0.0002	15.8	57.77	-
Mn 257.610	-0.0000uv	ppm	0.0000	861.7	71.57	-
Pb 220.353	-0.0012uv	ppm	0.0013	109.3	5.312	-

P0412024-01T (Samp) **12/7/2004, 10:41:53 AM** **Rack 3, Tube 23**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0108	ppm	0.0002	1.7	245.5
Fe 261.187	123.9x	ppm	0.6602	0.5	1599864
Mn 257.610	23.05x	ppm	0.1064	0.5	4925836
Pb 220.353	0.0246	ppm	0.0024	9.8	41.53

P0412024-02T (Samp) **12/7/2004, 10:44:48 AM** **Rack 3, Tube 24**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0107	ppm	0.0001	0.9	242.8
Fe 261.187	84.07	ppm	0.2907	0.3	1085818
Mn 257.610	13.55x	ppm	0.0243	0.2	2895115
Pb 220.353	0.0169	ppm	0.0023	13.7	30.63

P0412024-03T (Samp) **12/7/2004, 10:47:40 AM** **Rack 3, Tube 25**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0069	ppm	0.0001	2.1	157.2
Fe 261.187	174.5x	ppm	0.8062	0.5	2254104
Mn 257.610	28.65x	ppm	0.0635	0.2	6122326
Pb 220.353	0.0450	ppm	0.0020	4.5	70.08

P0412044-01T (Samp) **12/7/2004, 10:50:33 AM** **Rack 3, Tube 26**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	41.7	6.729
Fe 261.187	9.082	ppm	0.0304	0.3	117336
Mn 257.610	0.0437	ppm	0.0002	0.4	9418
Pb 220.353	0.0140	ppm	0.0019	13.4	26.58

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P0412066-01A (Samp) **12/7/2004, 10:53:28 AM** **Rack 3, Tube 27**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0023	ppm	0.0005	22.2	53.66
Fe 261.187	196.5x	ppm	1.159	0.6	2538113
Mn 257.610	1.251	ppm	0.0066	0.5	267394
Pb 220.353	0.3516	ppm	0.0045	1.3	499.4

P0412066-02A (Samp) **12/7/2004, 10:56:23 AM** **Rack 3, Tube 28**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0031	ppm	0.0003	10.8	70.77
Fe 261.187	253.0x	ppm	0.1243	0.0	3267483
Mn 257.610	0.2695	ppm	0.0002	0.1	57666
Pb 220.353	0.2020	ppm	0.0054	2.7	289.9

P0412077-02A (Samp) **12/7/2004, 10:59:18 AM** **Rack 3, Tube 29**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0221	ppm	0.0001	0.3	499.4
Fe 261.187	7.752	ppm	0.0132	0.2	100156
Mn 257.610	12.89x	ppm	0.0273	0.2	2754059
Pb 220.353	0.0116	ppm	0.0016	13.8	23.26

P0412077-03A (Samp) **12/7/2004, 11:02:12 AM** **Rack 3, Tube 30**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0134	ppm	0.0001	0.8	304.1
Fe 261.187	19.84	ppm	0.0588	0.3	256262
Mn 257.610	12.17x	ppm	0.0674	0.6	2599689
Pb 220.353	0.0094	ppm	0.0018	19.2	20.23

P0412077-04A (Samp) **12/7/2004, 11:05:06 AM** **Rack 3, Tube 31**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0237	ppm	0.0003	1.3	537.0
Fe 261.187	81.66	ppm	0.1723	0.2	1054685
Mn 257.610	12.61x	ppm	0.0468	0.4	2693596
Pb 220.353	0.0186	ppm	0.0020	10.7	33.04

P0412077-05A (Samp) **12/7/2004, 11:07:59 AM** **Rack 3, Tube 32**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0016	ppm	0.0006	37.2	38.22
Fe 261.187	55.91	ppm	0.1819	0.3	722174
Mn 257.610	4.863	ppm	0.0190	0.4	1039187

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	0.0078	ppm	0.0011	13.8	18.00

Cont Calib Verif (CCV) **12/7/2004, 11:10:54 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6111	ppm	0.0021	0.3	13780	97.8 -
Fe 261.187	12.74	ppm	0.0117	0.1	164542	101.9 -
Mn 257.610	1.568	ppm	0.0026	0.2	335204	104.5 -
Pb 220.353	0.6208	ppm	0.0015	0.2	876.4	99.3 -

Cont Calib Blank (CCB) **12/7/2004, 11:13:48 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0001	81.9	3.447	-
Fe 261.187	0.0021	ppm	0.0004	17.8	64.77	-
Mn 257.610	-0.0000uv	ppm	0.0000	745.0	71.11	-
Pb 220.353	-0.0016uv	ppm	0.0017	101.8	4.752	-

P0411587-01A (Samp) **12/7/2004, 11:16:44 AM** **Rack 3, Tube 33**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	105.2	3.456
Fe 261.187	2.207	ppm	0.0066	0.3	28544
Mn 257.610	0.0042	ppm	0.0000	0.4	968.3
Pb 220.353	0.0011uv	ppm	0.0021	186.2	8.566

P0411587-02A (Samp) **12/7/2004, 11:19:37 AM** **Rack 3, Tube 34**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	63.8	3.693
Fe 261.187	3.017	ppm	0.0238	0.8	39002
Mn 257.610	0.0037	ppm	0.0001	1.3	873.3
Pb 220.353	0.0007	ppm	0.0001	10.6	7.935

P0411587-03A (Samp) **12/7/2004, 11:22:33 AM** **Rack 3, Tube 35**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	58.8	3.885
Fe 261.187	1.592	ppm	0.0085	0.5	20595
Mn 257.610	0.0094	ppm	0.0001	0.7	2087
Pb 220.353	0.0025	ppm	0.0009	35.3	10.50

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ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

P0411587-04A (Samp) **12/7/2004, 11:25:25 AM** **Rack 3, Tube 36**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	75.7	6.145
Fe 261.187	0.4276	ppm	0.0032	0.7	5560
Mn 257.610	0.0035	ppm	0.0001	1.8	824.2
Pb 220.353	0.0010uv	ppm	0.0009	90.5	8.426

P0411587-05A (Samp) **12/7/2004, 11:28:33 AM** **Rack 3, Tube 37**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	83.7	5.573
Fe 261.187	24.21	ppm	0.1311	0.5	312700
Mn 257.610	0.0616	ppm	0.0003	0.5	13241
Pb 220.353	0.0002uv	ppm	0.0009	582.7	7.245

P0411587-06A (Samp) **12/7/2004, 11:31:26 AM** **Rack 3, Tube 38**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	-0.0001uv	ppm	0.0001	91.5	-0.1624
Fe 261.187	16.12	ppm	0.0539	0.3	208186
Mn 257.610	0.0102	ppm	0.0000	0.3	2260
Pb 220.353	-0.0006uv	ppm	0.0017	267.8	6.115

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PBW (PBLK) **12/7/2004, 11:34:18 AM** **Rack 3, Tube 39**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value	
Cd 214.439	0.0000uv	ppm	0.0001	379.4	2.072		-
Fe 261.187	0.0061	ppm	0.0003	5.4	116.2		-
Mn 257.610	0.0000uv	ppm	0.0000	193.1	76.79		-
Pb 220.353	-0.0022uv	ppm	0.0016	71.8	3.982		-

LCS-W (LCS) **12/7/2004, 11:37:11 AM** **Rack 3, Tube 40**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value	
Cd 214.439	0.4899	ppm	0.0004	0.1	11049	98.0	-
Fe 261.187	5.024	ppm	0.0135	0.3	64932	100.5	-
Mn 257.610	2.480	ppm	0.0031	0.1	529915	99.2	-
Pb 220.353	0.4821	ppm	0.0010	0.2	682.1	96.4	-

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P0412010-02D (Samp) **12/7/2004, 11:40:04 AM** **Rack 3, Tube 41**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	42.8	5.164
Fe 261.187	21.91	ppm	0.1378	0.6	283009
Mn 257.610	0.6151	ppm	0.0031	0.5	131508

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	0.0008uv	ppm	0.0024	318.4	8.095

P0412010-01D (Samp) **12/7/2004, 11:42:58 AM** **Rack 3, Tube 42**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	23.5	3.020
Fe 261.187	21.31	ppm	0.0746	0.4	275334
Mn 257.610	0.6846	ppm	0.0016	0.2	146360
Pb 220.353	0.4346	ppm	0.0050	1.2	615.5

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Cont Calib Verif (CCV) **12/7/2004, 11:45:55 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6058	ppm	0.0035	0.6	13663	96.9 -
Fe 261.187	12.61	ppm	0.0626	0.5	162965	100.1 -
Mn 257.610	1.563	ppm	0.0071	0.5	334147	104.2 -
Pb 220.353	0.6169	ppm	0.0037	0.6	870.8	98.5 -

Cont Calib Blank (CCB) **12/7/2004, 11:48:49 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0001	85.6	3.679	-
Fe 261.187	0.0020	ppm	0.0002	8.1	63.37	-
Mn 257.610	-0.0000uv	ppm	0.0000	598.8	71.34	-
Pb 220.353	-0.0025uv	ppm	0.0010	40.5	3.540	-

P0412010-01D - DUP (DUP) **12/7/2004, 11:51:44 AM** **Rack 3, Tube 43**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0004	ppm	0.0001	21.9	10.40	-*
Fe 261.187	21.39	ppm	0.0071	0.0	276317	-
Mn 257.610	0.6874	ppm	0.0007	0.1	146946	-
Pb 220.353	0.4364	ppm	0.0019	0.4	618.1	-

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P0412010-01D - MSPK (MSPK) **12/7/2004, 11:54:37 AM** **Rack 3, Tube 44**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0474	ppm	0.0003	0.6	1070	94.6 -
Fe 261.187	22.30	ppm	0.0619	0.3	288099	99.0 -
Mn 257.610	1.195	ppm	0.0029	0.2	255371	102.1 -
Pb 220.353	0.9253	ppm	0.0008	0.1	1303	98.1 -

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

4120628

P0412041-01D (Samp) 12/7/2004, 11:57:30 AM Rack 3, Tube 45
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0134	ppm	0.0001	0.9	304.5
Fe 261.187	50.48	ppm	0.0581	0.1	652054
Mn 257.610	16.75x	ppm	0.0248	0.1	3578507
Pb 220.353	0.0189	ppm	0.0006	3.4	33.46

P0412041-02D (Samp) 12/7/2004, 12:00:23 PM Rack 3, Tube 46
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0310	ppm	0.0009	2.8	700.2
Fe 261.187	42.12	ppm	1.026	2.4	544028
Mn 257.610	16.30x	ppm	0.3855	2.4	3483912
Pb 220.353	0.0168	ppm	0.0010	6.1	30.49

P0412024-01D (Samp) 12/7/2004, 12:03:15 PM Rack 3, Tube 47
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0106	ppm	0.0000	0.4	240.1
Fe 261.187	121.5x	ppm	0.1803	0.1	1569831
Mn 257.610	22.99x	ppm	0.0473	0.2	4913516
Pb 220.353	0.0269	ppm	0.0034	12.8	44.65

P0412024-02D (Samp) 12/7/2004, 12:06:08 PM Rack 3, Tube 48
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0109	ppm	0.0002	2.1	248.7
Fe 261.187	87.50	ppm	0.1736	0.2	1130141
Mn 257.610	14.20x	ppm	0.0230	0.2	3035024
Pb 220.353	0.0168	ppm	0.0025	15.0	30.53

P0412024-03D (Samp) 12/7/2004, 12:09:00 PM Rack 3, Tube 49
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0067	ppm	0.0001	1.4	153.4
Fe 261.187	182.4x	ppm	0.5599	0.3	2355763
Mn 257.610	30.33x	ppm	0.0429	0.1	6481053
Pb 220.353	0.0461	ppm	0.0041	8.8	71.61

P0412077-02D (Samp) 12/7/2004, 12:11:54 PM Rack 3, Tube 50
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0224	ppm	0.0002	0.7	506.4
Fe 261.187	7.817	ppm	0.0347	0.4	101001
Mn 257.610	13.06x	ppm	0.0688	0.5	2791446

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	0.0081	ppm	0.0013	15.9	18.33

P0412077-03D (Samp) **12/7/2004, 12:14:48 PM** **Rack 3, Tube 51**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0133	ppm	0.0000	0.2	302.4
Fe 261.187	20.25	ppm	0.0178	0.1	261530
Mn 257.610	12.29x	ppm	0.0523	0.4	2625840
Pb 220.353	0.0096	ppm	0.0005	4.9	20.49

4/20/6028 J

P0412077-04D (Samp) **12/7/2004, 12:17:42 PM** **Rack 3, Tube 52**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0231	ppm	0.0001	0.2	523.5
Fe 261.187	79.54	ppm	0.2843	0.4	1027345
Mn 257.610	12.48x	ppm	0.0403	0.3	2666137
Pb 220.353	0.0182	ppm	0.0028	15.3	32.57

J

Cont Calib Verif (CCV) **12/7/2004, 12:20:36 PM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5972	ppm	0.0022	0.4	13467	95.6 -
Fe 261.187	12.48	ppm	0.0439	0.4	161220	99.8 -
Mn 257.610	1.546	ppm	0.0072	0.5	330445	103.1 -
Pb 220.353	0.6114	ppm	0.0055	0.9	863.1	97.8 -

Cont Calib Blank (CCB) **12/7/2004, 12:23:30 PM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	48.2	3.028	-
Fe 261.187	0.0030	ppm	0.0006	20.0	76.61	-
Mn 257.610	0.0002	ppm	0.0000	16.6	118.7	-
Pb 220.353	-0.0030uv	ppm	0.0006	20.2	2.869	-

P0412077-05D (Samp) **12/7/2004, 12:26:24 PM** **Rack 3, Tube 53**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0015	ppm	0.0004	25.6	36.44
Fe 261.187	53.95	ppm	0.4048	0.8	696821
Mn 257.610	4.739	ppm	0.0344	0.7	1012625
Pb 220.353	0.0041	ppm	0.0019	45.2	12.81

4/20/6028 J

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

4120628

P0412022-01D (Samp) 12/7/2004, 12:29:17 PM Rack 3, Tube 54
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	-0.0000uv	ppm	0.0001	3848.4	1.739
Fe 261.187	0.0427	ppm	0.0014	3.2	589.2
Mn 257.610	0.7984	ppm	0.0085	1.1	170679
Pb 220.353	-0.0009uv	ppm	0.0005	52.7	5.772

P0412037-01D (Samp) 12/7/2004, 12:32:10 PM Rack 3, Tube 55
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0010	ppm	0.0006	62.7	24.90
Fe 261.187	45.35	ppm	0.4254	0.9	585800
Mn 257.610	0.7293	ppm	0.0079	1.1	155911
Pb 220.353	0.0080	ppm	0.0007	8.2	18.26

P0412037-02D (Samp) 12/7/2004, 12:35:04 PM Rack 3, Tube 56
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	57.7	3.681
Fe 261.187	0.0307	ppm	0.0005	1.7	433.8
Mn 257.610	0.0543	ppm	0.0009	1.6	11673
Pb 220.353	0.0590	ppm	0.0008	1.4	89.62

P0412042-01D (Samp) 12/7/2004, 12:37:58 PM Rack 3, Tube 57
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	52.2	3.739
Fe 261.187	7.196	ppm	0.0272	0.4	92979
Mn 257.610	0.7796	ppm	0.0022	0.3	166661
Pb 220.353	0.0005uv	ppm	0.0034	716.4	7.681

P0412042-02D (Samp) 12/7/2004, 12:40:53 PM Rack 3, Tube 58
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	19.8	3.353
Fe 261.187	0.0150	ppm	0.0005	3.6	230.9
Mn 257.610	0.0040	ppm	0.0000	0.3	933.6
Pb 220.353	-0.0009uv	ppm	0.0019	211.4	5.776

P0412042-03D (Samp) 12/7/2004, 12:43:47 PM Rack 3, Tube 59
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	4.7	5.021
Fe 261.187	0.0187	ppm	0.0002	1.1	278.8
Mn 257.610	0.0037	ppm	0.0001	1.9	859.4

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	-0.0008uv	ppm	0.0027	336.5	5.921

P0412042-04D (Samp) 12/7/2004, 12:46:41 PM Rack 3, Tube 60
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001uv	ppm	0.0001	91.6	3.597
Fe 261.187	2.325	ppm	0.0096	0.4	30071
Mn 257.610	0.1347	ppm	0.0007	0.5	28856
Pb 220.353	0.0001uv	ppm	0.0010	920.6	7.183

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P0412042-05D (Samp) 12/7/2004, 12:49:35 PM Rack 1, Tube 1
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	97.7	4.353
Fe 261.187	6.950	ppm	0.0219	0.3	89805
Mn 257.610	0.3719	ppm	0.0011	0.3	79547
Pb 220.353	0.0019uv	ppm	0.0018	94.3	9.745

P0412042-06D (Samp) 12/7/2004, 12:52:29 PM Rack 1, Tube 2
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0000	ppm	0.0000	64.7	2.838
Fe 261.187	0.3454	ppm	0.0011	0.3	4499
Mn 257.610	0.3677	ppm	0.0032	0.9	78634
Pb 220.353	-0.0025uv	ppm	0.0008	33.8	3.548

Cont Calib Verif (CCV) 12/7/2004, 12:55:23 PM Rack 2, Tube 10
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5853	ppm	0.0028	0.5	13200	93.6 -
Fe 261.187	12.27	ppm	0.0250	0.2	158524	98.2 -
Mn 257.610	1.527	ppm	0.0055	0.4	326356	101.8 -
Pb 220.353	0.5988	ppm	0.0002	0.0	845.5	95.8 -

Cont Calib Blank (CCB) 12/7/2004, 12:58:17 PM Rack 2, Tube 11
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	28.0	3.664	-
Fe 261.187	0.0011	ppm	0.0005	47.2	51.71	-
Mn 257.610	-0.0000uv	ppm	0.0000	42.8	69.36	-
Pb 220.353	-0.0009uv	ppm	0.0039	451.6	5.808	-

ANALYST: ARK FILE: ICP120804

12/8/2004 9:57:54 AM	Analysis started.
12/8/2004 9:59:54 AM	Measured Blank
12/8/2004 10:02:46 AM	Measured Low Low Level(I2-122-2)
12/8/2004 10:05:38 AM	Measured Low Level(I2-122-1)
12/8/2004 10:08:30 AM	Measured Low Standard(I2-121-6)
12/8/2004 10:11:22 AM	Measured Mid Standard(I2-121-5)
12/8/2004 10:14:15 AM	Measured High Standard(I2-121-4)
12/8/2004 10:17:08 AM	Measured Initial Calib Verif(I2-121-8)
12/8/2004 10:20:01 AM	Measured Initial Calib Blank
12/8/2004 10:24:20 AM	Measured CRI(I2-121-9)
12/8/2004 10:27:13 AM	Measured Interf Check A(I2-120-9)
12/8/2004 10:30:05 AM	Measured Interf Check AB(I2-121-1)
12/8/2004 10:32:57 AM	Measured ICSA 1/20
12/8/2004 10:35:50 AM	Measured ICSAB 1/20
12/8/2004 10:38:42 AM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 10:41:33 AM	Measured Cont Calib Blank
12/8/2004 10:44:26 AM	Measured PBW
12/8/2004 10:47:17 AM	Measured LCS-W(I2-102-2)
12/8/2004 10:50:09 AM	Measured P0412010-01T
12/8/2004 10:53:01 AM	Measured P0412010-01T - DUP
12/8/2004 10:55:53 AM	Measured P0412010-01T - MSPK(I2-107-5)
12/8/2004 10:58:44 AM	Measured P0412024-01T DIL 1/5
12/8/2004 11:01:36 AM	Measured P0412024-03T DIL 1/5
12/8/2004 11:04:28 AM	Measured PBW
12/8/2004 11:07:20 AM	Measured LCS-W(I2-102-2)
12/8/2004 11:10:12 AM	Measured P0412024-01D DIL 1/5
12/8/2004 11:13:04 AM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 11:15:58 AM	Measured Cont Calib Blank
12/8/2004 11:18:51 AM	Measured P0412010-01D
12/8/2004 11:21:42 AM	Measured P0412010-01D - DUP
12/8/2004 11:24:34 AM	Measured P0412010-01D - MSPK(I2-107-5)
12/8/2004 11:27:26 AM	Measured P0412024-03D DIL 1/5
12/8/2004 11:30:20 AM	Measured PBW
12/8/2004 11:33:12 AM	Measured LCS-W(I2-102-2)
12/8/2004 11:36:04 AM	Measured P0412042-01T
12/8/2004 11:38:56 AM	Measured P0412042-01T - DUP
12/8/2004 11:41:49 AM	Measured P0412042-01T - MSPK(I2-107-5)
12/8/2004 11:44:41 AM	Measured P0412079-01A DIL 1/5
12/8/2004 11:47:33 AM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 11:50:26 AM	Measured Cont Calib Blank

ICP120804. All Data Report 12/8/2004, 1:08:23 PM, Method: 6010B, Instrument ID: EL99063568

Blank (Blk) **12/8/2004, 9:59:54 AM** **Rack 1, Tube 1**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Fe 261.187	0.0000	ppm	3.675	8.8	41.85

Low Standard (Std) **12/8/2004, 10:08:30 AM** **Rack 1, Tube 4**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Fe 261.187	5.000	ppm	317.112	0.4	74609

Mid Standard (Std) **12/8/2004, 10:11:22 AM** **Rack 1, Tube 5**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Fe 261.187	25.00	ppm	3153.847	0.8	392281

High Standard (Std) **12/8/2004, 10:14:15 AM** **Rack 1, Tube 6**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Fe 261.187	50.00	ppm	8662.770	1.1	767295

Fe 261.187 Calibration (ppm) **12/8/2004, 10:14:15 AM** **Correlation Coefficient: 0.999912**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		41.85	0.0000	0.0000	-	-
Low Standard		74609	5.000	4.939	-0.0607	-1.2
Mid Standard		392281	25.00	25.98	0.9819	3.9
High Standard		767295	50.00	50.82	0.8229	1.6

Curve Type: Linear Equation: y = 15096.6 x + 41.8532

Initial Calib Verif (ICV) **12/8/2004, 10:17:08 AM** **Rack 1, Tube 7**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	1.064	ppm	0.0848	8.0	16099	106.36158

Initial Calib Blank (ICB) **12/8/2004, 10:20:01 AM** **Rack 1, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.0015	ppm	0.0009	57.4	65.08	0.00154

CRI (CRI) **12/8/2004, 10:24:20 AM** **Rack 1, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.0009	ppm	0.0006	62.5	56.08	-

ICP120804. All Data Report 12/8/2004, 1:08:23 PM, Method: 6010B, Instrument ID: EL99063568

Interf Check A (ICSA) **12/8/2004, 10:27:13 AM** **Rack 1, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	175.0x	ppm	0.2914	0.2	2641951	-

Interf Check AB (ICSAB) **12/8/2004, 10:30:05 AM** **Rack 1, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	176.3x	ppm	1.602	0.9	2661889	-

ICSA 1/20 (Samp) **12/8/2004, 10:32:57 AM** **Rack 3, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	9.837	ppm	0.0320	0.3	148544

ICSAB 1/20 (Samp) **12/8/2004, 10:35:50 AM** **Rack 3, Tube 2**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	10.05	ppm	0.0283	0.3	151788

Cont Calib Verif (CCV) **12/8/2004, 10:38:42 AM** **Rack 3, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	12.40	ppm	0.0236	0.2	187227	99.19327

Cont Calib Blank (CCB) **12/8/2004, 10:41:33 AM** **Rack 3, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.0028	ppm	0.0003	10.1	83.42	0.00275

PBW (PBLK) **12/8/2004, 10:44:26 AM** **Rack 3, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.0039	ppm	0.0006	15.3	100.8	0.00390

LCS-W (LCS) **12/8/2004, 10:47:17 AM** **Rack 3, Tube 6**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	4.926	ppm	0.0153	0.3	74405	98.51609

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ICP120804. All Data Report 12/8/2004, 1:08:23 PM, Method: 6010B, Instrument ID: EL99063568

P0412010-01T (Samp) **12/8/2004, 10:50:09 AM** **Rack 3, Tube 7**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	22.53	ppm	0.0740	0.3	340238

P0412010-01T - DUP (DUP) **12/8/2004, 10:53:01 AM** **Rack 3, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	22.81	ppm	0.0783	0.3	344374	1.20844

P0412010-01T - MSPK (MSPK) **12/8/2004, 10:55:53 AM** **Rack 3, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	23.97	ppm	0.3920	1.6	361925	143.65482N

P0412024-01T DIL 1/5 (Samp) **12/8/2004, 10:58:44 AM** **Rack 3, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	21.32	ppm	0.0406	0.2	321917

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P0412024-03T DIL 1/5 (Samp) **12/8/2004, 11:01:36 AM** **Rack 3, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	27.70	ppm	0.2779	1.0	418159

PBW (PBLK) **12/8/2004, 11:04:28 AM** **Rack 3, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.0026	ppm	0.0004	14.0	81.54	0.00263

41206028

LCS-W (LCS) **12/8/2004, 11:07:20 AM** **Rack 3, Tube 13**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	4.885	ppm	0.0099	0.2	73793	97.70530

P0412024-01D DIL 1/5 (Samp) **12/8/2004, 11:10:12 AM** **Rack 3, Tube 14**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	21.31	ppm	0.0351	0.2	321796

ICP120804. All Data Report 12/8/2004, 1:08:23 PM, Method: 6010B, Instrument ID: EL99063568

Cont Calib Verif (CCV) **12/8/2004, 11:13:04 AM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	12.22	ppm	0.2630	2.2	184521	97.75925

Cont Calib Blank (CCB) **12/8/2004, 11:15:58 AM** **Rack 2, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.0024	ppm	0.0003	10.9	78.52	0.00243

P0412010-01D (Samp) **12/8/2004, 11:18:51 AM** **Rack 3, Tube 15**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	20.43	ppm	0.0300	0.1	308541

P0412010-01D - DUP (DUP) **12/8/2004, 11:21:42 AM** **Rack 3, Tube 16**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	20.37	ppm	0.1045	0.5	307576	0.31316

P0412010-01D - MSPK (MSPK) **12/8/2004, 11:24:34 AM** **Rack 3, Tube 17**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	21.37	ppm	0.0404	0.2	322678	93.64471

P0412024-03D DIL 1/5 (Samp) **12/8/2004, 11:27:26 AM** **Rack 3, Tube 18**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	28.11	ppm	0.0608	0.2	424380

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PBW (PBLK) **12/8/2004, 11:30:20 AM** **Rack 3, Tube 19**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.0044	ppm	0.0003	7.3	108.7	0.00443

LCS-W (LCS) **12/8/2004, 11:33:12 AM** **Rack 3, Tube 20**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	4.827	ppm	0.0222	0.5	72915	96.54205

ICP120804. All Data Report 12/8/2004, 1:08:23 PM, Method: 6010B, Instrument ID: EL99063568

P0412042-01T (Samp) **12/8/2004, 11:36:04 AM** **Rack 3, Tube 21**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	0.0195	ppm	0.0010	5.3	337.0

P0412042-01T - DUP (DUP) **12/8/2004, 11:38:56 AM** **Rack 3, Tube 22**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.0185	ppm	0.0002	1.1	321.2	5.47663

P0412042-01T - MSPK (MSPK) **12/8/2004, 11:41:49 AM** **Rack 3, Tube 23**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.9837	ppm	0.0194	2.0	14893	96.41930

P0412079-01A DIL 1/5 (Samp) **12/8/2004, 11:44:41 AM** **Rack 3, Tube 24**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Fe 261.187	0.0337	ppm	0.0006	1.8	550.7

Cont Calib Verif (CCV) **12/8/2004, 11:47:33 AM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	12.45	ppm	0.0196	0.2	187935	99.56863

Cont Calib Blank (CCB) **12/8/2004, 11:50:26 AM** **Rack 2, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Fe 261.187	0.0012	ppm	0.0002	19.8	59.45	0.00117

ANALYST: ARK FILE: ICP120804

12/8/2004 9:57:54 AM	Analysis started.
12/8/2004 9:59:54 AM	Measured Blank
12/8/2004 10:02:46 AM	Measured Low Low Level(I2-122-2)
12/8/2004 10:05:38 AM	Measured Low Level(I2-122-1)
12/8/2004 10:08:30 AM	Measured Low Standard(I2-121-6)
12/8/2004 10:11:22 AM	Measured Mid Standard(I2-121-5)
12/8/2004 10:14:15 AM	Measured High Standard(I2-121-4)
12/8/2004 10:17:08 AM	Measured Initial Calib Verif(I2-121-8)
12/8/2004 10:20:01 AM	Measured Initial Calib Blank
12/8/2004 10:24:20 AM	Measured CRI(I2-121-9)
12/8/2004 10:27:13 AM	Measured Interf Check A(I2-120-9)
12/8/2004 10:30:05 AM	Measured Interf Check AB(I2-121-1)
12/8/2004 10:32:57 AM	Measured ICSA 1/20
12/8/2004 10:35:50 AM	Measured ICSAB 1/20
12/8/2004 10:38:42 AM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 10:41:33 AM	Measured Cont Calib Blank
12/8/2004 10:44:26 AM	Measured PBW
12/8/2004 10:47:17 AM	Measured LCS-W(I2-102-2)
12/8/2004 10:50:09 AM	Measured P0412010-01T
12/8/2004 10:53:01 AM	Measured P0412010-01T - DUP
12/8/2004 10:55:53 AM	Measured P0412010-01T - MSPK(I2-107-5)
12/8/2004 10:58:44 AM	Measured P0412024-01T DIL 1/5
12/8/2004 11:01:36 AM	Measured P0412024-03T DIL 1/5
12/8/2004 11:04:28 AM	Measured PBW
12/8/2004 11:07:20 AM	Measured LCS-W(I2-102-2)
12/8/2004 11:10:12 AM	Measured P0412024-01D DIL 1/5
12/8/2004 11:13:04 AM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 11:15:58 AM	Measured Cont Calib Blank
12/8/2004 11:18:51 AM	Measured P0412010-01D
12/8/2004 11:21:42 AM	Measured P0412010-01D - DUP
12/8/2004 11:24:34 AM	Measured P0412010-01D - MSPK(I2-107-5)
12/8/2004 11:27:26 AM	Measured P0412024-03D DIL 1/5
12/8/2004 11:30:20 AM	Measured PBW
12/8/2004 11:33:12 AM	Measured LCS-W(I2-102-2)
12/8/2004 11:36:04 AM	Measured P0412042-01T
12/8/2004 11:38:56 AM	Measured P0412042-01T - DUP
12/8/2004 11:41:49 AM	Measured P0412042-01T - MSPK(I2-107-5)
12/8/2004 11:44:41 AM	Measured P0412079-01A DIL 1/5
12/8/2004 11:47:33 AM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 11:50:26 AM	Measured Cont Calib Blank
12/8/2004 11:53:19 AM	Measured P0412079-02A DIL1/5
12/8/2004 11:56:11 AM	Measured P0412079-03A DIL1/10
12/8/2004 11:59:03 AM	Measured P0412079-04A DIL1/10
12/8/2004 12:01:58 PM	Measured P0412079-05A DIL1/20
12/8/2004 12:08:39 PM	Measured P0412022-01T
12/8/2004 12:11:32 PM	Measured P0412042-02T
12/8/2004 12:14:23 PM	Measured P0412042-03T
12/8/2004 12:17:14 PM	Measured P0412042-04T
12/8/2004 12:20:06 PM	Measured P0412042-05T
12/8/2004 12:22:59 PM	Measured P0412042-06T
12/8/2004 12:25:52 PM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 12:28:46 PM	Measured Cont Calib Blank
12/8/2004 12:31:40 PM	Measured P0412037-01T
12/8/2004 12:34:33 PM	Measured P0412037-02T
12/8/2004 12:37:29 PM	Measured PBW

12/8/2004 12:40:24 PM	Measured LCS-F(I2-102-3)
12/8/2004 12:43:18 PM	Measured LCSD-F(I2-102-3)
12/8/2004 12:46:14 PM	Measured P0412079-03A
12/8/2004 12:49:09 PM	Measured P0412079-05A
12/8/2004 12:52:05 PM	Measured PBW
12/8/2004 12:54:58 PM	Measured LCS-W(I2-102-2)
12/8/2004 12:57:50 PM	Measured P0412082-01D
12/8/2004 1:00:43 PM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 1:03:37 PM	Measured Cont Calib Blank
12/8/2004 1:06:30 PM	Measured P0412002-01D
12/8/2004 1:09:24 PM	Measured P0412002-01D - DUP
12/8/2004 1:12:16 PM	Measured P0412002-01D - MSPK(I2-107-5)
12/8/2004 1:15:08 PM	Measured P0412033-01D
12/8/2004 1:18:00 PM	Measured P0412033-02D
12/8/2004 1:20:52 PM	Measured P0412040-01D
12/8/2004 1:23:45 PM	Measured P0412063-01D
12/8/2004 1:26:38 PM	Measured PBW
12/8/2004 1:29:31 PM	Measured LCS-W(I2-102-2)
12/8/2004 1:32:23 PM	Measured P0412090-01D
12/8/2004 1:35:16 PM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 1:38:10 PM	Measured Cont Calib Blank
12/8/2004 1:41:04 PM	Measured P0412090-02D
12/8/2004 1:43:56 PM	Measured P0412090-02D - DUP
12/8/2004 1:46:50 PM	Measured P0412090-02D - MSPK(I2-107-5)
12/8/2004 1:49:43 PM	Measured P0412074-01D
12/8/2004 1:52:37 PM	Measured P0412074-02D
12/8/2004 1:55:34 PM	Measured P0412074-03D
12/8/2004 1:58:29 PM	Measured P0412067-01D
12/8/2004 2:01:25 PM	Measured P0412067-02D
12/8/2004 2:04:21 PM	Measured P0412067-03D
12/8/2004 2:07:16 PM	Measured P0412067-04D
12/8/2004 2:10:14 PM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 2:13:10 PM	Measured Cont Calib Blank
12/8/2004 2:16:07 PM	Measured P0412067-05D
12/8/2004 2:19:03 PM	Measured P0412067-06D
12/8/2004 2:21:57 PM	Measured P0412067-07D
12/8/2004 2:26:37 PM	Measured P0412079-05A
12/8/2004 2:29:33 PM	Measured P0412079-04ADIL1/50
12/8/2004 2:33:43 PM	Measured BLANK
12/8/2004 2:36:37 PM	Measured Cont Calib Verif(I2-121-7)
12/8/2004 2:39:32 PM	Measured Cont Calib Blank
12/8/2004 2:40:31 PM	Analysis completed.

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

Blank (Blk) 12/8/2004, 9:59:54 AM Rack 1, Tube 1

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
B 249.678	0.0000	ppm	9.156	7.4	122.9
Fe 261.187	0.0000	ppm	3.675	8.8	41.85
Mn 257.610	0.0000	ppm	7.453	12.6	59.17
P 213.618	0.0000	ppm	1.711	23.6	7.249
Se 196.026	0.0000	ppm	1.948	469.8	-0.4147

Low Low Level (Std) 12/8/2004, 10:02:46 AM Rack 1, Tube 2

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Se 196.026	0.0050	ppm	0.583	27.2	2.140

Low Level (Std) 12/8/2004, 10:05:38 AM Rack 1, Tube 3

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Se 196.026	0.0250	ppm	3.951	27.2	14.54

Low Standard (Std) 12/8/2004, 10:08:30 AM Rack 1, Tube 4

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
B 249.678	0.2000	ppm	17.927	0.7	2425
Fe 261.187	5.000	ppm	317.112	0.4	74609
Mn 257.610	0.6000	ppm	311.417	0.2	144430
P 213.618	1.000	ppm	5.401	0.6	953.6
Se 196.026	0.2500	ppm	2.277	1.3	174.5

Mid Standard (Std) 12/8/2004, 10:11:22 AM Rack 1, Tube 5

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
B 249.678	1.000	ppm	72.764	0.6	12411
Fe 261.187	25.00	ppm	3153.847	0.8	392281
Mn 257.610	3.000	ppm	6263.481	0.8	756314
P 213.618	5.000	ppm	45.708	0.9	5139
Se 196.026	1.250	ppm	7.144	0.8	939.6

High Standard (Std) 12/8/2004, 10:14:15 AM Rack 1, Tube 6

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
B 249.678	2.000	ppm	132.171	0.5	25040
Fe 261.187	50.00	ppm	8662.770	1.1	767295
Mn 257.610	6.000	ppm	11997.721	0.8	1516275
P 213.618	10.00	ppm	79.459	0.8	10365
Se 196.026	2.500	ppm	11.439	0.6	1903

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

B 249.678 Calibration (ppm) **12/8/2004, 10:14:15 AM** **Correlation Coefficient: 0.999961**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		122.9	0.0000	0.0000	-	-
Low Standard		2425	0.2000	0.1890	-0.0110	-5.5
Mid Standard		12411	1.000	1.009	0.0087	0.9
High Standard		25040	2.000	2.045	0.0454	2.3

Curve Type: Linear Equation: y = 12182 x + 122.915

Fe 261.187 Calibration (ppm) **12/8/2004, 10:14:15 AM** **Correlation Coefficient: 0.999912**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		41.85	0.0000	0.0000	-	-
Low Standard		74609	5.000	4.939	-0.0607	-1.2
Mid Standard		392281	25.00	25.98	0.9819	3.9
High Standard		767295	50.00	50.82	0.8229	1.6

Curve Type: Linear Equation: y = 15096.6 x + 41.8532

Mn 257.610 Calibration (ppm) **12/8/2004, 10:14:15 AM** **Correlation Coefficient: 0.999990**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		59.17	0.0000	0.0000	-	-
Low Standard		144430	0.6000	0.5967	-0.0033	-0.6
Mid Standard		756314	3.000	3.125	0.1254	4.2
High Standard		1516275	6.000	6.266	0.2662	4.4

Curve Type: Linear Equation: y = 241967 x + 59.1708

P 213.618 Calibration (ppm) **12/8/2004, 10:14:15 AM** **Correlation Coefficient: 0.999964**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		7.249	0.0000	0.0000	-	-
Low Standard		953.6	1.000	0.9612	-0.0388	-3.9
Mid Standard		5139	5.000	5.212	0.2117	4.2
High Standard		10365	10.00	10.52	0.5199	5.2

Curve Type: Linear Equation: y = 984.565 x + 7.24945

Se 196.026 Calibration (ppm) **12/8/2004, 10:14:15 AM** **Correlation Coefficient: 0.999964**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-0.4147	0.0000	0.0000	-	-
Low Low Level		2.140	0.0050	0.0034	-0.0016	-31.8
Low Level		14.54	0.0250	0.0199	-0.0051	-20.2
Low Standard		174.5	0.2500	0.2333	-0.0167	-6.7
Mid Standard		939.6	1.250	1.254	0.0039	0.3
High Standard		1903	2.500	2.539	0.0388	1.6

Curve Type: Linear Equation: y = 749.631 x + -0.414673

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

Initial Calib Verif (ICV) **12/8/2004, 10:17:08 AM** **Rack 1, Tube 7**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.5289	ppm	0.0414	7.8	6566	105.78213
Fe 261.187	1.064	ppm	0.0848	8.0	16099	106.36158
Mn 257.610	1.075	ppm	0.0828	7.7	260056	107.45157
P 213.618	5.189	ppm	0.3858	7.4	5116	103.77923
Se 196.026	1.024	ppm	0.0786	7.7	767.0	102.36577

Initial Calib Blank (ICB) **12/8/2004, 10:20:01 AM** **Rack 1, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0187	ppm	0.0013	7.0	351.0	0.01872
Fe 261.187	0.0015	ppm	0.0009	57.4	65.08	0.00154
Mn 257.610	0.0001	ppm	0.0000	60.7	71.94	0.00005
P 213.618	-0.0002uv	ppm	0.0010	434.1	7.033	-0.00022
Se 196.026	0.0016uv	ppm	0.0025	159.5	0.7707	0.00158

CRI (CRI) **12/8/2004, 10:24:20 AM** **Rack 1, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0093	ppm	0.0004	3.9	236.3	-
Fe 261.187	0.0009	ppm	0.0006	62.5	56.08	-
Mn 257.610	0.0302	ppm	0.0003	0.8	7372	100.73751
P 213.618	-0.0020uv	ppm	0.0011	56.2	5.266	-
Se 196.026	0.0022	ppm	0.0004	20.6	1.209	-

Interf Check A (ICSA) **12/8/2004, 10:27:13 AM** **Rack 1, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0063	ppm	0.0004	7.0	199.8	-
Fe 261.187	175.0x	ppm	0.2914	0.2	2641951	-
Mn 257.610	0.0095	ppm	0.0000	0.4	2353	0.00948
P 213.618	-0.0005uv	ppm	0.0033	646.0	6.745	-
Se 196.026	0.0177	ppm	0.0054	30.6	12.82	0.01766K

Interf Check AB (ICSAB) **12/8/2004, 10:30:05 AM** **Rack 1, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0044	ppm	0.0005	11.4	176.2	-
Fe 261.187	176.3x	ppm	1.602	0.9	2661889	-
Mn 257.610	0.4782	ppm	0.0046	1.0	115774	95.64477
P 213.618	0.0027uv	ppm	0.0029	107.0	9.957	-
Se 196.026	0.0114uv	ppm	0.0125	110.0	8.121	0.00000

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

ICSA 1/20 (Samp) **12/8/2004, 10:32:57 AM** **Rack 3, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0031	ppm	0.0001	3.2	161.2
Fe 261.187	9.837	ppm	0.0320	0.3	148544
Mn 257.610	0.0005	ppm	0.0000	8.9	176.9
P 213.618	0.0008uv	ppm	0.0057	737.0	8.013
Se 196.026	0.0040uv	ppm	0.0039	96.6	2.573

ICSAB 1/20 (Samp) **12/8/2004, 10:35:50 AM** **Rack 3, Tube 2**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0028	ppm	0.0005	18.6	157.0
Fe 261.187	10.05	ppm	0.0283	0.3	151788
Mn 257.610	0.0255	ppm	0.0001	0.4	6234
P 213.618	-0.0021uv	ppm	0.0022	105.1	5.211
Se 196.026	0.0097	ppm	0.0067	69.3	6.888

Cont Calib Verif (CCV) **12/8/2004, 10:38:42 AM** **Rack 3, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.4879	ppm	0.0039	0.8	6067	97.58106
Fe 261.187	12.40	ppm	0.0236	0.2	187227	99.19327
Mn 257.610	1.529	ppm	0.0003	0.0	370012	101.92921
P 213.618	2.510	ppm	0.0046	0.2	2479	100.40070
Se 196.026	0.6055	ppm	0.0064	1.1	453.5	96.88416

Cont Calib Blank (CCB) **12/8/2004, 10:41:33 AM** **Rack 3, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0078	ppm	0.0013	16.4	217.4	0.00775
Fe 261.187	0.0028	ppm	0.0003	10.1	83.42	0.00275
Mn 257.610	0.0001	ppm	0.0000	19.0	79.60	0.00008
P 213.618	-0.0036uv	ppm	0.0023	65.3	3.714	-0.00359
Se 196.026	0.0001uv	ppm	0.0033	2850.1	-0.3268	0.00012

PBW (PBLK) **12/8/2004, 10:44:26 AM** **Rack 3, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0049	ppm	0.0013	27.3	182.1	0.00486
Fe 261.187	0.0039	ppm	0.0006	15.3	100.8	0.00390
Mn 257.610	0.0001	ppm	0.0000	9.4	79.81	0.00009
P 213.618	0.1248	ppm	0.0032	2.5	130.1	0.12476Z
Se 196.026	-0.0023uv	ppm	0.0023	100.2	-2.131	-0.00229

4/20/6027

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

4120602?

LCS-W (LCS) 12/8/2004, 10:47:17 AM Rack 3, Tube 6
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.4943	ppm	0.0029	0.6	6144	98.85011
Fe 261.187	4.926	ppm	0.0153	0.3	74405	98.51609
Mn 257.610	2.432	ppm	0.0110	0.5	588579	97.28934
P 213.618	2.734	ppm	0.0109	0.4	2699	109.35468
Se 196.026	0.4958	ppm	0.0033	0.7	371.2	99.15616

P0412010-01T (Samp) 12/8/2004, 10:50:09 AM Rack 3, Tube 7
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0278	ppm	0.0013	4.9	461.1
Fe 261.187	22.53	ppm	0.0740	0.3	340238
Mn 257.610	0.6394	ppm	0.0024	0.4	154762
P 213.618	0.1872	ppm	0.0014	0.7	191.6
Se 196.026	0.0136	ppm	0.0070	51.2	9.788

P0412010-01T - DUP (DUP) 12/8/2004, 10:53:01 AM Rack 3, Tube 8
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0222	ppm	0.0015	6.9	393.1	22.33547*
Fe 261.187	22.81	ppm	0.0783	0.3	344374	1.20844
Mn 257.610	0.6474	ppm	0.0009	0.1	156702	1.24612
P 213.618	0.1930	ppm	0.0049	2.5	197.2	3.02951
Se 196.026	0.0117	ppm	0.0011	9.6	8.347	15.20027

P0412010-01T - MSPK (MSPK) 12/8/2004, 10:55:53 AM Rack 3, Tube 9
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0248	ppm	0.0029	11.5	425.1	-
Fe 261.187	23.97	ppm	0.3920	1.6	361925	143.65482N
Mn 257.610	1.143	ppm	0.0178	1.6	276723	100.80811
P 213.618	0.1718	ppm	0.0030	1.7	176.4	-
Se 196.026	1.869	ppm	0.0261	1.4	1400	92.75278

P0412024-01T DIL 1/5 (Samp) 12/8/2004, 10:58:44 AM Rack 3, Tube 10
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.1889	ppm	0.0011	0.6	2424
Fe 261.187	21.32	ppm	0.0406	0.2	321917
Mn 257.610	4.088	ppm	0.0218	0.5	989204
P 213.618	0.0185	ppm	0.0062	33.6	25.47
Se 196.026	0.0101	ppm	0.0067	66.2	7.137

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412024-03T DIL 1/5 (Samp) **12/8/2004, 11:01:36 AM** **Rack 3, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.1369	ppm	0.0018	1.3	1790
Fe 261.187	27.70	ppm	0.2779	1.0	418159
Mn 257.610	4.787	ppm	0.0458	1.0	1158399
P 213.618	0.0164	ppm	0.0025	15.6	23.38
Se 196.026	0.0051	ppm	0.0010	19.9	3.422

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PBW (PBLK) **12/8/2004, 11:04:28 AM** **Rack 3, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0047	ppm	0.0005	10.9	180.2	0.00471
Fe 261.187	0.0026	ppm	0.0004	14.0	81.54	0.00263
Mn 257.610	0.0001	ppm	0.0000	28.3	94.14	0.00014
P 213.618	0.0041	ppm	0.0010	25.5	11.24	0.00406
Se 196.026	-0.0012uv	ppm	0.0023	184.6	-1.351	-0.00125

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LCS-W (LCS) **12/8/2004, 11:07:20 AM** **Rack 3, Tube 13**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.4838	ppm	0.0032	0.7	6017	96.76836
Fe 261.187	4.885	ppm	0.0099	0.2	73793	97.70530
Mn 257.610	2.403	ppm	0.0117	0.5	581521	96.12247
P 213.618	2.647	ppm	0.0211	0.8	2613	105.88235
Se 196.026	0.4799	ppm	0.0040	0.8	359.3	95.98393

P0412024-01D DIL 1/5 (Samp) **12/8/2004, 11:10:12 AM** **Rack 3, Tube 14**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.1967	ppm	0.0011	0.6	2520
Fe 261.187	21.31	ppm	0.0351	0.2	321796
Mn 257.610	4.116	ppm	0.0158	0.4	996054
P 213.618	0.0428	ppm	0.0114	26.7	49.43
Se 196.026	0.0086	ppm	0.0032	37.8	6.009

Cont Calib Verif (CCV) **12/8/2004, 11:13:04 AM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.4914	ppm	0.0095	1.9	6109	98.28332
Fe 261.187	12.22	ppm	0.2630	2.2	184521	97.75925
Mn 257.610	1.514	ppm	0.0319	2.1	366482	100.95660
P 213.618	2.478	ppm	0.0555	2.2	2447	99.13895
Se 196.026	0.6048	ppm	0.0116	1.9	453.0	96.77127

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

Cont Calib Blank (CCB) **12/8/2004, 11:15:58 AM** **Rack 2, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0099	ppm	0.0008	8.1	243.3	0.00988
Fe 261.187	0.0024	ppm	0.0003	10.9	78.52	0.00243
Mn 257.610	0.0001	ppm	0.0000	8.6	87.46	0.00012
P 213.618	-0.0006uv	ppm	0.0036	654.0	6.704	-0.00055
Se 196.026	0.0001uv	ppm	0.0035	4973.0	-0.3620	0.00007

P0412010-01D (Samp) **12/8/2004, 11:18:51 AM** **Rack 3, Tube 15**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0269	ppm	0.0021	7.9	451.0
Fe 261.187	20.43	ppm	0.0300	0.1	308541
Mn 257.610	0.6558	ppm	0.0007	0.1	158734
P 213.618	0.2433	ppm	0.0024	1.0	246.8
Se 196 026	0.0123	ppm	0.0055	45.2	8.785

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P0412010-01D - DUP (DUP) **12/8/2004, 11:21:42 AM** **Rack 3, Tube 16**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0240	ppm	0.0004	1.8	415.6	11.40080
Fe 261.187	20.37	ppm	0.1045	0.5	307576	0.31316
Mn 257.610	0.6544	ppm	0.0029	0.4	158403	0.20863
P 213.618	0.2559	ppm	0.0020	0.8	259.2	5.05662
Se 196.026	0.0107	ppm	0.0053	49.5	7.577	14.05068

P0412010-01D - MSPK (MSPK) **12/8/2004, 11:24:34 AM** **Rack 3, Tube 17**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0224	ppm	0.0025	11.3	395.7	-
Fe 261.187	21.37	ppm	0.0404	0.2	322678	93.64471
Mn 257.610	1.145	ppm	0.0036	0.3	277116	97.85007
P 213.618	0.1896	ppm	0.0004	0.2	194.0	-
Se 196.026	1.866	ppm	0.0056	0.3	1398	92.66583

P0412024-03D DIL 1/5 (Samp) **12/8/2004, 11:27:26 AM** **Rack 3, Tube 18**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.1400	ppm	0.0005	0.3	1829
Fe 261.187	28.11	ppm	0.0608	0.2	424380
Mn 257.610	4.899	ppm	0.0115	0.2	1185559
P 213.618	0.0241	ppm	0.0035	14.6	30.96
Se 196.026	0.0039	ppm	0.0017	43.4	2.529

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

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PBW (PBLK) 12/8/2004, 11:30:20 AM Rack 3, Tube 19
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0049	ppm	0.0003	6.4	182.3	0.00487
Fe 261.187	0.0044	ppm	0.0003	7.3	108.7	0.00443
Mn 257.610	0.0003	ppm	0.0001	18.0	138.5	0.00033
P 213.618	0.0024uv	ppm	0.0042	172.3	9.622	0.00241
Se 196.026	-0.0002uv	ppm	0.0043	2409.0	-0.5494	-0.00018

LCS-W (LCS) 12/8/2004, 11:33:12 AM Rack 3, Tube 20
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.4820	ppm	0.0024	0.5	5995	96.40608
Fe 261.187	4.827	ppm	0.0222	0.5	72915	96.54205
Mn 257.610	2.393	ppm	0.0145	0.6	579040	95.71240
P 213.618	2.661	ppm	0.0124	0.5	2627	106.42188
Se 196.026	0.4756	ppm	0.0026	0.5	356.1	95.12968

P0412042-01T (Samp) 12/8/2004, 11:36:04 AM Rack 3, Tube 21
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0165	ppm	0.0008	4.8	323.4
Fe 261.187	0.0195	ppm	0.0010	5.3	337.0
Mn 257.610	0.3312	ppm	0.0080	2.4	80189
P 213.618	0.2768	ppm	0.0037	1.3	279.8
Se 196.026	0.0104	ppm	0.0048	45.6	7.397

P0412042-01T - DUP (DUP) 12/8/2004, 11:38:56 AM Rack 3, Tube 22
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0138	ppm	0.0007	5.4	291.1	17.50648
Fe 261.187	0.0185	ppm	0.0002	1.1	321.2	5.47663
Mn 257.610	0.3324	ppm	0.0076	2.3	80477	0.35865
P 213.618	0.3083	ppm	0.0059	1.9	310.7	10.74226
Se 196.026	0.0107	ppm	0.0007	6.7	7.625	2.88151

P0412042-01T - MSPK (MSPK) 12/8/2004, 11:41:49 AM Rack 3, Tube 23
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0130	ppm	0.0005	3.7	281.4	-
Fe 261.187	0.9837	ppm	0.0194	2.0	14893	96.41930
Mn 257.610	0.8437	ppm	0.0227	2.7	204199	102.50182
P 213.618	0.2713	ppm	0.0100	3.7	274.4	-
Se 196.026	1.897	ppm	0.0333	1.8	1422	94.31999

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412079-01A DIL 1/5 (Samp) **12/8/2004, 11:44:41 AM** **Rack 3, Tube 24**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	1.620	ppm	0.0094	0.6	19854
Fe 261.187	0.0337	ppm	0.0006	1.8	550.7
Mn 257.610	0.0085	ppm	0.0001	0.6	2121
P 213.618	0.0517	ppm	0.0020	3.9	58.15
Se 196.026	0.0099	ppm	0.0022	22.2	7.030

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Cont Calib Verif (CCV) **12/8/2004, 11:47:33 AM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.5161	ppm	0.0023	0.4	6410	103.21938
Fe 261.187	12.45	ppm	0.0196	0.2	187935	99.56863
Mn 257.610	1.546	ppm	0.0050	0.3	374203	103.08391
P 213.618	2.538	ppm	0.0124	0.5	2506	101.51607
Se 196.026	0.6118	ppm	0.0044	0.7	458.2	97.89143

Cont Calib Blank (CCB) **12/8/2004, 11:50:26 AM** **Rack 2, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0155	ppm	0.0011	7.4	311.6	0.01549
Fe 261.187	0.0012	ppm	0.0002	19.8	59.45	0.00117
Mn 257.610	0.0000uv	ppm	0.0000	133.1	64.43	0.00002
P 213.618	0.0040uv	ppm	0.0053	130.2	11.24	0.00405
Se 196.026	-0.0001uv	ppm	0.0034	4234.8	-0.4746	-0.00008

P0412079-02A DIL1/5 (Samp) **12/8/2004, 11:53:19 AM** **Rack 3, Tube 25**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.8581	ppm	0.0099	1.2	10577
Fe 261.187	0.0047	ppm	0.0004	8.2	113.2
Mn 257.610	0.0009	ppm	0.0000	3.9	275.8
P 213.618	0.0419	ppm	0.0024	5.8	48.53
Se 196.026	0.0072	ppm	0.0005	6.5	4.961

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P0412079-03A DIL1/10 (Samp) **12/8/2004, 11:56:11 AM** **Rack 3, Tube 26**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	1.390	ppm	0.0040	0.3	17056
Fe 261.187	0.0041	ppm	0.0003	7.0	103.1
Mn 257.610	0.0063	ppm	0.0001	0.8	1574
P 213.618	0.0261	ppm	0.0019	7.3	32.95
Se 196.026	0.0075	ppm	0.0065	87.3	5.177

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412079-04A DIL1/10 (Samp) **12/8/2004, 11:59:03 AM** **Rack 3, Tube 27**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	4.519x	ppm	0.0622	1.4	55177
Fe 261.187	0.0005uv	ppm	0.0010	182.8	49.92
Mn 257.610	0.0509	ppm	0.0013	2.5	12383
P 213.618	0.0161	ppm	0.0037	22.9	23.07
Se 196.026	0.0089	ppm	0.0037	41.8	6.221

P0412079-05A DIL1/20 (Samp) **12/8/2004, 12:01:58 PM** **Rack 3, Tube 28**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0724	ppm	0.0075	10.4	1005
Fe 261.187	0.0278	ppm	0.0003	1.1	461.7
Mn 257.610	0.0024	ppm	0.0000	0.7	639.0
P 213.618	0.0212	ppm	0.0051	24.1	28.16
Se 196.026	-0.0011uv	ppm	0.0023	211.1	-1.246

P0412022-01T (Samp) **12/8/2004, 12:08:39 PM** **Rack 3, Tube 29**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.2004	ppm	0.0022	1.1	2564
Fe 261.187	0.0077	ppm	0.0003	3.3	158.5
Mn 257.610	0.7783	ppm	0.0257	3.3	188385
P 213.618	0.2375	ppm	0.0034	1.4	241.1
Se 196.026	0.0094	ppm	0.0023	24.2	6.598

P0412042-02T (Samp) **12/8/2004, 12:11:32 PM** **Rack 3, Tube 30**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0255	ppm	0.0008	3.3	433.8
Fe 261.187	1.875	ppm	0.0069	0.4	28346
Mn 257.610	0.1153	ppm	0.0006	0.5	27959
P 213.618	0.3331	ppm	0.0015	0.5	335.2
Se 196.026	0.0114	ppm	0.0051	44.8	8.096

P0412042-03T (Samp) **12/8/2004, 12:14:23 PM** **Rack 3, Tube 31**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0266	ppm	0.0004	1.3	447.1
Fe 261.187	5.969	ppm	0.0761	1.3	90149
Mn 257.610	0.4590	ppm	0.0058	1.3	111110
P 213.618	0.6108	ppm	0.0102	1.7	608.6
Se 196.026	0.0121	ppm	0.0043	35.2	8.691

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ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412042-04T (Samp) **12/8/2004, 12:17:14 PM** **Rack 3, Tube 32**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0238	ppm	0.0002	0.7	412.8
Fe 261.187	0.0049	ppm	0.0004	8.6	115.7
Mn 257.610	0.0073	ppm	0.0000	0.6	1825
P 213.618	0.3647	ppm	0.0003	0.1	366.3
Se 196.026	0.0079	ppm	0.0074	94.0	5.503

P0412042-05T (Samp) **12/8/2004, 12:20:06 PM** **Rack 3, Tube 33**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0190	ppm	0.0002	1.3	354.4
Fe 261.187	0.0702	ppm	0.0015	2.1	1102
Mn 257.610	0.0144	ppm	0.0001	0.7	3547
P 213.618	0.2630	ppm	0.0116	4.4	266.2
Se 196.026	0.0068	ppm	0.0013	18.8	4.647

P0412042-06T (Samp) **12/8/2004, 12:22:59 PM** **Rack 3, Tube 34**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0229	ppm	0.0007	3.3	402.0
Fe 261.187	6.964	ppm	0.0293	0.4	105177
Mn 257.610	0.7343	ppm	0.0030	0.4	177746
P 213.618	0.5449	ppm	0.0046	0.9	543.8
Se 196.026	0.0089	ppm	0.0016	17.5	6.259

Cont Calib Verif (CCV) **12/8/2004, 12:25:52 PM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.4980	ppm	0.0033	0.7	6189	99.59261
Fe 261.187	12.36	ppm	0.0228	0.2	186677	98.90168
Mn 257.610	1.536	ppm	0.0032	0.2	371613	102.37049
P 213.618	2.532	ppm	0.0141	0.6	2500	101.26419
Se 196.026	0.6115	ppm	0.0068	1.1	458.0	97.83652

Cont Calib Blank (CCB) **12/8/2004, 12:28:46 PM** **Rack 2, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0136	ppm	0.0012	9.0	288.2	0.01356
Fe 261.187	0.0017	ppm	0.0003	15.5	67.26	0.00168
Mn 257.610	0.0001	ppm	0.0000	12.2	78.14	0.00008
P 213.618	-0.0007uv	ppm	0.0010	140.0	6.567	-0.00069
Se 196.026	-0.0020uv	ppm	0.0026	129.1	-1.937	-0.00203

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ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412037-01T (Samp) **12/8/2004, 12:31:40 PM** **Rack 3, Tube 35**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0358	ppm	0.0020	5.7	558.5
Fe 261.187	44.94	ppm	2.505	5.6	678453
Mn 257.610	0.7126	ppm	0.0422	5.9	172477
P 213.618	0.2461	ppm	0.0161	6.6	249.6
Se 196.026	0.0089	ppm	0.0022	25.1	6.232

P0412037-02T (Samp) **12/8/2004, 12:34:33 PM** **Rack 3, Tube 36**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0491	ppm	0.0009	1.8	720.6
Fe 261.187	14.01	ppm	0.0539	0.4	211509
Mn 257.610	0.3028	ppm	0.0012	0.4	73325
P 213.618	0.2217	ppm	0.0009	0.4	225.5
Se 196.026	0.0092	ppm	0.0045	48.7	6.491

PBW (PBLK) **12/8/2004, 12:37:29 PM** **Rack 3, Tube 37**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0078	ppm	0.0012	14.8	218.3	0.00783
Fe 261.187	0.0052	ppm	0.0004	6.8	120.2	0.00519
Mn 257.610	0.0001	ppm	0.0000	21.6	84.38	0.00010
P 213.618	0.0074	ppm	0.0040	54.1	14.54	0.00741
Se 196.026	0.0004uv	ppm	0.0008	239.2	-0.1518	0.00035

LCS-F (LCS) **12/8/2004, 12:40:24 PM** **Rack 3, Tube 38**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0594	ppm	0.0008	1.4	846.9	-
Fe 261.187	0.0248	ppm	0.0002	0.9	415.6	-
Mn 257.610	0.0001	ppm	0.0000	8.2	93.93	-
P 213.618	0.4799	ppm	0.0042	0.9	479.7	-
Se 196.026	0.0470	ppm	0.0062	13.3	34.80	93.96497

LCSD-F (LCS) **12/8/2004, 12:43:18 PM** **Rack 3, Tube 39**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0532	ppm	0.0006	1.0	771.2	-
Fe 261.187	0.0047	ppm	0.0006	13.5	112.7	-
Mn 257.610	0.0002	ppm	0.0000	13.3	100.2	-
P 213.618	0.4194	ppm	0.0032	0.8	420.2	-
Se 196.026	0.0475	ppm	0.0005	1.0	35.19	94.98380

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ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412079-03A (Samp) **12/8/2004, 12:46:14 PM** **Rack 3, Tube 40**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	13.72x	ppm	0.1584	1.2	167227
Fe 261.187	0.0225	ppm	0.0003	1.3	381.9
Mn 257.610	0.0611	ppm	0.0003	0.5	14843
P 213.618	0.2603	ppm	0.0080	3.1	263.5
Se 196.026	0.0452	ppm	0.0022	4.8	33.44

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P0412079-05A (Samp) **12/8/2004, 12:49:09 PM** **Rack 3, Tube 41**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.2416	ppm	0.0138	5.7	3066
Fe 261.187	0.5543	ppm	0.0016	0.3	8409
Mn 257.610	0.0467	ppm	0.0002	0.5	11351
P 213.618	0.3366	ppm	0.0015	0.4	338.6
Se 196.026	0.0091	ppm	0.0064	70.2	6.394

PBW (PBLK) **12/8/2004, 12:52:05 PM** **Rack 3, Tube 42**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0801	ppm	0.0010	1.2	1098	0.08005Z
Fe 261.187	0.0011	ppm	0.0002	19.0	58.32	0.00109
Mn 257.610	0.0001	ppm	0.0000	20.9	72.50	0.00006
P 213.618	0.0062	ppm	0.0008	13.2	13.33	0.00617
Se 196.026	0.0000uv	ppm	0.0056	25787.9	-0.3983	0.00002

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LCS-W (LCS) **12/8/2004, 12:54:58 PM** **Rack 3, Tube 43**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.5466	ppm	0.0044	0.8	6782	109.32929
Fe 261.187	4.977	ppm	0.0123	0.2	75180	99.54315
Mn 257.610	2.473	ppm	0.0213	0.9	598516	98.93208
P 213.618	2.708	ppm	0.0037	0.1	2674	108.32486
Se 196.026	0.4972	ppm	0.0053	1.1	372.3	99.43218

P0412082-01D (Samp) **12/8/2004, 12:57:50 PM** **Rack 3, Tube 44**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.3107	ppm	0.0026	0.8	3908
Fe 261.187	0.0089	ppm	0.0006	6.9	176.2
Mn 257.610	0.0050	ppm	0.0000	0.6	1275
P 213.618	0.2343	ppm	0.0029	1.2	238.0
Se 196.026	0.0063	ppm	0.0053	83.8	4.285

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

Cont Calib Verif (CCV) **12/8/2004, 1:00:43 PM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.5202	ppm	0.0016	0.3	6460	104.03493
Fe 261.187	12.21	ppm	0.0635	0.5	184395	97.69248
Mn 257.610	1.516	ppm	0.0097	0.6	367001	101.09980
P 213.618	2.488	ppm	0.0289	1.2	2457	99.51606
Se 196.026	0.6057	ppm	0.0067	1.1	453.6	96.90906

Cont Calib Blank (CCB) **12/8/2004, 1:03:37 PM** **Rack 2, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0375	ppm	0.0032	8.5	580.1	0.03753Z
Fe 261.187	0.0024	ppm	0.0006	24.6	77.57	0.00237
Mn 257.610	0.0001	ppm	0.0001	83.9	84.89	0.00011
P 213.618	0.0029uv	ppm	0.0026	88.9	10.11	0.00290
Se 196.026	0.0017uv	ppm	0.0029	172.7	0.8544	0.00169

P0412002-01D (Samp) **12/8/2004, 1:06:30 PM** **Rack 3, Tube 45**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.1820	ppm	0.0009	0.5	2340
Fe 261.187	0.0075	ppm	0.0009	11.7	155.8
Mn 257.610	7.276	ppm	0.0565	0.8	1760664
P 213.618	0.2466	ppm	0.0025	1.0	250.0
Se 196.026	0.0183	ppm	0.0021	11.5	13.33

P0412002-01D - DUP (DUP) **12/8/2004, 1:09:24 PM** **Rack 3, Tube 46**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.1796	ppm	0.0041	2.3	2311	1.33884
Fe 261.187	0.0054	ppm	0.0011	19.6	123.4	33.12367
Mn 257.610	7.226	ppm	0.0973	1.3	1748632	0.68575
P 213.618	0.2482	ppm	0.0030	1.2	251.6	0.65039
Se 196.026	0.0149	ppm	0.0013	8.6	10.76	20.56277*

P0412002-01D - MSPK (MSPK) **12/8/2004, 1:12:16 PM** **Rack 3, Tube 47**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.1723	ppm	0.0002	0.1	2222	-
Fe 261.187	0.9297	ppm	0.0016	0.2	14077	92.21622
Mn 257.610	7.379	ppm	0.0819	1.1	1785522	20.54682N
P 213.618	0.2359	ppm	0.0038	1.6	239.5	-
Se 196.026	1.871	ppm	0.0064	0.3	1402	92.64215

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ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412033-01D (Samp) **12/8/2004, 1:15:08 PM** **Rack 3, Tube 48**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.1295	ppm	0.0043	3.3	1700
Fe 261.187	0.1995	ppm	0.0002	0.1	3054
Mn 257.610	0.6275	ppm	0.0050	0.8	151881
P 213.618	0.2538	ppm	0.0031	1.2	257.1
Se 196.026	0.0113	ppm	0.0029	26.1	8.068

P0412033-02D (Samp) **12/8/2004, 1:18:00 PM** **Rack 3, Tube 49**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0734	ppm	0.0003	0.4	1018
Fe 261.187	0.2626	ppm	0.0020	0.8	4006
Mn 257.610	1.644	ppm	0.0381	2.3	397958
P 213.618	0.2585	ppm	0.0058	2.3	261.7
Se 196.026	0.0024uv	ppm	0.0027	112.5	1.404

P0412040-01D (Samp) **12/8/2004, 1:20:52 PM** **Rack 3, Tube 50**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0771	ppm	0.0003	0.4	1062
Fe 261.187	0.0011	ppm	0.0001	12.3	58.79
Mn 257.610	0.0025	ppm	0.0000	1.9	661.5
P 213.618	0.2337	ppm	0.0036	1.5	237.4
Se 196.026	0.0109	ppm	0.0041	37.8	7.761

P0412063-01D (Samp) **12/8/2004, 1:23:45 PM** **Rack 3, Tube 51**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0994	ppm	0.0013	1.3	1334
Fe 261.187	0.0857	ppm	0.0002	0.3	1335
Mn 257.610	0.0049	ppm	0.0001	1.3	1235
P 213.618	2.716	ppm	0.0148	0.5	2681
Se 196.026	0.0058	ppm	0.0036	63.0	3.913

PBW (PBLK) **12/8/2004, 1:26:38 PM** **Rack 3, Tube 52**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0168	ppm	0.0003	1.8	327.5	0.01679
Fe 261.187	0.0025	ppm	0.0005	21.6	79.21	0.00247
Mn 257.610	0.0001	ppm	0.0000	20.5	78.32	0.00008
P 213.618	0.1299	ppm	0.0018	1.4	135.1	0.12990Z
Se 196.026	0.0026uv	ppm	0.0033	127.8	1.541	0.00261

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ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

LCS-W (LCS) **12/8/2004, 1:29:31 PM** **Rack 3, Tube 53**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.4946	ppm	0.0053	1.1	6149	98.92715
Fe 261.187	4.794	ppm	0.0330	0.7	72421	95.88779
Mn 257.610	2.384	ppm	0.0194	0.8	577010	95.37682
P 213.618	2.675	ppm	0.0228	0.9	2641	107.00706
Se 196.026	0.4837	ppm	0.0056	1.2	362.2	96.74150

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P0412090-01D (Samp) **12/8/2004, 1:32:23 PM** **Rack 3, Tube 54**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.6326	ppm	0.0117	1.8	7829
Fe 261.187	0.0128	ppm	0.0005	4.1	235.5
Mn 257.610	0.0026	ppm	0.0000	1.2	689.2
P 213.618	0.2301	ppm	0.0022	0.9	233.8
Se 196.026	0.0150	ppm	0.0022	14.9	10.80

Cont Calib Verif (CCV) **12/8/2004, 1:35:16 PM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.5198	ppm	0.0020	0.4	6455	103.96446
Fe 261.187	12.51	ppm	0.0460	0.4	188918	100.08936
Mn 257.610	1.554	ppm	0.0091	0.6	376115	103.61094
P 213.618	2.566	ppm	0.0268	1.0	2534	102.65762
Se 196.026	0.6188	ppm	0.0087	1.4	463.5	99.00819

Cont Calib Blank (CCB) **12/8/2004, 1:38:10 PM** **Rack 2, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0246	ppm	0.0007	2.8	422.2	0.02457
Fe 261.187	0.0015	ppm	0.0004	29.0	64.88	0.00153
Mn 257.610	0.0001	ppm	0.0000	8.1	82.12	0.00009
P 213.618	-0.0026uv	ppm	0.0011	41.0	4.666	-0.00262
Se 196.026	0.0061	ppm	0.0040	66.0	4.154	0.00609Z

P0412090-02D (Samp) **12/8/2004, 1:41:04 PM** **Rack 3, Tube 55**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.5082	ppm	0.0066	1.3	6314
Fe 261.187	0.0968	ppm	0.0015	1.5	1503
Mn 257.610	1.538	ppm	0.0275	1.8	372261
P 213.618	0.2227	ppm	0.0067	3.0	226.5
Se 196.026	0.0084	ppm	0.0037	43.8	5.866

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ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412090-02D - DUP (DUP) **12/8/2004, 1:43:56 PM** **Rack 3, Tube 56**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.5054	ppm	0.0080	1.6	6280	0.55955
Fe 261.187	0.0945	ppm	0.0023	2.4	1469	2.34338
Mn 257.610	1.490	ppm	0.0704	4.7	360653	3.16819
P 213.618	0.2240	ppm	0.0029	1.3	227.8	0.59957
Se 196.026	0.0083	ppm	0.0003	3.5	5.841	0.39606

P0412090-02D - MSPK (MSPK) **12/8/2004, 1:46:50 PM** **Rack 3, Tube 57**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.5141	ppm	0.0019	0.4	6386	-
Fe 261.187	1.086	ppm	0.0031	0.3	16441	98.94983
Mn 257.610	1.996	ppm	0.0187	0.9	483136	91.64460
P 213.618	0.2133	ppm	0.0029	1.4	217.2	-
Se 196.026	1.960	ppm	0.0072	0.4	1469	97.59698

P0412074-01D (Samp) **12/8/2004, 1:49:43 PM** **Rack 3, Tube 58**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.6743	ppm	0.0032	0.5	8337
Fe 261.187	0.0596	ppm	0.0008	1.3	942.2
Mn 257.610	4.807	ppm	0.0920	1.9	1163149
P 213.618	0.2302	ppm	0.0030	1.3	233.9
Se 196.026	0.0254	ppm	0.0043	16.8	18.65

P0412074-02D (Samp) **12/8/2004, 1:52:37 PM** **Rack 3, Tube 59**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.5870	ppm	0.0043	0.7	7274
Fe 261.187	0.0351	ppm	0.0005	1.5	571.1
Mn 257.610	6.874	ppm	0.0912	1.3	1663225
P 213.618	0.2429	ppm	0.0003	0.1	246.4
Se 196.026	0.0133	ppm	0.0039	29.6	9.520

P0412074-03D (Samp) **12/8/2004, 1:55:34 PM** **Rack 3, Tube 60**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.7408	ppm	0.0109	1.5	9147
Fe 261.187	2.331	ppm	0.0320	1.4	35226
Mn 257.610	6.233	ppm	0.0831	1.3	1508185
P 213.618	0.3396	ppm	0.0063	1.9	341.6
Se 196.026	0.0127	ppm	0.0045	35.6	9.080

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ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412067-01D (Samp) **12/8/2004, 1:58:29 PM** **Rack 3, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0574	ppm	0.0002	0.3	822.5
Fe 261.187	112.3x	ppm	0.3729	0.3	1696022
Mn 257.610	2.330	ppm	0.0022	0.1	563734
P 213.618	0.1831	ppm	0.0039	2.1	187.5
Se 196.026	0.0088	ppm	0.0025	28.5	6.209

P0412067-02D (Samp) **12/8/2004, 2:01:25 PM** **Rack 3, Tube 2**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0384	ppm	0.0002	0.6	590.8
Fe 261.187	8.215	ppm	0.0156	0.2	124056
Mn 257.610	0.4639	ppm	0.0009	0.2	112317
P 213.618	0.2638	ppm	0.0029	1.1	267.0
Se 196.026	0.0032	ppm	0.0028	88.8	1.984

P0412067-03D (Samp) **12/8/2004, 2:04:21 PM** **Rack 3, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0863	ppm	0.0009	1.0	1174
Fe 261.187	127.0x	ppm	0.6840	0.5	1916968
Mn 257.610	2.907	ppm	0.0142	0.5	703530
P 213.618	0.1821	ppm	0.0030	1.7	186.5
Se 196.026	0.0128	ppm	0.0026	20.3	9.145

P0412067-04D (Samp) **12/8/2004, 2:07:16 PM** **Rack 3, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.1296	ppm	0.0024	1.8	1702
Fe 261.187	19.18	ppm	0.0886	0.5	289551
Mn 257.610	1.135	ppm	0.0039	0.3	274695
P 213.618	0.2107	ppm	0.0027	1.3	214.7
Se 196.026	0.0093	ppm	0.0060	64.2	6.579

Cont Calib Verif (CCV) **12/8/2004, 2:10:14 PM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.5103	ppm	0.0037	0.7	6340	102.06364
Fe 261.187	12.54	ppm	0.0840	0.7	189423	100.35708
Mn 257.610	1.554	ppm	0.0107	0.7	376038	103.58951
P 213.618	2.549	ppm	0.0284	1.1	2517	101.97432
Se 196.026	0.6154	ppm	0.0064	1.0	460.9	98.45758

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ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

Cont Calib Blank (CCB) **12/8/2004, 2:13:10 PM** **Rack 2, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0199	ppm	0.0007	3.5	365.5	0.01991
Fe 261.187	0.0019	ppm	0.0008	40.4	71.15	0.00194
Mn 257.610	0.0001	ppm	0.0000	16.0	83.64	0.00010
P 213.618	0.0023	ppm	0.0011	48.5	9.531	0.00232
Se 196.026	0.0018	ppm	0.0022	121.7	0.9131	0.00177

P0412067-05D (Samp) **12/8/2004, 2:16:07 PM** **Rack 3, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0283	ppm	0.0030	10.8	467.1
Fe 261.187	30.94	ppm	0.1727	0.6	467143
Mn 257.610	3.670	ppm	0.0156	0.4	887977
P 213.618	0.1880	ppm	0.0071	3.8	192.4
Se 196.026	0.0064	ppm	0.0014	21.5	4.413

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P0412067-06D (Samp) **12/8/2004, 2:19:03 PM** **Rack 3, Tube 6**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0936	ppm	0.0004	0.4	1263
Fe 261.187	67.95	ppm	0.2661	0.4	1025930
Mn 257.610	2.298	ppm	0.0049	0.2	556190
P 213.618	0.2261	ppm	0.0039	1.7	229.9
Se 196.026	0.0153	ppm	0.0015	9.7	11.04

P0412067-07D (Samp) **12/8/2004, 2:21:57 PM** **Rack 3, Tube 7**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.1037	ppm	0.0048	4.7	1387
Fe 261.187	2.803	ppm	0.0346	1.2	42363
Mn 257.610	3.784	ppm	0.0947	2.5	915606
P 213.618	0.2177	ppm	0.0026	1.2	221.6
Se 196.026	0.0144	ppm	0.0044	30.5	10.37

P0412079-05A (Samp) **12/8/2004, 2:26:37 PM** **Rack 3, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0686	ppm	0.0007	1.0	959.2
Fe 261.187	0.5636	ppm	0.0033	0.6	8550
Mn 257.610	0.0474	ppm	0.0003	0.6	11522
P 213.618	0.3391	ppm	0.0020	0.6	341.2
Se 196.026	0.0089	ppm	0.0032	35.4	6.290

4120800 3

ICP120804. All Data Report 12/8/2004, 2:42:47 PM, Method: 6010B, Instrument ID: EL99063568

P0412079-04ADIL1/50 (Samp) **12/8/2004, 2:29:33 PM** **Rack 3, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.8893	ppm	0.0081	0.9	10956
Fe 261.187	0.0027	ppm	0.0010	37.9	82.60
Mn 257.610	0.0102	ppm	0.0001	0.8	2526
P 213.618	0.0054	ppm	0.0042	78.1	12.53
Se 196.026	0.0054	ppm	0.0034	64.2	3.606

4/20/8003

BLANK (Samp) **12/8/2004, 2:33:43 PM** **Rack 3, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
B 249.678	0.0184	ppm	0.0002	0.9	347.1
Fe 261.187	0.0009	ppm	0.0004	37.8	55.98
Mn 257.610	0.0000	ppm	0.0000	108.8	67.67
P 213.618	0.0030	ppm	0.0025	81.9	10.20
Se 196.026	0.0015	ppm	0.0012	78.3	0.7411

Cont Calib Verif (CCV) **12/8/2004, 2:36:37 PM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.5055	ppm	0.0055	1.1	6281	101.09893
Fe 261.187	12.52	ppm	0.1000	0.8	188991	100.12799
Mn 257.610	1.553	ppm	0.0127	0.8	375815	103.52821
P 213.618	2.548	ppm	0.0247	1.0	2516	101.90570
Se 196.026	0.6188	ppm	0.0049	0.8	463.5	99.01452

Cont Calib Blank (CCB) **12/8/2004, 2:39:32 PM** **Rack 2, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
B 249.678	0.0188	ppm	0.0009	5.0	351.8	0.01878
Fe 261.187	0.0011	ppm	0.0005	43.8	58.10	0.00108
Mn 257.610	0.0001	ppm	0.0000	28.0	82.42	0 00010
P 213.618	0.0020uv	ppm	0.0025	125.3	9.221	0.00200
Se 196.026	0.0017uv	ppm	0.0020	119.0	0.8576	0.00170

Organics Data

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-01A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13122
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	340	E
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	1400	E
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	360	E
156-60-5	trans-1,2-Dichloroethene	630	E
1634-04-4	Methyl-t-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	820	E
156-59-2	cis-1,2-Dichloroethene	1500	E
78-93-3	2-Butanone		
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	2000	E
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	63	
107-06-2	1,2-Dichloroethane	260	E

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-01A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13122
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	920	E
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane	4.6	J
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	2400	E
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	30	
127-18-4	Tetrachloroethene	55	
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.4	
100-41-4	Ethylbenzene	230	
95-47-6	o-Xylene	160	
	m & p-Xylene	370	
100-42-5	Styrene		
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane	0.46	J
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether	20	U

1A - Form I VOA-1
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EPASampleNo: MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-01A R1
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13191
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/21/2004
GC Column: ID: (mm) Dilution 100
Soil Extract Volume: (uL) Soil Aliquot (uL)
Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride	380	J
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	1300	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	460	J
156-60-5	trans-1,2-Dichloroethene	960	
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane	1000	
156-59-2	cis-1,2-Dichloroethene	63000	E
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane	2600	
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane	310	J

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-01A R1
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13191
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/21/2004
GC Column: ID: (mm) Dilution 100
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	35000	E
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	4100	
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-01A R2
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13222
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/23/2004
GC Column: ID: (mm) Dilution 500
Soil Extract Volume: (uL) Soil Aliquot (uL)
Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride		
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride		
156-60-5	trans-1,2-Dichloroethene		
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane		
156-59-2	cis-1,2-Dichloroethene	67000	
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane		
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane		

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-01A R2
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13222
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/23/2004
GC Column: ID: (mm) Dilution 500
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	33000	M
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene		
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-1

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-02A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13123
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	320	E
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	410	E
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	95	
156-60-5	trans-1,2-Dichloroethene	240	E
1634-04-4	Methyl-t-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	250	E
156-59-2	cis-1,2-Dichloroethene	7500	E
78-93-3	2-Butanone		
67-66-3	Chloroform	14	
71-55-6	1,1,1-Trichloroethane	560	E
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	21	
107-06-2	1,2-Dichloroethane	210	

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-1

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-02A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13123
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	6000	E
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	360	E
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	6.6	
127-18-4	Tetrachloroethene	18	
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	2.4	J
100-41-4	Ethylbenzene	43	
95-47-6	o-Xylene	35	
	m & p-Xylene	80	
100-42-5	Styrene		
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane	0.34	J
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether	20	U

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-1

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-02A R1
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13192
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/21/2004
GC Column: ID: (mm) Dilution 500
Soil Extract Volume: (uL) Soil Aliquot (uL)
Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride		
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride		
156-60-5	trans-1,2-Dichloroethene		
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane		
156-59-2	cis-1,2-Dichloroethene	23000	
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane		
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane		

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-1

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-02A R1
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13192
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/21/2004
GC Column: ID: (mm) Dilution 500
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene		
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene		
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-1

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-02A R2
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13223
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/23/2004
GC Column: ID: (mm) Dilution 100
Soil Extract Volume: (uL) Soil Aliquot (uL)
Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride	460	J
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	490	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride		
156-60-5	trans-1,2-Dichloroethene	310	J
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane	320	J
156-59-2	cis-1,2-Dichloroethene	29000	E
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane	880	
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane		

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-1

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-02A R2
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13223
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/23/2004
GC Column: ID: (mm) Dilution 100
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	18000	M
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	570	
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-03A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13124
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	470	E
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	1000	E
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	500	E
156-60-5	trans-1,2-Dichloroethene	1200	E
1634-04-4	Methyl-t-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	570	E
156-59-2	cis-1,2-Dichloroethene	3800	E
78-93-3	2-Butanone		
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	950	E
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	92	
107-06-2	1,2-Dichloroethane	300	E

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-03A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13124
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	4000	E
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane	4.7	J
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	2600	E
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	20	
127-18-4	Tetrachloroethene	31	
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	7.5	
100-41-4	Ethylbenzene	250	
95-47-6	o-Xylene	120	
	m & p-Xylene	310	
100-42-5	Styrene		
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane	0.32	J
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether	20	U

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-03A R1
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13193
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/21/2004
GC Column: ID: (mm) Dilution 500
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride		
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride		
156-60-5	trans-1,2-Dichloroethene		
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane		
156-59-2	cis-1,2-Dichloroethene	120000	
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane		
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane		

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-03A R1
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13193
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/21/2004
GC Column: ID: (mm) Dilution 500
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	28000	
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene		
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-03A R2
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13224
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/23/2004
GC Column: ID: (mm) Dilution 100
Soil Extract Volume: (uL) Soil Aliquot (uL)
Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride	600	
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	1100	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	640	
156-60-5	trans-1,2-Dichloroethene	1400	
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane	700	
156-59-2	cis-1,2-Dichloroethene	110000	E
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane	1200	
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane	380	J

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E SDG No.: MWB-2

Lab Code: P0412024 Case No.: Mod.Ref No.:

Matrix (soil / sed / water): Water Lab Sample ID: P0412024-03A R2

Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13224

Level (Trace or Date Received: 12/1/2004

% Moisture: not Date 12/23/2004

GC Column: ID: (mm) Dilution 100

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

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	27000	E
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	5000	
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: TB113004

Lab Name: Microseeps, Inc. Contract: 7464127E SDG No.: MWB-2

Lab Code: P0412024 Case No.: Mod.Ref No.:

Matrix (soil / sed / water): Water Lab Sample ID: P0412024-04A

Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13118

Level (Trace or Date Received: 12/1/2004

% Moisture: not Date 12/14/2004

GC Column: ID: (mm) Dilution 1

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

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl-t-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.3	J
78-93-3	2-Butanone		
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: TB113004

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2
Matrix (soil / sed / water): Water Lab Sample ID: P0412024-04A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13118
Level (Trace or Date Received: 12/1/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	0.56	J
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	1.0	J
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.6	
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
	m & p-Xylene	10	U
100-42-5	Styrene		
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether	20	U

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2

EPA Sample No.	SMC1 (TOT) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
PBW	102	103	95.0		
LCSW	99.6	101	93.3		
MWB-1	99.7	97.8	92.6		
MWB-2	182	94.5	88.3		1
MWB-3	192	96.5	92.3		1
TB113004	104	103	99.6		

		QC LIMITS
SMC1 (TOL) #	= Toluene-d8	(70-130)
SMC2 (BFB) #	=	(70-130)
SMC3 (DCE) #	= 1,2-Dichloroethane-d4	(70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2

EPA Sample No.	SMC1 (TOT) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
PBW	104	100	107		
LCSW	105	105	108		
MWB-2	107	104	115		
MWB-1	106	101	114		
MWB-3	107	101	117		

		QC LIMITS
SMC1 (TOL) #	= Toluene-d8	(70-130)
SMC2 (BFB) #	=	(70-130)
SMC3 (DCE) #	= 1,2-Dichloroethane-d4	(70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: Mod.Ref No.: SDG No.: MWB-2

EPA Sample No.	SMC1 (TOT) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
PBW	101	97.8	103		
LCSW	102	98.4	104		
LCSD	102	97.8	104		
MWB-2	101	98.6	108		
MWB-1	103	97.8	109		
MWB-3	102	99.1	112		

		QC LIMITS
SMC1 (TOL) #	= Toluene-d8	(70-130)
SMC2 (BFB) #	=	(70-130)
SMC3 (DCE) #	= 1,2-Dichloroethane-d4	(70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBW

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Lab File ID: VBLK1426 Lab Sample ID: PBW

Date 12/14/04 Time Analyzed: 15:14

GC Column: ID: (mm) Heated Purge: Y

Instrument ID: SYS B

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
LCSW	LCSW	LCSW1426	14:41
MWB-2	P0412024-01A	VSA13122	18:28
MWB-1	P0412024-02A	VSA13123	19:00
MWB-3	P0412024-03A	VSA13124	19:32
TB113004	P0412024-04A	VSA13118	16:18

Comments:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
PBW

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Lab File ID: VBLK1450 Lab Sample ID: PBW

Date 12/21/04 Time Analyzed: 12:26

GC Column: ID: (mm) Heated Purge: Y

Instrument ID: SYS B

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
LCSW	LCSW	LCSW1432	11:54
MWB-2	P0412024-01A R1	VSA13191	18:58
MWB-1	P0412024-02A R1	VSA13192	19:30
MWB-3	P0412024-03A R1	VSA13193	20:02

Comments:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
PBW

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Lab File ID: VBLK1454 Lab Sample ID: PBW

Date 12/23/04 Time Analyzed: 00:09

GC Column: ID: (mm) Heated Purge: Y

Instrument ID: SYS B

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
LCSW	LCSW	LCSW1434	23:05
LCSD	LCSD	LCSW1435	23:37
MWB-2	P0412024-01A R2	VSA13222	03:56
MWB-1	P0412024-02A R2	VSA13223	04:29
MWB-3	P0412024-03A R2	VSA13224	05:01

Comments:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Lab File ID: BF121404 BFB Injection Date: 12/14/04

Instrument ID: SYS B BFB Injection Time: 10:08

GC Column: ID: (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.1
75	30.0 - 66.0% of mass 95	45.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less then 2.0% of mass 174	0.0
174	50.0 - 120% of mass 95	54.5
175	4.0 - 9.0% of mass 174	6.8
176	93.0 - 101.0% of mass 174	96.6
177	5.0 - 9.0% of mass 176	6.8

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

This check applies to the following samples, MS, MSD, BLANKS, and Standards:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
PBW	PBW	VBLK1443	12/14/04	15:14
LCSW	LCSW	LCSW1426	12/14/04	14:41
MWB-2	P0412024-01A	VSA13122	12/14/04	18:28
MWB-1	P0412024-02A	VSA13123	12/14/04	19:00
MWB-3	P0412024-03A	VSA13124	12/14/04	19:32
TB113004	P0412024-04A	VSA13118	12/14/04	16:18

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Lab File ID: BF122104 BFB Injection Date: 12/21/04

Instrument ID: SYS B BFB Injection Time: 10:39

GC Column: ID: (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	17.4
75	30.0 - 66.0% of mass 95	47.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.6
173	Less then 2.0% of mass 174	0.0
174	50.0 - 120% of mass 95	85.9
175	4.0 - 9.0% of mass 174	7.5
176	93.0 - 101.0% of mass 174	97.2
177	5.0 - 9.0% of mass 176	6.3

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

This check applies to the following samples, MS, MSD, BLANKS, and

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
PBW	PBW	VBLK1450	12/21/04	12:26
LCSW	LCSW	LCSW1432	12/21/04	11:54
MWB-2	P0412024-01A R1	VSA13191	12/21/04	18:58
MWB-1	P0412024-02A R1	VSA13192	12/21/04	19:30
MWB-3	P0412024-03A R1	VSA13193	12/21/04	20:02

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Lab File ID: BB122204 BFB Injection Date: 12/22/04

Instrument ID: SYS B BFB Injection Time: 22:00

GC Column: ID: (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.4
75	30.0 - 66.0% of mass 95	50.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less then 2.0% of mass 174	0.0
174	50.0 - 120% of mass 95	65.8
175	4.0 - 9.0% of mass 174	7.8
176	93.0 - 101.0% of mass 174	96.3
177	5.0 - 9.0% of mass 176	6.2

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

This check applies to the following samples, MS, MSD, BLANKS, and

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
PBW	PBW	VBLK1454	12/23/04	00:09
LCSW	LCSW	LCSW1434	12/22/04	23:05
LCSD	LCSD	LCSW1435	12/22/04	23:37
MWB-2	P0412024-01A R2	VSA13222	12/23/04	03:56
MWB-1	P0412024-02A R2	VSA13223	12/23/04	04:29
MWB-3	P0412024-03A R2	VSA13224	12/23/04	05:01

6A

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: Microseeps, Inc Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument ID: SYS B Calibration Date(s): 12/14/04 12/14/04

Heated Purge: (Y/N) Y Calibration Time(s): 10:54 13:47

GC Column: ID: (mm)

RRF5 = VSTD1956 RRF10 = VSTD1955 RRF20 = VSTD1954

RRF50 = VSTD1953 RRF100 = VSTD1952 RRF200 = VSTD1951

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
Dichlorodifluoromethane								
Chloromethane	2.154	2.431	2.136	2.250	2.319	2.227	2.253	4.87
Vinyl Chloride	2.080	2.356	2.120	2.254	2.227	2.089	2.188	5.01
Bromomethane	1.427	1.496	1.258	1.287	1.295	1.228	1.332	7.90
Chloroethane	1.426	1.535	1.344	1.407	1.415	1.386	1.419	4.49
Trichlorofluoromethane								
1,1-Dichloroethene	1.682	1.738	1.645	1.708	1.722	1.684	1.696	1.97
1,1,2-Trichloro-1,2,2-trifluoroethane								
Acetone		0.678	0.474	0.440	0.468	0.425	0.497	20.78
Carbon Disulfide	5.857	6.184	5.818	5.913	5.925	5.708	5.901	2.69
Methyl Acetate								
Methylene Chloride	2.014	2.176	1.961	1.931	1.941	1.839	1.977	5.70
trans-1,2-Dichloroethene	1.883	2.043	1.919	1.972	1.967	1.908	1.949	2.96
Methyl-t-butyl ether	4.066	4.703	4.493	4.441	4.694	4.495	4.482	5.18
1,1-Dichloroethane	2.992	3.216	2.988	2.961	2.985	2.898	3.007	3.60
cis-1,2-Dichloroethene	2.793	2.532	2.245	2.179	2.162	2.063	2.329	11.91
2-Butanone		0.882	0.764	0.668	0.688	0.651	0.731	13.01
Chloroform	2.898	2.927	2.837	2.869	2.831	2.780	2.857	1.83
1,1,1-Trichloroethane	0.366	0.381	0.364	0.374	0.370	0.352	0.368	2.66
Cyclohexane								
Carbon tetrachloride	0.267	0.294	0.288	0.297	0.302	0.292	0.290	4.29
Benzene	1.012	1.128	1.094	1.055	1.036	0.966	1.049	5.51
1,2-Dichloroethane	1.987	2.088	1.990	1.961	1.964	1.884	1.979	3.32
Trichloroethene	0.243	0.247	0.237	0.230	0.229	0.207	0.232	6.02
Methylcyclohexane								

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

6B

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument ID: SYS B Calibration Date(s): 12/14/04 12/14/04

Heated Purge: (Y/N) Y Calibration Time(s): 10:54 13:47

GC Column: _____ ID: _____ (mm)

RRF5 = VSTD1956 RRF10 = VSTD1955 RRF20 = VSTD1954

RRF50 = VSTD1953 RRF100 = VSTD1952 RRF200 = VSTD1951

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF10	RRF200	RRF	% RSD
1,2-Dichloropropane	0.260	0.277	0.265	0.265	0.265	0.246	0.263	3.83
Bromodichloromethane	0.317	0.349	0.334	0.329	0.327	0.303	0.327	4.70
cis-1,3-Dichloropropene	0.420	0.474	0.437	0.448	0.465	0.438	0.447	4.43
4-Methyl-2-pentanone		0.222	0.241	0.219	0.222	0.212	0.223	4.83
Toluene	0.709	0.749	0.753	0.727	0.710	0.651	0.716	5.16
trans-1,3-Dichloropropene	0.368	0.397	0.378	0.392	0.405	0.376	0.386	3.70
1,1,2-Trichloroethane	0.235	0.262	0.240	0.235	0.241	0.220	0.239	5.62
Tetrachloroethene	0.173	0.174	0.182	0.184	0.189	0.178	0.180	3.35
2-Hexanone		0.153	0.162	0.148	0.157	0.147	0.153	4.17
Dibromochloromethane	0.241	0.248	0.239	0.238	0.243	0.231	0.240	2.37
1,2-Dibromoethane	0.259	0.295	0.279	0.279	0.287	0.269	0.278	4.67
Chlorobenzene	0.807	0.858	0.814	0.793	0.801	0.760	0.806	3.97
Ethylbenzene	1.254	1.369	1.341	1.305	1.297	1.224	1.299	4.13
m & p-Xylene	0.538	0.594	0.575	0.556	0.544	0.522	0.555	4.71
o-Xylene	0.532	0.578	0.559	0.546	0.523	0.500	0.540	5.12
Styrene	0.849	0.957	0.938	0.946	0.902	0.871	0.910	4.81
Isopropylbenzene	1.295	1.447	1.419	1.449	1.383	1.330	1.387	4.57
Bromoform	0.128	0.144	0.137	0.140	0.140	0.142	0.139	4.07
1,1,2,2-Tetrachloroethane	0.391	0.397	0.393	0.348	0.332	0.302	0.361	10.94
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
1,2-Dichlorobenzene								
1,2-Dibromo-3-chloropropane								
1,2,4-Trichlorobenzene								
2-Chloroethyl vinyl ether								
Toluene-d8	0.938	1.055	1.031	1.015	1.007	0.928	0.996	5.16
Bromofluorobenzene	0.372	0.429	0.397	0.387	0.367	0.362	0.386	6.49
1,2-Dichloroethane-d4	1.524	1.761	1.576	1.588	1.606	1.606	1.610	4.95

* Compounds with required minimum RRF and maximum %RSD values.

All other compounds must meet a minimum RRF of 0.010.

6A

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument SYS B Calibration Date(s): 12/15/04 12/15/04

Heated Purge: (Y/N) Y Calibration Time(s): 13:52 16:37

GC Column: ID: (mm)

RRF5 = VSTD1968 RRF10 = VSTD1967 RRF20 = VSTD1966

RRF50 = VSTD1965 RRF100 = VSTD1964 RRF200 = VSTD1963

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
Dichlorodifluoromethane								
Chloromethane	1.372	1.406	1.428	1.541	1.548	1.458	1.459	4.93
Vinyl Chloride	1.357	1.470	1.459	1.547	1.496	1.410	1.456	4.56
Bromomethane	0.907	0.947	0.874	0.928	0.935	0.855	0.908	4.00
Chloroethane	0.941	0.998	0.979	1.034	1.017	0.991	0.993	3.22
Trichlorofluoromethane								
1,1-Dichloroethene	1.109	1.160	1.091	1.116	1.112	1.115	1.117	2.05
1,1,2-Trichloro-1,2,2-trifluoroethane								
Acetone		0.473	0.435	0.339	0.344	0.331	0.384	16.98
Carbon Disulfide	3.973	4.317	4.010	4.085	4.060	4.026	4.078	3.02
Methyl Acetate								
Methylene Chloride	1.439	1.649	1.349	1.377	1.373	1.308	1.416	8.62
trans-1,2-Dichloroethene	1.373	1.471	1.284	1.322	1.307	1.295	1.342	5.24
Methyl-t-butyl ether	3.035	3.361	3.121	3.100	3.148	3.070	3.139	3.68
1,1-Dichloroethane	2.246	2.510	2.176	2.186	2.188	2.125	2.238	6.18
cis-1,2-Dichloroethene	1.803	1.811	1.503	1.430	1.412	1.377	1.556	12.79
2-Butanone		0.715	0.644	0.555	0.561	0.525	0.600	12.98
Chloroform	2.001	2.273	1.932	1.916	1.945	1.917	1.997	6.94
1,1,1-Trichloroethane	0.285	0.310	0.285	0.283	0.279	0.276	0.286	4.25
Cyclohexane								
Carbon tetrachloride	0.231	0.251	0.244	0.243	0.243	0.244	0.243	2.63
Benzene	0.995	1.143	0.992	0.983	0.964	0.909	0.998	7.84
1,2-Dichloroethane	1.416	1.566	1.395	1.367	1.368	1.339	1.409	5.79
Trichloroethene	0.391	0.365	0.344	0.295	0.282	0.275	0.325	14.79
Methylcyclohexane								

* Compounds with required minimum RRF and maximum %RSD

All other compounds must meet a minimum RRF of

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument SYS B Calibration Date(s): 12/15/04 12/15/04

Heated Purge: (Y/N) Y Calibration Time(s): 13:52 16:37

GC Column: ID: (mm)

RRF5 = VSTD1968 RRF10 = VSTD1967 RRF20 = VSTD1966

RRF50 = VSTD1965 RRF100 = VSTD1964 RRF200 = VSTD1963

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF10	RRF200	RRF	% RSD
1,2-Dichloropropane	0.253	0.293	0.250	0.253	0.251	0.241	0.257	7.18
Bromodichloromethane	0.289	0.336	0.281	0.286	0.288	0.274	0.292	7.60
cis-1,3-Dichloropropene	0.389	0.459	0.415	0.418	0.420	0.400	0.417	5.71
4-Methyl-2-pentanone		0.217	0.219	0.208	0.215	0.202	0.212	3.39
Toluene	0.605	0.691	0.605	0.579	0.570	0.549	0.600	8.27
trans-1,3-Dichloropropene	0.329	0.367	0.357	0.348	0.354	0.338	0.349	3.90
1,1,2-Trichloroethane	0.201	0.228	0.217	0.204	0.202	0.192	0.207	6.13
Tetrachloroethene	0.222	0.242	0.222	0.223	0.223	0.221	0.226	3.62
2-Hexanone		0.142	0.151	0.144	0.147	0.142	0.145	2.57
Dibromochloromethane	0.260	0.287	0.266	0.262	0.263	0.251	0.265	4.52
1,2-Dibromoethane	0.229	0.254	0.239	0.236	0.239	0.224	0.237	4.32
Chlorobenzene	0.726	0.829	0.724	0.703	0.707	0.671	0.727	7.42
Ethylbenzene	1.056	1.210	1.113	1.082	1.082	1.016	1.093	6.01
m & p-Xylene	0.441	0.502	0.448	0.438	0.425	0.401	0.442	7.56
o-Xylene	0.430	0.494	0.436	0.414	0.415	0.390	0.430	8.19
Styrene	0.662	0.807	0.722	0.718	0.718	0.678	0.718	7.02
Isopropylbenzene	1.012	1.185	1.091	1.072	1.065	1.008	1.072	6.03
Bromoform	0.175	0.186	0.186	0.179	0.185	0.178	0.181	2.71
1,1,2,2-Tetrachloroethane	0.334	0.337	0.335	0.294	0.290	0.258	0.308	10.57
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
1,2-Dichlorobenzene								
1,2-Dibromo-3-chloropropane								
1,2,4-Trichlorobenzene								
2-Chloroethyl vinyl ether								
Toluene-d8	0.834	0.841	0.839	0.819	0.797	0.762	0.816	3.79
Bromofluorobenzene	0.336	0.323	0.311	0.305	0.295	0.286	0.309	5.99
1,2-Dichloroethane-d4	1.317	1.258	1.214	1.197	1.188	1.179	1.225	4.31

* Compounds with required minimum RRF and maximum %RSD
All other compounds must meet a minimum RRF of

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument SYS B Calibration Date: 12/21/04 Calibration Time: 11:21

EPA Sample No.: VSTD 50 Init. Calib. Date(s): 12/15/04 12/15/04

Lab File ID: VCAL1456 Init. Calib. Time(s): 13:52 16:37

Heated Purge: Y

GC Column: _____ ID: _____ (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX % D
Dichlorodifluoromethane					
Chloromethane	1.459	1.370		6.1	
Vinyl Chloride	1.456	1.458	0.100	-0.1	25.0
Bromomethane	0.908	0.798	0.100	12.1	25.0
Chloroethane	0.993	1.082		-8.9	
Trichlorofluoromethane					
1,1-Dichloroethene	1.117	1.130	0.100	-1.1	25.0
1,1,2-Trichloro-1,2,2-trifluoroethane					
Acetone	0.384	0.382		0.7	
Carbon Disulfide	4.078	4.156		-1.9	
Methyl Acetate					
Methylene Chloride	1.416	1.467		-3.6	
trans-1,2-Dichloroethene	1.342	1.356		-1.1	
Methyl-t-butyl ether	3.139	3.392		-8.0	
1,1-Dichloroethane	2.238	2.459	0.200	-9.9	25.0
cis-1,2-Dichloroethene	1.556	1.446		7.1	
2-Butanone	0.600	0.593		1.1	
Chloroform	1.997	2.084	0.200	-4.3	25.0
1,1,1-Trichloroethane	0.286	0.289	0.100	-1.0	25.0
Cyclohexane					
Carbon tetrachloride	0.243	0.244	0.100	-0.5	25.0
Benzene	0.998	1.010	0.500	-1.2	25.0
1,2-Dichloroethane	1.409	1.601	0.100	-13.7	25.0
Trichloroethene	0.325	0.269	0.300	17.4	25.0
Methylcyclohexane					

All other compounds must meet a minimum RRF of

7B

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument SYS B Calibration Date: 12/21/04 Calibration Time: 11:21

EPA Sample No. : VSTD 50 Init. Calib. Date(s): 12/15/04 12/15/04

Lab File ID: VCAL1456 Init. Calib. Time(s): 13:52 16:37

Heated Purge: Y

GC Column: _____ ID: _____ (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX D
1,2-Dichloropropane	0.257	0.274		-6.7	
Bromodichloromethane	0.292	0.298	0.200	-1.9	25.0
cis-1,3-Dichloropropene	0.417	0.429	0.200	-2.9	25.0
4-Methyl-2-pentanone	0.212	0.219		-3.5	
Toluene	0.600	0.586	0.400	2.3	25.0
trans-1,3-Dichloropropene	0.349	0.353	0.100	-1.3	25.0
1,1,2-Trichloroethane	0.207	0.216	0.100	-4.2	25.0
Tetrachloroethene	0.226	0.195	0.200	13.3	25.0
2-Hexanone	0.145	0.150		-3.5	
Dibromochloromethane	0.265	0.254	0.100	4.2	25.0
1,2-Dibromoethane	0.237	0.243		-2.4	
Chlorobenzene	0.727	0.702	0.500	3.3	25.0
Ethylbenzene	1.093	1.089	0.100	0.4	25.0
m & p-Xylene	0.442	0.437	0.300	1.3	25.0
o-Xylene	0.430	0.426	0.300	1.0	25.0
Styrene	0.718	0.719	0.300	-0.1	25.0
Isopropylbenzene	1.072	1.077		-0.4	
Bromoform	0.181	0.161	0.100	11.4	25.0
1,1,2,2-Tetrachloroethane	0.308	0.308	0.300	-0.0	25.0
1,3-Dichlorobenzene			0.600		25.0
1,4-Dichlorobenzene			0.500		25.0
1,2-Dichlorobenzene			0.400		25.0
1,2-Dibromo-3-chloropropane					
1,2,4-Trichlorobenzene			0.200		25.0
2-Chloroethyl vinyl ether					
Toluene-d8	0.816	0.842		-3.2	
Bromofluorobenzene	0.309	0.312	0.200	-0.8	25.0
1,2-Dichloroethane-d4	1.225	1.341		-9.4	

All other compounds must meet a minimum RRF of

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument ID: SYS B Calibration Date: 12/22/04 Calibration Time: 22:32

EPA Sample No.: VSTD 50 Init. Calib. Date(s): 12/15/04 12/15/04

Lab File ID: VCAL1458 Init. Calib. Time(s): 13:52 16:37

Heated Purge: (Y/N) Y

GC Column: _____ ID: _____ (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX % D
Dichlorodifluoromethane					
Chloromethane	1.459	1.009		30.8	
Vinyl Chloride	1.456	1.197	0.100	17.8	25.0
Bromomethane	0.908	0.618	0.100	31.9	25.0
Chloroethane	0.993	0.940		5.3	
Trichlorofluoromethane					
1,1-Dichloroethene	1.117	1.003	0.100	10.2	25.0
1,1,2-Trichloro-1,2,2-trifluoroethane					
Acetone	0.384	0.362		5.7	
Carbon Disulfide	4.078	3.450		15.4	
Methyl Acetate					
Methylene Chloride	1.416	1.356		4.2	
trans-1,2-Dichloroethene	1.342	1.243		7.3	
Methyl-t-butyl ether	3.139	3.053		2.8	
1,1-Dichloroethane	2.238	2.333	0.200	-4.2	25.0
cis-1,2-Dichloroethene	1.556	1.364		12.3	
2-Butanone	0.600	0.555		7.5	
Chloroform	1.997	1.970	0.200	1.4	25.0
1,1,1-Trichloroethane	0.286	0.263	0.100	8.1	25.0
Cyclohexane					
Carbon tetrachloride	0.243	0.223	0.100	8.0	25.0
Benzene	0.998	0.900	0.500	9.8	25.0
1,2-Dichloroethane	1.409	1.530	0.100	-8.6	25.0
Trichloroethene	0.325	0.235	0.300	27.8	25.0
Methylcyclohexane					

All other compounds must meet a minimum RRF of 0.010.

7B

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Instrument ID: SYS B Calibration Date: 12/22/04 Calibration Time: 22:32

EPA Sample No.: VSTD 50 Init. Calib. Date(s): 12/15/04 12/15/04

Lab File ID: VCAL1458 Init. Calib. Time(s): 13:52 16:37

Heated Purge: (Y/N) Y

GC Column: ID: (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX D
1,2-Dichloropropane	0.257	0.253		1.5	
Bromodichloromethane	0.292	0.271	0.200	7.2	25.0
cis-1,3-Dichloropropene	0.417	0.377	0.200	9.4	25.0
4-Methyl-2-pentanone	0.212	0.212		0.1	
Toluene	0.600	0.543	0.400	9.5	25.0
trans-1,3-Dichloropropene	0.349	0.322	0.100	7.6	25.0
1,1,2-Trichloroethane	0.207	0.194	0.100	6.3	25.0
Tetrachloroethene	0.226	0.182	0.200	19.5	25.0
2-Hexanone	0.145	0.144		0.7	
Dibromochloromethane	0.265	0.230	0.100	13.0	25.0
1,2-Dibromoethane	0.237	0.221		6.5	
Chlorobenzene	0.727	0.674	0.500	7.3	25.0
Ethylbenzene	1.093	1.023	0.100	6.4	25.0
m & p-Xylene	0.442	0.418	0.300	5.6	25.0
o-Xylene	0.430	0.415	0.300	3.6	25.0
Styrene	0.718	0.693	0.300	3.4	25.0
Isopropylbenzene	1.072	1.058		1.3	
Bromoform	0.181	0.144	0.100	20.5	25.0
1,1,2,2-Tetrachloroethane	0.308	0.301	0.300	2.1	25.0
1,3-Dichlorobenzene			0.600		25.0
1,4-Dichlorobenzene			0.500		25.0
1,2-Dichlorobenzene			0.400		25.0
1,2-Dibromo-3-chloropropane					
1,2,4-Trichlorobenzene			0.200		25.0
2-Chloroethyl vinyl ether					
Toluene-d8	0.816	1.603		-96.5	
Bromofluorobenzene	0.309	0.613	0.200	-98.3	25.0
1,2-Dichloroethane-d4	1.225	2.637		-115.2	

All other compounds must meet a minimum RRF of 0.010.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

EPA Sample no. VSTD 50 Date Analyzed: 12/14/04

Lab File ID (Standard): VSTD1953 Time Analyzed: 12:10

Instrument ID: SYS B Heated Purge: Y

GC Column: ID: (mm)

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 Hour STD	100234	10.94	670432	12.60	571081	16.78
Upper Limit	200468	11.44	1340864	13.10	1142162	17.28
Lower Limit	50117	10.44	335216	12.10	285540	16.28
EPA SAMPLE						
PBW	90073	10.94	596587	12.60	492765	16.77
LCSW	94094	10.94	613258	12.60	524670	16.78
MWB-2	90686	10.95	622484	12.60	539399	16.77
MWB-1	80495	10.93	607881	12.59	502453	16.76
MWB-3	84243	10.96	591795	12.61	524925	16.77
TB113004	85218	10.94	568175	12.60	472532	16.77

IS1 (BCM) =
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) =

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

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

EPA Sample no. VSTD 50 Date Analyzed: 12/21/04

Lab File ID (Standard): VCAL1456 Time Analyzed: 11:21

Instrument ID: SYS B Heated Purge: Y

GC Column: ID: (mm)

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 Hour STD	166530	10.97	894040	12.63	851307	16.81
Upper Limit	333060	11.47	1788080	13.13	1702614	17.31
Lower Limit	83265	10.47	447020	12.13	425653	16.31
EPA SAMPLE						
PBW	167295	10.97	907742	12.63	848570	16.81
LCSW	168881	10.97	895260	12.63	845064	16.81
MWB-2	158941	10.96	892145	12.63	807430	16.80
MWB-1	159272	10.96	884134	12.62	812319	16.81
MWB-3	155031	10.97	872620	12.63	804831	16.80

IS1 (BCM) =
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) =

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

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

EPA Sample no. VSTD 50 Date Analyzed: 12/22/04

Lab File ID (Standard): VCAL1458 Time Analyzed: 22:32

Instrument ID: SYS B Heated Purge: Y

GC Column: ID: (mm)

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 Hour STD	157372	10.97	868209	12.63	790546	16.80
Upper Limit	314744	11.47	1736418	13.13	1501092	17.30
Lower Limit	78686	10.47	434104	12.13	375273	16.30
EPA SAMPLE						
PBW	166356	10.97	879115	12.64	803149	16.82
LCSW	168932	10.97	888103	12.63	798997	16.80
LCSD	169656	10.97	888940	12.64	794557	16.81
MWB-2	155105	11.00	856976	12.67	781167	16.84
MWB-1	154389	11.00	848452	12.67	764538	16.84
MWB-3	150794	11.01	849995	12.67	769531	16.84

IS1 (BCM) =
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) =

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

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

GC/MS QA-QC Check Report

'une File : C:\HPCHEM\1\DATA\BF121404.D
'une Time : 14 Dec 2004 10:08

aily Calibration File : C:\HPCHEM\1\DATA\VSTD1953.D

					Internal Standard Responses		
					100234	670432	571081
ile	Sample	Surrogate Recovery %					
CSW1426.D	50UG/L TCL LCS	93	100	101	94094	613258	524670
BLK1443.D	WATER METHOD BLK	95	102	103	90073	596587	492765
SA13117.D	P0412041-03A	97	103	101	86077	574059	484210
SA13118.D	P0412024-04A	100	104	103	85218	568175	472532
SA13119.D	P0412077-01A	99	104	105	81627	557562	462388
SA13120.D	P0412041-02A	104	99	100	79492	552478	485062
SA13121.D	P0412041-01A	96	99	102	77612	563173	499340
SA13122.D	P0412024-01A	88	182*	95	90686	622484	539399
SA13123.D	P0412024-02A	93	100	98	80495	607881	502453
SA13124.D	P0412024-03A	92	192*	97	84243	591795	524925
SA13125.D	P0412077-02A	98	97	98	79950	592617	514927
SA13126.D	P0412077-03A	98	97	97	81794	600421	509044
SA13127.D	P0412077-04A	100	179*	100	79790	574377	501376
SA13128.D	P0412077-05A	102	185*	99	79436	597853	513258

t - fails 12hr time check * - fails criteria

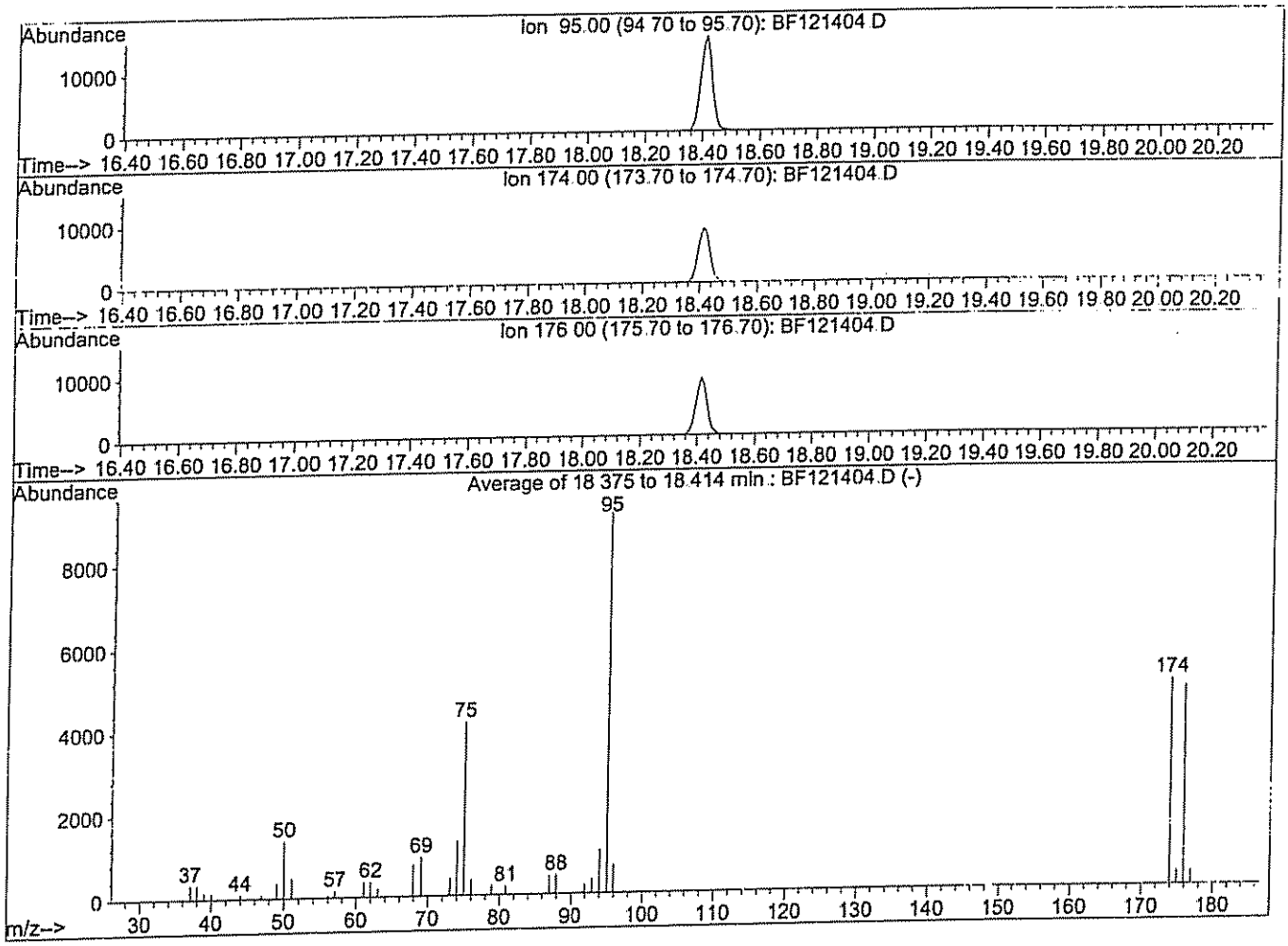
Created: Mon Dec 20 11:56:25 2004 GC

S Ins

Data File : C:\HPCHEM\1\data\BF121404.D
Acq On : 14 Dec 2004 10:08
Sample : 50NG BFB TUNING STD
Misc : SOIL

Vial: 1
Operator: hfg system
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

Method : C:\HPCHEM\1\METHODS\BFB.M (Chemstation Integrator)
Title :



Spectrum Information: Average of 18.375 to 18.414 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.1	1380	PASS
75	95	30	60	45.7	4183	PASS
95	95	100	100	100.0	9145	PASS
96	95	5	9	7.5	683	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	54.5	4983	PASS
175	174	5	9	6.8	337	PASS
176	174	95	101	96.6	4815	PASS
177	176	5	9	6.8	329	PASS

BF121404.D BFB.M Tue Dec 14 11:07:30 2004

Average of 18.375 to 18.414 min.: BF121404.D

50NG BFB TUNING STD

MWB-2

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	30	51.05	482	73.05	413	95.00	9145
37.05	342	56.05	62	74.00	1310	95.95	683
38.00	324	57.00	167	75.00	4183	173.95	4983
39.00	169	61.05	358	76.00	371	174.90	337
40.05	134	62.00	365	78.90	235	175.90	4815
43.00	33	63.00	206	80.85	208	176.90	329
44.00	106	65.00	31	87.00	449		
45.00	38	67.95	756	87.95	453		
47.00	87	69.05	938	91.95	206		
49.05	359	69.95	31	92.95	356		
50.00	1380	72.90	36	94.00	1050		

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 14:19:44 2004
Response via : Initial Calibration

Calibration Files
5 =VSTD1956.D 10 =VSTD1955.D 20 =VSTD1954.D
50 =VSTD1953.D 100 =VSTD1952.D 200 =VSTD1951.D

		Compound	5	10	20	50	100	200	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	TP	Chloromethane	2.154	2.431	2.136	2.250	2.319	2.227	2.253	4.87
3)	TC	Vinyl chloride	2.080	2.356	2.120	2.254	2.227	2.089	2.188	5.01
4)	T	Bromomethane	1.427	1.496	1.258	1.287	1.295	1.228	1.332	7.90
5)	T	Chloroethane	1.426	1.535	1.344	1.407	1.415	1.386	1.419	4.49
6)	TCM	1,1-Dichloroethene	1.682	1.738	1.645	1.708	1.722	1.684	1.696	1.97
7)	T	Carbon disulfide	5.857	6.184	5.818	5.913	5.925	5.708	5.901	2.69
8)	T	Methylene chloride	2.014	2.176	1.961	1.931	1.941	1.839	1.977	5.70
9)	T	Acetone		0.678	0.474	0.440	0.468	0.425	0.497	20.78
10)	T	trans-1,2-Dichloroe	1.883	2.043	1.919	1.972	1.967	1.908	1.949	2.96
11)	T	methyl-tert-butyl-E	4.066	4.703	4.493	4.441	4.694	4.495	4.482	5.18
12)	TP	1,1-Dichloroethane	2.992	3.216	2.988	2.961	2.985	2.898	3.007	3.60
13)	T	cis-1,2-Dichloroeth	2.793	2.532	2.245	2.179	2.162	2.063	2.329	11.91
14)	TC	Chloroform	2.898	2.927	2.837	2.869	2.831	2.780	2.857	1.83
15)	T	2-Butanone		0.882	0.764	0.668	0.688	0.651	0.731	13.01
16)	S	1,2-Dichloroethane-	1.524	1.761	1.576	1.588	1.606	1.606	1.610	4.95
17)	T	1,2-Dichloroethane	1.987	2.088	1.990	1.961	1.964	1.884	1.979	3.32
18)	I	1,4-Difluorobenzene	----------ISTD----------							
19)	T	Carbon tetrachlorid	0.267	0.294	0.288	0.297	0.302	0.292	0.290	4.29
20)	T	1,1,1-Trichloroetha	0.366	0.381	0.364	0.374	0.370	0.352	0.368	2.66
21)	TM	Benzene	1.012	1.128	1.094	1.055	1.036	0.966	1.049	5.51
22)	TM	Trichloroethene	0.243	0.247	0.237	0.230	0.229	0.207	0.232	6.02
23)	TC	1,2-Dichloropropane	0.260	0.277	0.265	0.265	0.265	0.246	0.263	3.83
24)	T	Bromodichloromethan	0.317	0.349	0.334	0.329	0.327	0.303	0.327	4.70
25)	T	cis-1,3-Dichloropro	0.420	0.474	0.437	0.448	0.465	0.438	0.447	4.43
26)	T	trans-1,3-Dichlorop	0.368	0.397	0.378	0.392	0.405	0.376	0.386	3.70
27)	T	1,1,2-Trichloroetha	0.235	0.262	0.240	0.235	0.241	0.220	0.239	5.62
28)	T	Dibromochloromethan	0.241	0.248	0.239	0.238	0.243	0.231	0.240	2.37
29)		1,2-Dibromoethane	0.259	0.295	0.279	0.279	0.287	0.269	0.278	4.67
30)	TP	Bromoform	0.128	0.144	0.137	0.140	0.140	0.142	0.139	4.07
31)	I	Chlorobenzene-d5	----------ISTD----------							
32)	S	Toluene-d8	0.938	1.055	1.031	1.015	1.007	0.928	0.996	5.16
33)	TMC	Toluene	0.709	0.749	0.753	0.727	0.710	0.651	0.716	5.16
34)	T	4-methyl-2-Pentanon		0.222	0.241	0.219	0.222	0.212	0.223	4.83
35)	T	Tetrachloroethene	0.173	0.174	0.182	0.184	0.189	0.178	0.180	3.35
36)	T	2-Hexanone		0.153	0.162	0.148	0.157	0.147	0.153	4.17
37)	TC	Ethyl benzene	1.254	1.369	1.341	1.305	1.297	1.224	1.299	4.13

#) = Out of Range

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 14:19:44 2004
Response via : Initial Calibration

Calibration Files
5 =VSTD1956.D 10 =VSTD1955.D 20 =VSTD1954.D
50 =VSTD1953.D 100 =VSTD1952.D 200 =VSTD1951.D

		Compound	5	10	20	50	100	200	Avg	%RSD
38)	TMP	Chlorobenzene	0.807	0.858	0.814	0.793	0.801	0.760	0.806	3.97
39)	T	m&p-Xylenes	0.538	0.594	0.575	0.556	0.544	0.522	0.555	4.71
40)	T	o-Xylene	0.532	0.578	0.559	0.546	0.523	0.500	0.540	5.12
41)	T	Styrene	0.849	0.957	0.938	0.946	0.902	0.871	0.910	4.81
42)	T	Isopropylbenzene	1.295	1.447	1.419	1.449	1.383	1.330	1.387	4.57
43)	S	4-Bromofluorobenzen	0.372	0.429	0.397	0.387	0.367	0.362	0.386	6.49
44)	TP	1,1,2,2-Tetrachloro	0.391	0.397	0.393	0.348	0.332	0.302	0.361	10.94
45)	T	Naphthalene	0.664	0.745	0.766	0.724	0.774	0.685	0.726	6.05

#) = Out of Range

Quantitation Report (Not Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSTD1956.D
Acq On : 14 Dec 2004 13:47
Sample : 5UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 14:19 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.94	128	93412	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	625566	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.78	117	527329	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	14236	4.68	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 9.36%#			
32) Toluene-d8	14.87	98	49473	4.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 9.32%#			
43) 4-Bromofluorobenzene	18.40	95	19618	4.79	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 9.58%#			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	20122	4.74	ug/L	99
3) Vinyl chloride	6.57	62	19432	4.71	ug/L	99
4) Bromomethane	7.17	94	13328	5.43	ug/L	97
5) Chloroethane	7.37	64	13319	5.03	ug/L	98
6) 1,1-Dichloroethene	8.81	96	15715	4.95	ug/L	94
7) Carbon disulfide	9.32	76	54716	4.96	ug/L	100
8) Methylene chloride	8.96	84	18817	5.11	ug/L	98
9) Acetone	8.30	43	7443	8.02	ug/L	100
10) trans-1,2-Dichloroethene	9.77	96	17588	4.80	ug/L	99
11) methyl-tert-butyl-Ether	9.87	73	37977	4.45	ug/L	99
12) 1,1-Dichloroethane	10.06	63	27950	4.97	ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	26093	6.25	ug/L	98
14) Chloroform	10.98	83	27070	5.09	ug/L	97
15) 2-Butanone	10.60	43	10492	7.68	ug/L	97
17) 1,2-Dichloroethane	11.77	62	18558	5.02	ug/L	97
19) Carbon tetrachloride	12.35	117	16678	4.52	ug/L	94
20) 1,1,1-Trichloroethane	11.89	97	22913	4.98	ug/L	99
21) Benzene	12.39	78	63320	4.79	ug/L	100
22) Trichloroethene	13.14	130	15196	5.28	ug/L	94
23) 1,2-Dichloropropane	13.09	63	16237	4.92	ug/L	93
24) Bromodichloromethane	13.20	83	19858	4.83	ug/L	97
25) cis-1,3-Dichloropropene	13.97	75	26287	4.64	ug/L	98
26) trans-1,3-Dichloropropene	14.49	75	23000	4.72	ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1956.D
Acq On : 14 Dec 2004 13:47
Sample : 5UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 14:19 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.73	97	14718	4.91	ug/L		95
28) Dibromochloromethane	15.41	129	15095	5.04	ug/L		98
29) 1,2-Dibromoethane	15.75	107	16193	4.59	ug/L		98
30) Bromoform	17.53	173	8023	4.56	ug/L		99
33) Toluene	14.97	92	37408	4.94	ug/L		98
34) 4-methyl-2-Pentanone	14.17	43	13297	5.65	ug/L		97
35) Tetrachloroethene	15.94	164	9134	4.78	ug/L		90
36) 2-Hexanone	15.25	43	9259	5.72	ug/L		98
37) Ethyl benzene	17.05	91	66145	4.80	ug/L		100
38) Chlorobenzene	16.82	112	42569	5.01	ug/L		97
39) m&p-Xylenes	17.29	106	56724	9.63	ug/L		96
40) o-Xylene	17.84	106	28074	4.92	ug/L		97
41) Styrene	17.75	104	44793	4.60	ug/L		99
42) Isopropylbenzene	18.34	105	68295	4.61	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	20642	5.52	ug/L		98
45) Naphthalene	23.72	128	35041	4.50	ug/L	#	100

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

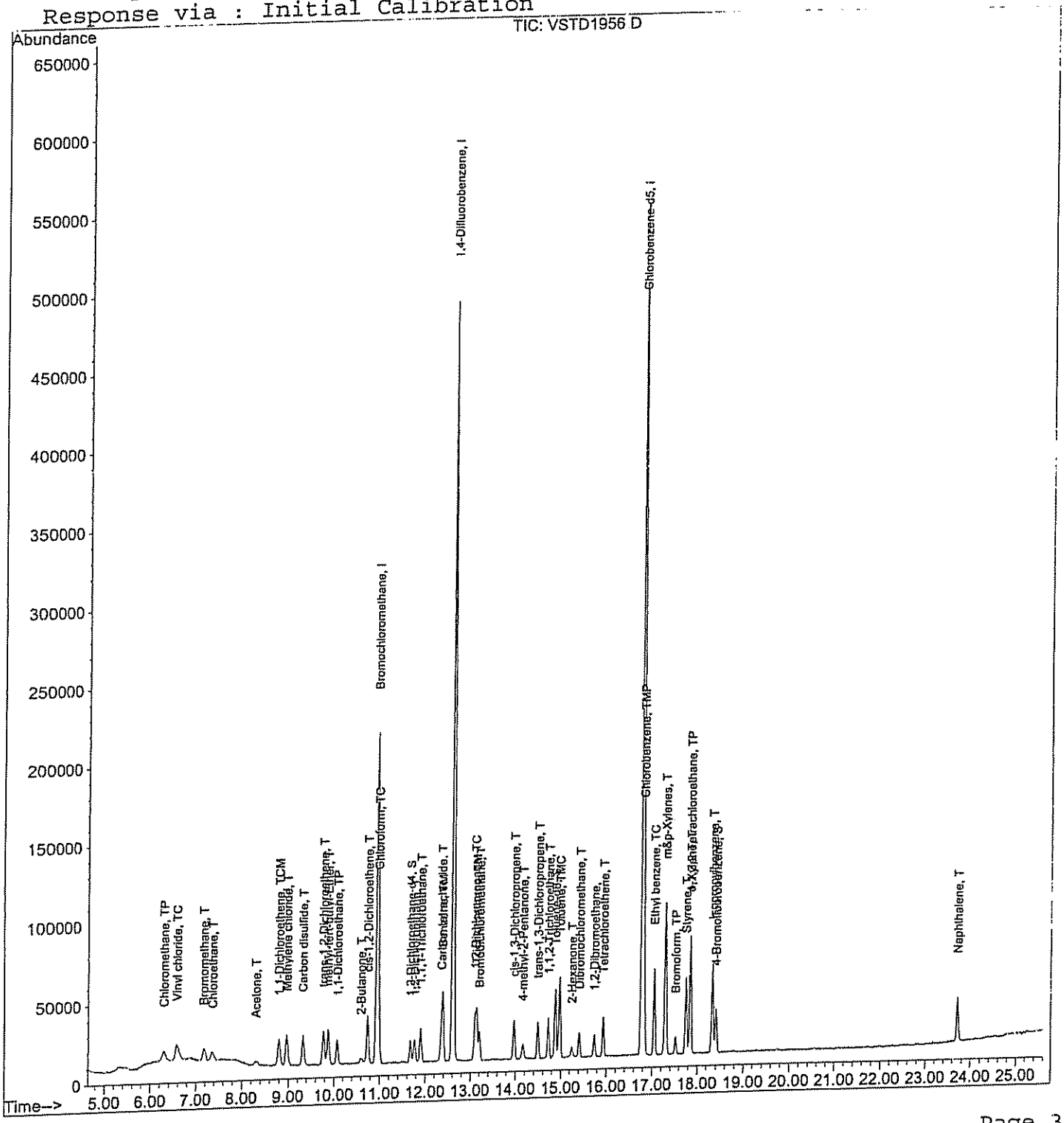
Data File : C:\HPCHEM\1\DATA\VSTD1956.D
Acq On : 14 Dec 2004 13:47
Sample : 5UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 14:19 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSTD1955.D
Acq On : 14 Dec 2004 13:14
Sample : 10UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:56 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	92812	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.61	114	599508	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.78	117	522884	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	32680	11.05	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 22.10%#			
32) Toluene-d8	14.88	98	110380	10.61	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 21.22%#			
43) 4-Bromofluorobenzene	18.41	95	44900	11.35	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 22.70%#			
Target Compounds						Qvalue
2) Chloromethane	6.29	50	45120	10.89	ug/L	99
3) Vinyl chloride	6.57	62	43726	10.84	ug/L	99
4) Bromomethane	7.18	94	27761	11.80	ug/L	93
5) Chloroethane	7.37	64	28486	11.06	ug/L	99
6) 1,1-Dichloroethene	8.80	96	32261	10.29	ug/L	96
7) Carbon disulfide	9.32	76	114781	10.59	ug/L	100
8) Methylene chloride	8.97	84	40386	11.34	ug/L	99
9) Acetone	8.31	43	12587	15.01	ug/L	97
10) trans-1,2-Dichloroethene	9.77	96	37920	10.52	ug/L	96
11) methyl-tert-butyl-Ether	9.87	73	87308	10.38	ug/L	99
12) 1,1-Dichloroethane	10.07	63	59694	10.87	ug/L	99
13) cis-1,2-Dichloroethene	10.74	96	46992	11.71	ug/L	98
14) Chloroform	10.98	83	54341	10.35	ug/L	99
15) 2-Butanone	10.59	43	16379	12.73	ug/L	99
17) 1,2-Dichloroethane	11.77	62	38751	10.71	ug/L	99
19) Carbon tetrachloride	12.34	117	35308	9.99	ug/L	96
20) 1,1,1-Trichloroethane	11.89	97	45641	10.43	ug/L	98
21) Benzene	12.38	78	135217	10.87	ug/L	100
22) Trichloroethene	13.14	130	29566	10.92	ug/L	99
23) 1,2-Dichloropropane	13.10	63	33226	10.65	ug/L	97
24) Bromodichloromethane	13.21	83	41802	10.78	ug/L	99
25) cis-1,3-Dichloropropene	13.96	75	56815	10.60	ug/L	98
26) trans-1,3-Dichloropropene	14.50	75	47604	10.24	ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1955.D
Acq On : 14 Dec 2004 13:14
Sample : 10UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:56 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.72	97	31384	11.18	ug/L		97
28) Dibromochloromethane	15.41	129	29693	10.43	ug/L		98
29) 1,2-Dibromoethane	15.74	107	35406	10.61	ug/L		99
30) Bromoform	17.52	173	17292	10.32	ug/L		96
33) Toluene	14.97	92	78330	10.55	ug/L		98
34) 4-methyl-2-Pentanone	14.15	43	23213	9.93	ug/L		100
35) Tetrachloroethene	15.93	164	18181	9.49	ug/L		96
36) 2-Hexanone	15.23	43	16041	9.99	ug/L		96
37) Ethyl benzene	17.05	91	143194	10.60	ug/L		99
38) Chlorobenzene	16.83	112	89774	10.84	ug/L		98
39) m&p-Xylenes	17.30	106	124241	21.63	ug/L		98
40) o-Xylene	17.85	106	60481	10.87	ug/L		97
41) Styrene	17.75	104	100068	10.47	ug/L		99
42) Isopropylbenzene	18.33	105	151342	10.37	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	41549	11.56	ug/L		99
45) Naphthalene	23.72	128	77918	10.11	ug/L	#	97

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

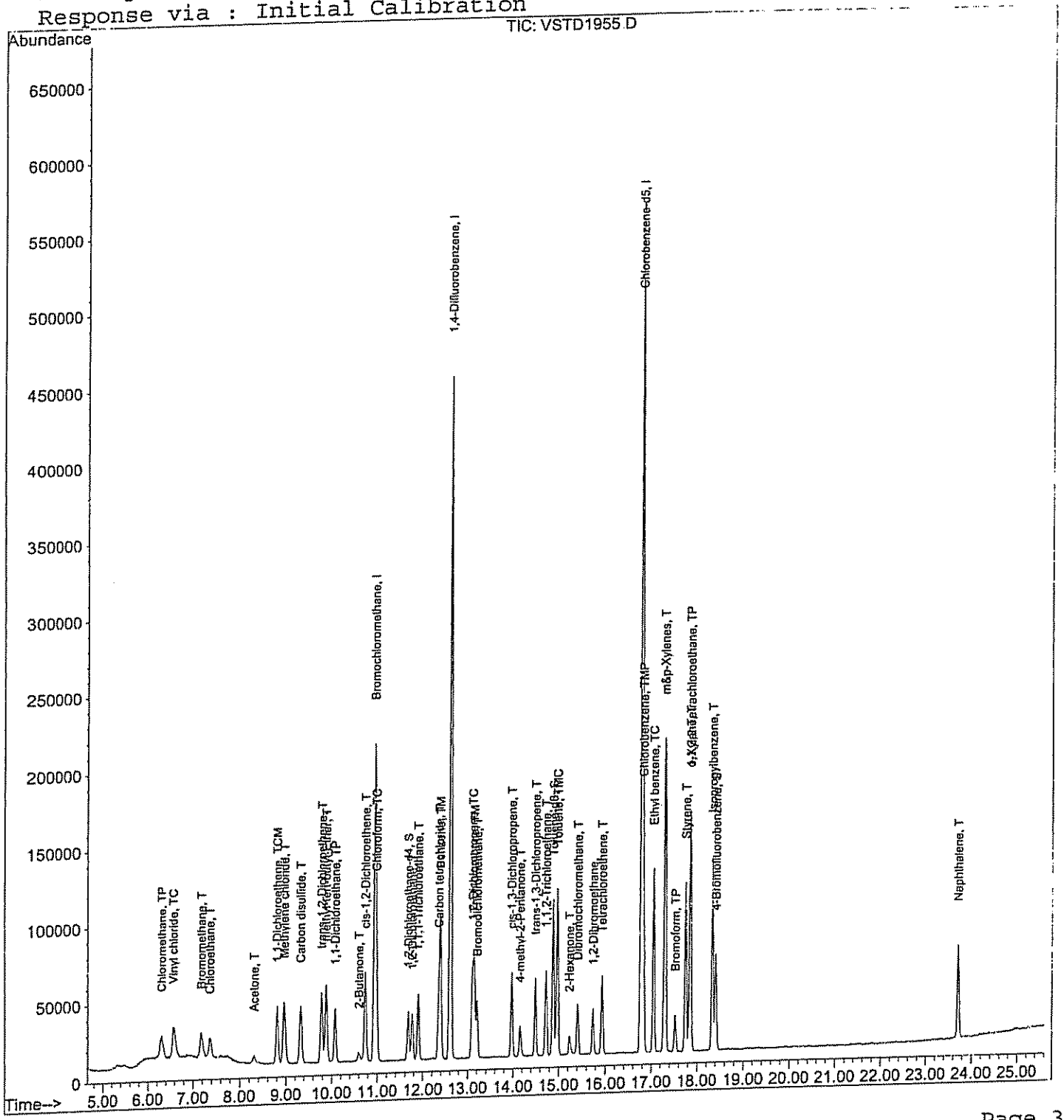
Data File : C:\HPCHEM\1\DATA\VSTD1955.D
Acq On : 14 Dec 2004 13:14
Sample : 10UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:56 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSTD1954.D
Acq On : 14 Dec 2004 12:42
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:33 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	102363	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	665548	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.77	117	548070	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	64526	19.70	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 39.40%#			
32) Toluene-d8	14.87	98	225999	20.97	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 41.94%#			
43) 4-Bromofluorobenzene	18.40	95	86954	21.32	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 42.64%#			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	87465	18.86	ug/L	100
3) Vinyl chloride	6.58	62	86823	19.36	ug/L	99
4) Bromomethane	7.18	94	51514	19.81	ug/L	98
5) Chloroethane	7.36	64	55043	19.17	ug/L	100
6) 1,1-Dichloroethene	8.80	96	67335	19.29	ug/L	99
7) Carbon disulfide	9.32	76	238237	19.90	ug/L	100
8) Methylene chloride	8.95	84	80275	20.60	ug/L	96
9) Acetone	8.29	43	19418	21.36	ug/L	98
10) trans-1,2-Dichloroethene	9.77	96	78561	19.69	ug/L	98
11) methyl-tert-butyl-Ether	9.87	73	183979	19.78	ug/L	99
12) 1,1-Dichloroethane	10.06	63	122357	20.27	ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	91925	21.03	ug/L	99
14) Chloroform	10.98	83	116154	20.07	ug/L	99
15) 2-Butanone	10.58	43	31302	22.85	ug/L	98
17) 1,2-Dichloroethane	11.76	62	81490	20.56	ug/L	99
19) Carbon tetrachloride	12.35	117	76566	19.36	ug/L	99
20) 1,1,1-Trichloroethane	11.89	97	96986	19.96	ug/L	99
21) Benzene	12.39	78	291363	21.48	ug/L	100
22) Trichloroethene	13.14	130	63148	21.36	ug/L	99
23) 1,2-Dichloropropane	13.09	63	70431	20.46	ug/L	99
24) Bromodichloromethane	13.20	83	88879	20.88	ug/L	98
25) cis-1,3-Dichloropropene	13.97	75	116403	19.42	ug/L	100
26) trans-1,3-Dichloropropene	14.49	75	100588	19.33	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1954.D
Acq On : 14 Dec 2004 12:42
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:33 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.73	97	63942	20.70	ug/L		99
28) Dibromochloromethane	15.41	129	63515	20.12	ug/L		98
29) 1,2-Dibromoethane	15.74	107	74321	20.08	ug/L		99
30) Bromoform	17.52	173	36407	19.43	ug/L		100
33) Toluene	14.97	92	164971	21.63	ug/L		100
34) 4-methyl-2-Pentanone	14.14	43	52845	22.16	ug/L		99
35) Tetrachloroethene	15.94	164	39876	19.82	ug/L		96
36) 2-Hexanone	15.23	43	35604	21.57	ug/L		100
37) Ethyl benzene	17.05	91	294078	21.04	ug/L		100
38) Chlorobenzene	16.82	112	178491	20.75	ug/L		100
39) m&p-Xylenes	17.29	106	252210	42.55	ug/L		100
40) o-Xylene	17.84	106	122583	21.39	ug/L		100
41) Styrene	17.75	104	205661	20.71	ug/L		100
42) Isopropylbenzene	18.34	105	311031	20.45	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	86184	24.03	ug/L		100
45) Naphthalene	23.72	128	167880	21.05	ug/L	#	100

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

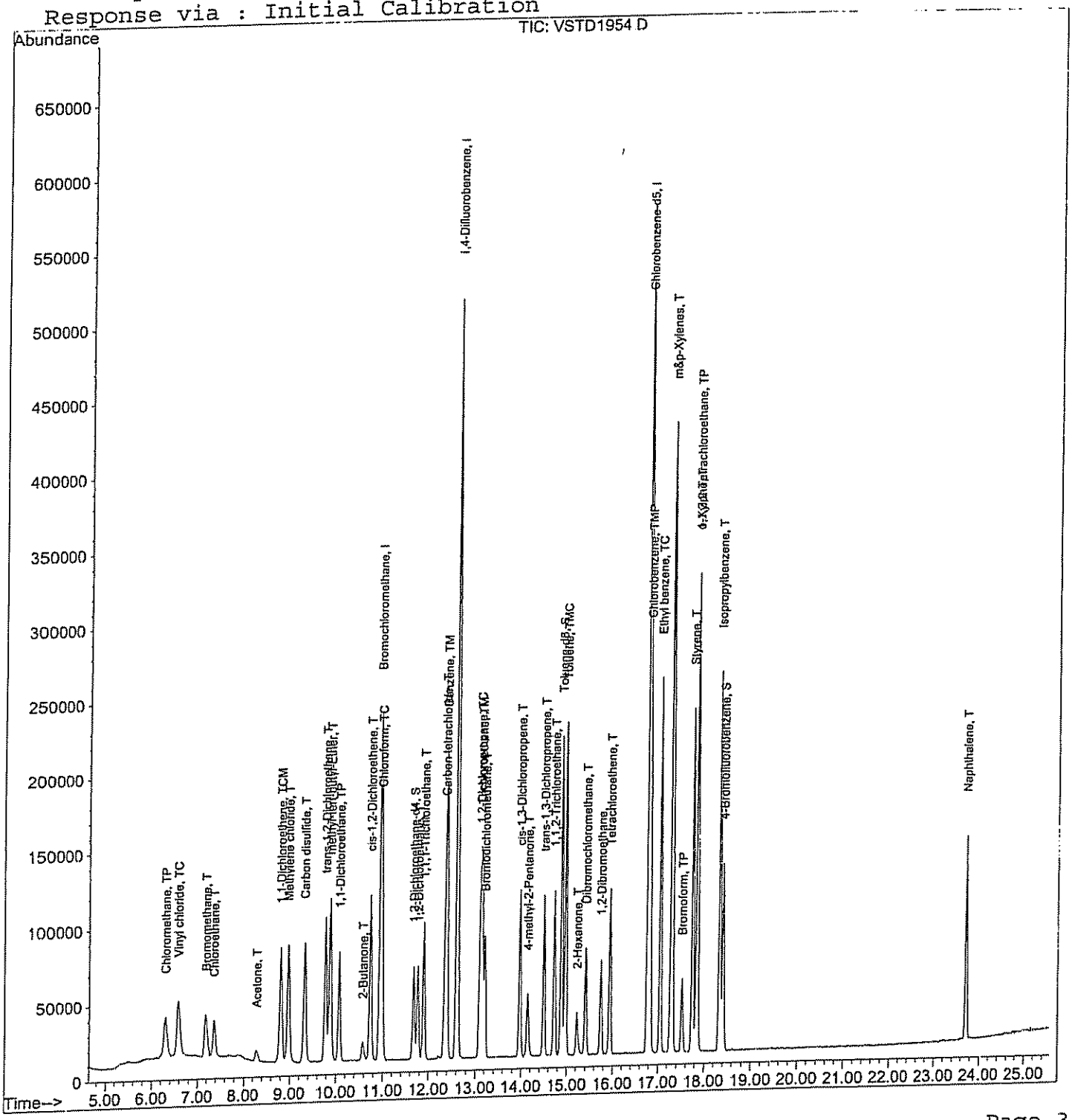
Data File : C:\HPCHEM\1\DATA\VSTD1954.D
Acq On : 14 Dec 2004 12:42
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:33 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSTD1953.D
Acq On : 14 Dec 2004 12:10
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:25 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:11 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	100234	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	670432	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.78	117	571081	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	159204	49.64	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.28%			
32) Toluene-d8	14.87	98	579453	51.60	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.20%			
43) 4-Bromofluorobenzene	18.40	95	221272	52.06	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.12%			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	225481	49.65	ug/L	100
3) Vinyl chloride	6.57	62	225976	51.47	ug/L	100
4) Bromomethane	7.18	94	129004	50.67	ug/L	100
5) Chloroethane	7.37	64	141065	50.17	ug/L	100
6) 1,1-Dichloroethene	8.80	96	171168	50.09	ug/L	100
7) Carbon disulfide	9.32	76	592695	50.55	ug/L	100
8) Methylene chloride	8.96	84	193528	50.71	ug/L	100
9) Acetone	8.27	43	44087	49.52	ug/L	100
10) trans-1,2-Dichloroethene	9.77	96	197651	50.58	ug/L	100
11) methyl-tert-butyl-Ether	9.87	73	445153	48.87	ug/L	100
12) 1,1-Dichloroethane	10.06	63	296836	50.22	ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	218396	51.03	ug/L	100
14) Chloroform	10.98	83	287546	50.74	ug/L	100
15) 2-Butanone	10.56	43	66991	49.93	ug/L	100
17) 1,2-Dichloroethane	11.77	62	196657	50.67	ug/L	100
19) Carbon tetrachloride	12.35	117	198956	49.93	ug/L	100
20) 1,1,1-Trichloroethane	11.89	97	250510	51.17	ug/L	100
21) Benzene	12.39	78	707412	51.77	ug/L	100
22) Trichloroethene	13.14	130	154328	51.82	ug/L	100
23) 1,2-Dichloropropane	13.09	63	177450	51.16	ug/L	100
24) Bromodichloromethane	13.20	83	220791	51.48	ug/L	100
25) cis-1,3-Dichloropropene	13.97	75	300494	49.77	ug/L	100
26) trans-1,3-Dichloropropene	14.49	75	263121	50.19	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1953.D
Acq On : 14 Dec 2004 12:10
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:25 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:11 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.72	97	157306	50.56	ug/L		100
28) Dibromochloromethane	15.41	129	159522	50.17	ug/L		100
29) 1,2-Dibromoethane	15.74	107	186764	50.08	ug/L		100
30) Bromoform	17.52	173	94138	49.87	ug/L		100
33) Toluene	14.97	92	414957	52.21	ug/L		100
34) 4-methyl-2-Pentanone	14.13	43	125236	50.39	ug/L		100
35) Tetrachloroethene	15.94	164	105007	50.09	ug/L		100
36) 2-Hexanone	15.22	43	84589	49.19	ug/L		100
37) Ethyl benzene	17.05	91	745211	51.16	ug/L		100
38) Chlorobenzene	16.82	112	452833	50.53	ug/L		100
39) m&p-Xylenes	17.29	106	635133	102.84	ug/L		100
40) o-Xylene	17.84	106	311620	52.18	ug/L		100
41) Styrene	17.75	104	540259	52.20	ug/L		100
42) Isopropylbenzene	18.33	105	827434	52.21	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	198513	53.13	ug/L		100
45) Naphthalene	23.72	128	413569	49.76	ug/L	#	100

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

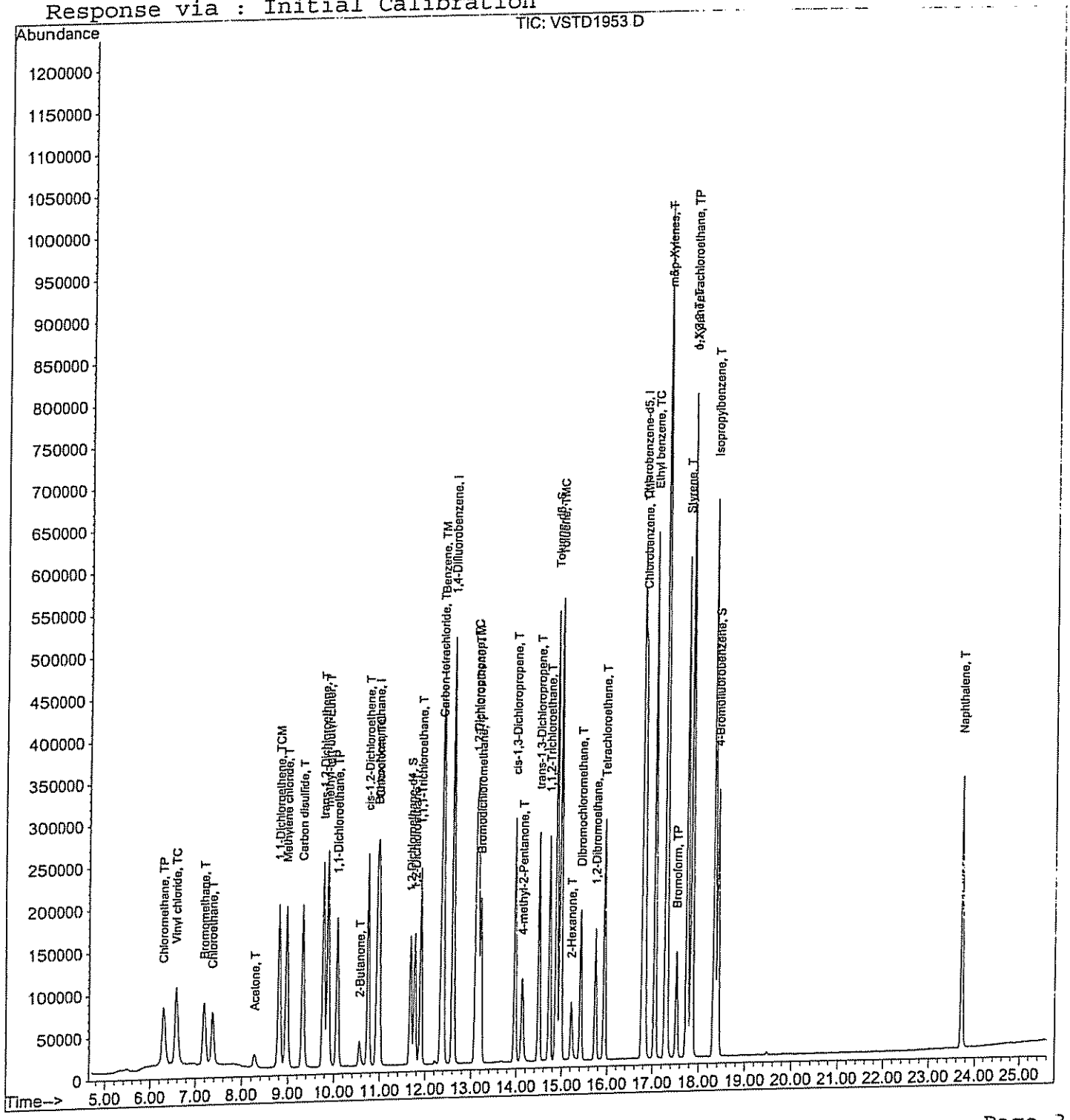
Data File : C:\HPCHEM\1\DATA\VSTD1953.D
Acq On : 14 Dec 2004 12:10
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:25 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSTD1952.D
Acq On : 14 Dec 2004 11:37
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:23:59 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.93	128	100304	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.61	114	671931	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.78	117	579344	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	322141	100.55	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 201.10%#			
32) Toluene-d8	14.88	98	1166673	103.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 207.32%#			
43) 4-Bromofluorobenzene	18.41	95	425114	97.91	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 195.82%#			
Target Compounds						Qvalue
2) Chloromethane	6.29	50	465240	103.62	ug/L	100
3) Vinyl chloride	6.57	62	446678	102.53	ug/L	100
4) Bromomethane	7.17	94	259854	103.01	ug/L	96
5) Chloroethane	7.36	64	283837	101.31	ug/L	100
6) 1,1-Dichloroethene	8.80	96	345547	101.58	ug/L	99
7) Carbon disulfide	9.32	76	1188538	101.96	ug/L	100
8) Methylene chloride	8.96	84	389477	102.99	ug/L	100
9) Acetone	8.26	43	93878	108.27	ug/L	100
10) trans-1,2-Dichloroethene	9.77	96	394686	101.41	ug/L	98
11) methyl-tert-butyl-Ether	9.86	73	941708	105.07	ug/L	100
12) 1,1-Dichloroethane	10.07	63	598880	101.90	ug/L	100
13) cis-1,2-Dichloroethene	10.74	96	433749	101.94	ug/L	99
14) Chloroform	10.98	83	567901	100.22	ug/L	99
15) 2-Butanone	10.54	43	138071	104.32	ug/L	98
17) 1,2-Dichloroethane	11.76	62	394025	102.18	ug/L	99
19) Carbon tetrachloride	12.34	117	406137	102.58	ug/L	100
20) 1,1,1-Trichloroethane	11.90	97	497099	101.99	ug/L	100
21) Benzene	12.38	78	1392179	102.51	ug/L	100
22) Trichloroethene	13.14	130	307436	104.56	ug/L	100
23) 1,2-Dichloropropane	13.10	63	356493	103.88	ug/L	98
24) Bromodichloromethane	13.21	83	439524	103.42	ug/L	99
25) cis-1,3-Dichloropropene	13.96	75	625193	105.05	ug/L	99
26) trans-1,3-Dichloropropene	14.49	75	543862	105.37	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1952.D
Acq On : 14 Dec 2004 11:37
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:23:59 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
27) 1,1,2-Trichloroethane	14.72	97	323926	105.95 ug/L		99
28) Dibromochloromethane	15.41	129	326329	103.64 ug/L		100
29) 1,2-Dibromoethane	15.74	107	385986	104.99 ug/L		100
30) Bromoform	17.52	173	187779	98.89 ug/L		99
33) Toluene	14.97	92	822559	103.06 ug/L		100
34) 4-methyl-2-Pentanone	14.09	43	256678	102.73 ug/L		99
35) Tetrachloroethene	15.93	164	218654	104.28 ug/L		97
36) 2-Hexanone	15.19	43	181640	106.31 ug/L		99
37) Ethyl benzene	17.05	91	1503132	102.60 ug/L		100
38) Chlorobenzene	16.83	112	927740	103.11 ug/L		99
39) m&p-Xylenes	17.29	106	1259971	201.64 ug/L		99
40) o-Xylene	17.85	106	605737	99.98 ug/L		99
41) Styrene	17.75	104	1045003	99.30 ug/L		100
42) Isopropylbenzene	18.33	105	1602668	99.54 ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	384241	102.07 ug/L		100
45) Naphthalene	23.71	128	896317	109.77 ug/L	#	100

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

Quantitation Report

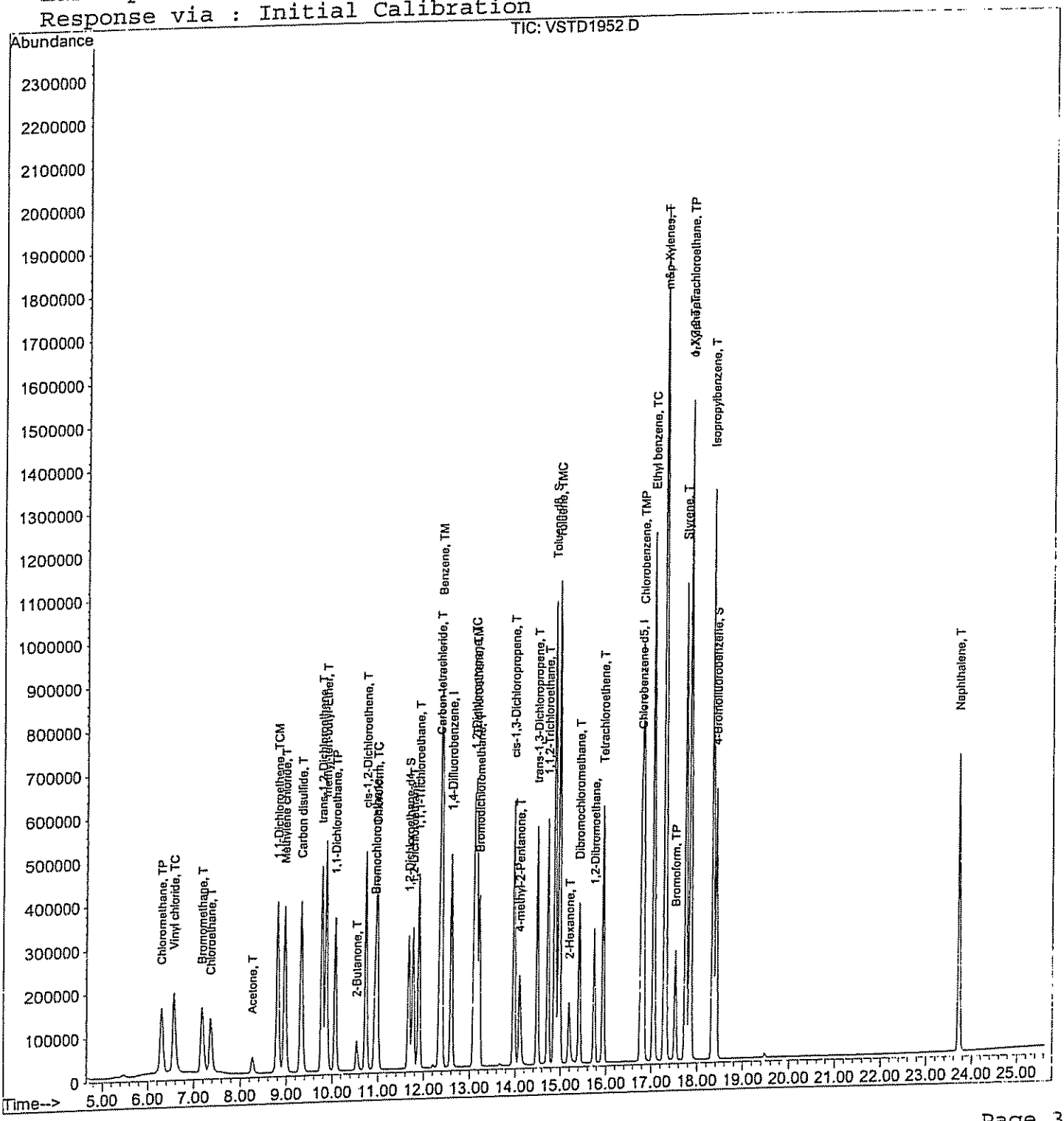
Data File : C:\HPCHEM\1\DATA\VSTD1952.D
Acq On : 14 Dec 2004 11:37
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSTD1951.D
Acq On : 14 Dec 2004 10:54
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:23:59 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	98236	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	681080	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.78	117	591675	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	630917	202.18	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 404.36%#			
32) Toluene-d8	14.87	98	2196150	182.91	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 365.82%#			
43) 4-Bromofluorobenzene	18.40	95	856705	186.85	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 373.70%#			
Target Compounds						Qvalue
2) Chloromethane	6.29	50	875044	197.99	ug/L	100
3) Vinyl chloride	6.55	62	820873	185.32	ug/L	99
4) Bromomethane	7.17	94	482541	190.83	ug/L	98
5) Chloroethane	7.36	64	544517	196.93	ug/L	99
6) 1,1-Dichloroethene	8.80	96	661625	197.20	ug/L	99
7) Carbon disulfide	9.32	76	2243049	193.07	ug/L	100
8) Methylene chloride	8.95	84	722808	190.54	ug/L	99
9) Acetone	8.25	43	166832	193.06	ug/L	100
10) trans-1,2-Dichloroethene	9.77	96	749797	193.53	ug/L	98
11) methyl-tert-butyl-Ether	9.87	73	1766186	202.41	ug/L	100
12) 1,1-Dichloroethane	10.06	63	1138750	195.72	ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	810715	189.38	ug/L	99
14) Chloroform	10.98	83	1092565	193.84	ug/L	100
15) 2-Butanone	10.54	43	255882	194.87	ug/L	99
17) 1,2-Dichloroethane	11.76	62	740217	192.15	ug/L	99
19) Carbon tetrachloride	12.35	117	796782	197.11	ug/L	100
20) 1,1,1-Trichloroethane	11.89	97	958176	188.26	ug/L	100
21) Benzene	12.39	78	2631860	183.11	ug/L	100
22) Trichloroethene	13.14	130	565049	180.21	ug/L	99
23) 1,2-Dichloropropane	13.09	63	670375	185.94	ug/L	99
24) Bromodichloromethane	13.20	83	825921	184.11	ug/L	99
25) cis-1,3-Dichloropropene	13.96	75	1191956	195.23	ug/L	99
26) trans-1,3-Dichloropropene	14.49	75	1023496	191.45	ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1951.D
Acq On : 14 Dec 2004 10:54
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:23:59 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.73	97	600400	187.85 ug/L	100
28) Dibromochloromethane	15.41	129	628429	193.89 ug/L	99
29) 1,2-Dibromoethane	15.74	107	731644	192.81 ug/L	100
30) Bromoform	17.53	173	387343	202.52 ug/L	99
33) Toluene	14.96	92	1540897	179.21 ug/L	99
34) 4-methyl-2-Pentanone	14.08	43	501704	193.33 ug/L	99
35) Tetrachloroethene	15.94	164	421404	193.67 ug/L	98
36) 2-Hexanone	15.17	43	347452	198.23 ug/L	99
37) Ethyl benzene	17.05	91	2896721	187.59 ug/L	100
38) Chlorobenzene	16.82	112	1799100	191.74 ug/L	98
39) m&p-Xylenes	17.29	106	2473018	375.82 ug/L	98
40) o-Xylene	17.84	106	1183656	183.31 ug/L	97
41) Styrene	17.75	104	2060284	184.04 ug/L	99
42) Isopropylbenzene	18.34	105	3148469	183.63 ug/L #	92
44) 1,1,2,2-Tetrachloroethane	17.84	83	715187	173.87 ug/L	100
45) Naphthalene	23.71	128	1621625	189.23 ug/L #	100

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

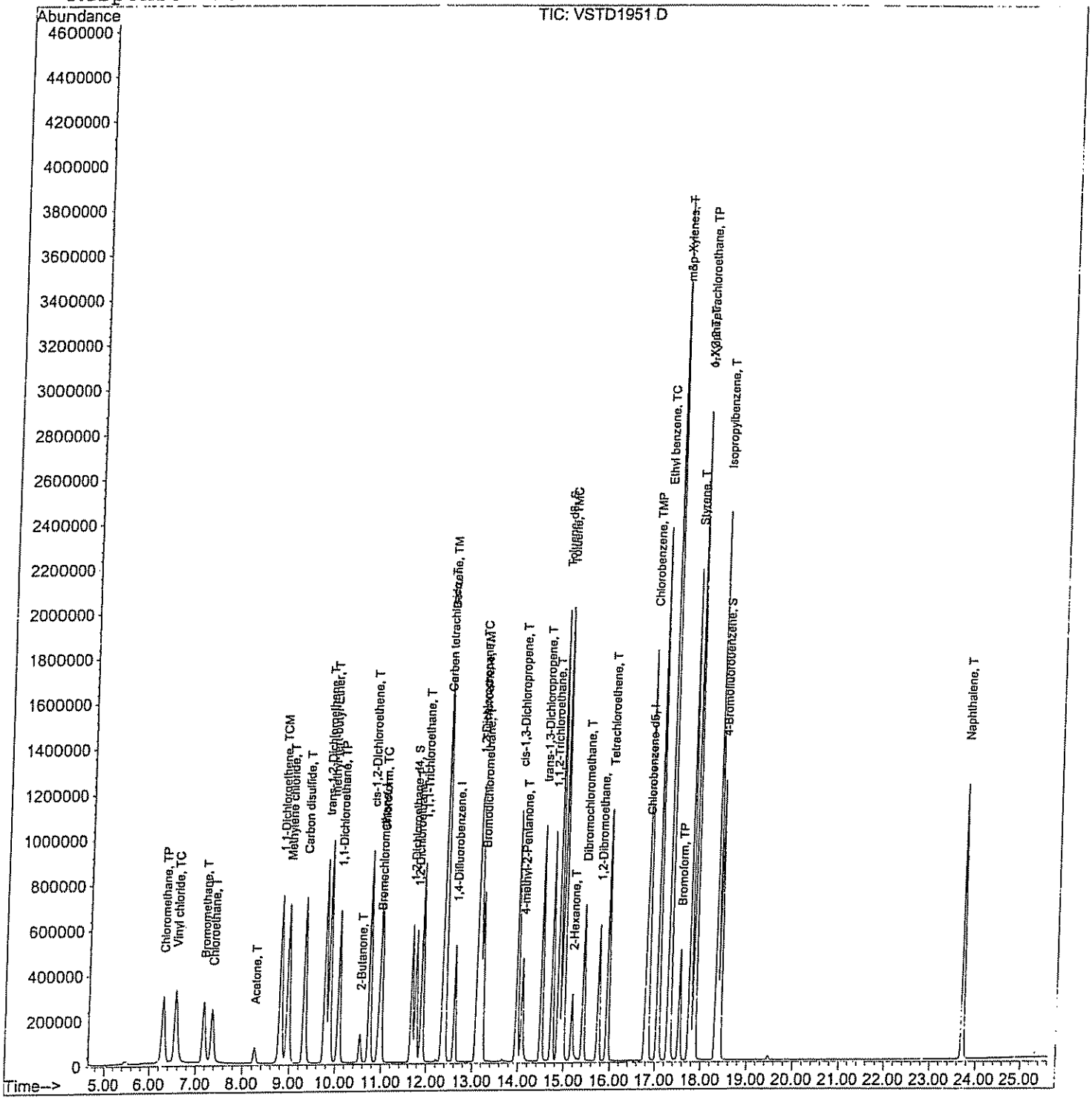
Data File : C:\HPCHEM\1\DATA\VSTD1951.D
Acq On : 14 Dec 2004 10:54
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VBLK1443.D
Acq On : 14 Dec 2004 15:14
Sample : WATER METHOD BLK
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:45 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	90073	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	596587	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.77	117	492765	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	137756	47.50	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.00%			
32) Toluene-d8	14.87	98	501004	51.06	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.12%			
43) 4-Bromofluorobenzene	18.40	95	195431	51.41	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.82%			
Target Compounds						Qvalue
2) Chloromethane	6.31	50	199	0.05	ug/L #	85
4) Bromomethane	7.19	94	461	0.19	ug/L	89
6) 1,1-Dichloroethene	8.81	96	349	0.11	ug/L #	51
7) Carbon disulfide	9.33	76	1366	0.13	ug/L	100
8) Methylene chloride	8.96	84	1138	0.32	ug/L #	79
9) Acetone	8.27	43	1451	1.62	ug/L	98
13) cis-1,2-Dichloroethene	10.74	96	6011	1.43	ug/L	98
15) 2-Butanone	10.60	43	3793	2.88	ug/L	100
20) 1,1,1-Trichloroethane	11.89	97	372	0.08	ug/L #	62
21) Benzene	12.39	78	643	0.05	ug/L	89
22) Trichloroethene	13.14	130	2286	0.83	ug/L	87
27) 1,1,2-Trichloroethane	14.88	97	14783	~~5.19~~	ug/L #	53
33) Toluene	14.96	92	901	0.13	ug/L	90
37) Ethyl benzene	17.29	91	448	0.04	ug/L #	84
38) Chlorobenzene	16.82	112	1014	0.13	ug/L #	66
45) Naphthalene	23.73	128	785	0.11	ug/L #	97

#4 12/16/04

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

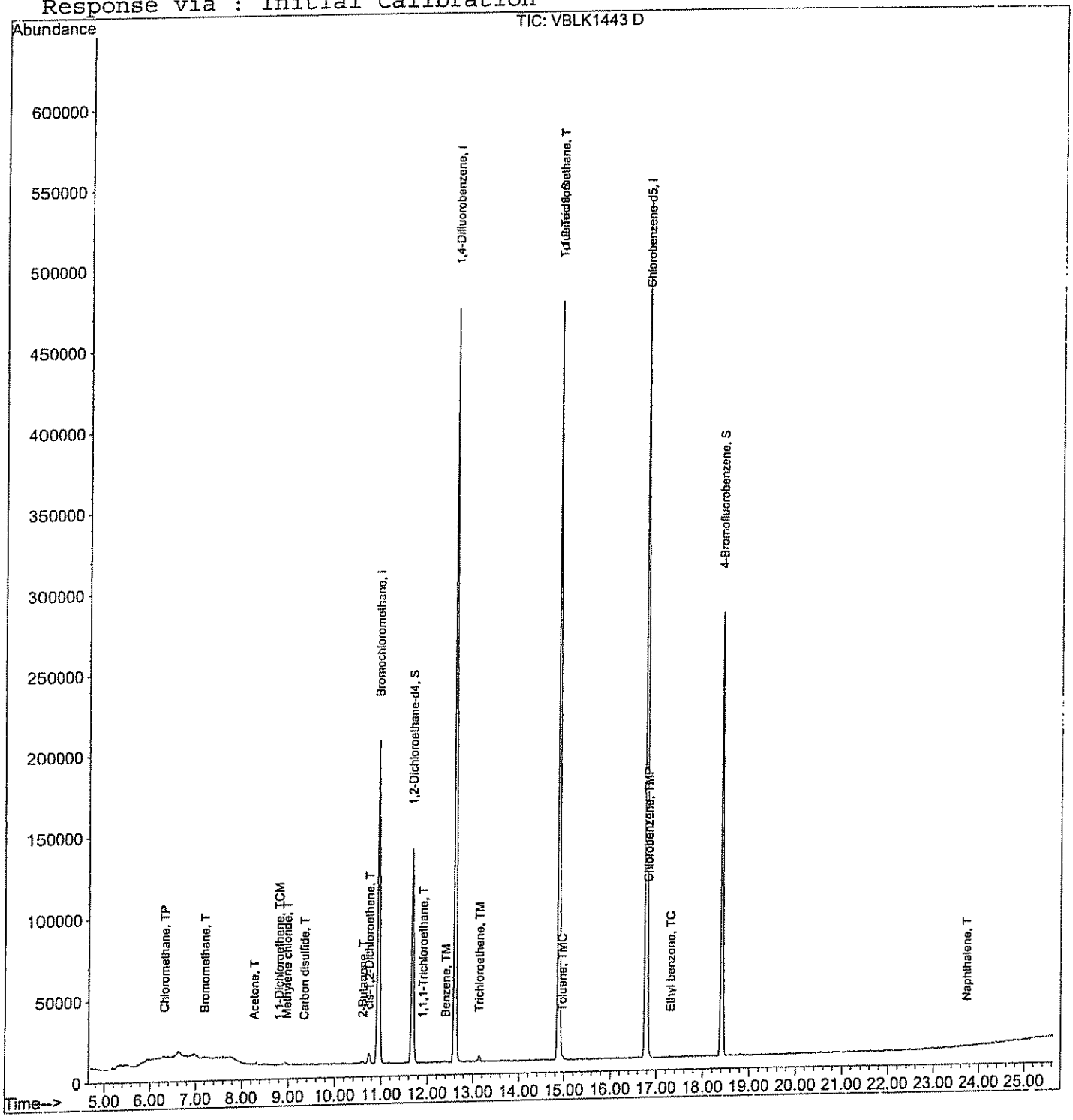
Data File : C:\HPCHEM\1\DATA\VBLK1443.D
Acq On : 14 Dec 2004 15:14
Sample : WATER METHOD BLK
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:45 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



LCS Blank Summary Report

Data File : C:\HPCHEM\1\DATA\LCSW1426.D
Acq On : 14 Dec 2004 14:41
Sample : 50UG/L TCL LCS
Misc : WATER
Matrix : WATER
Vial: 1
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Multiple Level Calibration

		Compound Name	Conc	Added	Recv(%)	QC Range	Q
6)	T	1,1-Dichloroethene	32.21	50.00	64.42	54 to 121%	[ ]
21)	T	Benzene	46.28	50.00	92.55	80 to 118%	[ ]
22)	T	Trichloroethene	41.52	50.00	83.04	67 to 118%	[ ]
33)	T	Toluene	46.36	50.00	92.72	73 to 124%	[ ]
38)	T	Chlorobenzene	46.20	50.00	92.40	80 to 117%	[ ]

* = out of control limits
Tue Dec 21 10:51:38 2004

Data File : C:\HPCHEM\1\DATA\LCSW1426.D
Acq On : 14 Dec 2004 14:41
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 1
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:32 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1
IS QA File : File name for IS QA unknown

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane	10.94	128	94094	50.00	ug/L	0.00 NA%
18) 1,4-Difluorobenzene	12.60	114	613258	50.00	ug/L	0.00 NA%
31) Chlorobenzene-d5	16.78	117	524670	50.00	ug/L	0.00 NA%
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	141324	46.64	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 93.28%			
32) Toluene-d8	14.87	98	520305	49.80	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.60%			
43) 4-Bromofluorobenzene	18.40	95	204398	50.50	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.00%			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	314	0.07	ug/L #	85
3) Vinyl chloride	6.55	62	424	0.10	ug/L #	71
4) Bromomethane	7.19	94	1137	0.45	ug/L	95
5) Chloroethane	7.34	64	96	0.04	ug/L	90
6) 1,1-Dichloroethene	8.80	96	102835	32.21	ug/L	97
7) Carbon disulfide	9.32	76	5470	0.49	ug/L	100
8) Methylene chloride	8.95	84	1354	0.36	ug/L #	77
9) Acetone	8.25	43	4233	4.53	ug/L	94
10) trans-1,2-Dichloroethene	9.77	96	771	0.21	ug/L #	71
12) 1,1-Dichloroethane	10.04	63	116	0.02	ug/L #	84
13) cis-1,2-Dichloroethene	10.73	96	13476	3.07	ug/L	99
15) 2-Butanone	10.56	43	4858	3.53	ug/L	97
20) 1,1,1-Trichloroethane	11.90	97	705	0.16	ug/L #	62
21) Benzene	12.38	78	595155	46.28	ug/L	100
22) Trichloroethene	13.14	130	118237	41.52	ug/L	97
24) Bromodichloromethane	13.18	83	97	0.02	ug/L #	68
26) trans-1,3-Dichloropropene	14.49	75	342	0.07	ug/L #	78
27) 1,1,2-Trichloroethane	14.88	97	15487	5.29	ug/L #	53

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

Data File : C:\HPCHEM\1\DATA\LCSW1426.D
Acq On : 14 Dec 2004 14:41
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 1
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:32 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29) 1,2-Dibromoethane	15.74	107	195	0.06	ug/L		97
33) Toluene	14.97	92	348529	46.36	ug/L		100
35) Tetrachloroethene	15.94	164	196	0.10	ug/L	#	37
37) Ethyl benzene	17.07	91	1187	0.09	ug/L		97
38) Chlorobenzene	16.82	112	390541	46.20	ug/L		99
39) m&p-Xylenes	17.30	106	974	0.17	ug/L	#	69
40) o-Xylene	17.86	106	319	0.06	ug/L	#	72
41) Styrene	17.76	104	823	0.09	ug/L		93
42) Isopropylbenzene	18.34	105	965	0.07	ug/L	#	92
45) Naphthalene	23.71	128	3129	0.41	ug/L	#	97

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

Quantitation Report

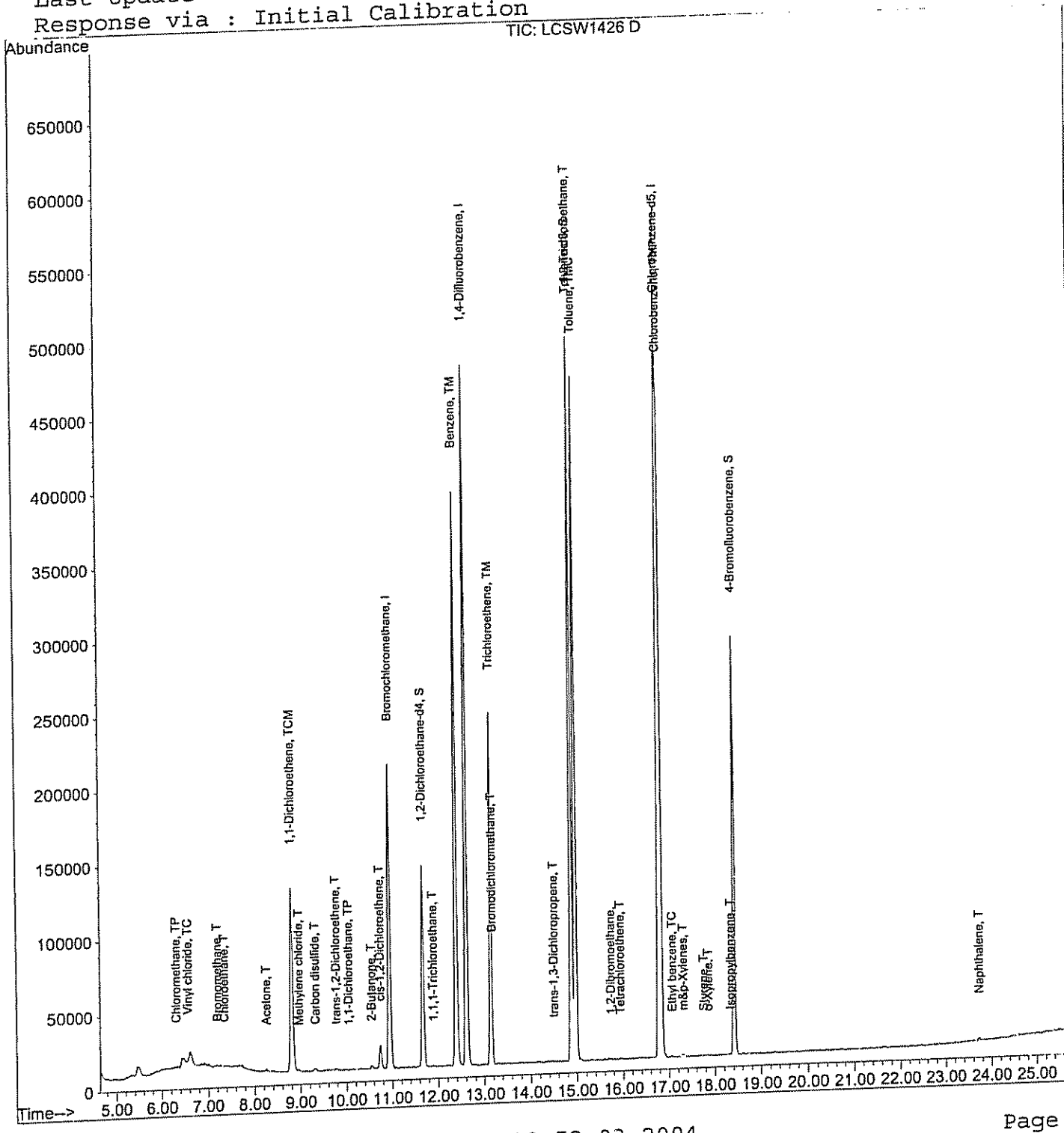
Data File : C:\HPCHEM\1\DATA\LCSW1426.D
Acq On : 14 Dec 2004 14:41
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 1
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:32 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSA13122.D
Acq On : 14 Dec 2004 18:28
Sample : P0412024-01A
Misc : WATER

Vial: 8
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:27 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.95	128	90686	50.00	ug/L	0.01
18) 1,4-Difluorobenzene	12.60	114	622484	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.77	117	539399	50.00	ug/L	-0.01
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	128926	44.15	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 88.30%			
32) Toluene-d8	14.88	98	978442	91.09	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 182.18%#			
43) 4-Bromofluorobenzene	18.40	95	196657	47.26	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.52%			
Target Compounds						Qvalue
2) Chloromethane	6.28	50	470	0.12	ug/L #	85
3) Vinyl chloride	6.56	62	1341987	338.21	ug/L	100
4) Bromomethane	7.25	94	236	0.10	ug/L	86
5) Chloroethane	7.39	64	218	0.08	ug/L	94
6) 1,1-Dichloroethene	8.80	96	4242841	1378.93	ug/L	99
7) Carbon disulfide	9.31	76	27603	2.58	ug/L	100
8) Methylene chloride	8.95	84	1291321	360.12	ug/L	100
9) Acetone	8.29	43	14033	15.57	ug/L	92
10) trans-1,2-Dichloroethene	9.76	96	2213547	626.31	ug/L	99
11) methyl-tert-butyl-Ether	9.87	73	1124	0.14	ug/L #	83
12) 1,1-Dichloroethane	10.07	63	4482692	821.97	ug/L	100
13) cis-1,2-Dichloroethene	10.66	96	6533023	1546.57	ug/L	97
14) Chloroform	10.99	83	90869	~~17.54~~	ug/L	99
15) 2-Butanone	10.58	43	3860	2.91	ug/L	89
17) 1,2-Dichloroethane	11.76	62	934560	260.39	ug/L	99
20) 1,1,1-Trichloroethane	11.90	97	9026257	1971.49	ug/L	99
21) Benzene	12.38	78	828724	63.48	ug/L	100
22) Trichloroethene	13.10	130	2659195	919.96	ug/L	95
23) 1,2-Dichloropropane	13.10	63	15066	4.60	ug/L #	1
24) Bromodichloromethane	13.10	83	46503	~~11.44~~	ug/L #	1
27) 1,1,2-Trichloroethane	14.72	97	88390	29.72	ug/L	96
33) Toluene	14.96	92	18242312	2360.33	ug/L #	58
34) 4-methyl-2-Pentanone	14.14	43	37747	15.68	ug/L	98

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

Data File : C:\HPCHEM\1\DATA\VSA13122.D
Acq On : 14 Dec 2004 18:28
Sample : P0412024-01A
Misc : WATER

Vial: 8
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:27 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
35) Tetrachloroethene	15.93	164	107584	55.42	ug/L		96
36) 2-Hexanone	15.14	43	72505	43.79	ug/L	#	82
37) Ethyl benzene	17.04	91	3197100	228.23	ug/L		100
38) Chlorobenzene	16.82	112	46523	5.35	ug/L		98
39) m&p-Xylenes	17.28	106	2212690	369.64	ug/L		100
40) o-Xylene	17.84	106	966421	165.97	ug/L		100
41) Styrene	17.74	104	9751	0.99	ug/L		90
42) Isopropylbenzene	18.32	105	237938	15.90	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	1771	0.46	ug/L	#	1
45) Naphthalene	23.70	128	382795	48.85	ug/L	#	100

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

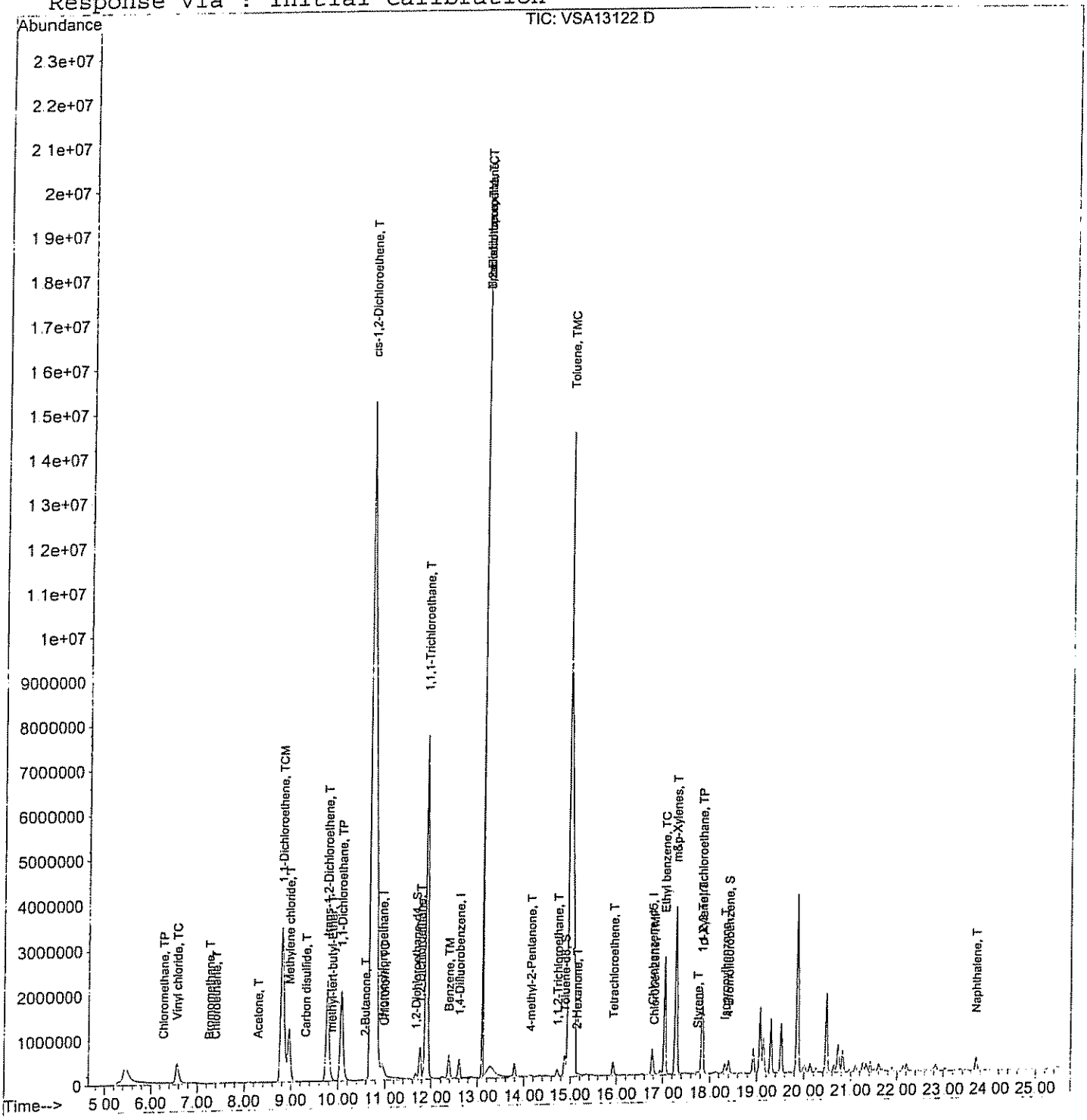
Data File : C:\HPCHEM\1\DATA\VSA13122.D
Acq On : 14 Dec 2004 18:28
Sample : P0412024-01A
Misc : WATER

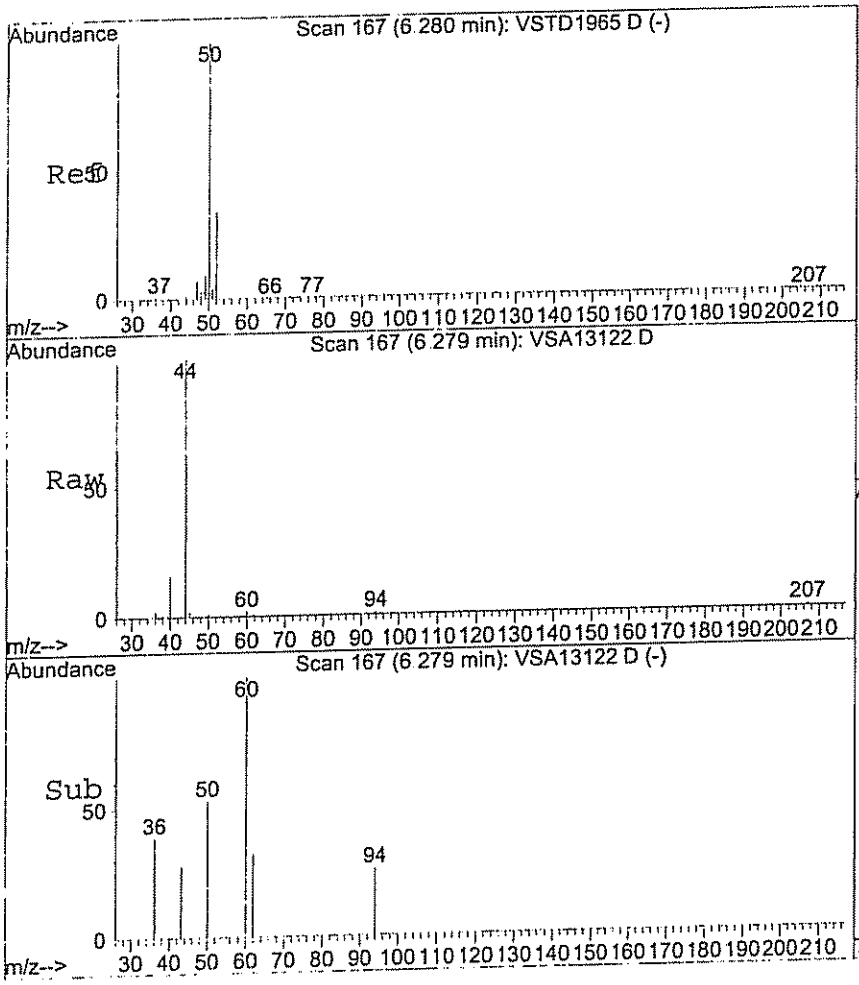
Vial: 8
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:27 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration

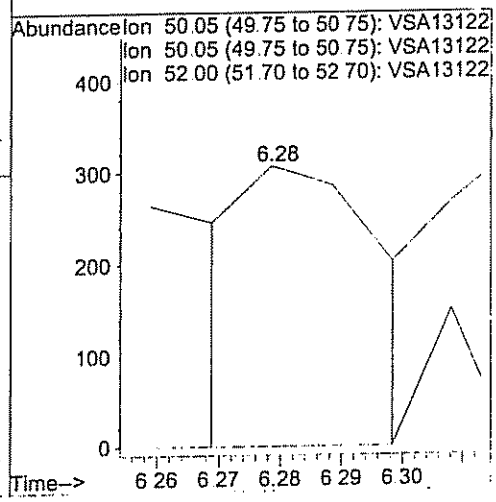


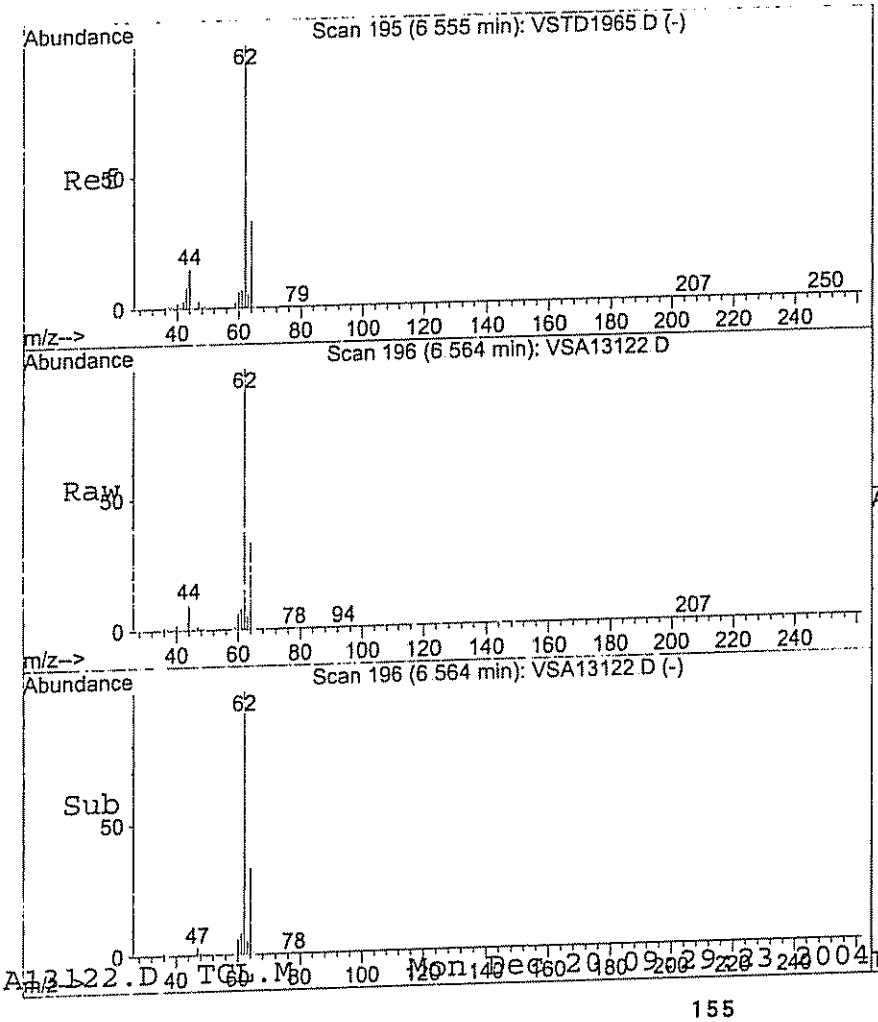


#2
Chloromethane
Concen: 0.12 ug/L
RT: 6.28 min Scan# 167
Delta R.T. -0.02 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 50 Resp: 470

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.5	63.5#

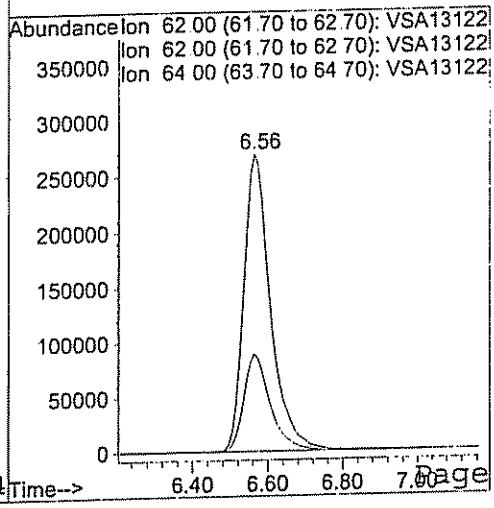


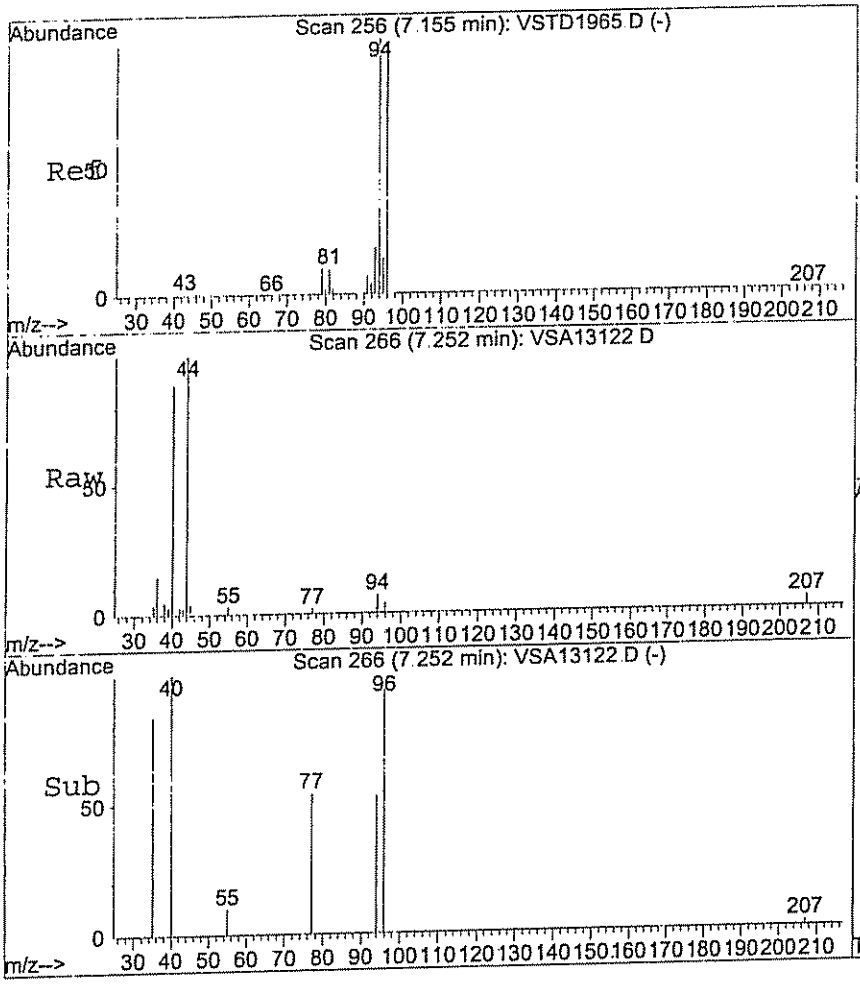


#3
Vinyl chloride
Concen: 338.21 ug/L
RT: 6.56 min Scan# 196
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 62 Resp: 1341987

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	33.1	2.0	62.0

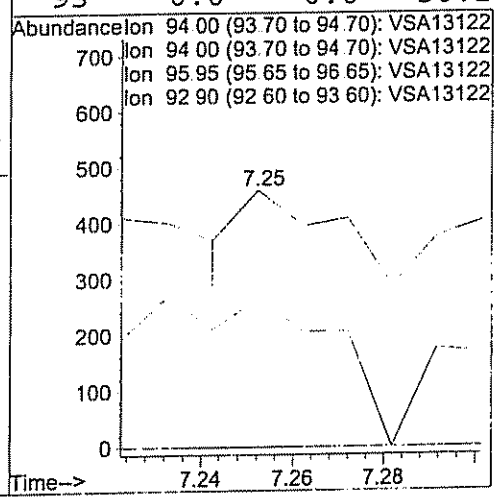


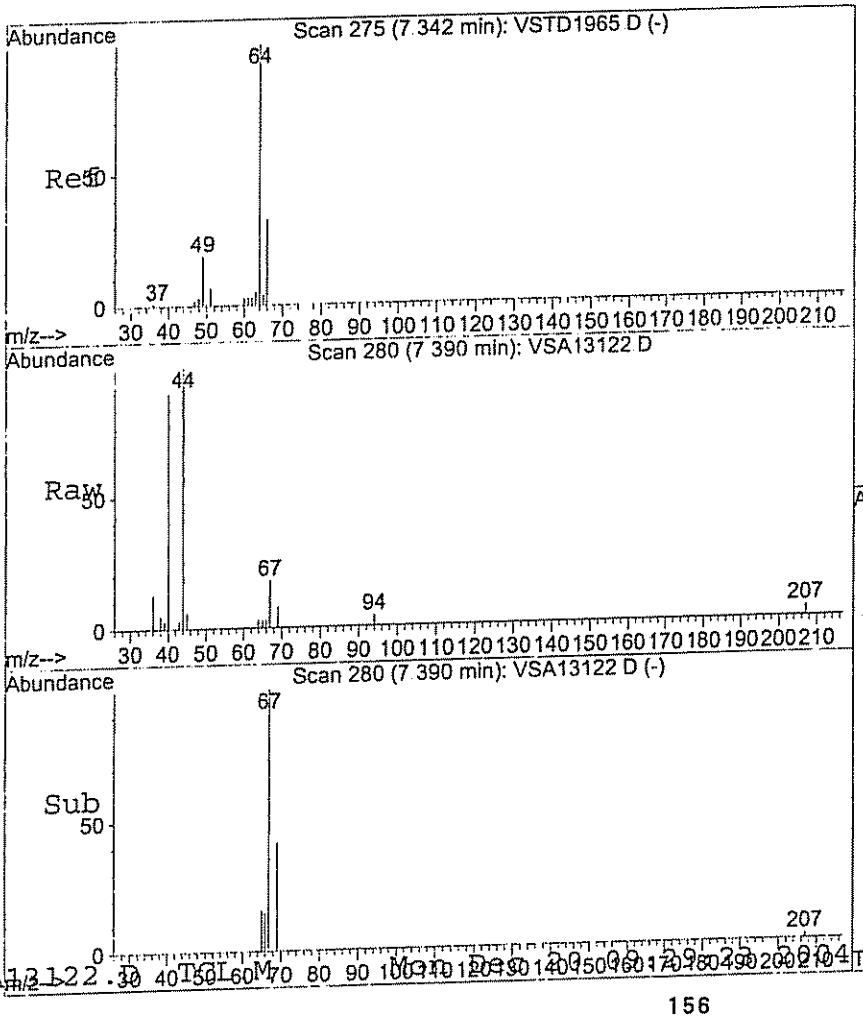


#4
Bromomethane
Concen: 0.10 ug/L
RT: 7.25 min Scan# 266
Delta R.T. 0.07 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 94 Resp: 236

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	122.5	70.5	130.5
93	0.0	0.0	50.2

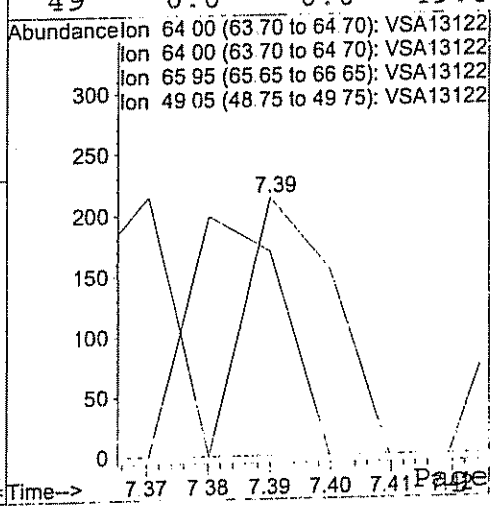


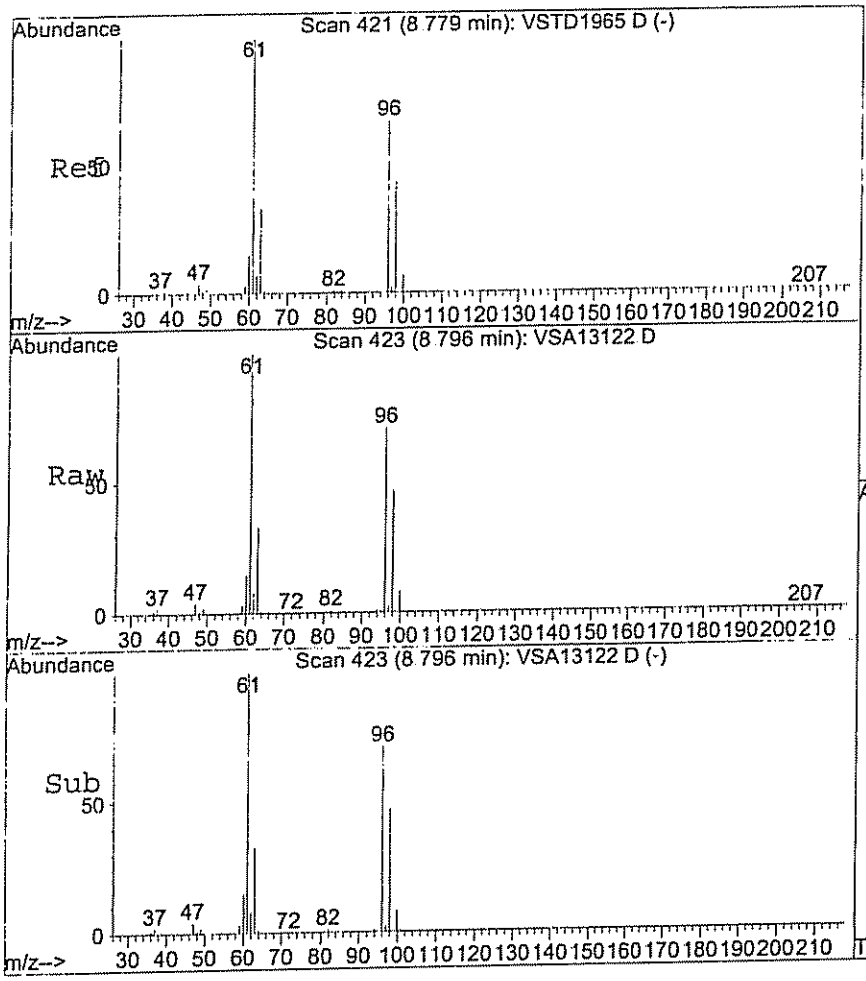


#5
Chloroethane
Concen: 0.08 ug/L
RT: 7.39 min Scan# 280
Delta R.T. 0.02 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 64 Resp: 218

Ion	Ratio	Lower	Upper
64	100		
64	100.0	70.0	130.0
66	32.9	1.9	61.9
49	0.0	0.0	49.6

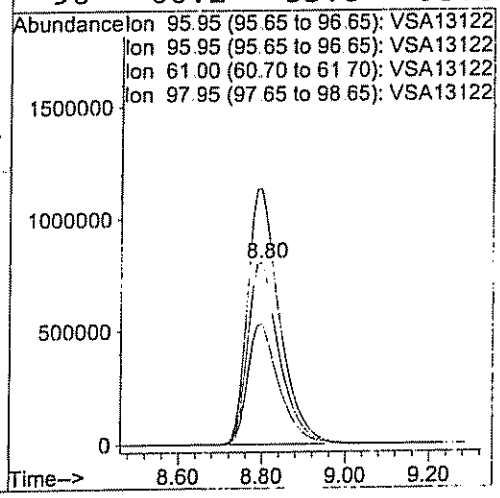


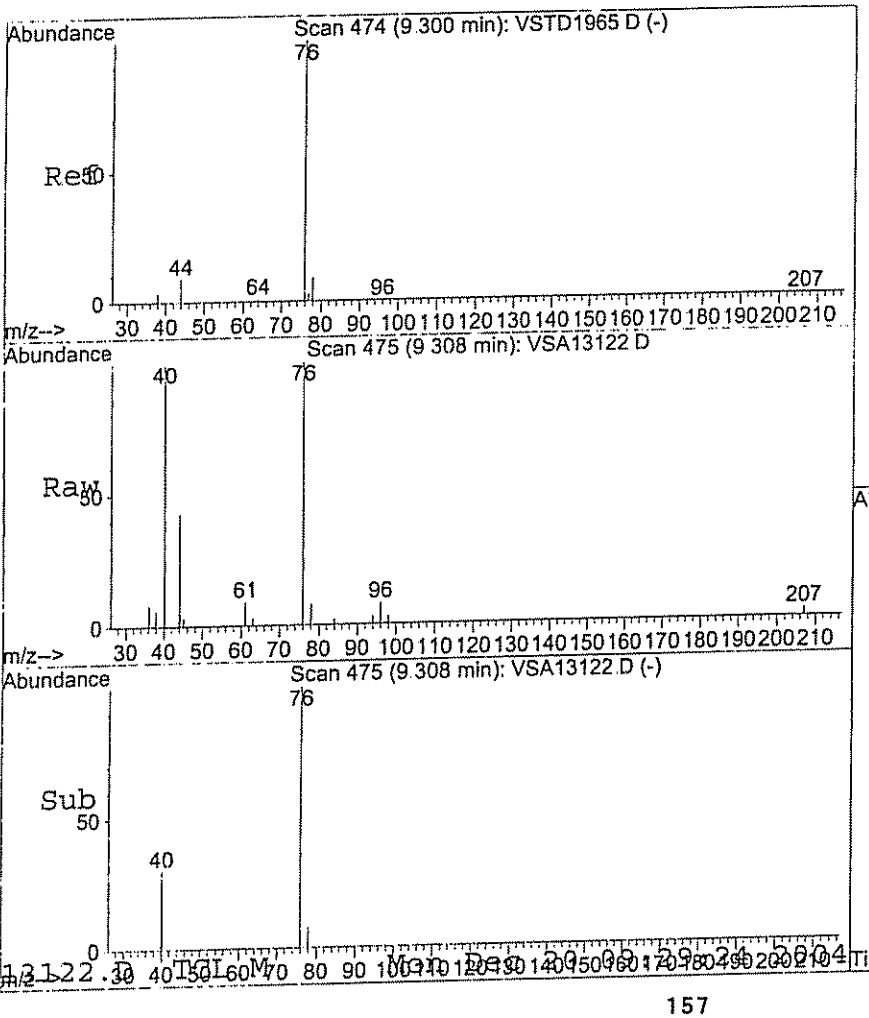


#6
1,1-Dichloroethene
Concen: 1378.93 ug/L
RT: 8.80 min Scan# 423
Delta R.T. -0.00 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 96 Resp: 4242841

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	141.3	108.4	168.4
98	66.1	35.8	95.8

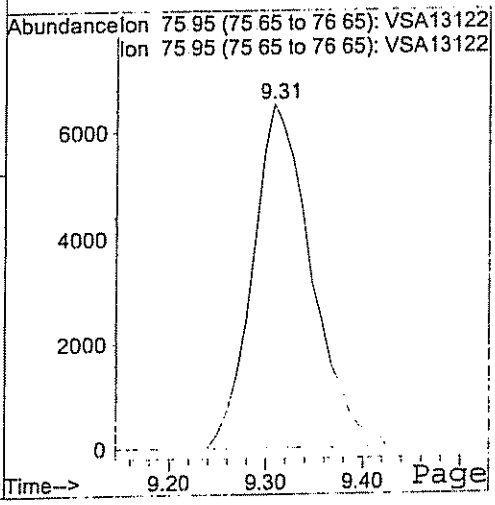


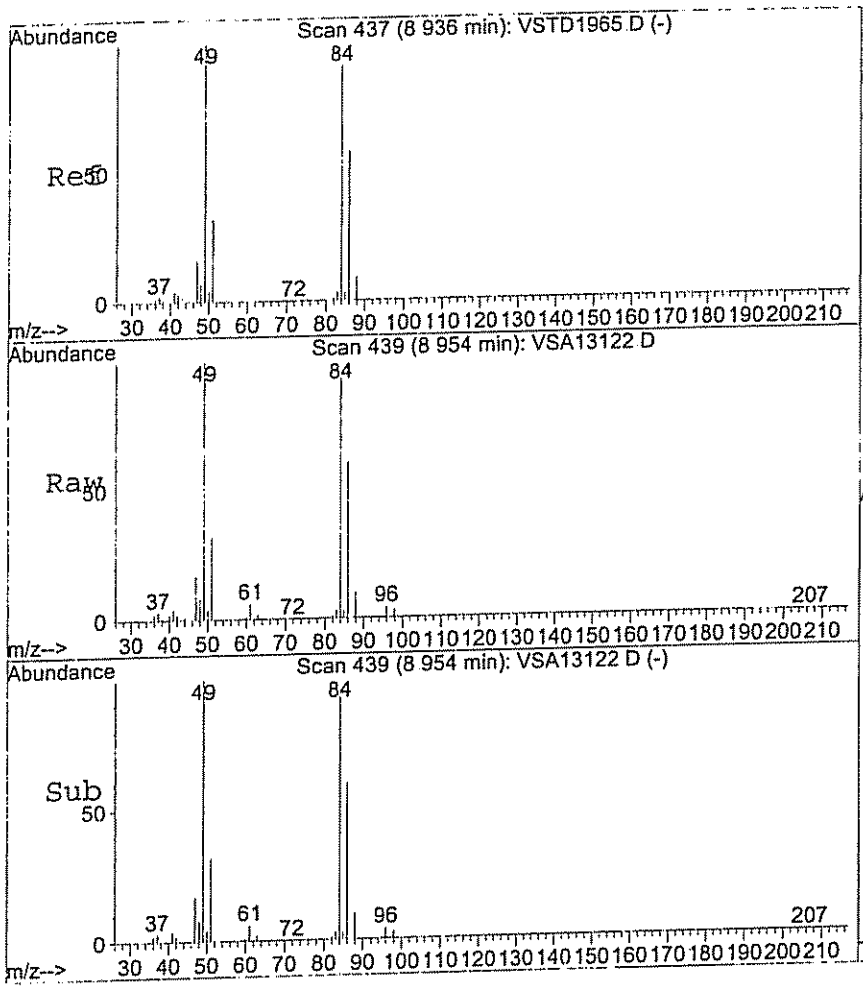


#7
Carbon disulfide
Concen: 2.58 ug/L
RT: 9.31 min Scan# 475
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 76 Resp: 27603

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

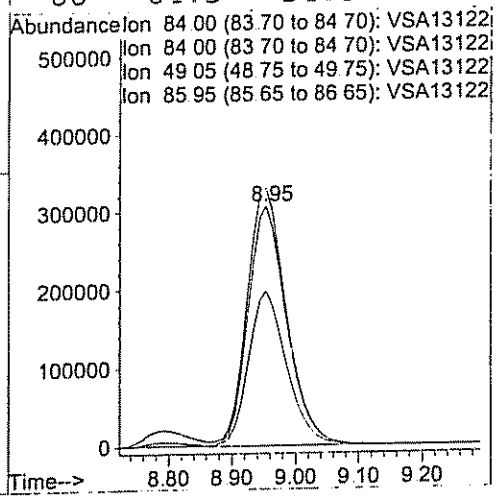


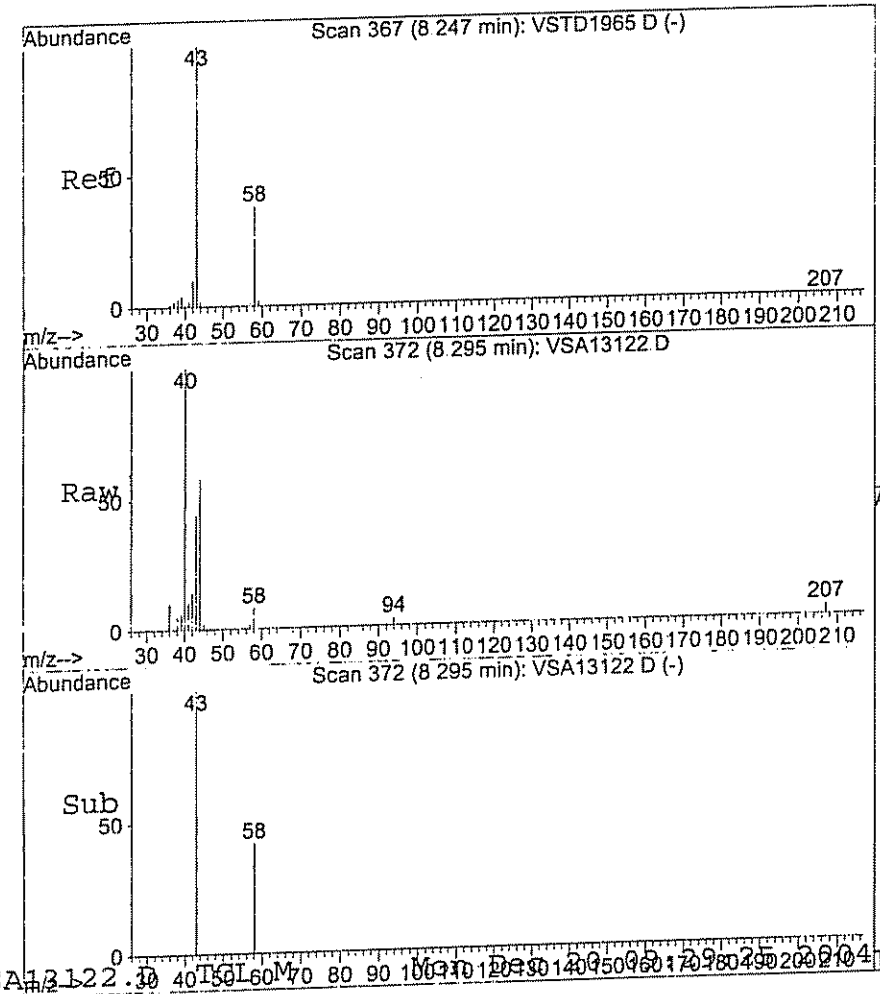


#8
Methylene chloride
Concen: 360.12 ug/L
RT: 8.95 min Scan# 439
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 84 Resp: 1291321

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	106.8	76.9	136.9
86	64.5	34.8	94.8

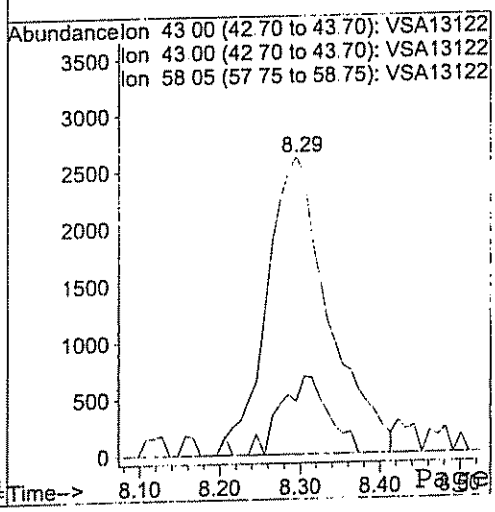


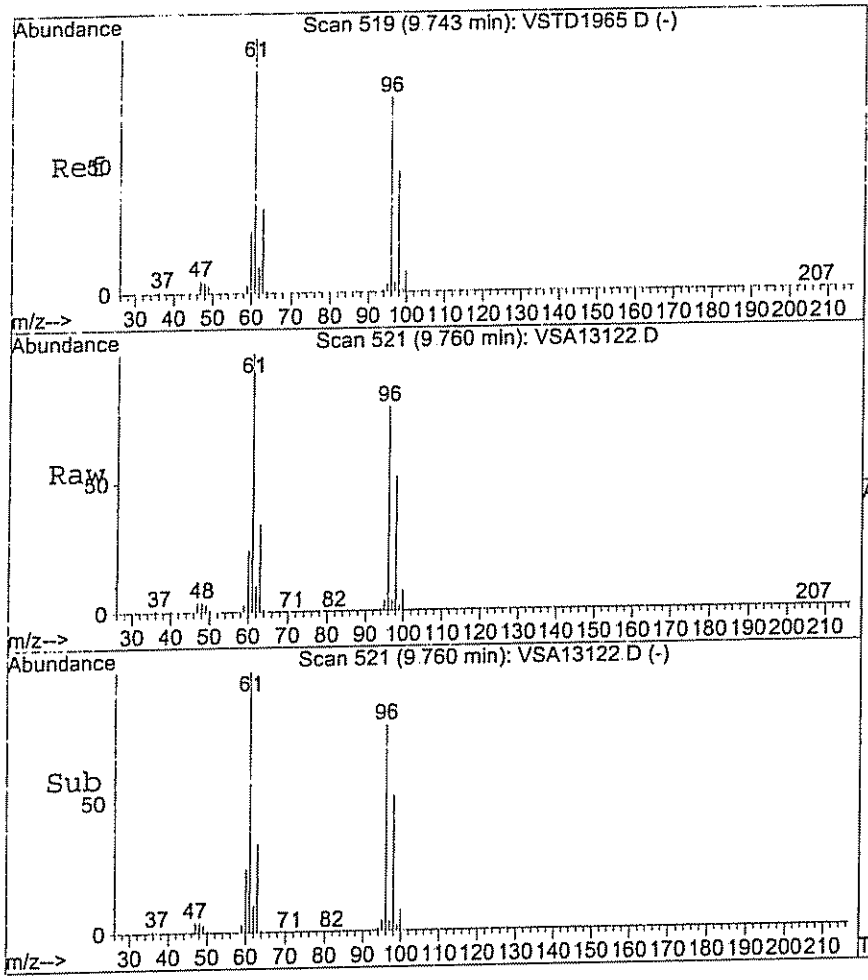


#9
Acetone
Concen: 15.57 ug/L
RT: 8.29 min Scan# 372
Delta R.T. 0.00 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 43 Resp: 14033

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	18.5	6.8	66.8

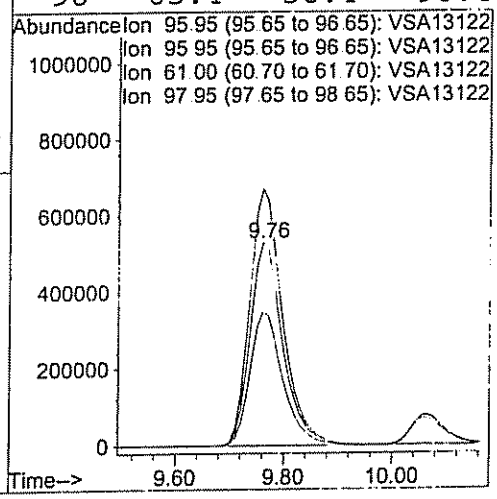


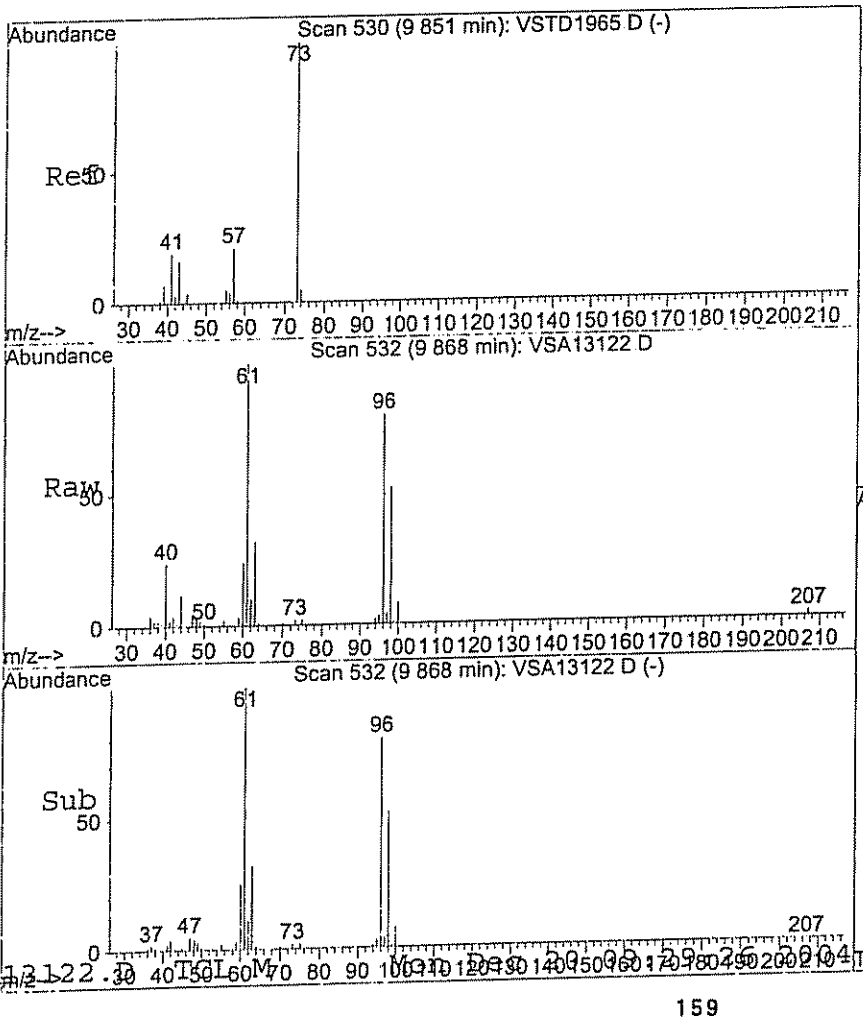


#10
trans-1,2-Dichloroethene
Concen: 626.31 ug/L
RT: 9.76 min Scan# 521
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 96 Resp: 2213547

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	126.5	93.5	153.5
98	65.4	36.4	96.4

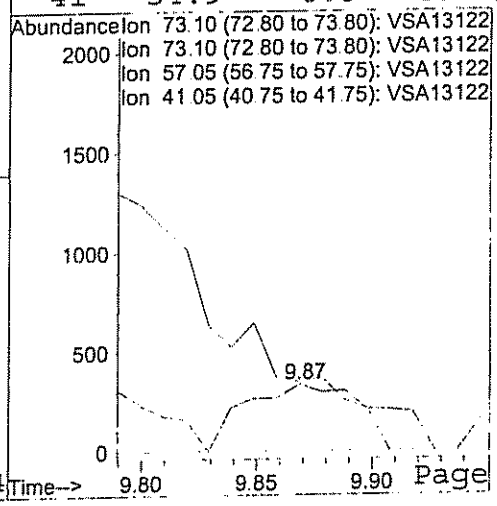


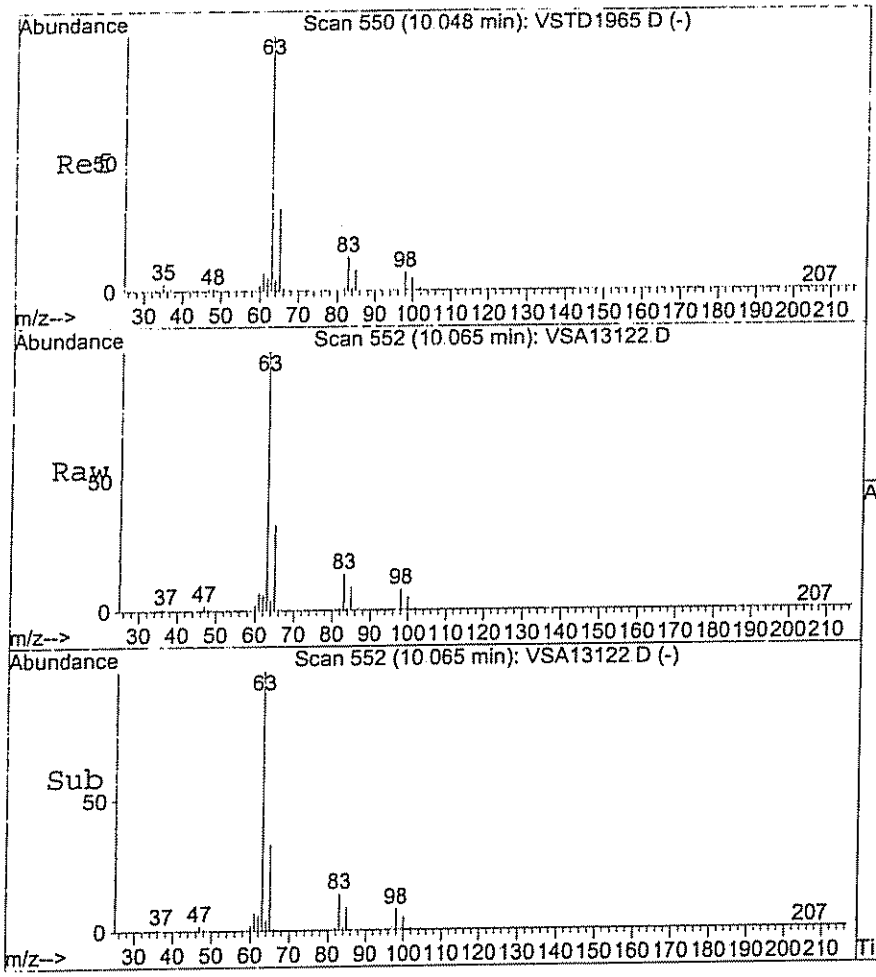


#11
methyl-tert-butyl-Ether
Concen: 0.14 ug/L
RT: 9.87 min Scan# 532
Delta R.T. -0.00 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 73 Resp: 1124

Ion	Ratio	Lower	Upper
73	100		
73	100.0	70.0	130.0
57	0.0	0.0	49.9
41	54.9	0.0	48.9#

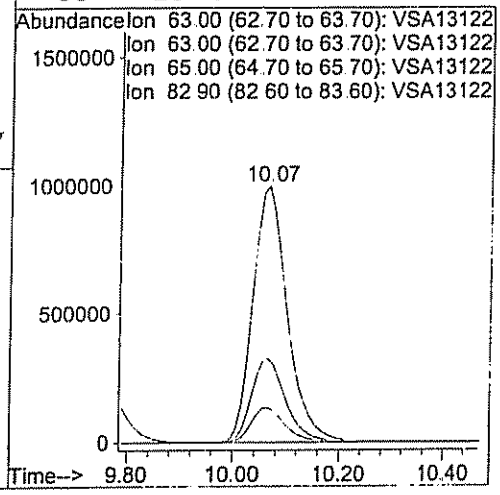


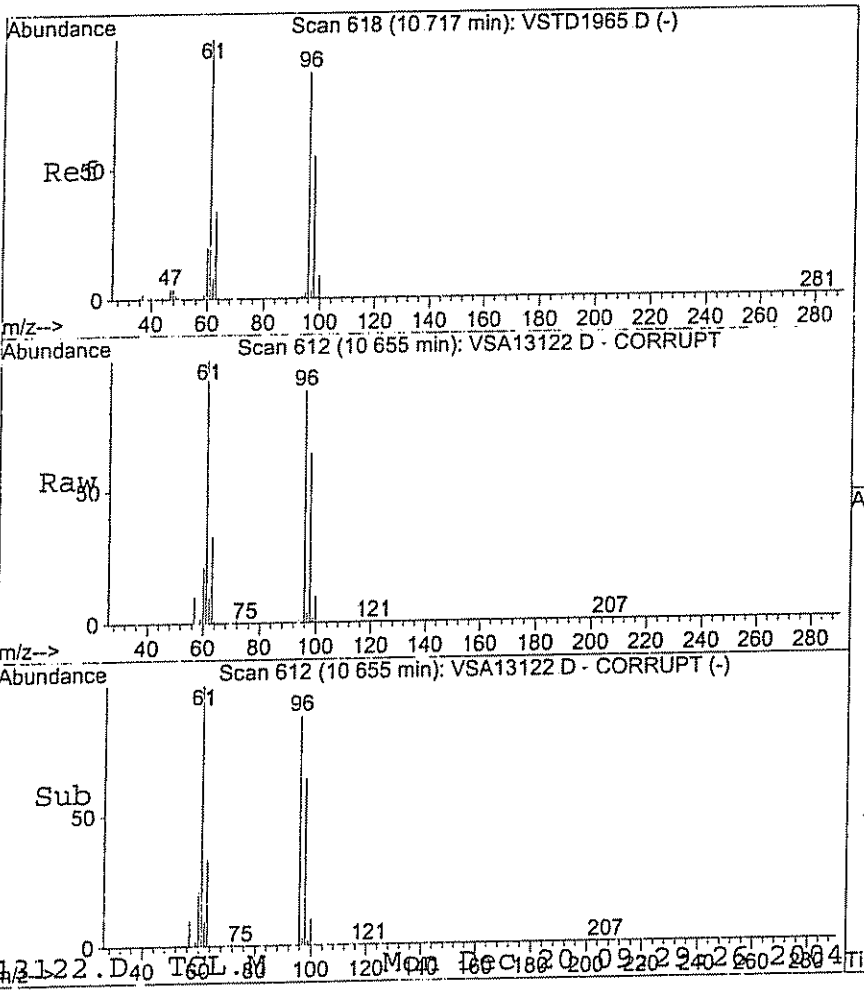


#12
1,1-Dichloroethane
Concen: 821.97 ug/L
RT: 10.07 min Scan# 552
Delta R.T. -0.00 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 63 Resp: 4482692

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	32.6	2.8	62.8
83	13.6	0.0	43.5

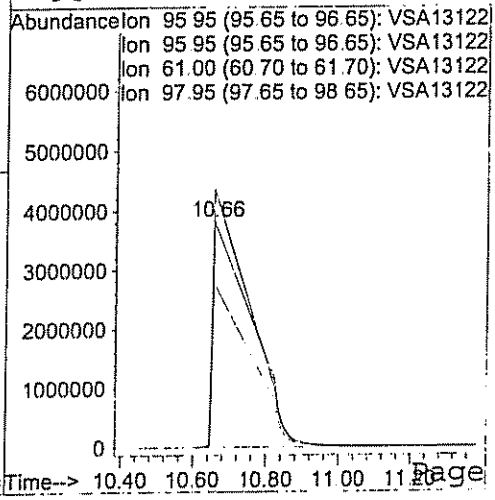


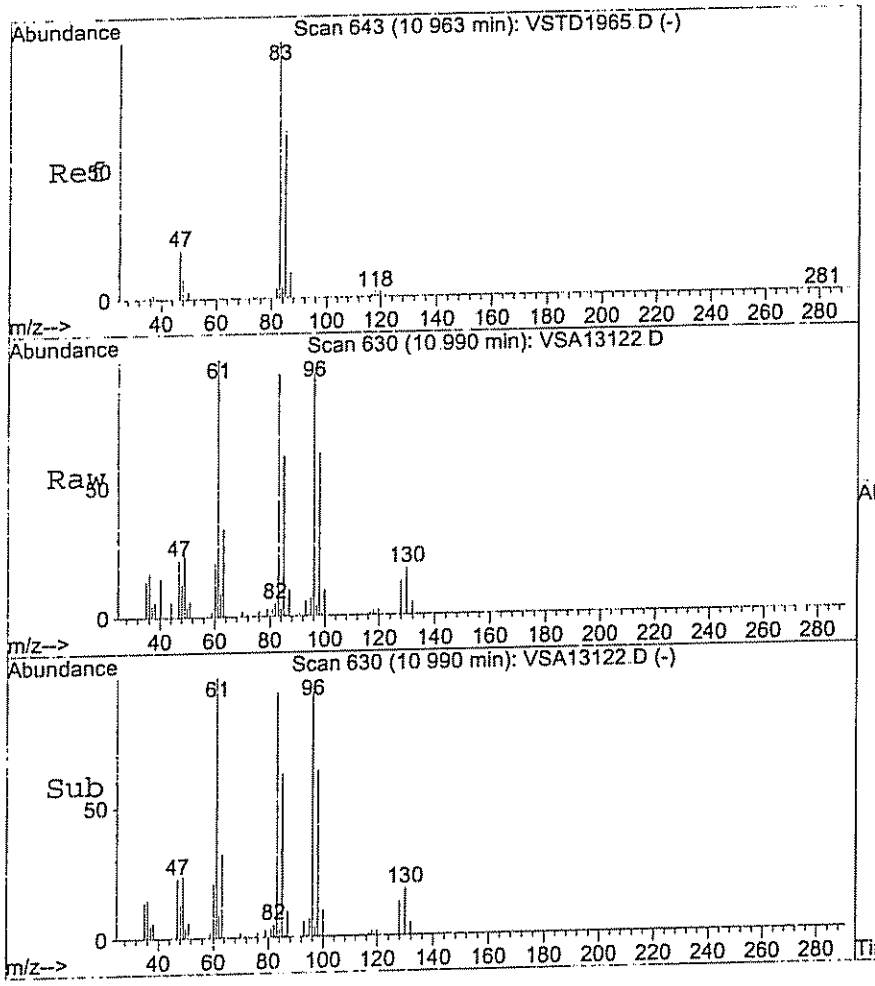


#13
cis-1,2-Dichloroethene
Concen: 1546.57 ug/L
RT: 10.66 min Scan# 612
Delta R.T. -0.08 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 96 Resp: 6533023

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	114.2	81.4	141.4
98	72.7	35.9	95.9

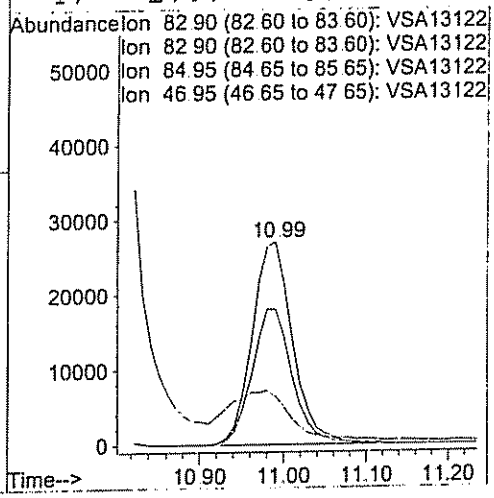


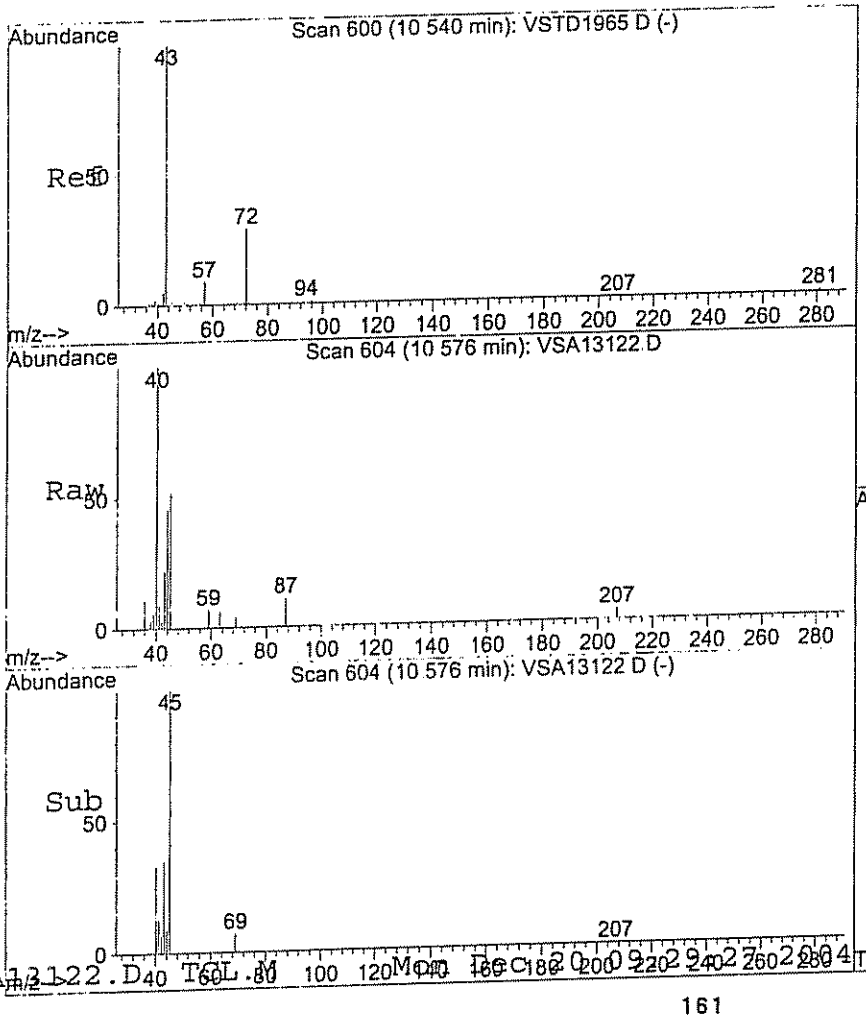


#14
Chloroform
Concen: 17.54 ug/L
RT: 10.99 min Scan# 630
Delta R.T. 0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 83 Resp: 90869

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	66.7	35.2	95.2
47	17.7	0.0	50.7

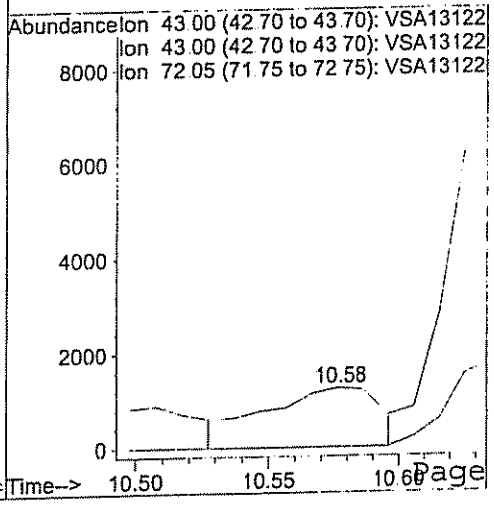


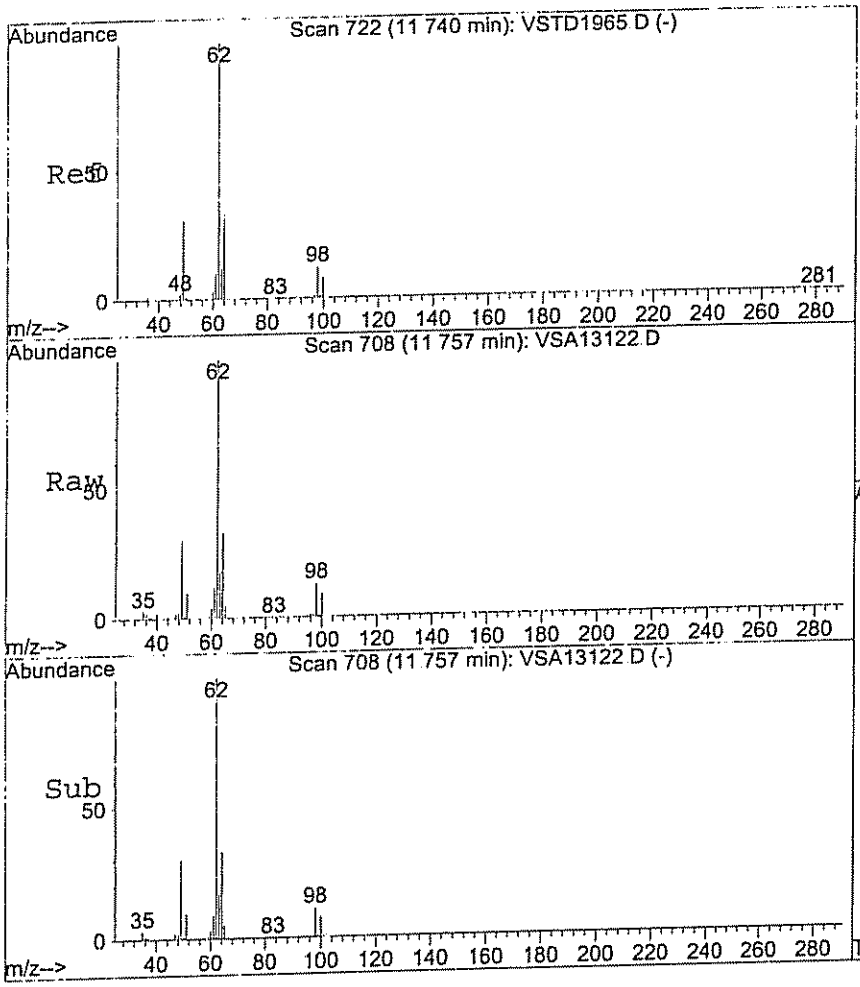


#15
2-Butanone
Concen: 2.91 ug/L
RT: 10.58 min Scan# 604
Delta R.T. 0.00 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 43 Resp: 3860

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	57.1

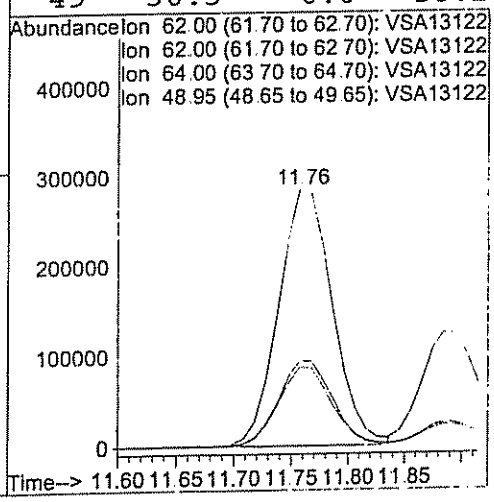


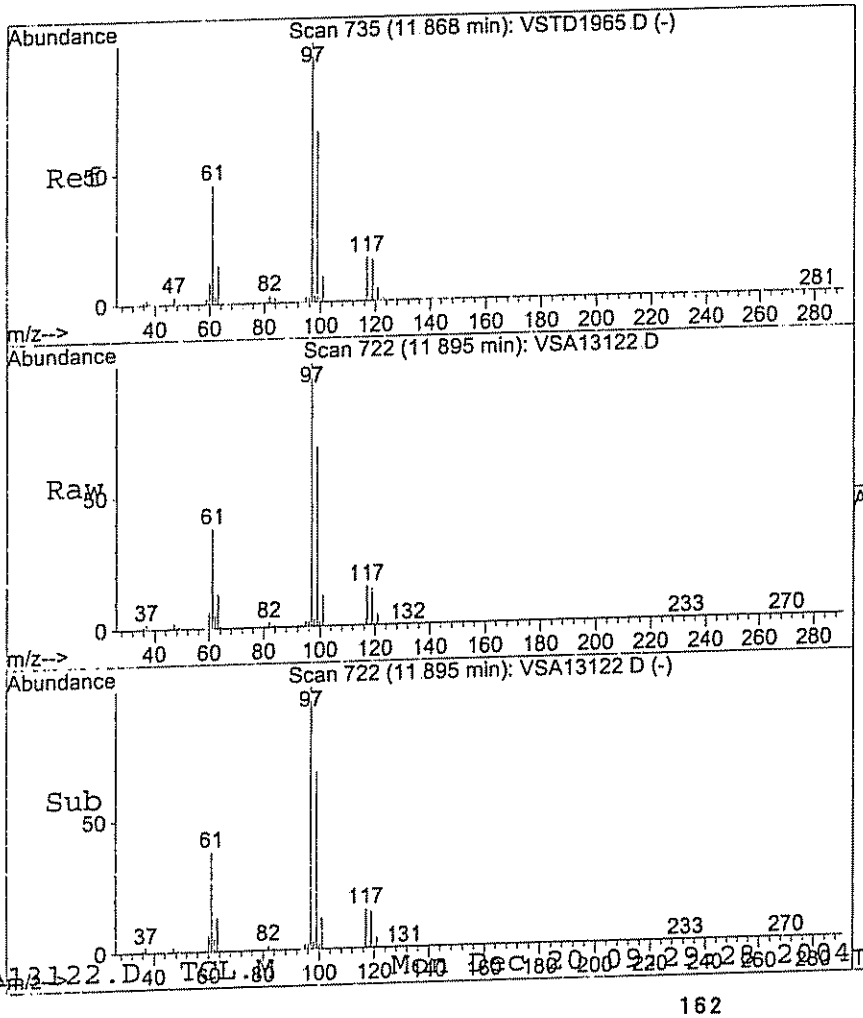


#17
1,2-Dichloroethane
Concen: 260.39 ug/L
RT: 11.76 min Scan# 708
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 62 Resp: 934560

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	32.8	2.3	62.3
49	30.3	0.0	58.2

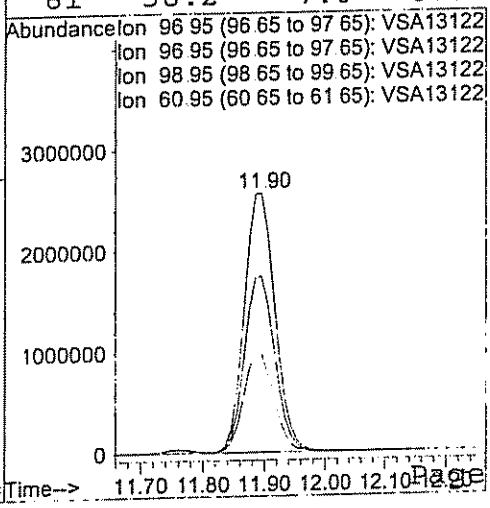


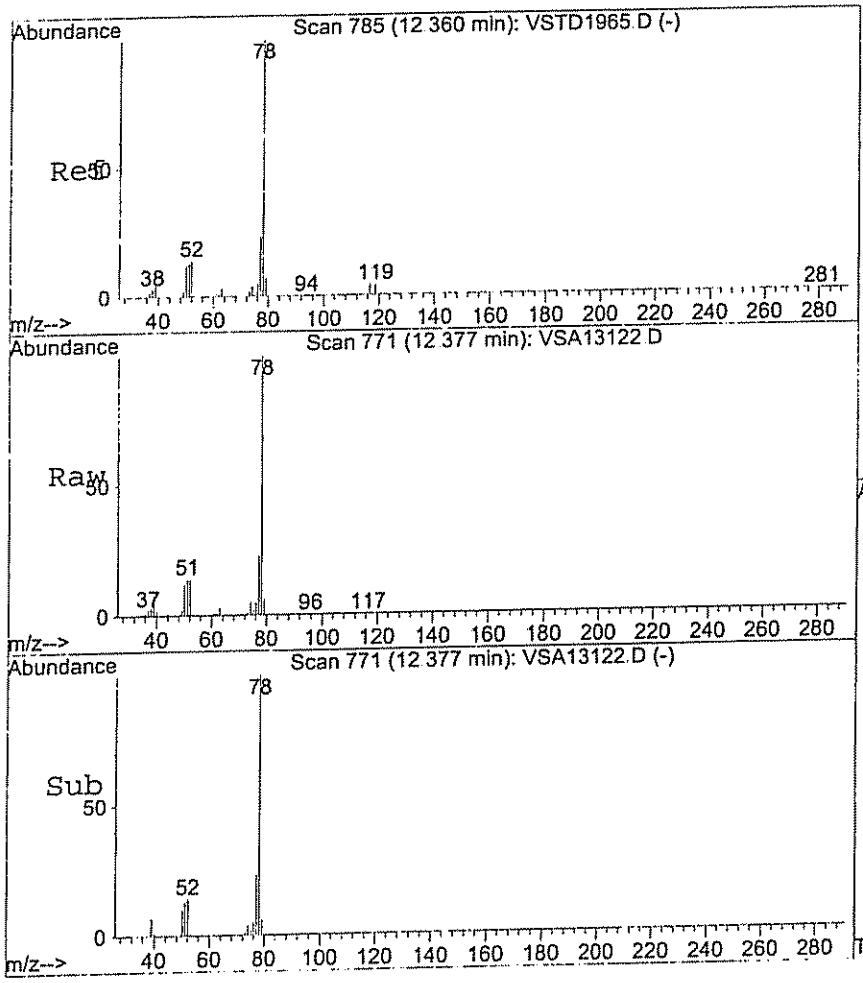


#20
1,1,1-Trichloroethane
Concen: 1971.49 ug/L
RT: 11.90 min Scan# 722
Delta R.T. 0.00 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 97 Resp: 9026257

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	68.1	36.4	96.4
61	38.2	7.0	67.0

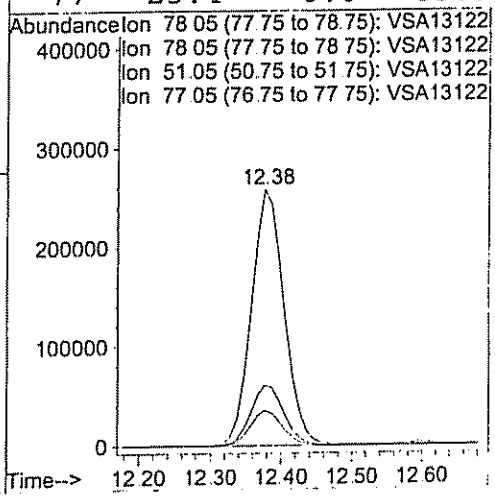


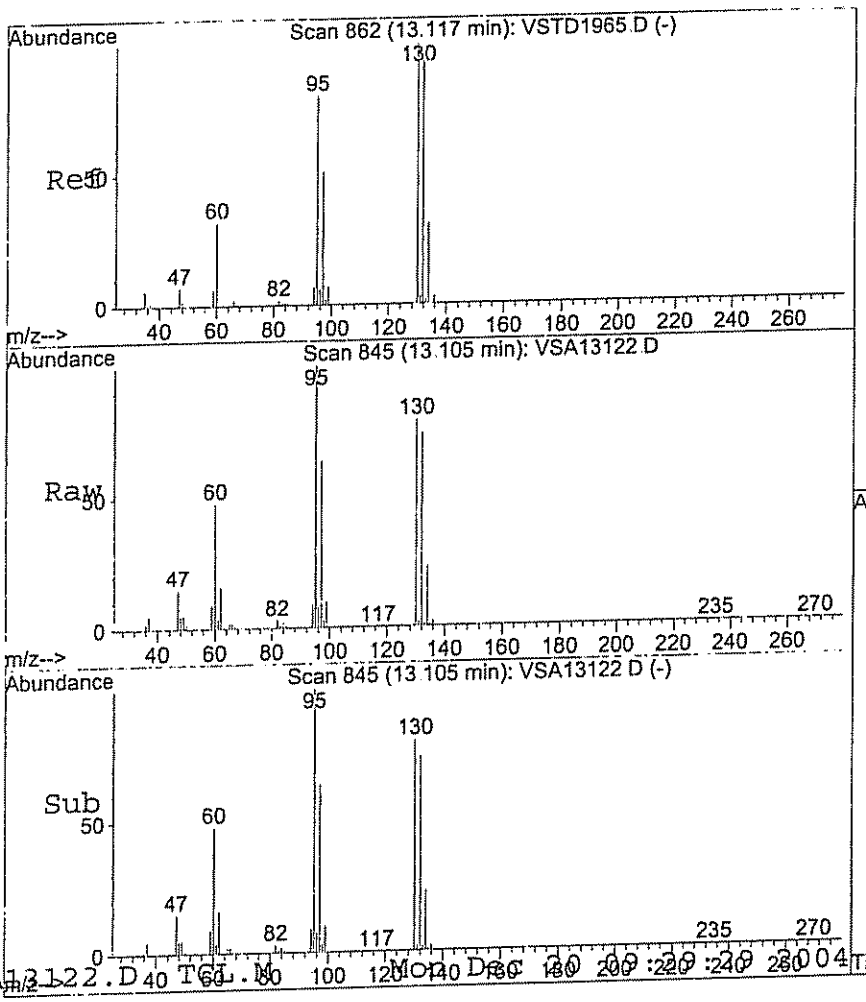


#21
Benzene
Concen: 63.48 ug/L
RT: 12.38 min Scan# 771
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 78 Resp: 828724

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	13.5	0.0	42.7
77	23.4	0.0	53.3

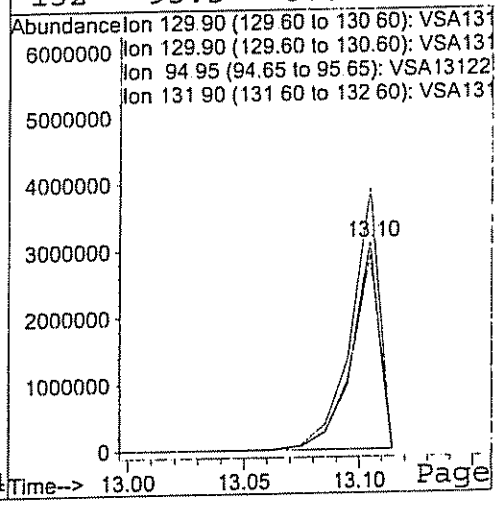


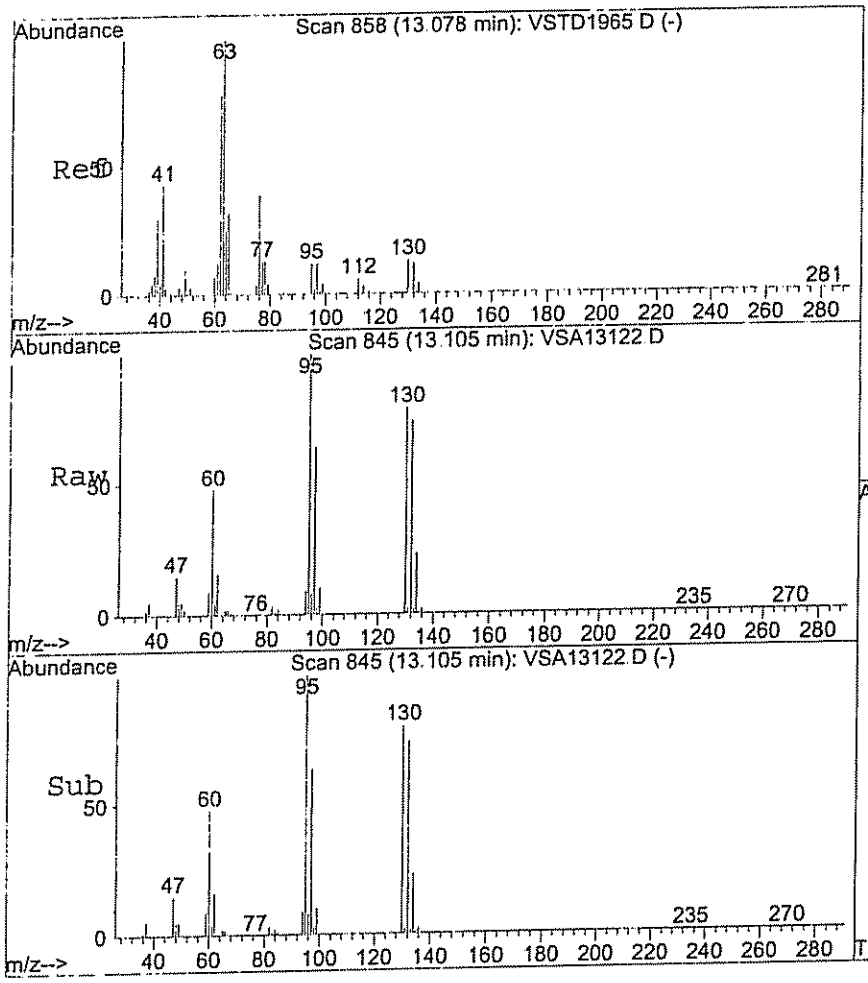


#22
Trichloroethene
Concen: 919.96 ug/L
RT: 13.10 min Scan# 845
Delta R.T. -0.04 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion:130 Resp: 2659195

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	125.8	84.6	144.6
132	93.5	67.2	127.2

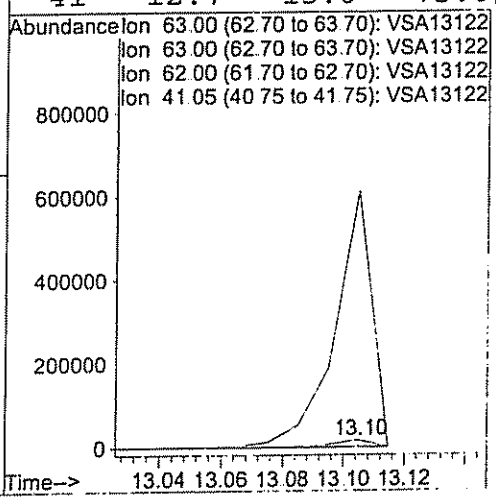


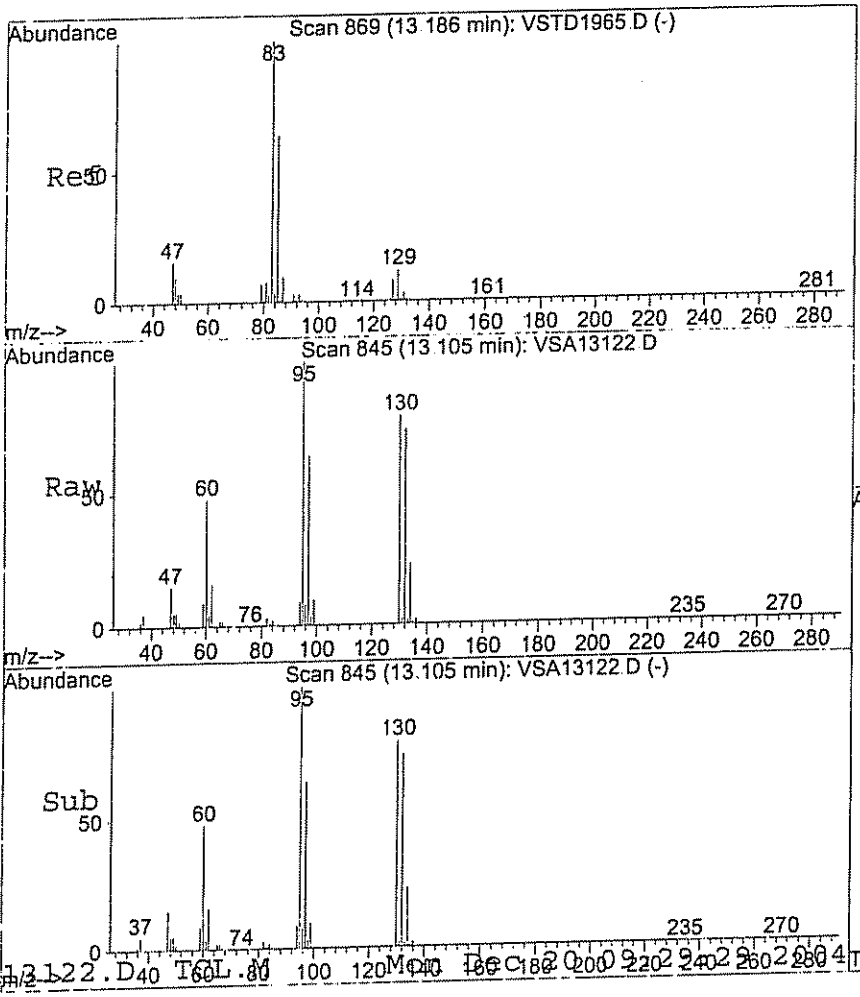


#23
1,2-Dichloropropane
Concen: 4.60 ug/L
RT: 13.10 min Scan# 845
Delta R.T. 0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 63 Resp: 15066

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
62	3636.0	44.6	104.6#
41	12.7	15.0	75.0#

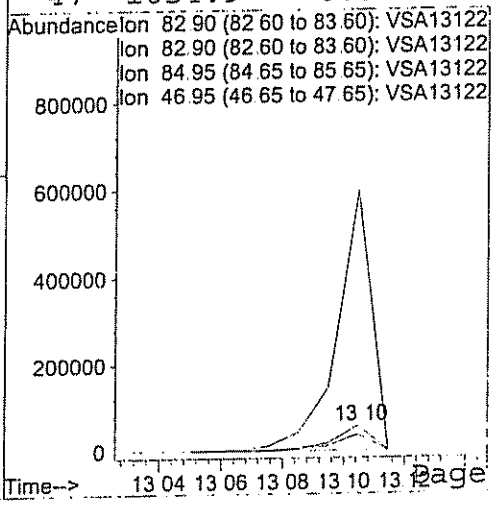


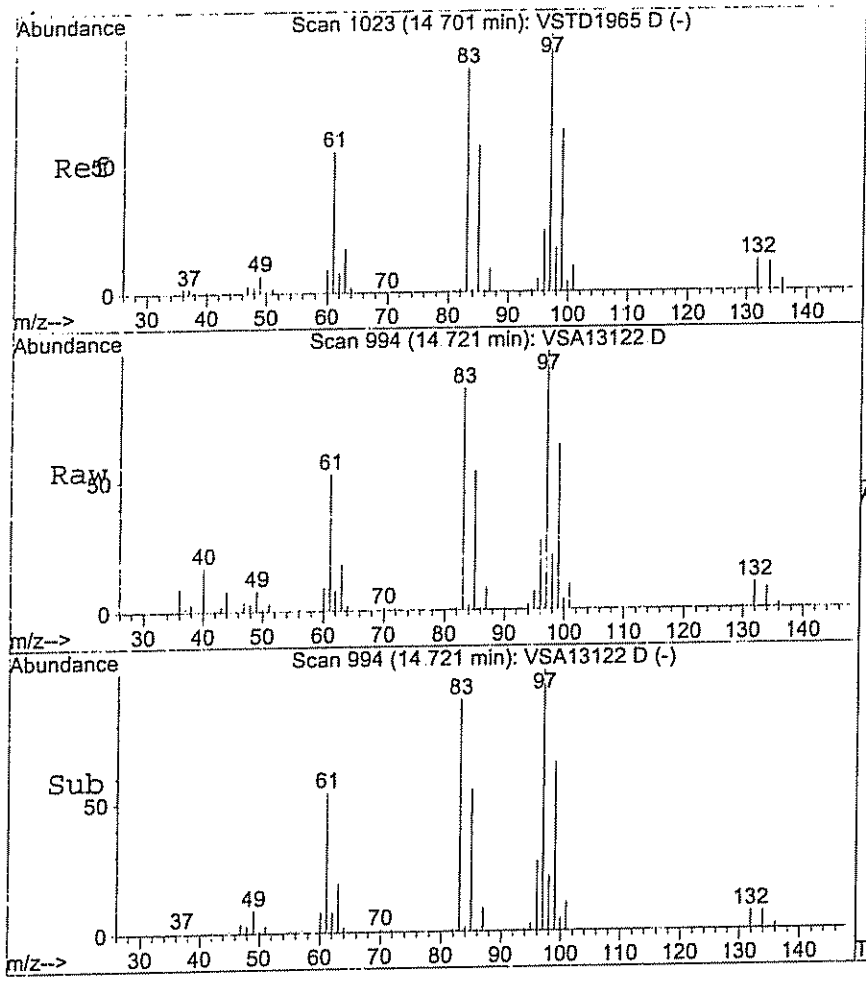


#24
Bromodichloromethane
Concen: 11.44 ug/L
RT: 13.10 min Scan# 845
Delta R.T. -0.10 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 83 Resp: 46503

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	64.1	33.5	93.5
47	1054.9	0.0	45.4#

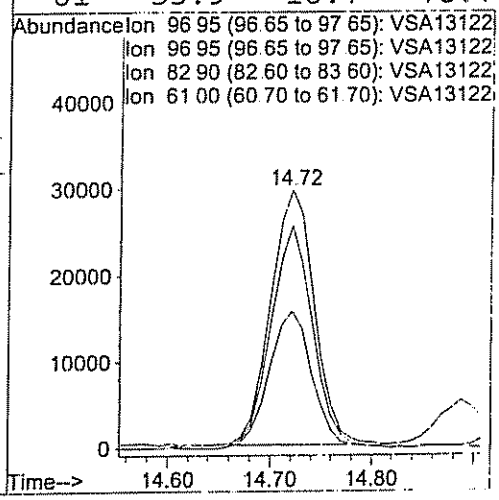


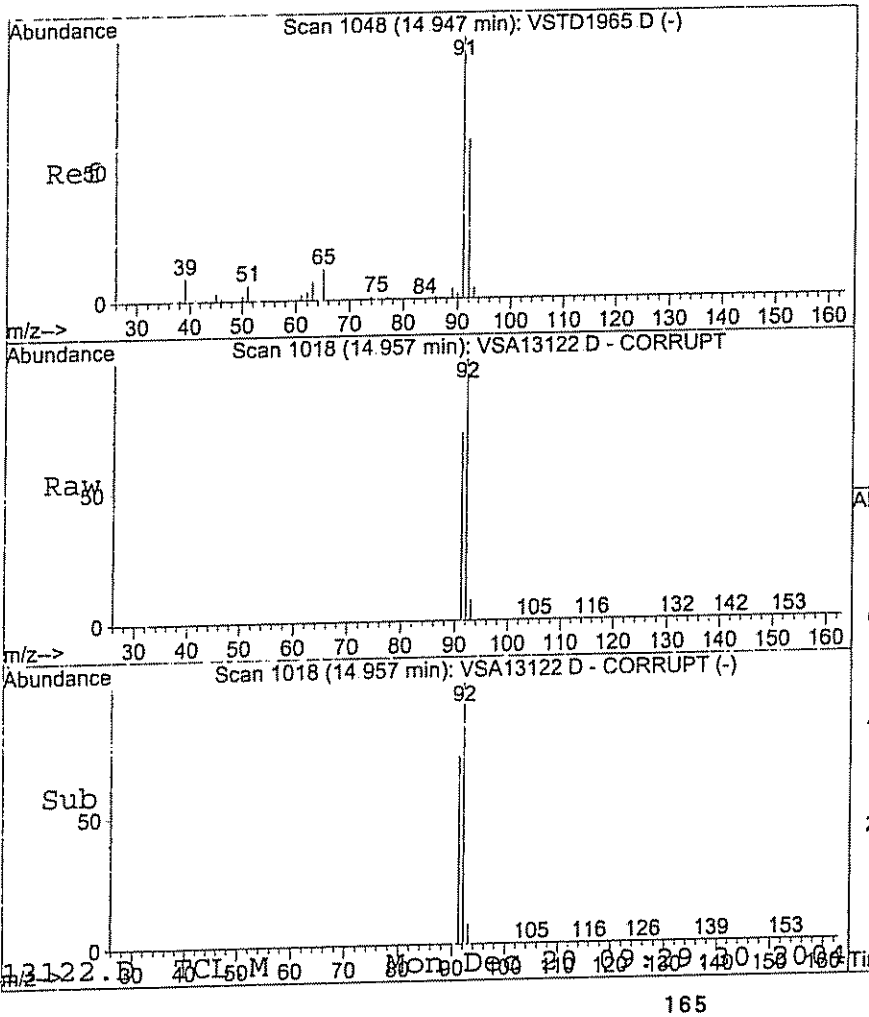


#27
1,1,2-Trichloroethane
Concen: 29.72 ug/L
RT: 14.72 min Scan# 994
Delta R.T. -0.00 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 97 Resp: 88390

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	87.4	50.2	110.2
61	53.9	18.7	78.7

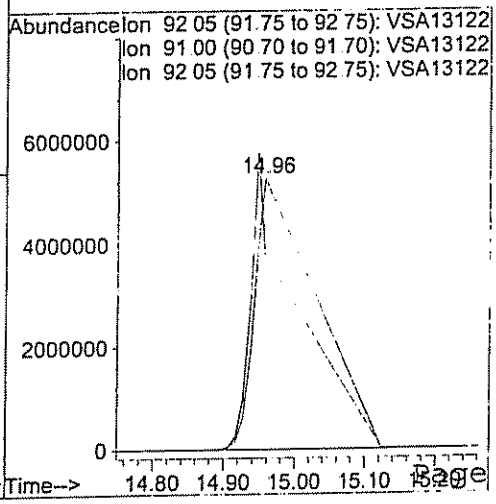


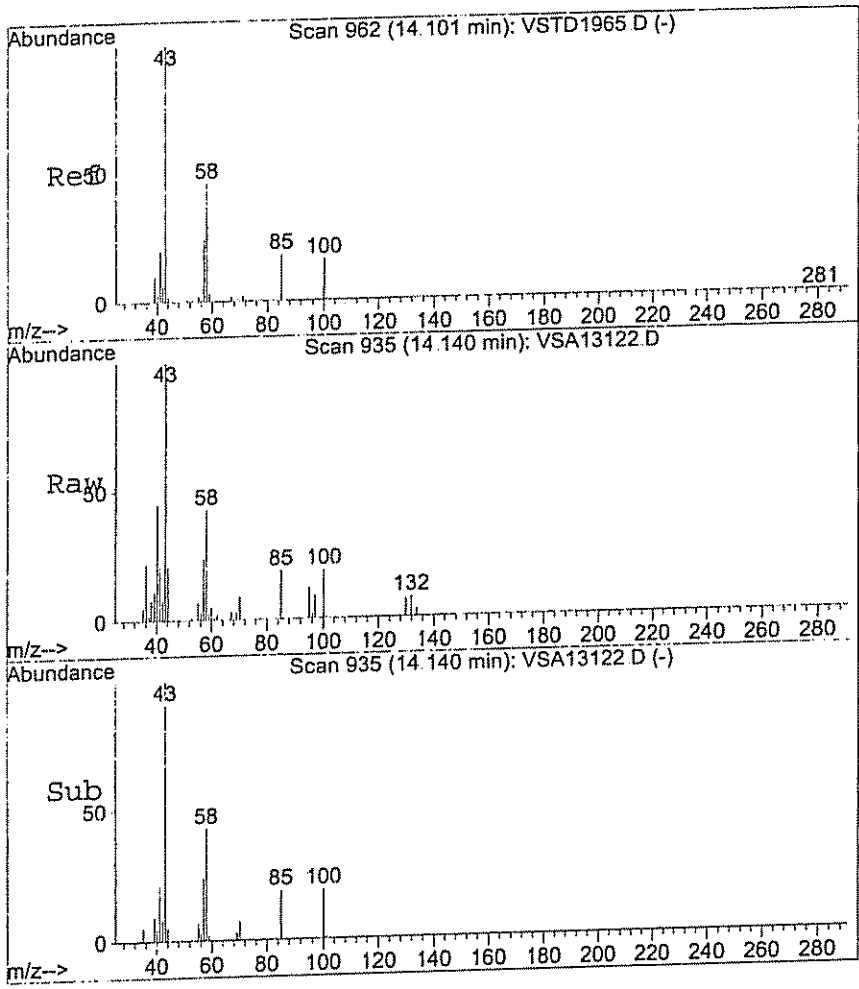


#33
Toluene
Concen: 2360.33 ug/L
RT: 14.96 min Scan# 1018
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 92 Resp: 18242312

Ion	Ratio	Lower	Upper
92	100		
91	71.5	132.3	192.3#
92	100.0	70.0	130.0

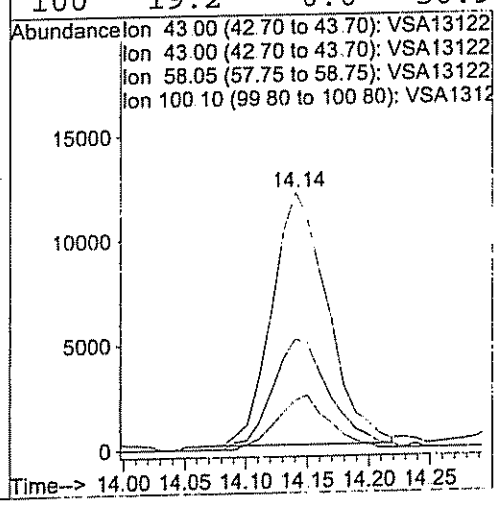


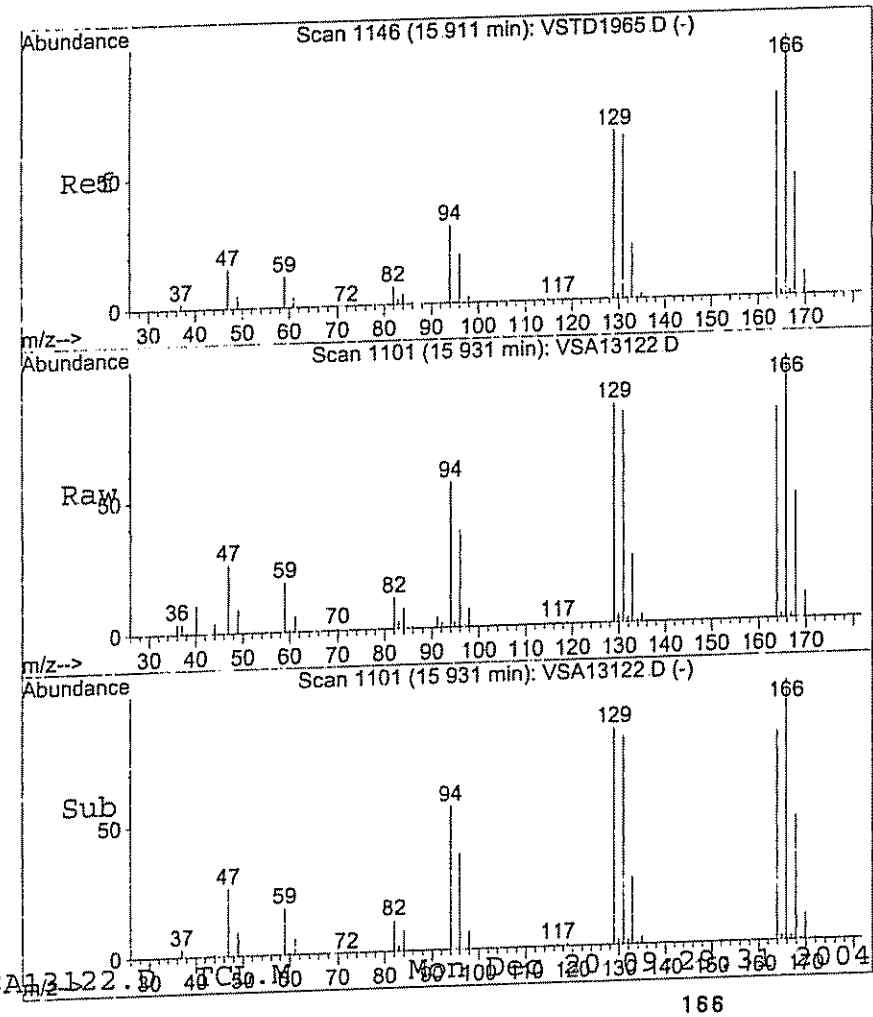


#34
4-methyl-2-Pentanone
Concen: 15.68 ug/L
RT: 14.14 min Scan# 935
Delta R.T. -0.00 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 43 Resp: 37747

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	42.9	15.5	75.5
100	19.2	0.0	50.9

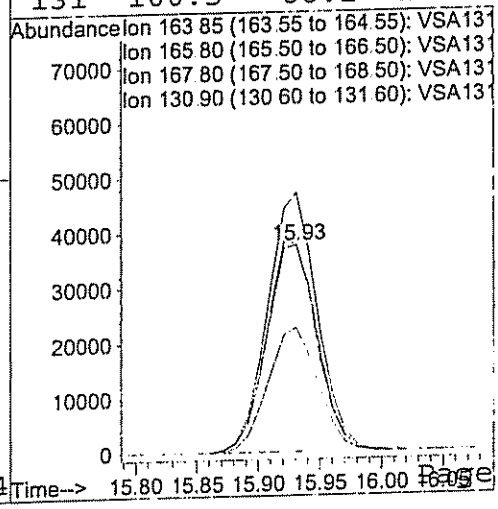


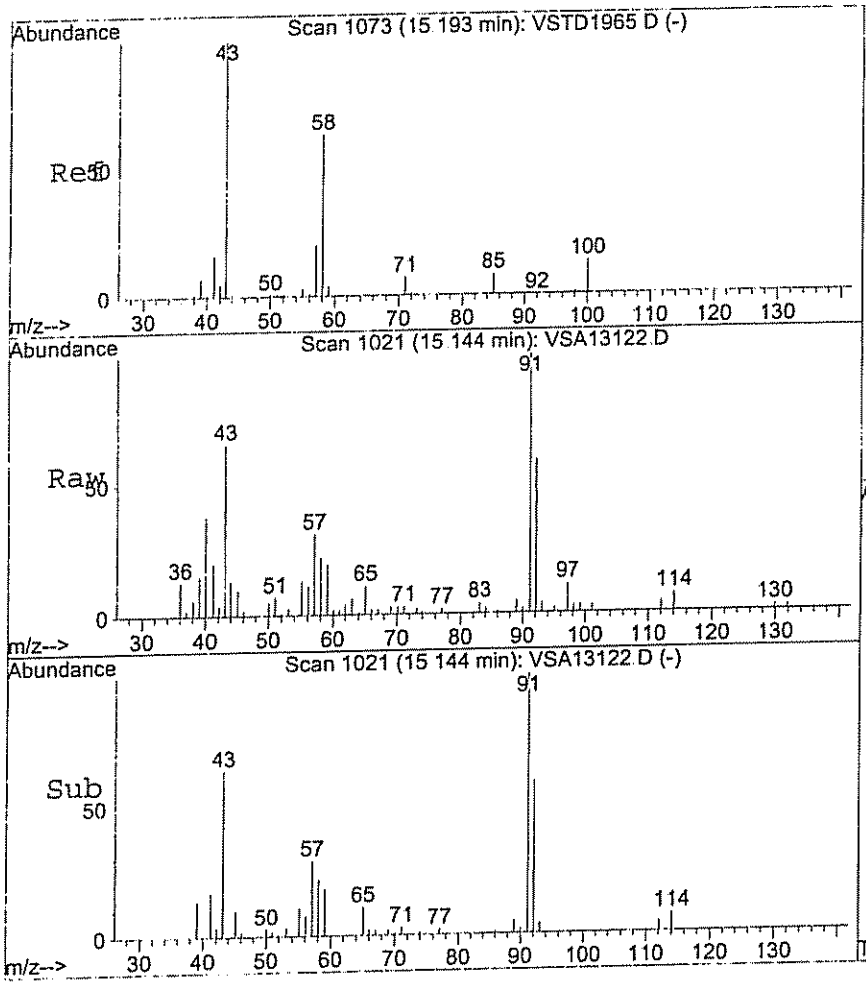


#35
Tetrachloroethene
Concen: 55.42 ug/L
RT: 15.93 min Scan# 1101
Delta R.T. -0.00 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion:164 Resp: 107584

Ion	Ratio	Lower	Upper
164	100		
166	125.1	100.8	160.8
168	60.1	30.1	90.1
131	100.5	66.1	126.1

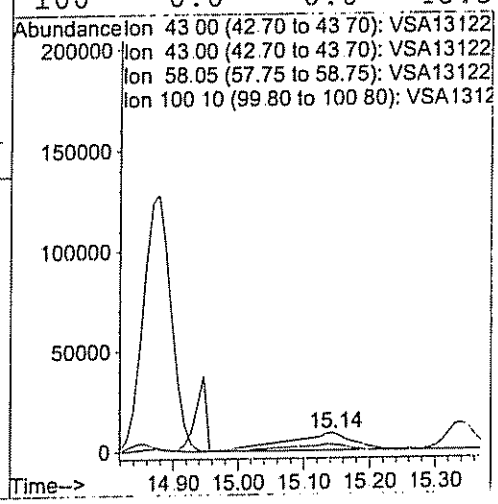


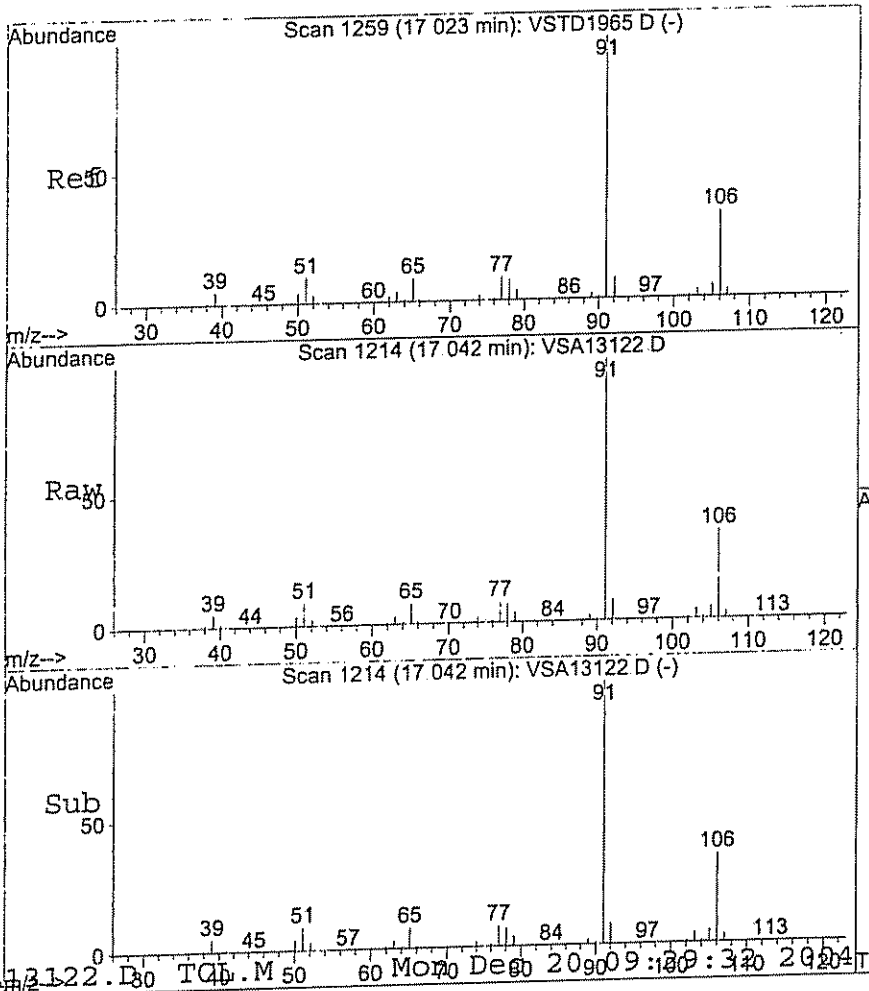


#36
2-Hexanone
Concen: 43.79 ug/L
RT: 15.14 min Scan# 1021
Delta R.T. -0.09 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 43 Resp: 72505

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	33.2	34.3	94.3#
100	0.0	0.0	46.8

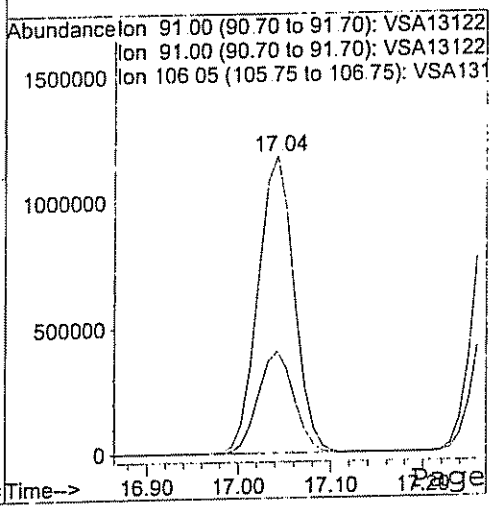


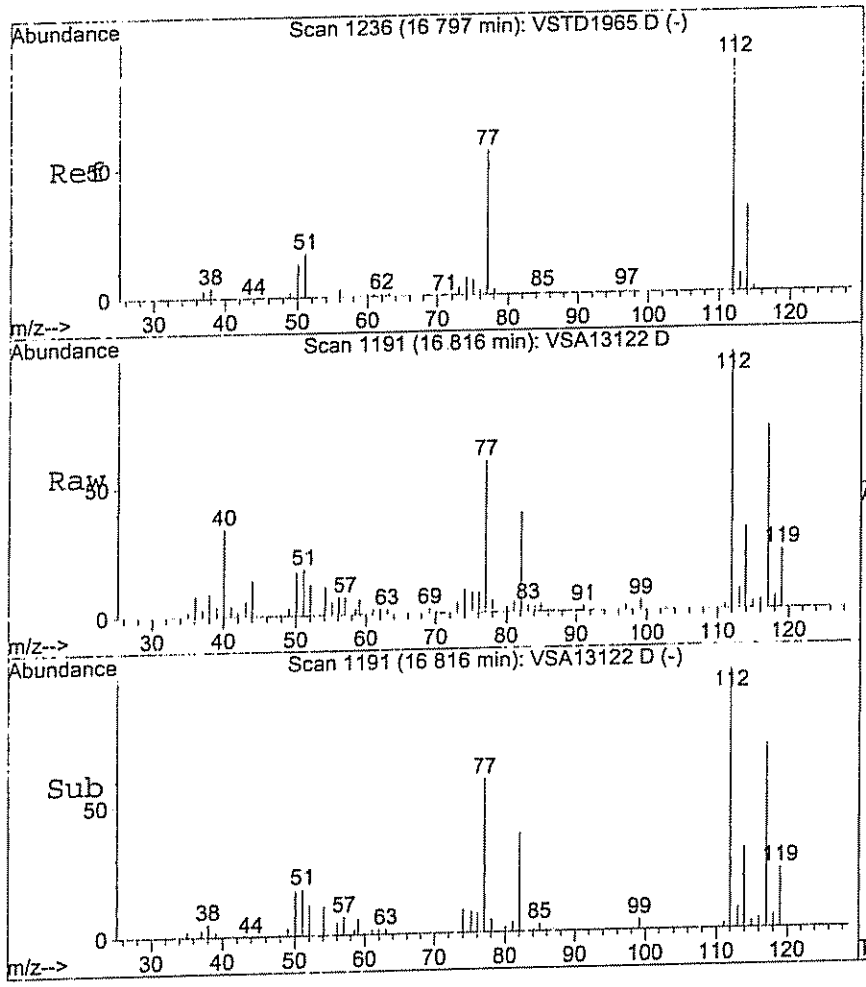


#37
Ethyl benzene
Concen: 228.23 ug/L
RT: 17.04 min Scan# 1214
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 91 Resp: 3197100

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	34.4	4.8	64.8

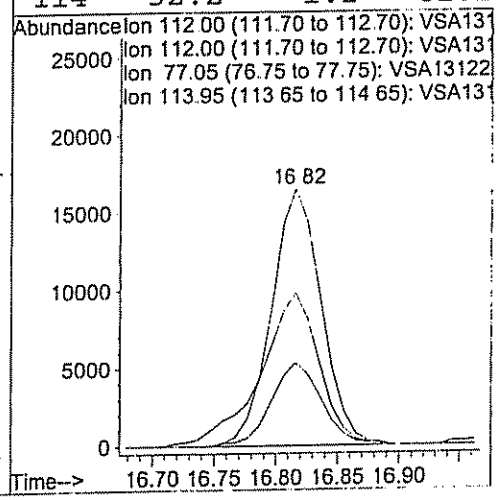


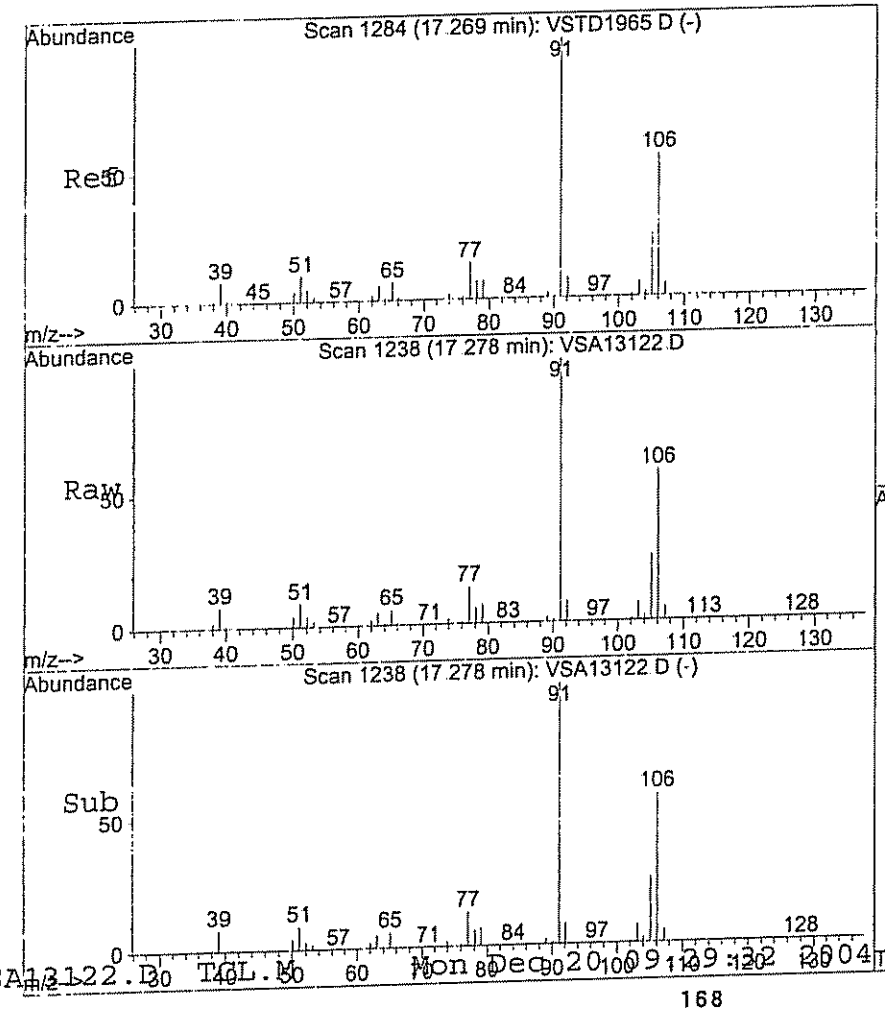


#38
Chlorobenzene
Concen: 5.35 ug/L
RT: 16.82 min Scan# 1191
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion:112 Resp: 46523

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	56.4	29.8	89.8
114	32.2	1.2	61.2

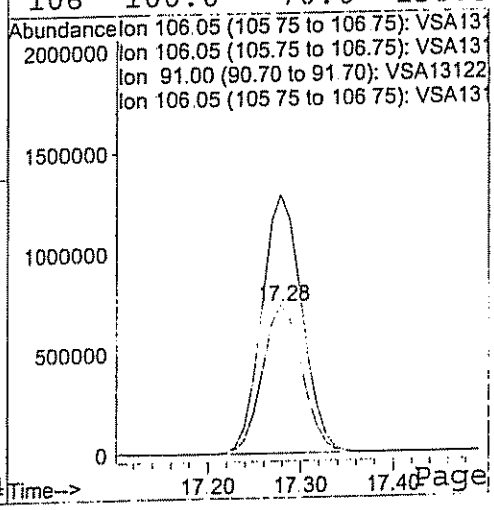


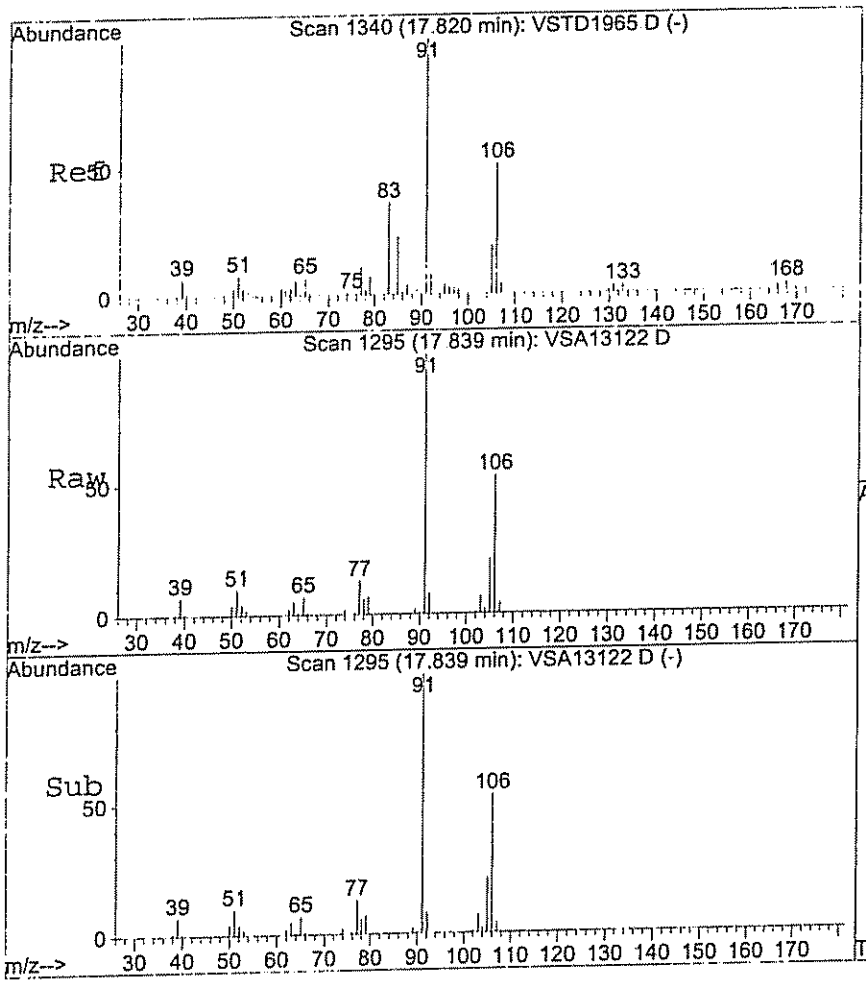


#39
m&p-Xylenes
Concen: 369.64 ug/L
RT: 17.28 min Scan# 1238
Delta R.T. -0.02 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion:106 Resp: 2212690

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	175.3	144.3	204.3
106	100.0	70.0	130.0

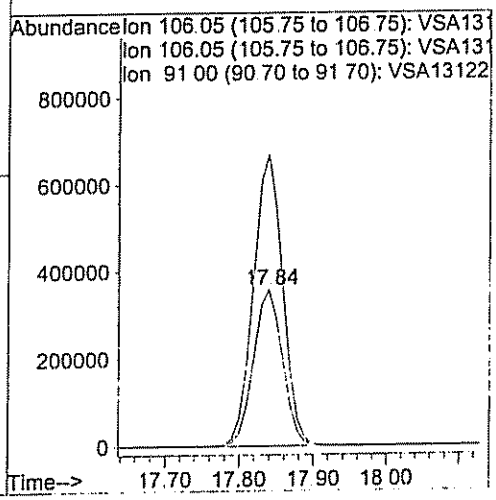


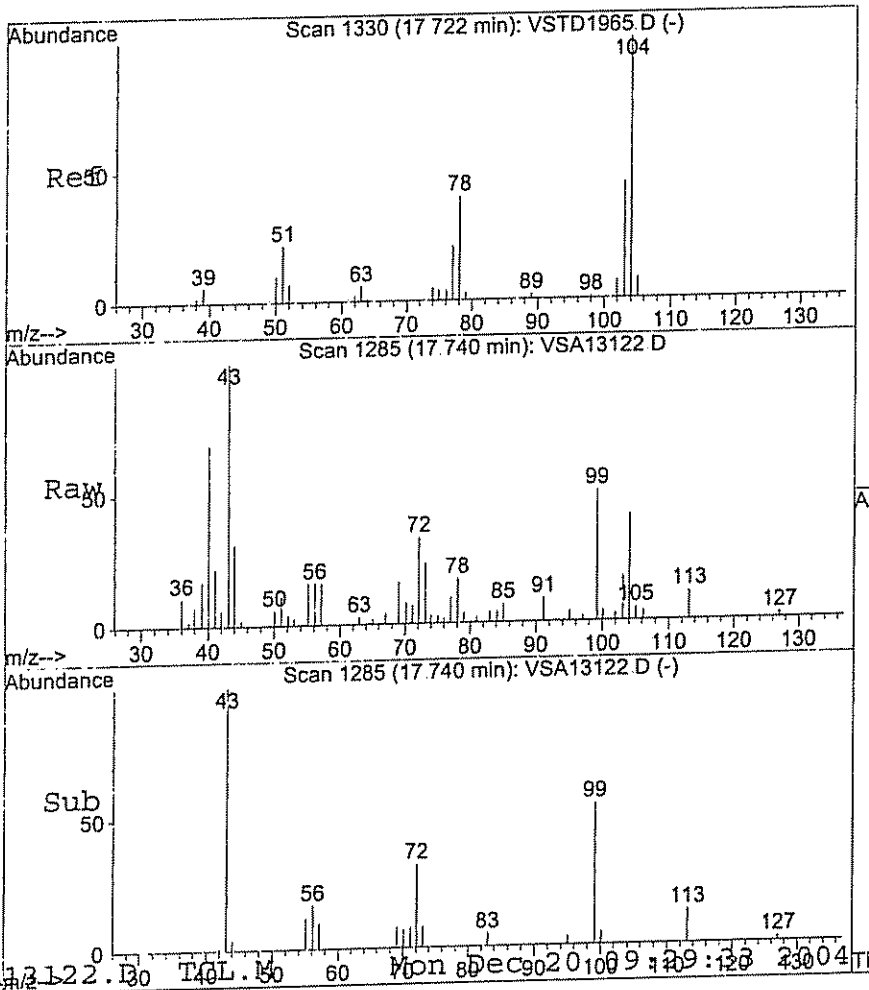


#40
o-Xylene
Concen: 165.97 ug/L
RT: 17.84 min Scan# 1295
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion:106 Resp: 966421

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	187.2	157.0	217.0

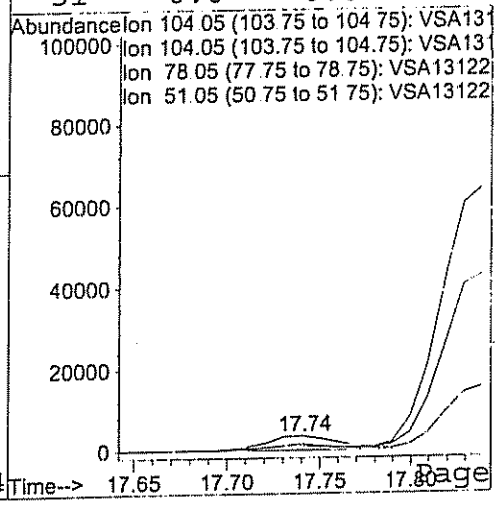


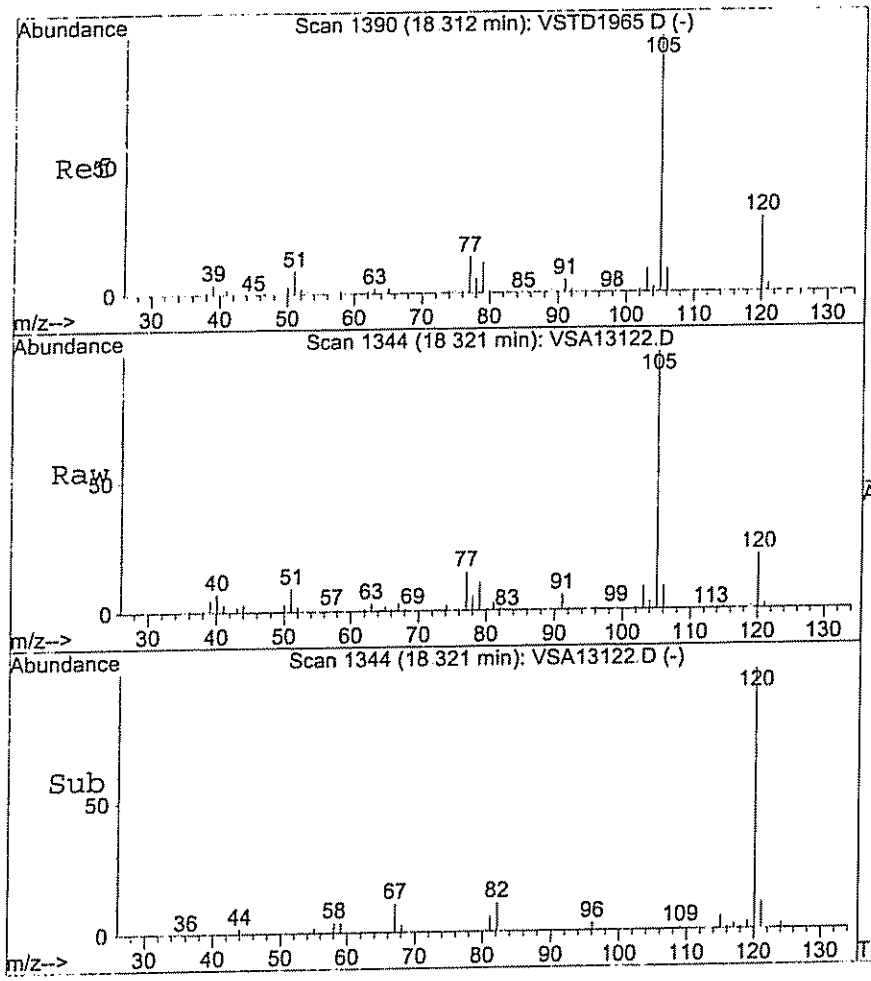


#41
Styrene
Concen: 0.99 ug/L
RT: 17.74 min Scan# 1285
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion:104 Resp: 9751

Ion	Ratio	Lower	Upper
104	100		
104	100.0	70.0	130.0
78	23.8	6.9	66.9
51	0.0	0.0	47.4

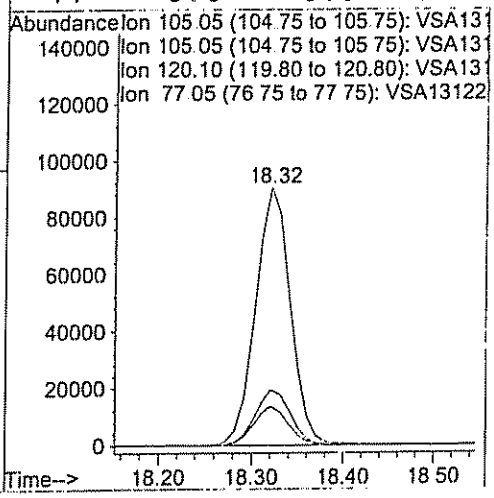


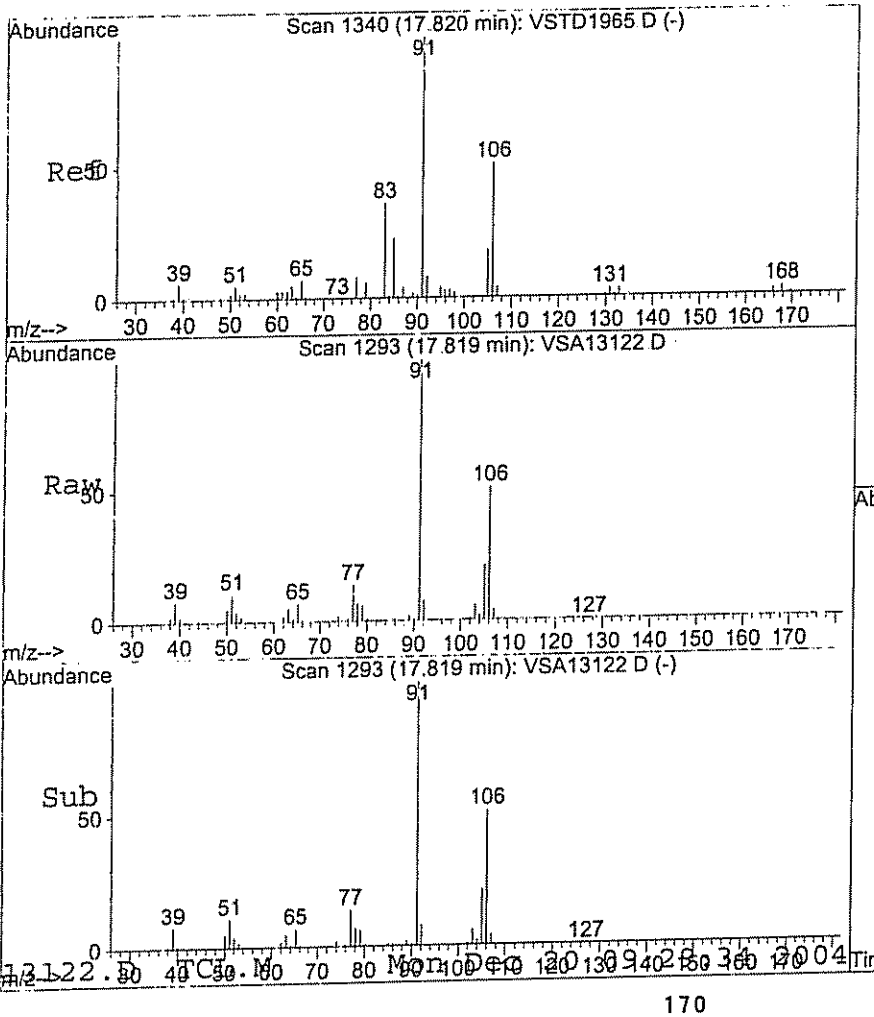


#42
Isopropylbenzene
Concen: 15.90 ug/L
RT: 18.32 min Scan# 1344
Delta R.T. -0.01 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion:105 Resp: 237938

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	21.5	0.0	51.3
77	0.0	0.0	30.0

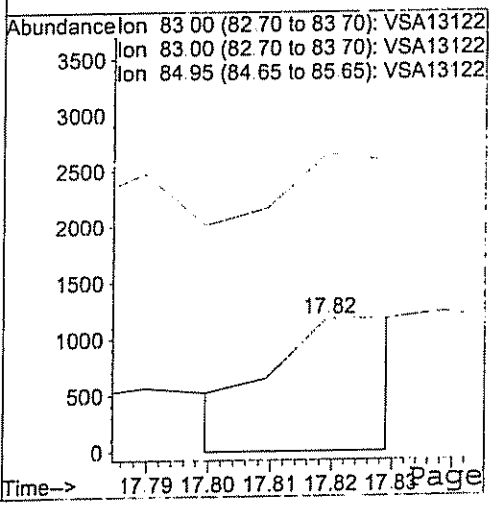


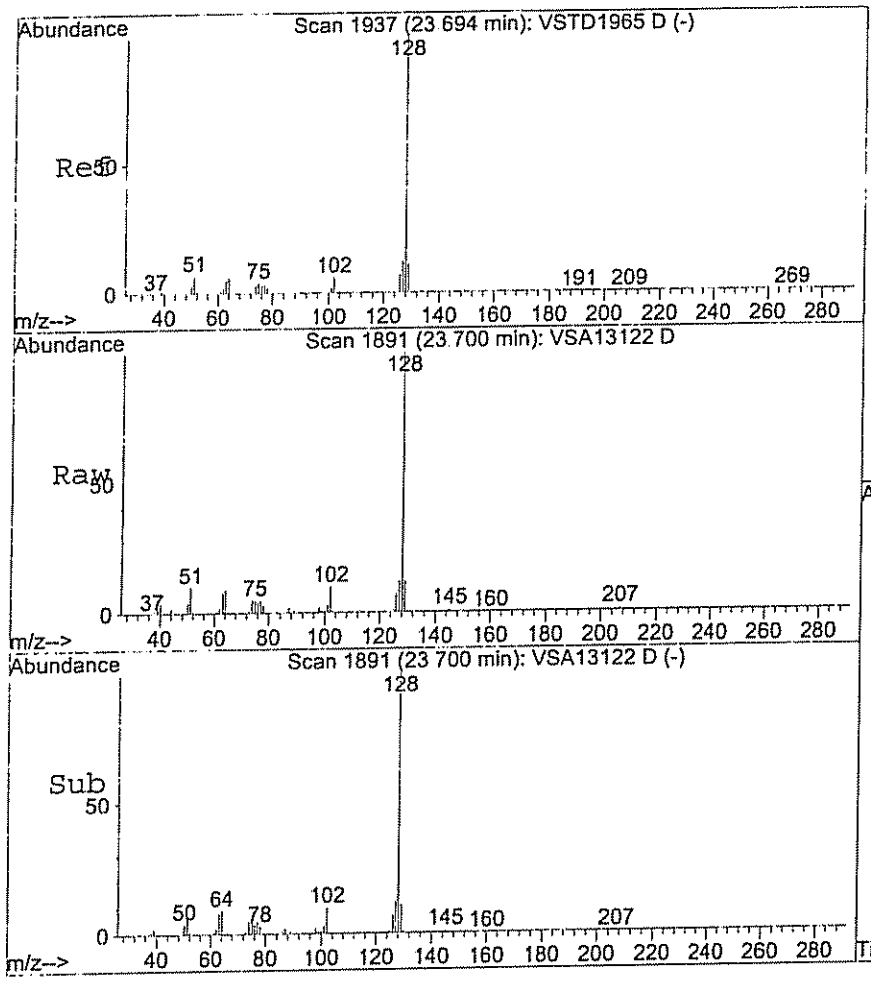


#44
1,1,2,2-Tetrachloroethane
Concen: 0.46 ug/L
RT: 17.82 min Scan# 1293
Delta R.T. -0.02 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion: 83 Resp: 1771

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	463.8	34.4	94.4#

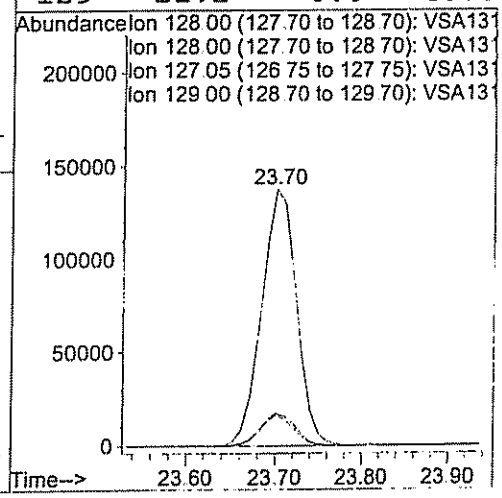




#45
Naphthalene
Concen: 48.85 ug/L
RT: 23.70 min Scan# 1891
Delta R.T. -0.02 min
Lab File: VSA13122.D
Acq: 14 Dec 2004 18:28

Tgt Ion:128 Resp: 382795

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	11.2	0.0	40.8



Non Target Peak Search Report

Data File : C:\HPCHEM\1\DATA\VSA13122.D
Acq On : 14 Dec 2004 18:28
Sample : P0412024-01A
Misc : WATER

Vial: 8
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Library : C:\DATABASE\NIST129K.L

****

Peak Number 1 Carbon dioxide — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.45	7.69 ug/L	5718980	Bromochloromethane	10.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	4
2	Carbon dioxide $$ Carbon oxide (CO2	44	CO2	000124-38-9	4
3	Ethylene oxide	44	C2H4O	000075-21-8	3
4	Nitrous Oxide	44	N2O	010024-97-2	3
5	Nitrous Oxide $$ Nitrogen oxide (N2	44	N2O	010024-97-2	3

****

Peak Number 2 Benzene, 1-ethyl-2-methyl- — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.07	27.31 ug/L	3916860	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-2-methyl- $$ Tolue	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-4-methyl- $$ Tolue	120	C9H12	000622-96-8	95
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95

****

Peak Number 3 Benzene, 1,3,5-trimethyl- — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.86	74.51 ug/L	10685700	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93
2	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	93
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	93
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91

****

Peak Number 4 Benzene, 1,3,5-trimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.47	33.11 ug/L	4747950	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93
2	Benzene, 1,2,3-trimethyl- $$ Hemime	120	C9H12	000526-73-8	93
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	90
4	Benzene, 1,3,5-trimethyl- $$ Mesity	120	C9H12	000108-67-8	90
5	Benzene, 1-ethyl-2-methyl- $$ Tolue	120	C9H12	000611-14-3	90

VSA13122.D TCL.M Mon Dec 20 09:30:35 2004

Quantitation Report (QT Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSA13123.D
Acq On : 14 Dec 2004 19:00
Sample : P0412024-02A
Misc : WATER

Vial: 9
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:32 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	10.93	128	80495	50.00 ug/L	0.00
18) 1,4-Difluorobenzene	12.59	114	607881	50.00 ug/L	0.00
31) Chlorobenzene-d5	16.76	117	502453	50.00 ug/L	-0.02
System Monitoring Compounds					
16) 1,2-Dichloroethane-d4	11.66	65	119979	46.29 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 92.58%		
32) Toluene-d8	14.87	98	498535	49.83 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.66%		
43) 4-Bromofluorobenzene	18.40	95	189482	48.88 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.76%		
Target Compounds					Qvalue
2) Chloromethane	6.31	50	140	0.04 ug/L #	85
3) Vinyl chloride	6.56	62	1128933	320.53 ug/L	100
4) Bromomethane	7.10	94	84	0.04 ug/L	90
6) 1,1-Dichloroethene	8.79	96	1119610	409.94 ug/L	97
7) Carbon disulfide	9.31	76	40228	4.23 ug/L	100
8) Methylene chloride	8.95	84	303915	95.48 ug/L	98
9) Acetone	8.30	43	11997	15.00 ug/L	96
10) trans-1,2-Dichloroethene	9.76	96	763156	243.27 ug/L	98
11) methyl-tert-butyl-Ether	9.87	73	4312	0.60 ug/L	96
12) 1,1-Dichloroethane	10.06	63	1216111	251.23 ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	28076672m	7488.10 ug/L	98
14) Chloroform	10.97	83	64990	14.13 ug/L	99
15) 2-Butanone	10.60	43	6924	5.88 ug/L	99
17) 1,2-Dichloroethane	11.76	62	662333	207.90 ug/L	99
20) 1,1,1-Trichloroethane	11.89	97	2530244	565.93 ug/L	100
21) Benzene	12.38	78	265177	20.80 ug/L	100
22) Trichloroethene	13.14	130	16854689	5971.02 ug/L	98
23) 1,2-Dichloropropane	13.11	63	59684	~~18.67 ug/L~~ #	1
24) Bromodichloromethane	13.14	83	237104m	~~59.72 ug/L~~	1
27) 1,1,2-Trichloroethane	14.72	97	19326	6.65 ug/L	97
33) Toluene	14.95	92	2568376	356.75 ug/L	100
34) 4-methyl-2-Pentanone	14.14	43	14779	6.59 ug/L	96
35) Tetrachloroethene	15.93	164	32240	17.83 ug/L	96

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

See 06100

Data File : C:\HPCHEM\1\DATA\VSA13123.D
Acq On : 14 Dec 2004 19:00
Sample : P0412024-02A
Misc : WATER

Vial: 9
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:32 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
36) 2-Hexanone	15.14	43	34349	22.27 ug/L		87
37) Ethyl benzene	17.04	91	556058	42.61 ug/L		99
38) Chlorobenzene	16.81	112	19483	2.41 ug/L		97
39) m&p-Xylenes	17.27	106	447408	80.24 ug/L		99
40) o-Xylene	17.84	106	191817	35.37 ug/L		98
41) Styrene	17.75	104	1713	0.19 ug/L		93
42) Isopropylbenzene	18.33	105	66393	4.76 ug/L		100
44) 1,1,2,2-Tetrachloroethane	17.83	83	1223	0.34 ug/L	#	68
45) Naphthalene	23.71	128	47542	6.51 ug/L	#	100

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

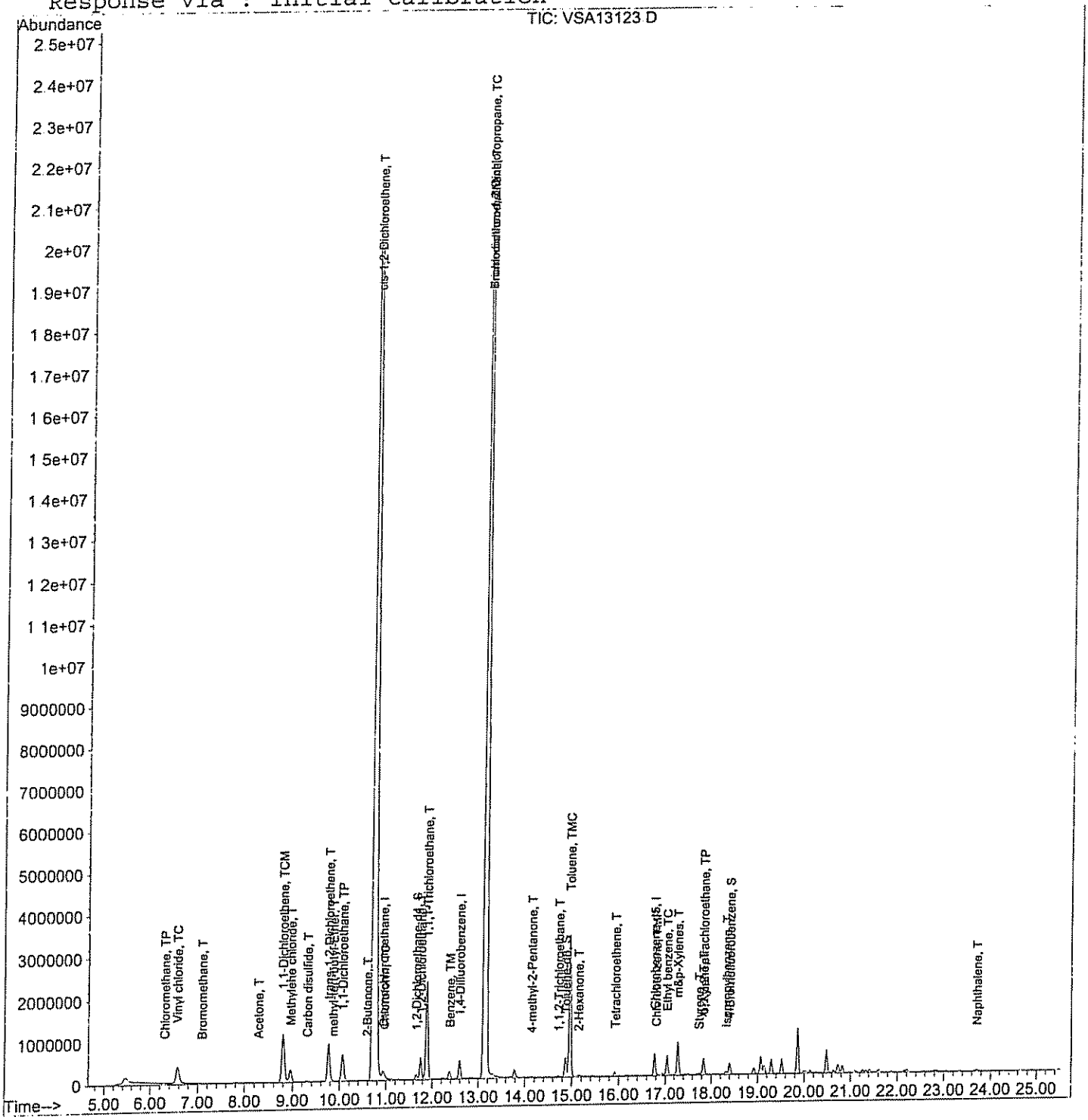
Data File : C:\HPCHEM\1\DATA\VSA13123.D
Acq On : 14 Dec 2004 19:00
Sample : P0412024-02A
Misc : WATER

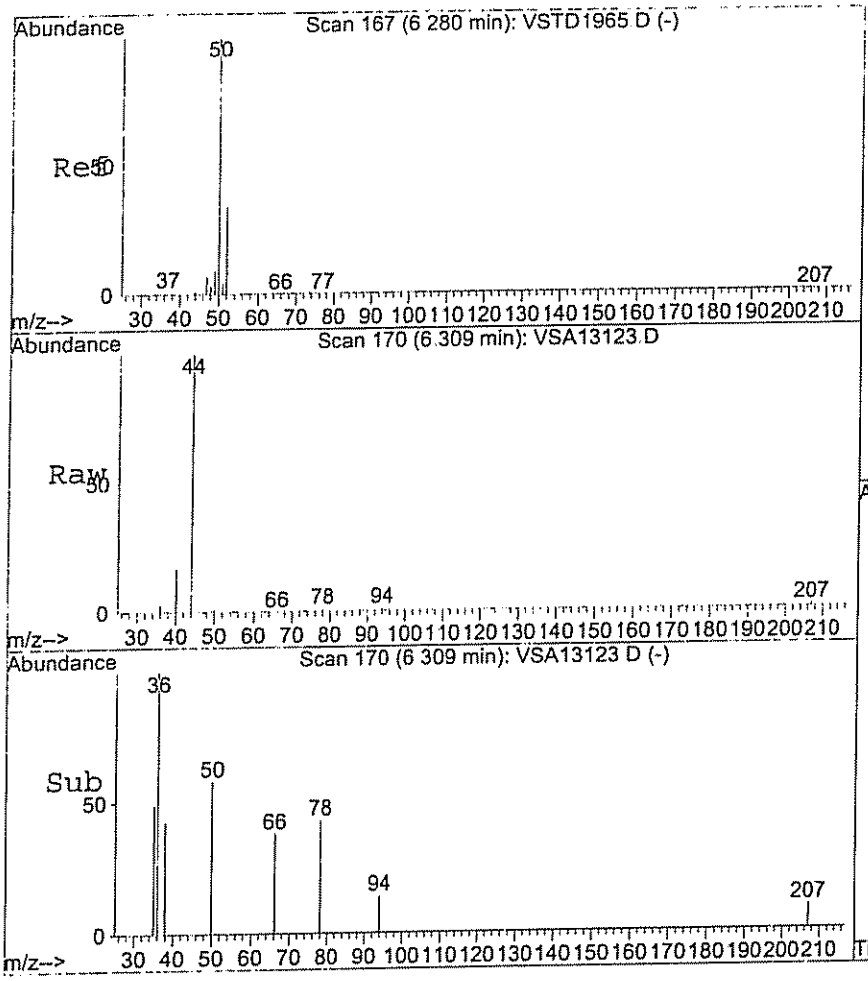
Vial: 9
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:32 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration

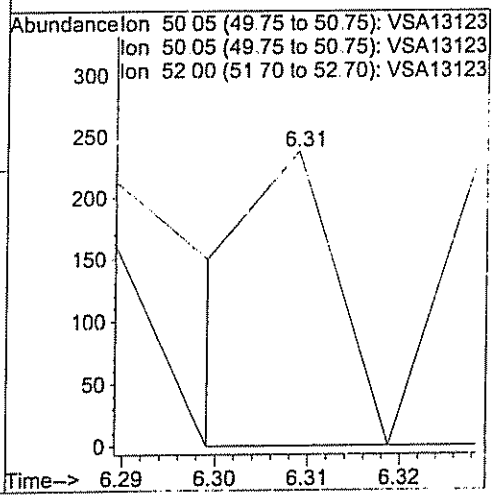


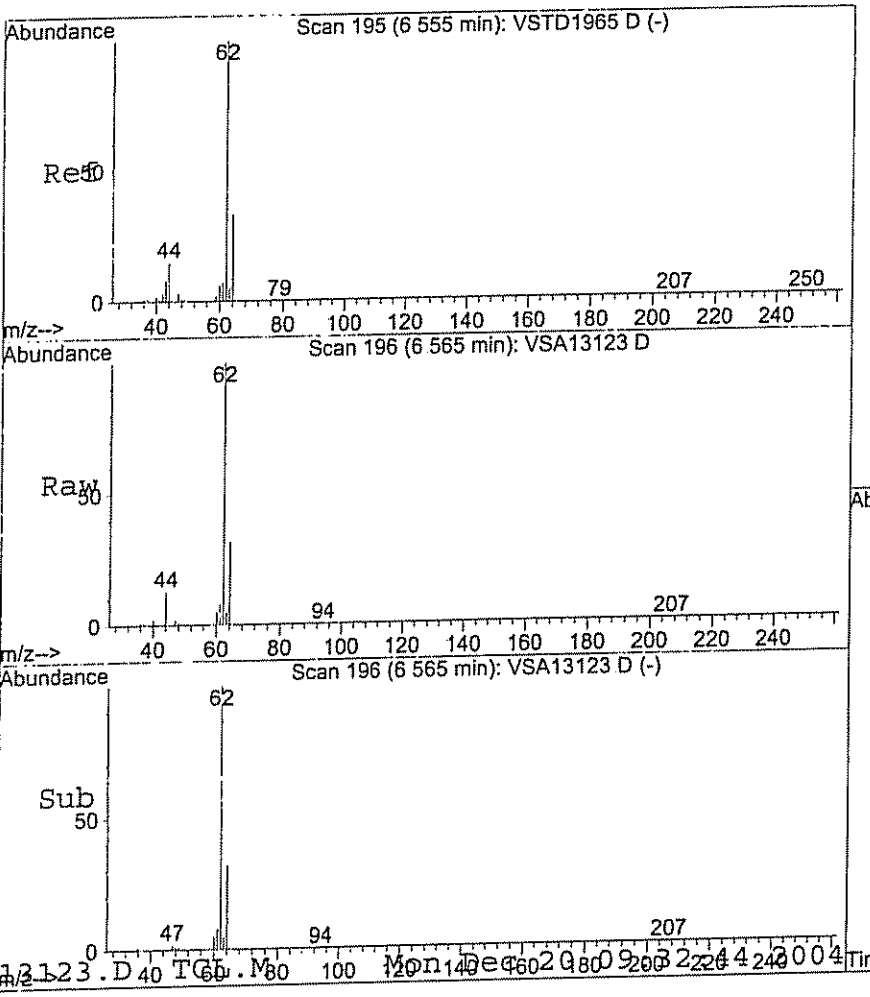


#2
Chloromethane
Concen: 0.04 ug/L
RT: 6.31 min Scan# 170
Delta R.T. 0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 50 Resp: 140

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.5	63.5#

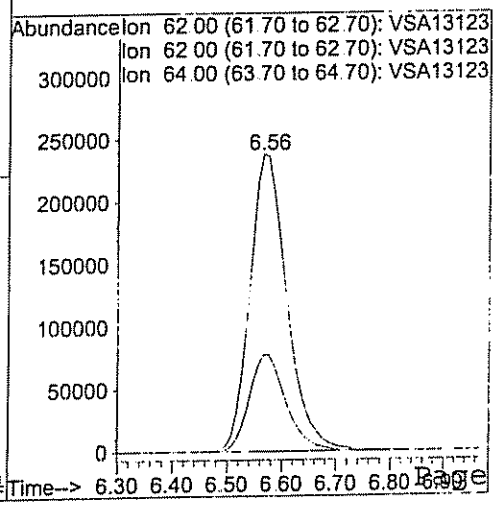


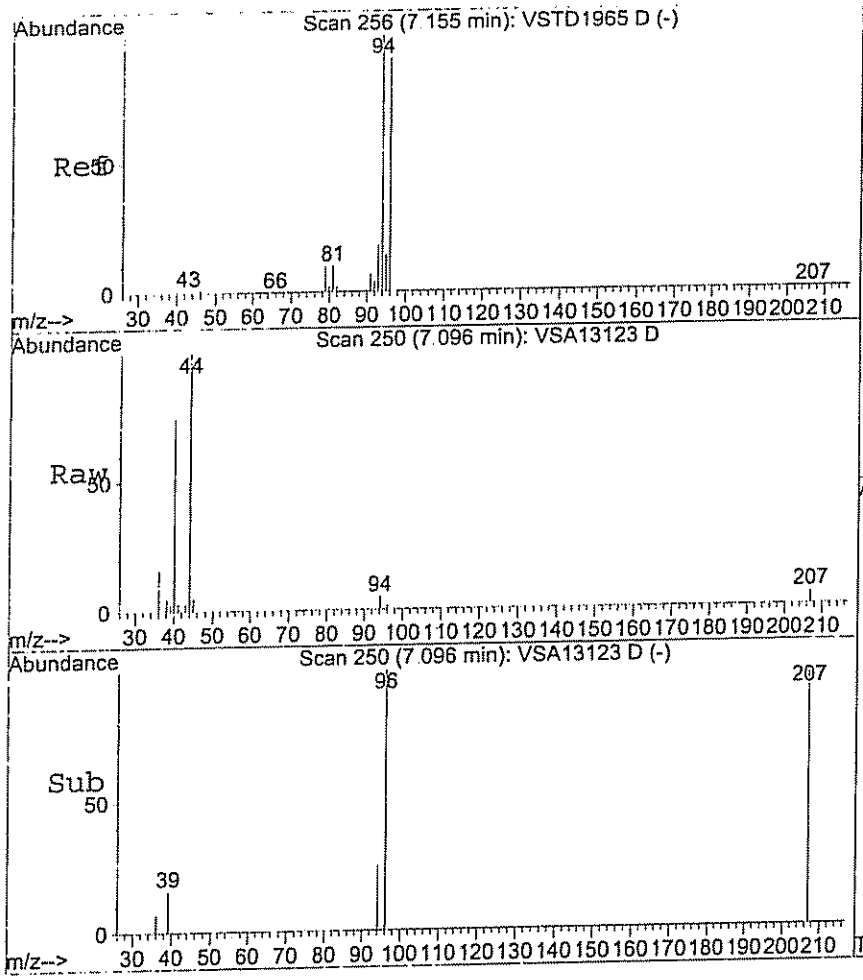


#3
Vinyl chloride
Concen: 320.53 ug/L
RT: 6.56 min Scan# 196
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 62 Resp: 1128933

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	32.3	2.0	62.0

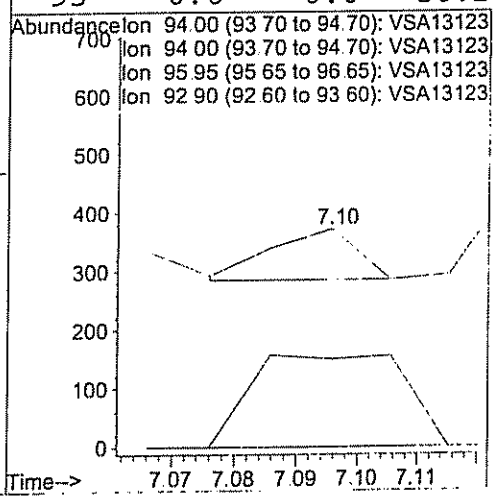


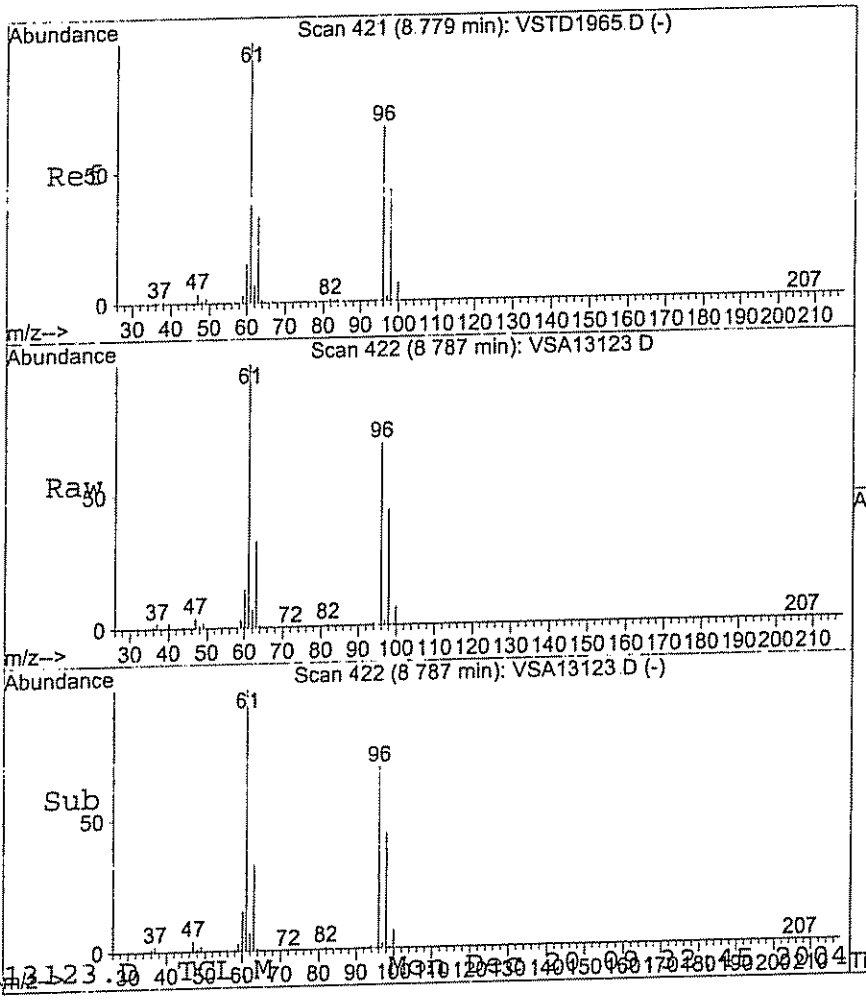


#4
Bromomethane
Concen: 0.04 ug/L
RT: 7.10 min Scan# 250
Delta R.T. -0.08 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 94 Resp: 84

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	87.3	70.5	130.5
93	0.0	0.0	50.2

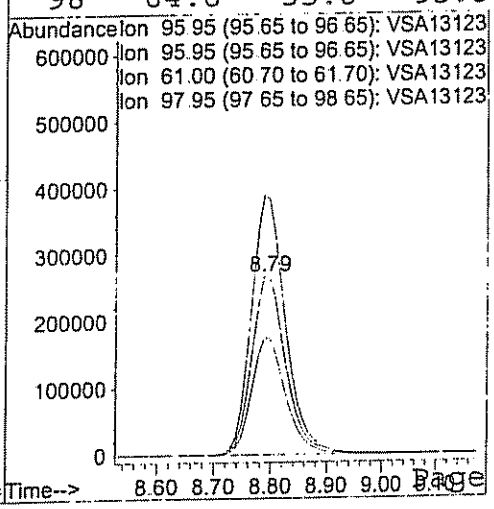


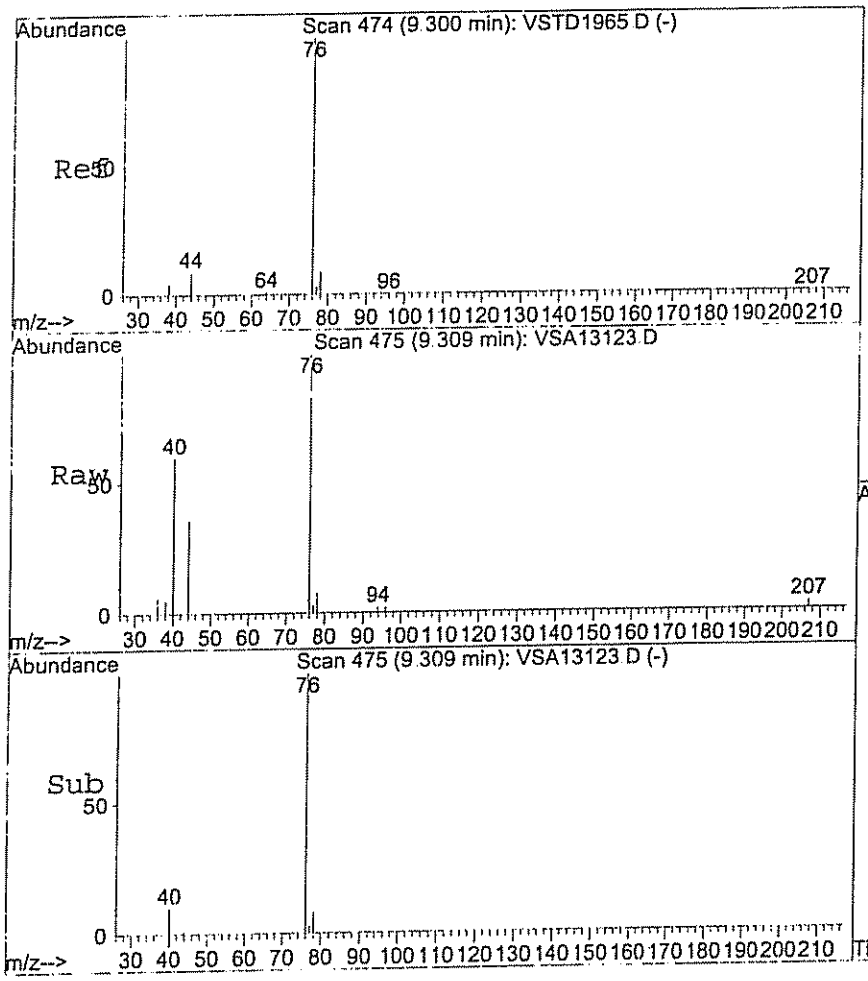


#6
1,1-Dichloroethene
Concen: 409.94 ug/L
RT: 8.79 min Scan# 422
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 96 Resp: 1119610

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	145.9	108.4	168.4
98	64.6	35.8	95.8

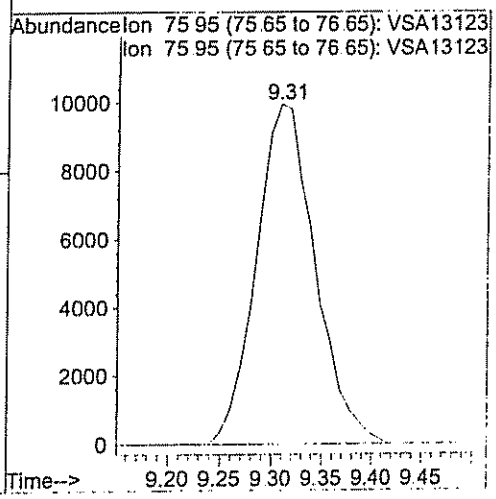


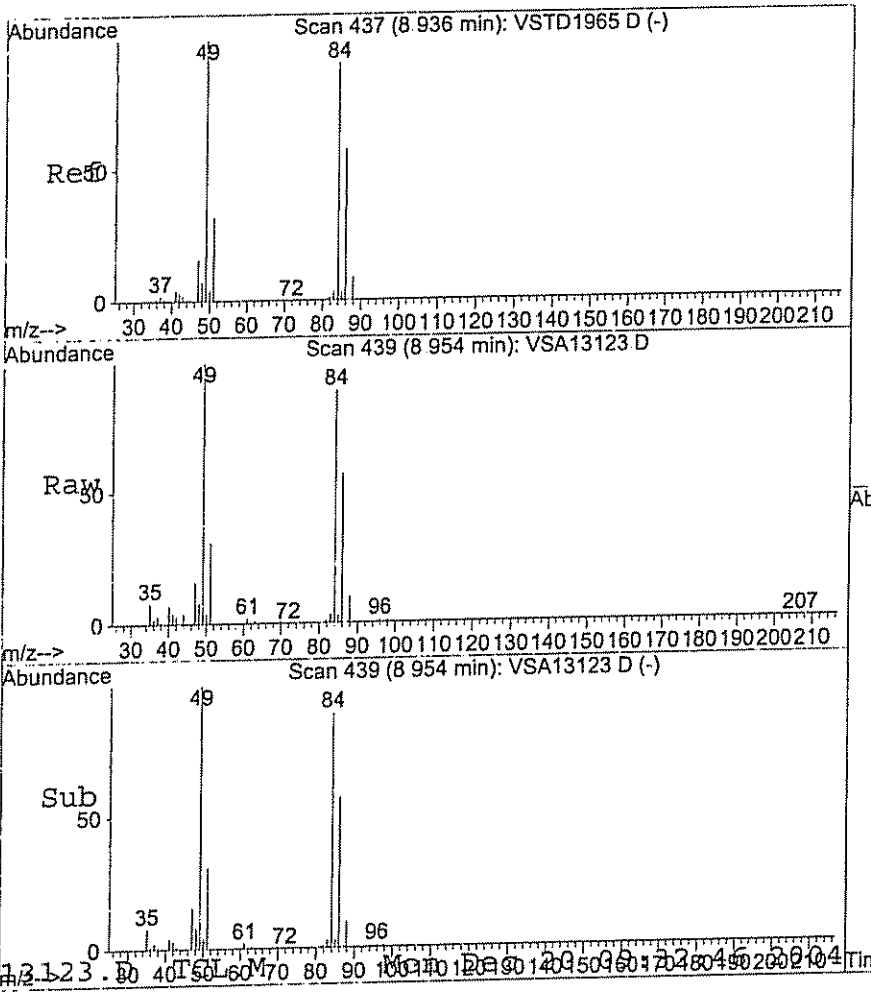


#7
Carbon disulfide
Concen: 4.23 ug/L
RT: 9.31 min Scan# 475
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 76 Resp: 40228

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

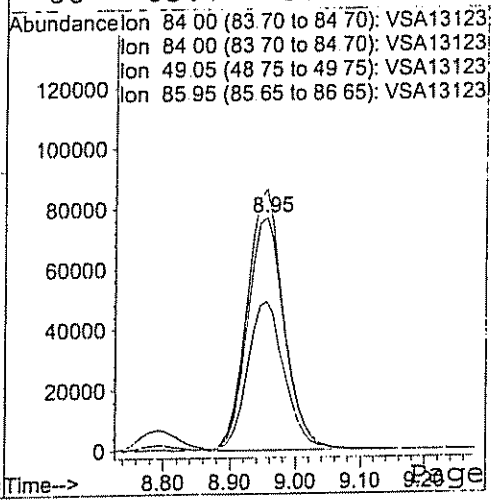


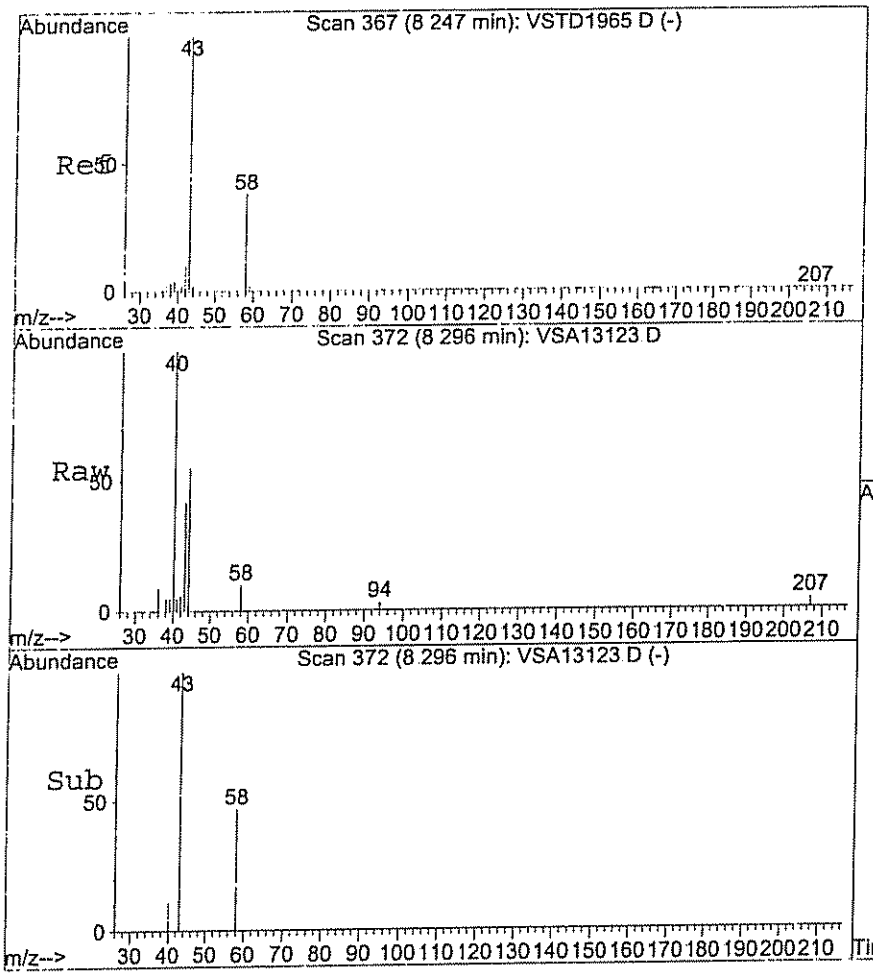


#8
Methylene chloride
Concen: 95.48 ug/L
RT: 8.95 min Scan# 439
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 84 Resp: 303915

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	111.7	76.9	136.9
86	63.7	34.8	94.8

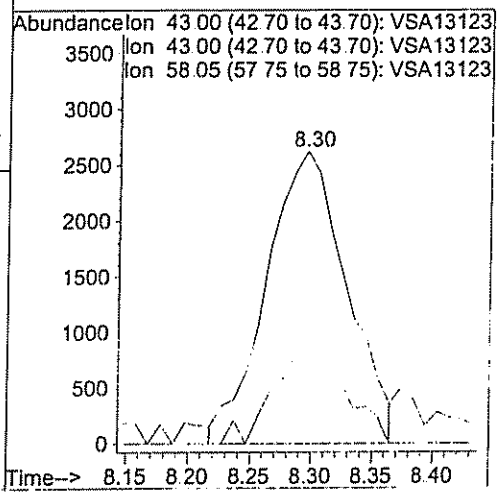


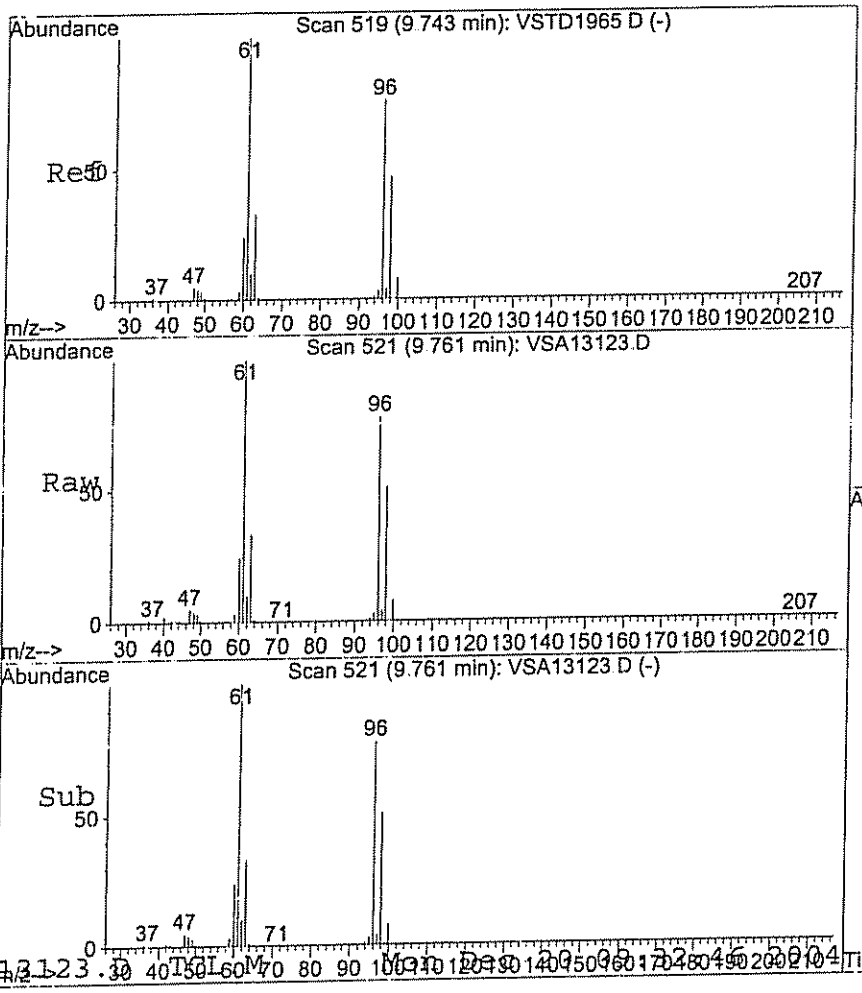


#9
Acetone
Concen: 15.00 ug/L
RT: 8.30 min Scan# 372
Delta R.T. 0.00 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 43 Resp: 11997

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	27.8	6.8	66.8

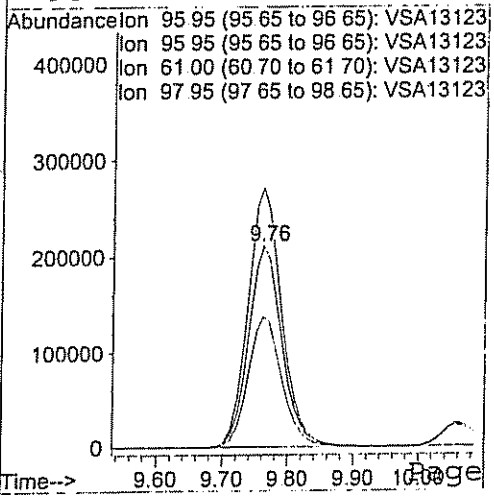


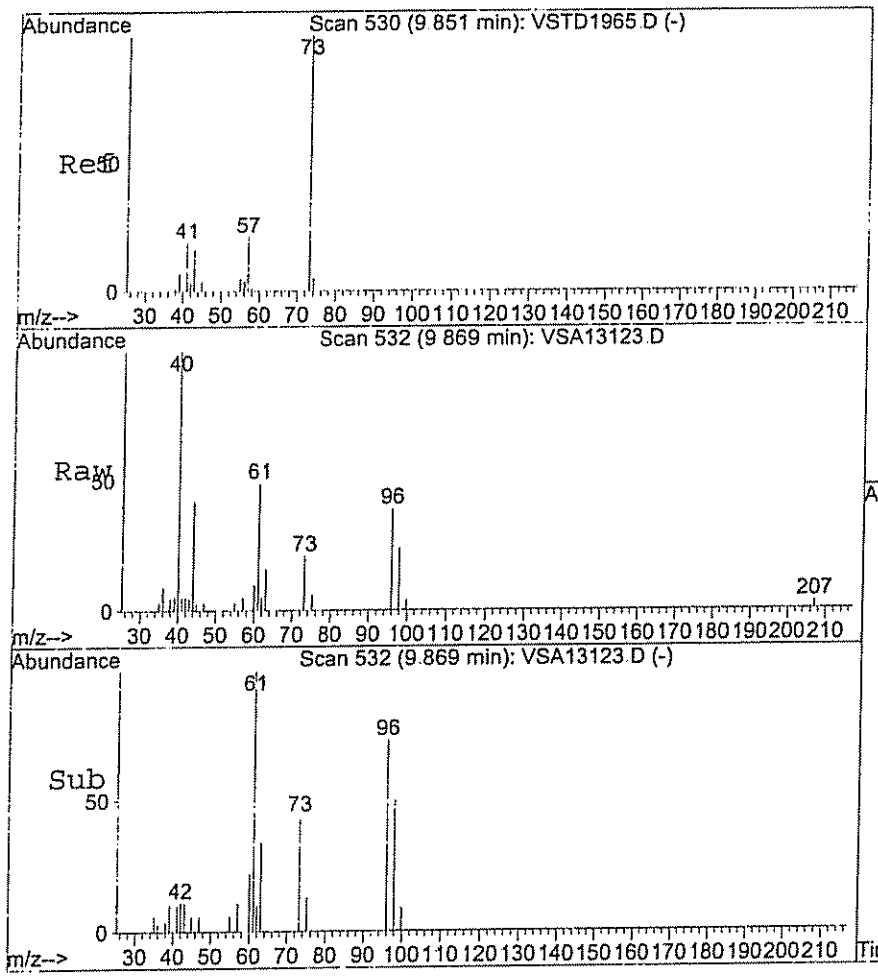


#10
trans-1,2-Dichloroethene
Concen: 243.27 ug/L
RT: 9.76 min Scan# 521
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 96 Resp: 763156

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	128.5	93.5	153.5
98	65.2	36.4	96.4

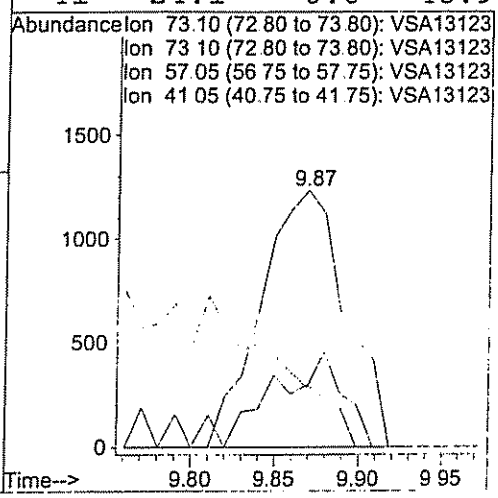


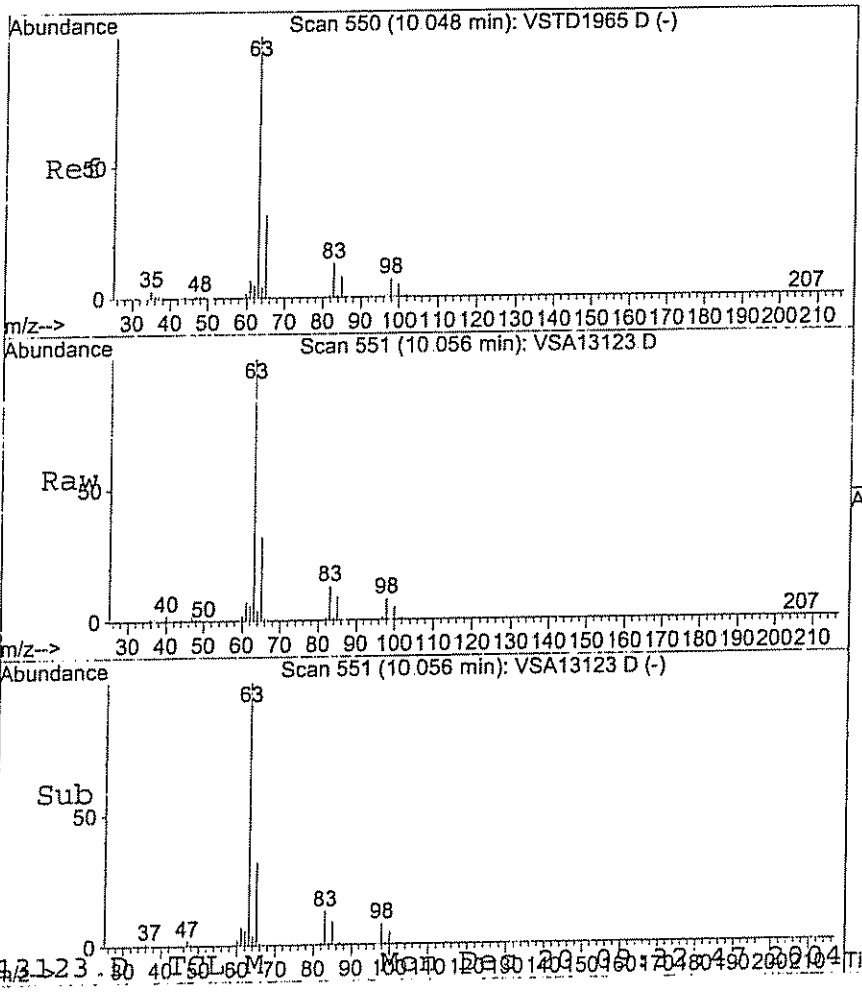


#11
methyl-tert-butyl-Ether
Concen: 0.60 ug/L
RT: 9.87 min Scan# 532
Delta R.T. 0.00 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 73 Resp: 4312

Ion	Ratio	Lower	Upper
73	100		
73	100.0	70.0	130.0
57	12.9	0.0	49.9
41	24.1	0.0	48.9

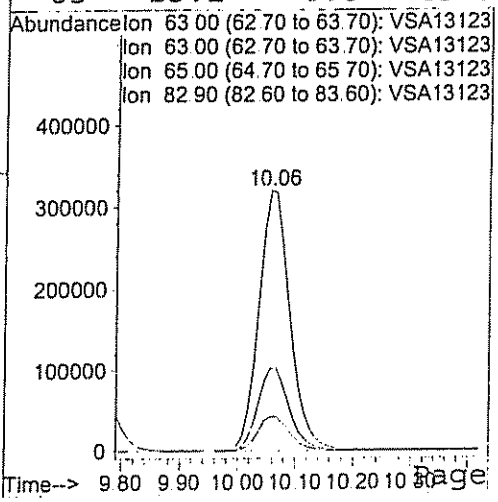


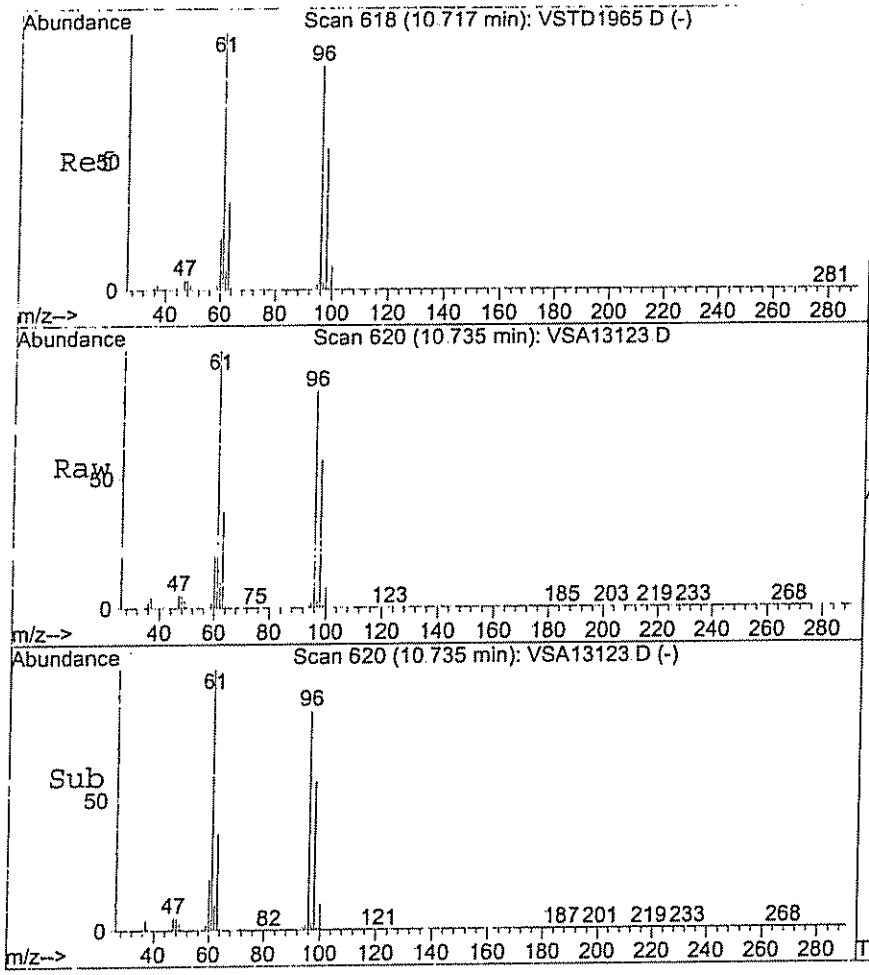


#12
1,1-Dichloroethane
Concen: 251.23 ug/L
RT: 10.06 min Scan# 551
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 63 Resp: 1216111

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	32.0	2.8	62.8
83	13.1	0.0	43.5

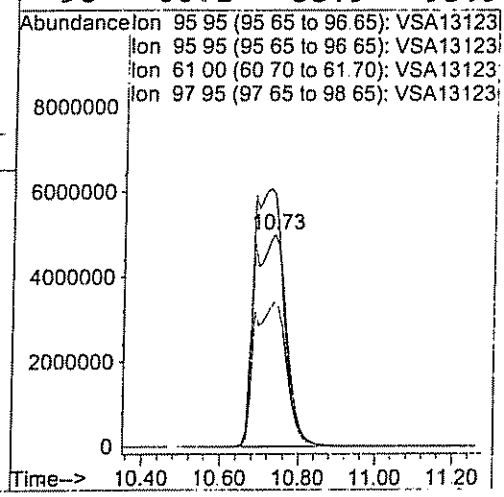


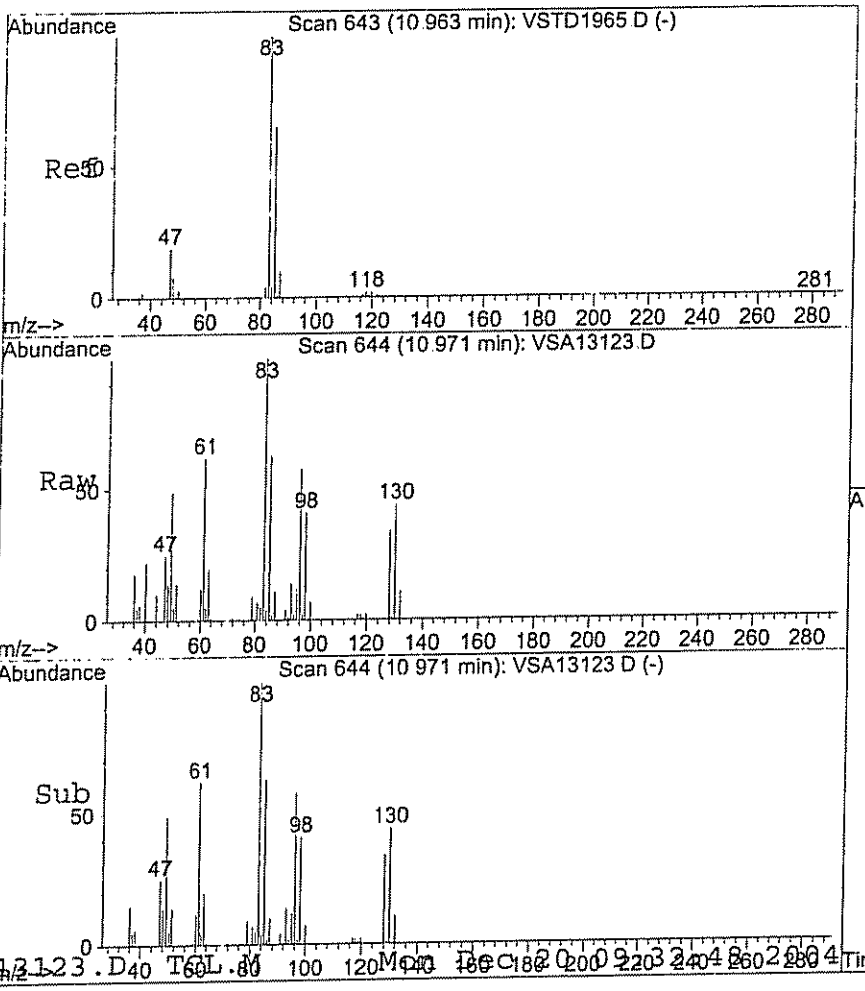


#13
cis-1,2-Dichloroethene
Concen: 7488.10 ug/L m
RT: 10.73 min Scan# 620
Delta R.T. 0.00 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 96 Resp:28076672

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	118.8	81.4	141.4
98	68.1	35.9	95.9

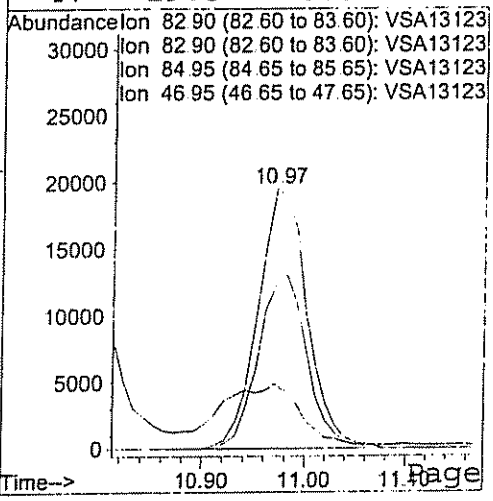


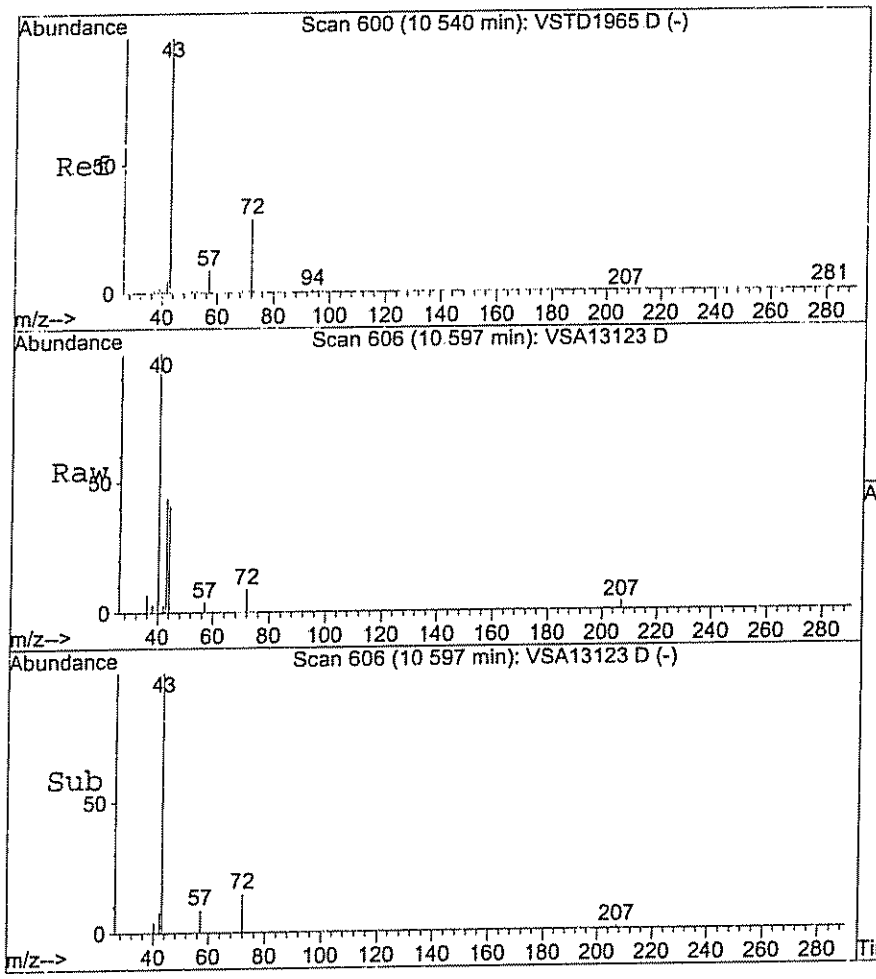


#14
Chloroform
Concen: 14.13 ug/L
RT: 10.97 min Scan# 644
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 83 Resp: 64990

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	62.6	35.2	95.2
47	19.8	0.0	50.7

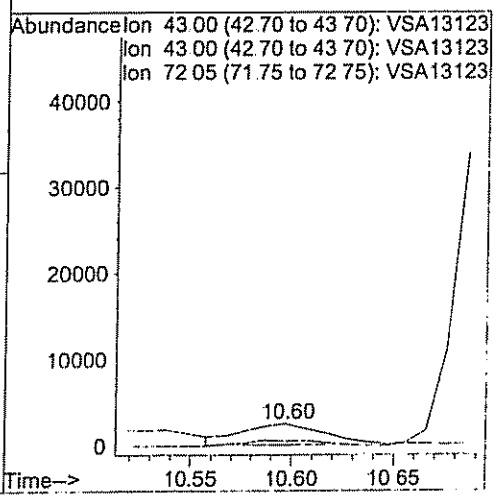


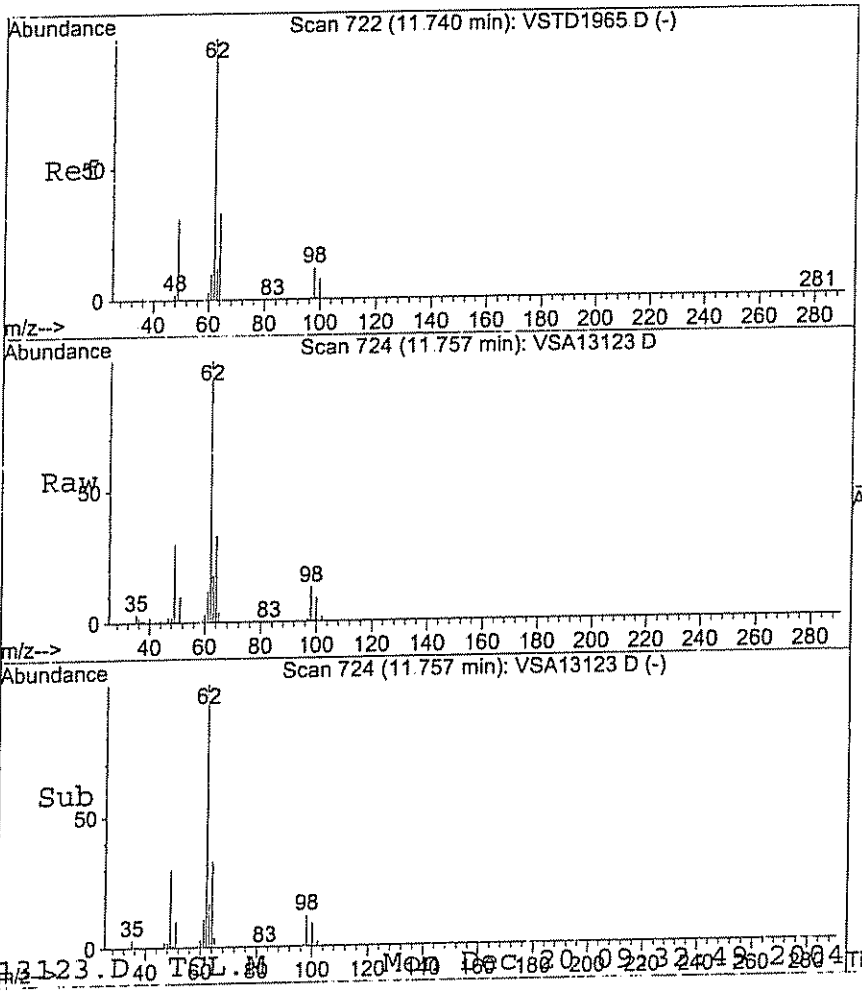


#15
2-Butanone
Concen: 5.88 ug/L
RT: 10.60 min Scan# 606
Delta R.T. 0.02 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 43 Resp: 6924

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	28.6	0.0	57.1

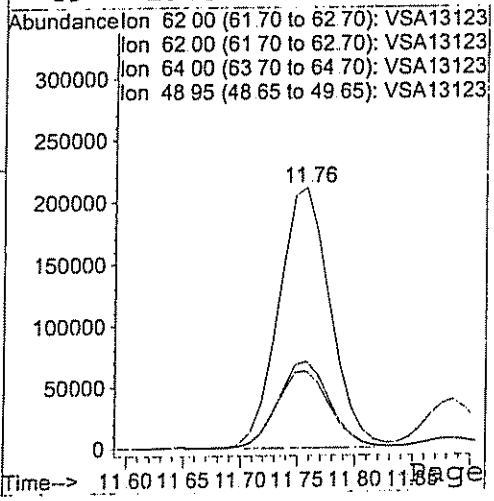


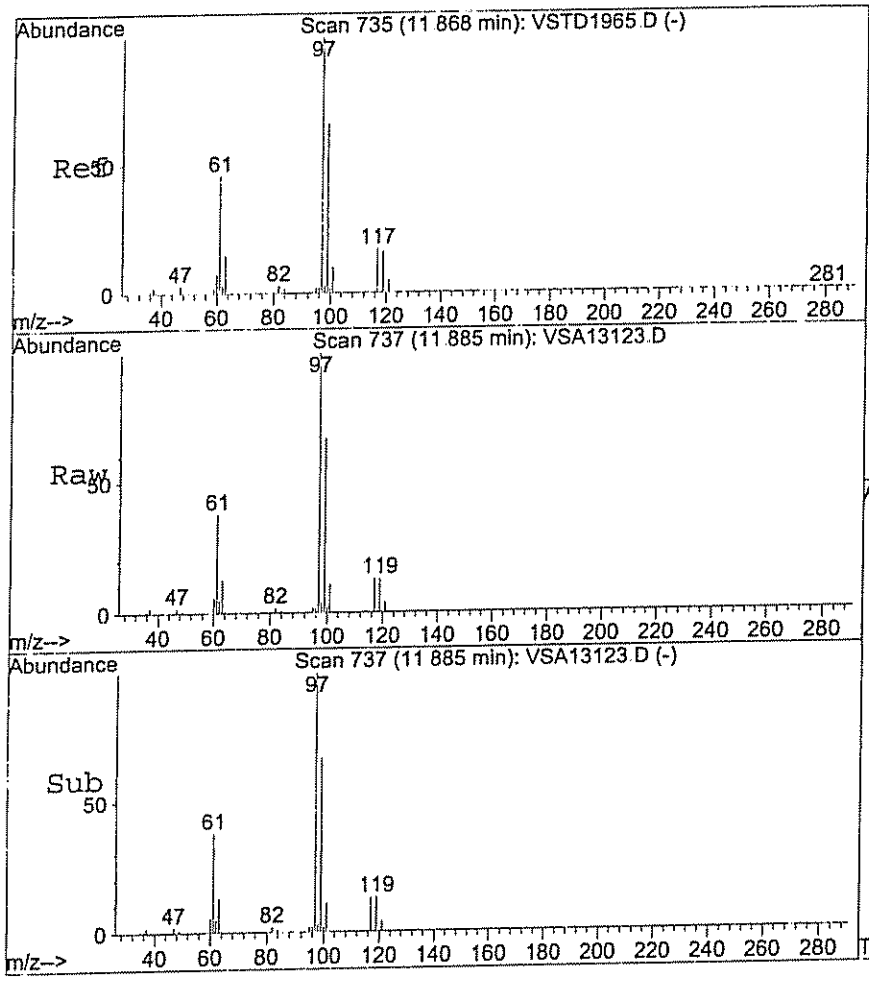


#17
1,2-Dichloroethane
Concen: 207.90 ug/L
RT: 11.76 min Scan# 724
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 62 Resp: 662333

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	33.1	2.3	62.3
49	29.3	0.0	58.2

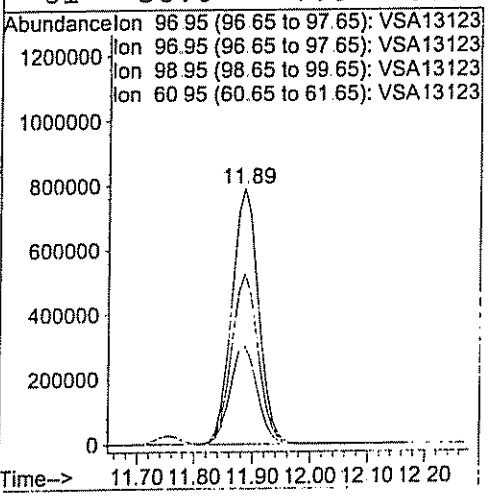


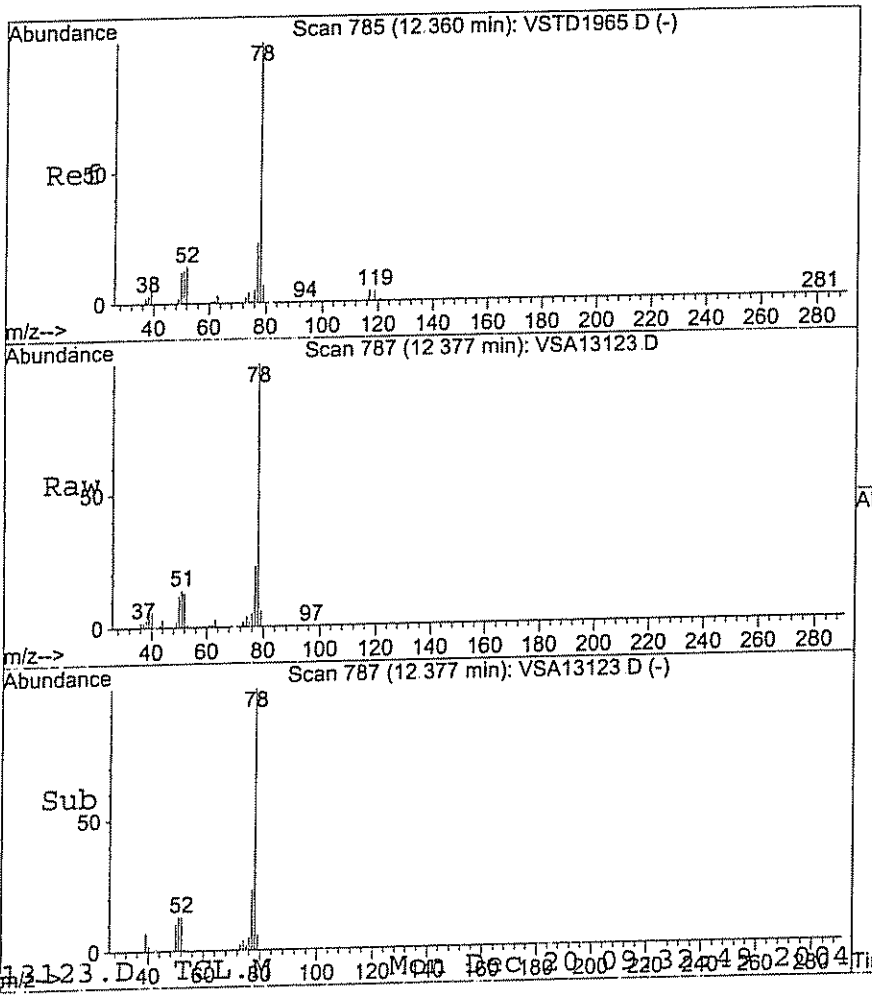


#20
1,1,1-Trichloroethane
Concen: 565.93 ug/L
RT: 11.89 min Scan# 737
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 97 Resp: 2530244

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	66.5	36.4	96.4
61	38.0	7.0	67.0

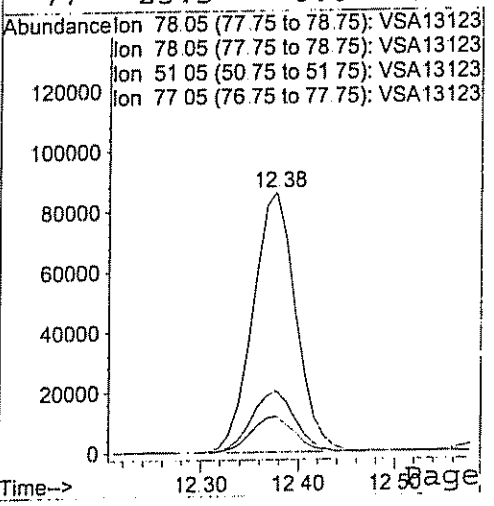


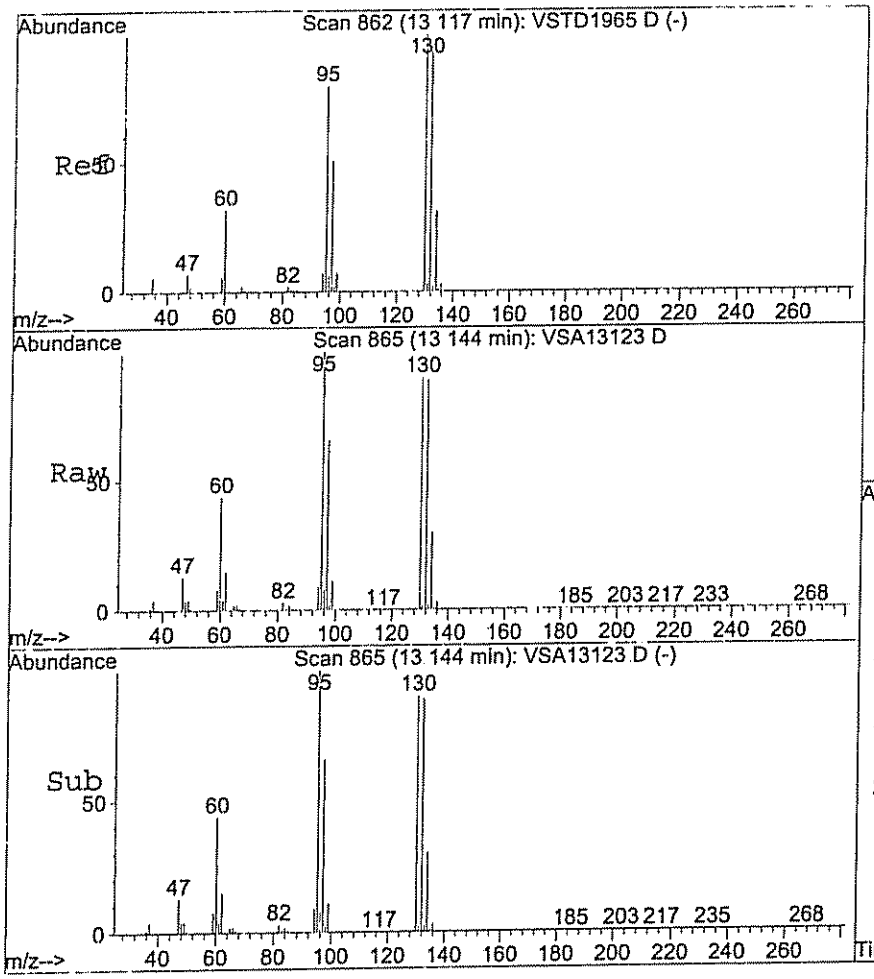


#21
Benzene
Concen: 20.80 ug/L
RT: 12.38 min Scan# 787
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 78 Resp: 265177

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	13.7	0.0	42.7
77	23.5	0.0	53.3

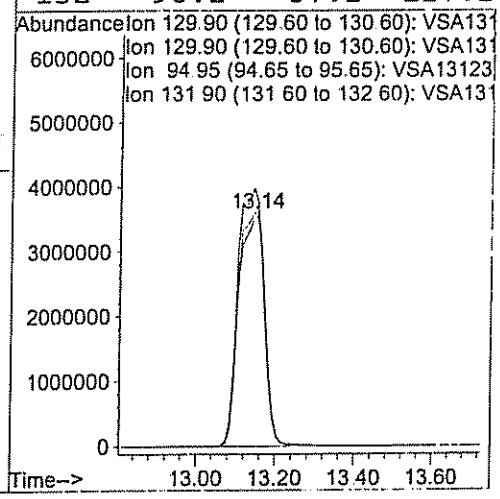


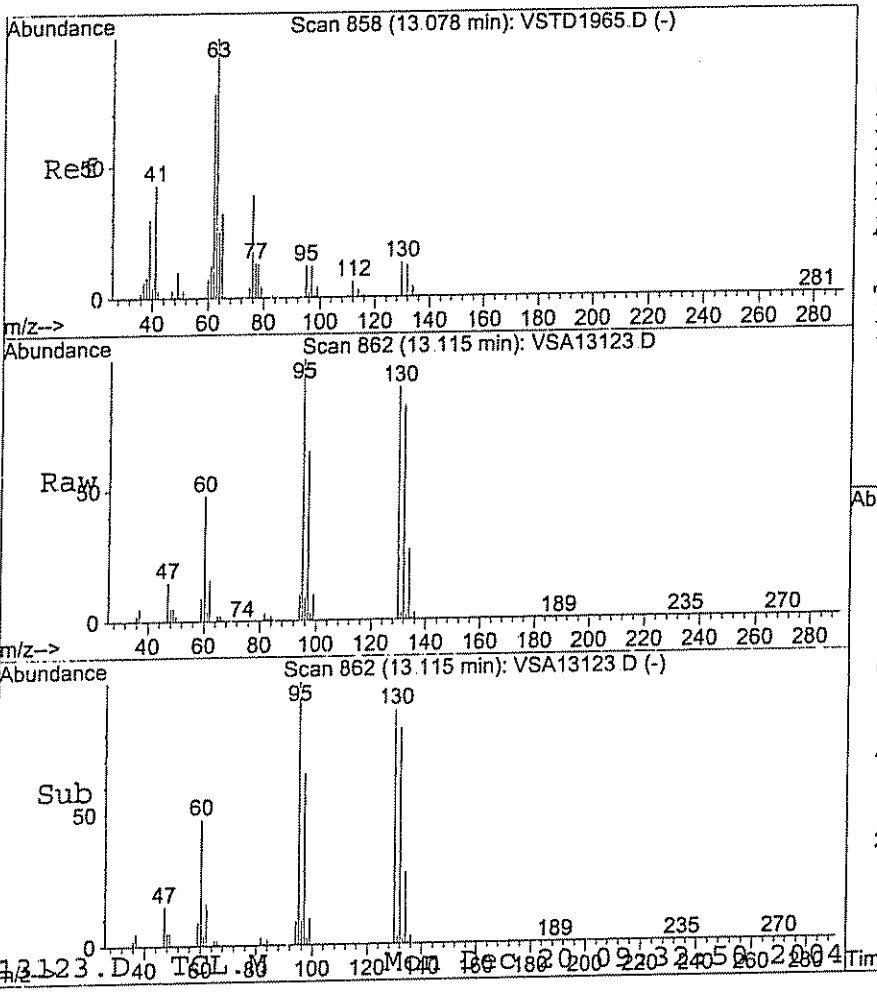


#22
Trichloroethene
Concen: 5971.02 ug/L
RT: 13.14 min Scan# 865
Delta R.T. 0.00 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion:130 Resp:16854689

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	110.6	84.6	144.6
132	98.2	67.2	127.2

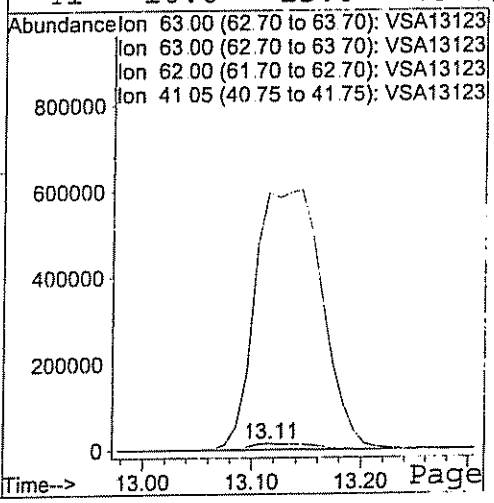


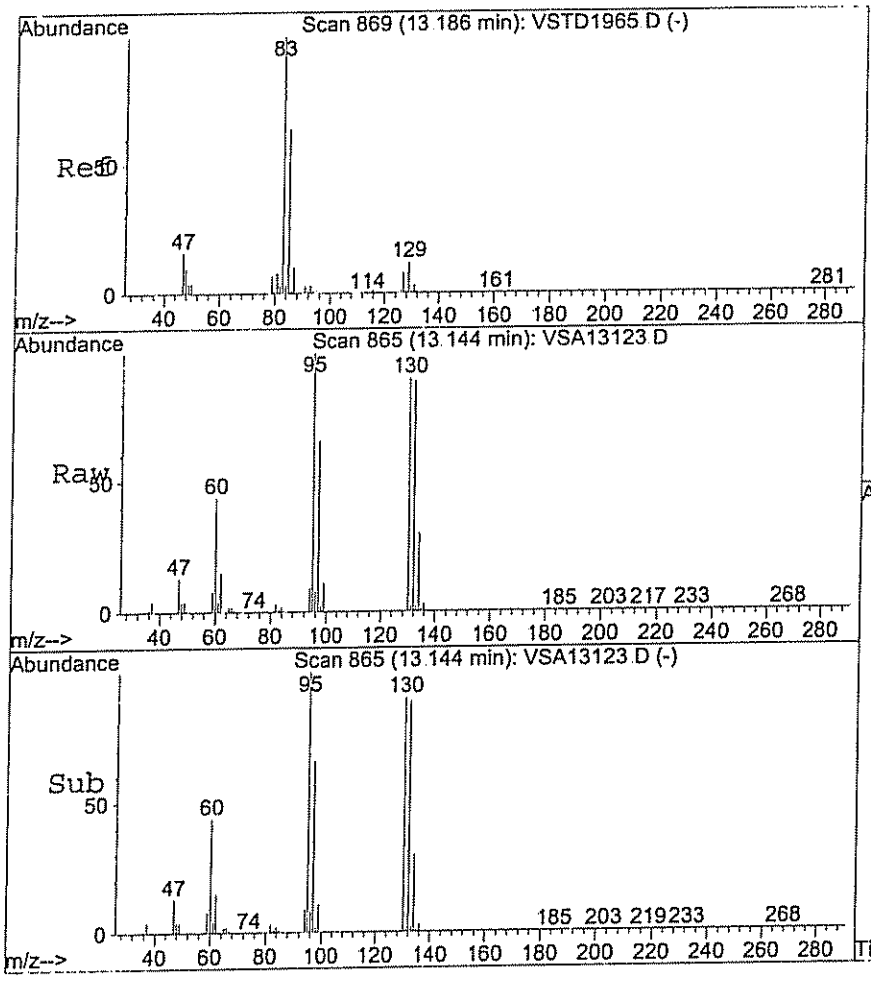


#23
1,2-Dichloropropane
Concen: 18.67 ug/L
RT: 13.11 min Scan# 862
Delta R.T. 0.02 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 63 Resp: 59684

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
62	3879.0	44.6	104.6#
41	10.0	15.0	75.0#

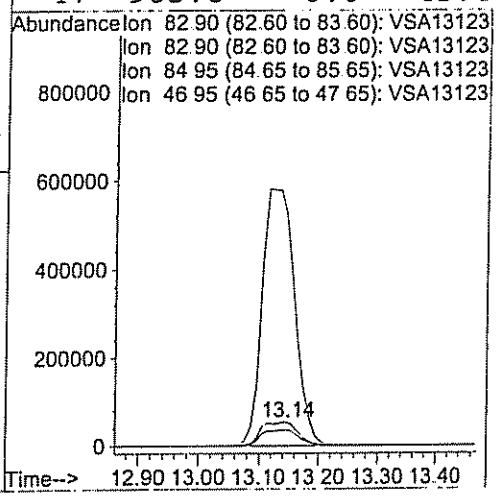


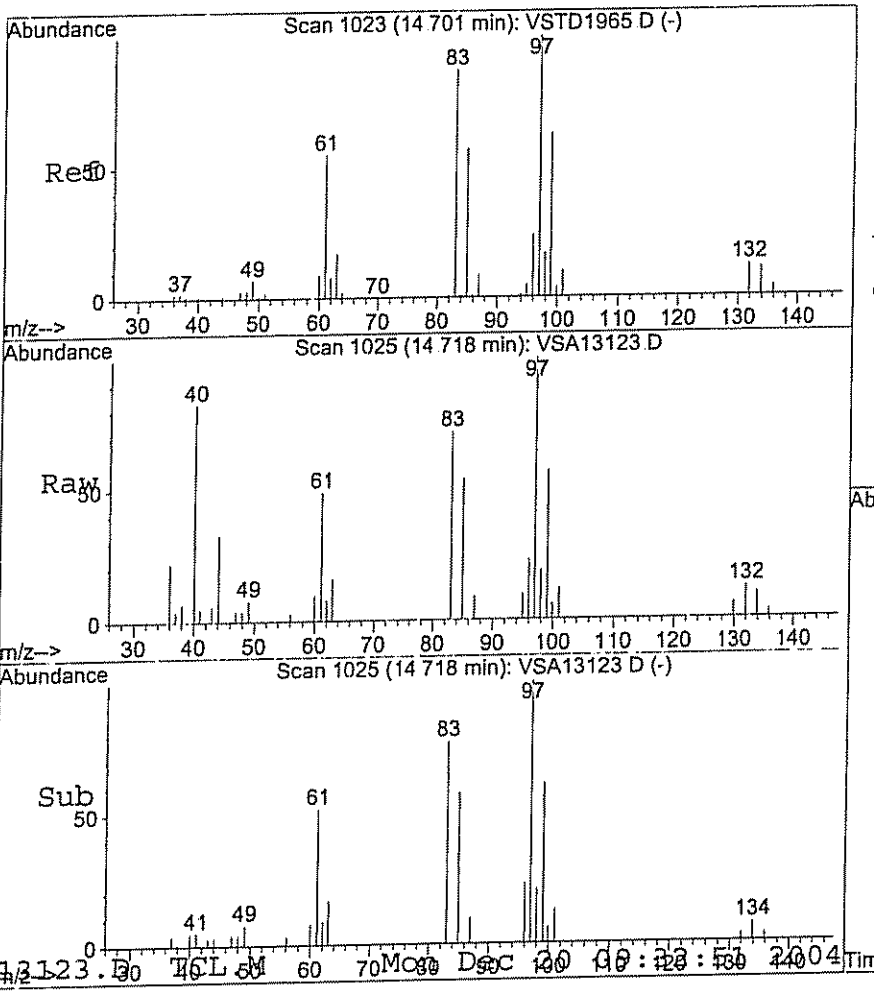


#24
Bromodichloromethane
Concen: 59.72 ug/L m
RT: 13.14 min Scan# 865
Delta R.T. -0.06 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 83 Resp: 237104

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	66.5	33.5	93.5
47	965.6	0.0	45.4#

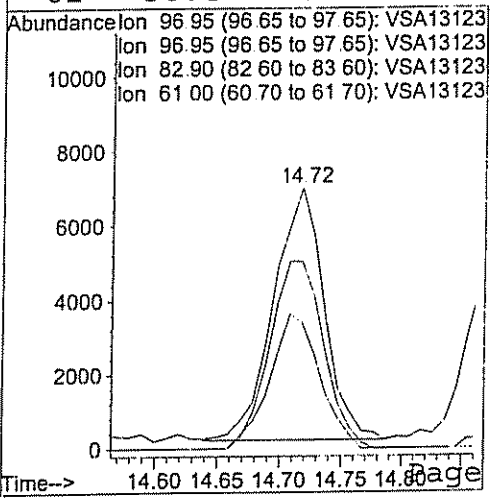


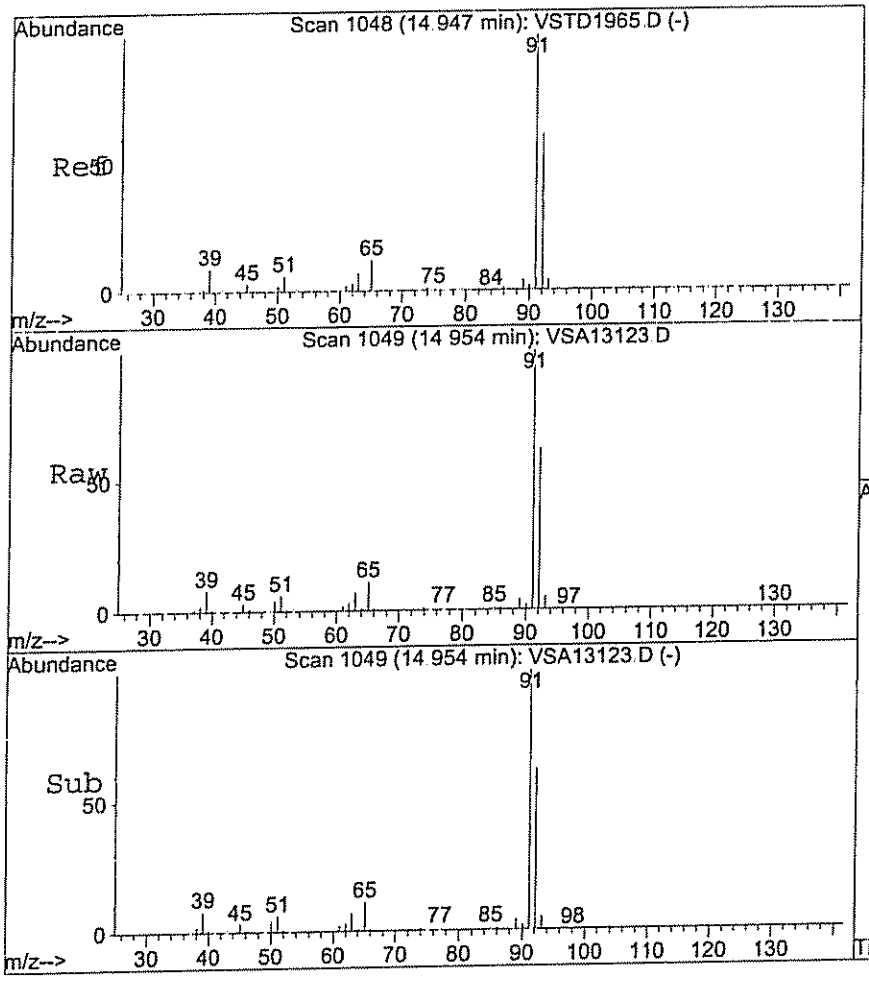


#27
1,1,2-Trichloroethane
Concen: 6.65 ug/L
RT: 14.72 min Scan# 1025
Delta R.T. -0.00 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 97 Resp: 19326

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	74.6	50.2	110.2
61	50.4	18.7	78.7

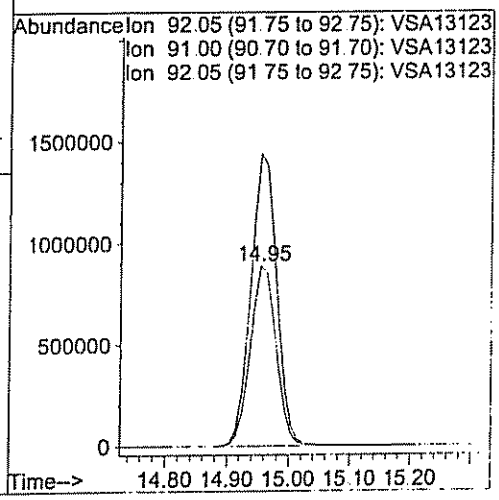


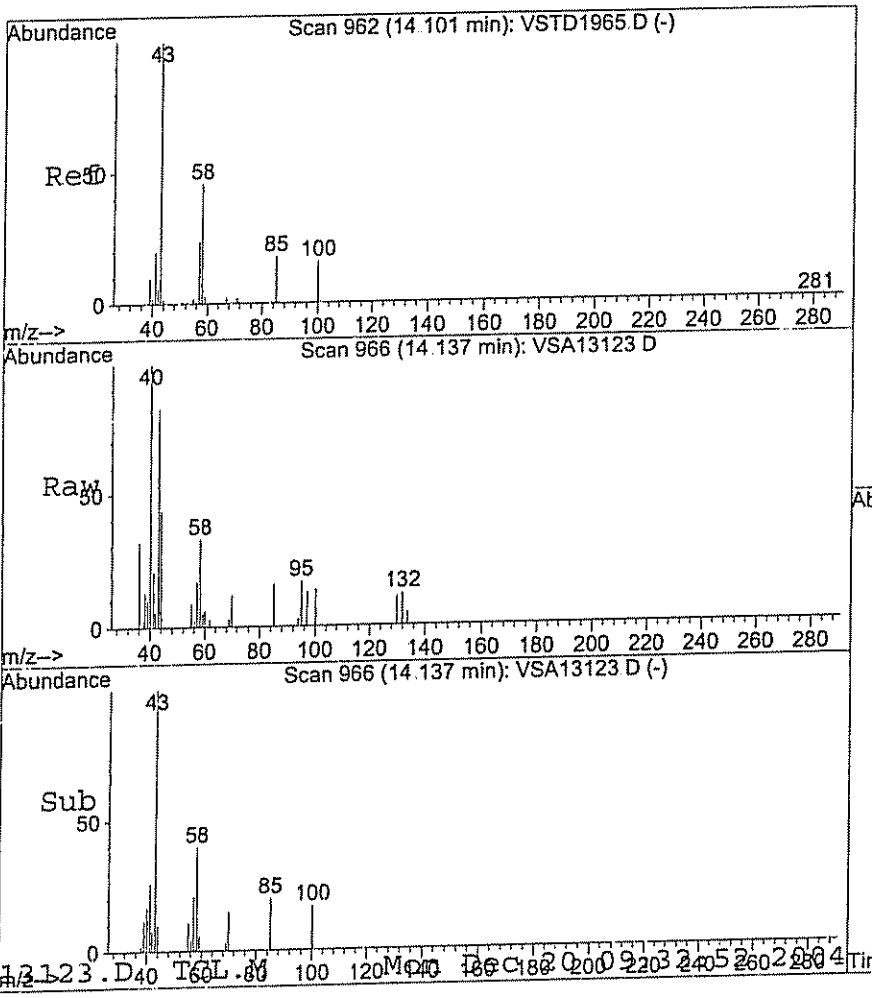


#33
Toluene
Concen: 356.75 ug/L
RT: 14.95 min Scan# 1049
Delta R.T. -0.02 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 92 Resp: 2568376

Ion	Ratio	Lower	Upper
92	100		
91	161.9	132.3	192.3
92	100.0	70.0	130.0

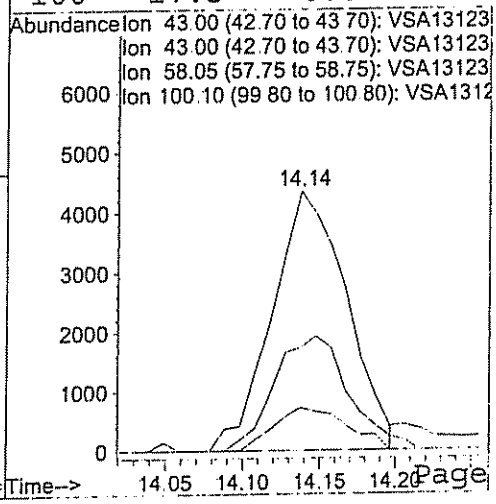


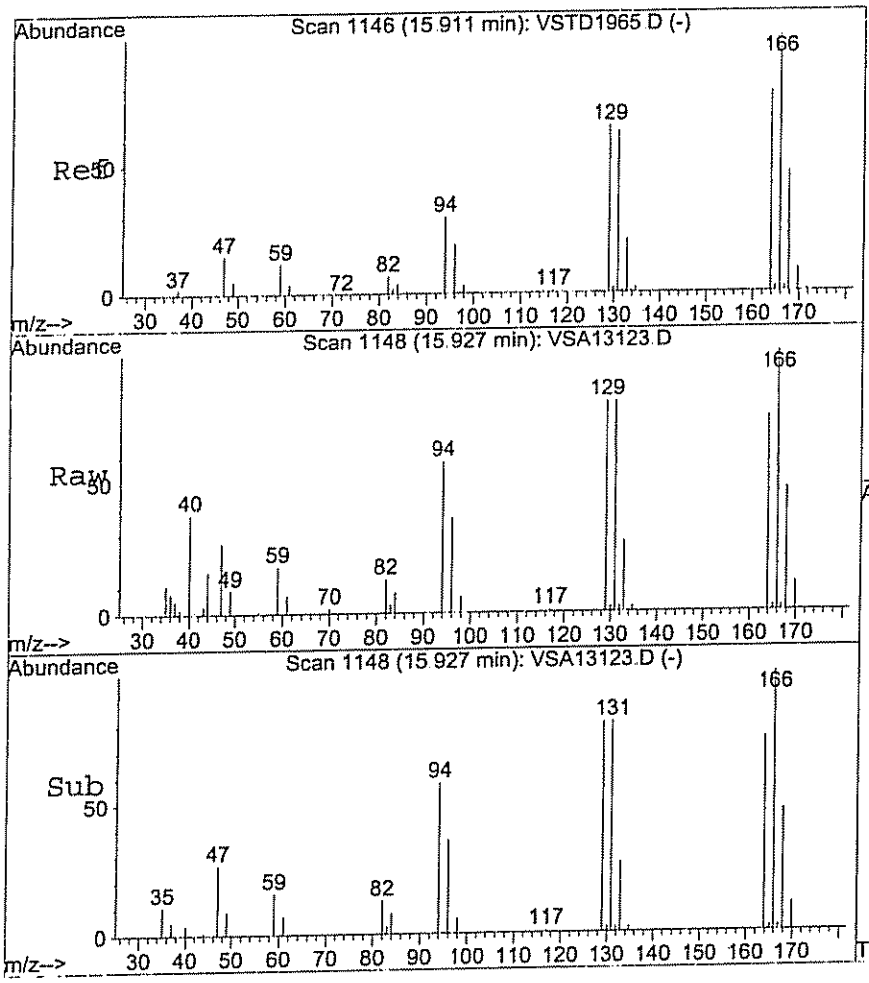


#34
4-methyl-2-Pentanone
Concen: 6.59 ug/L
RT: 14.14 min Scan# 966
Delta R.T. -0.00 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 43 Resp: 14779

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	39.0	15.5	75.5
100	17.5	0.0	50.9

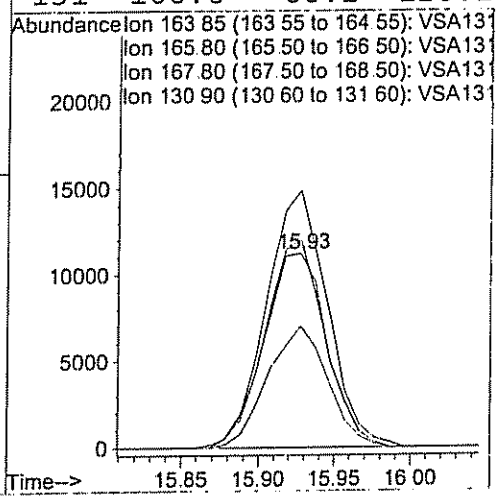


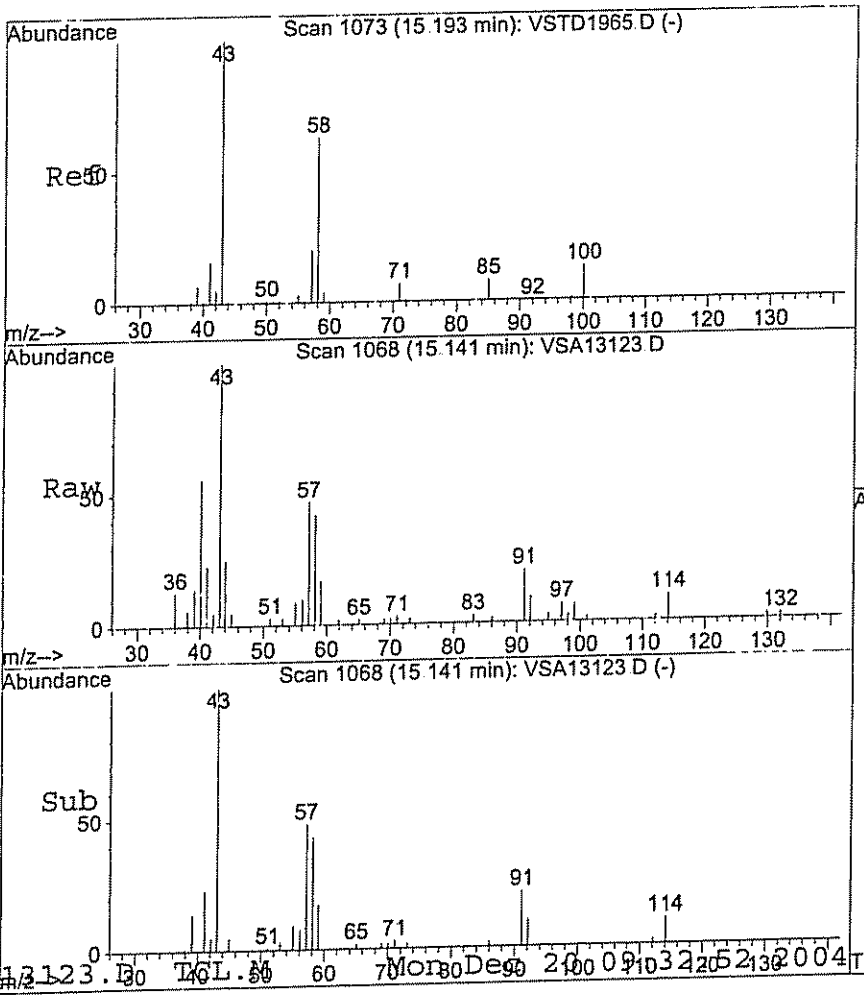


#35
Tetrachloroethene
Concen: 17.83 ug/L
RT: 15.93 min Scan# 1148
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion:164 Resp: 32240

Ion	Ratio	Lower	Upper
164	100		
166	131.2	100.8	160.8
168	62.5	30.1	90.1
131	106.6	66.1	126.1

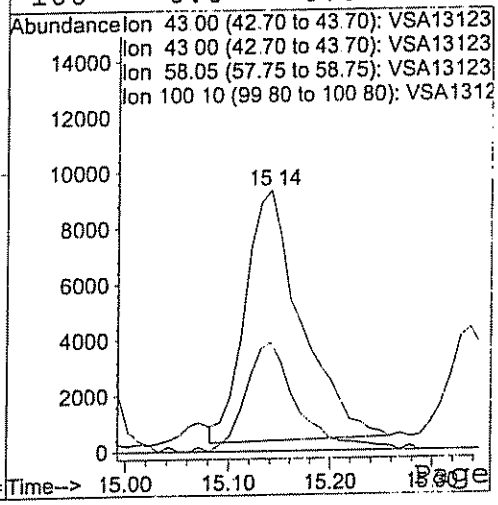


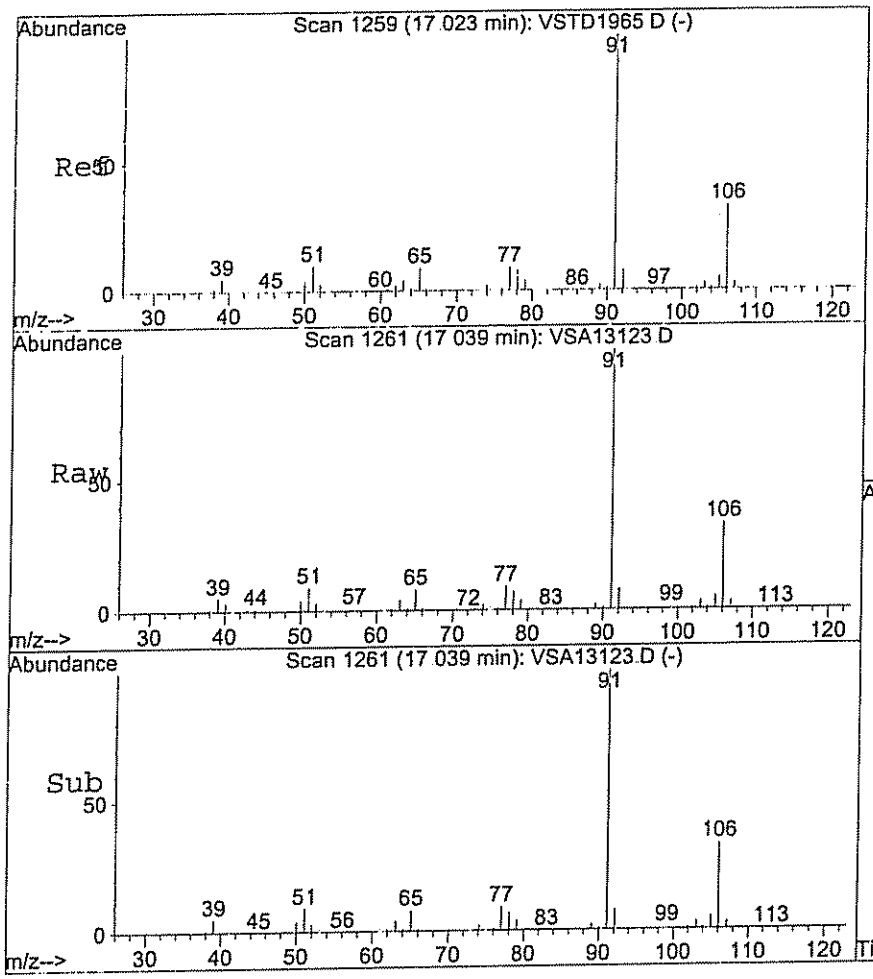


#36
2-Hexanone
Concen: 22.27 ug/L
RT: 15.14 min Scan# 1068
Delta R.T. -0.09 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 43 Resp: 34349

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	43.9	34.3	94.3
100	0.0	0.0	46.8

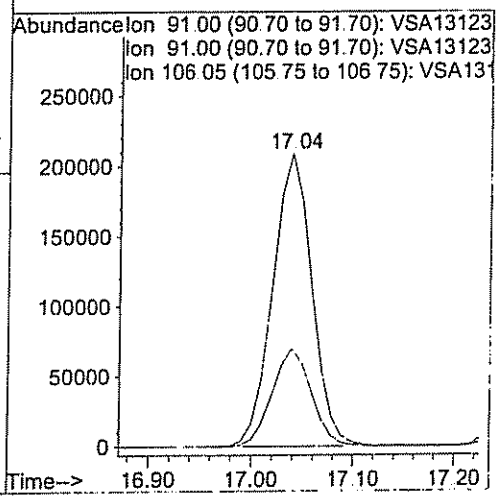


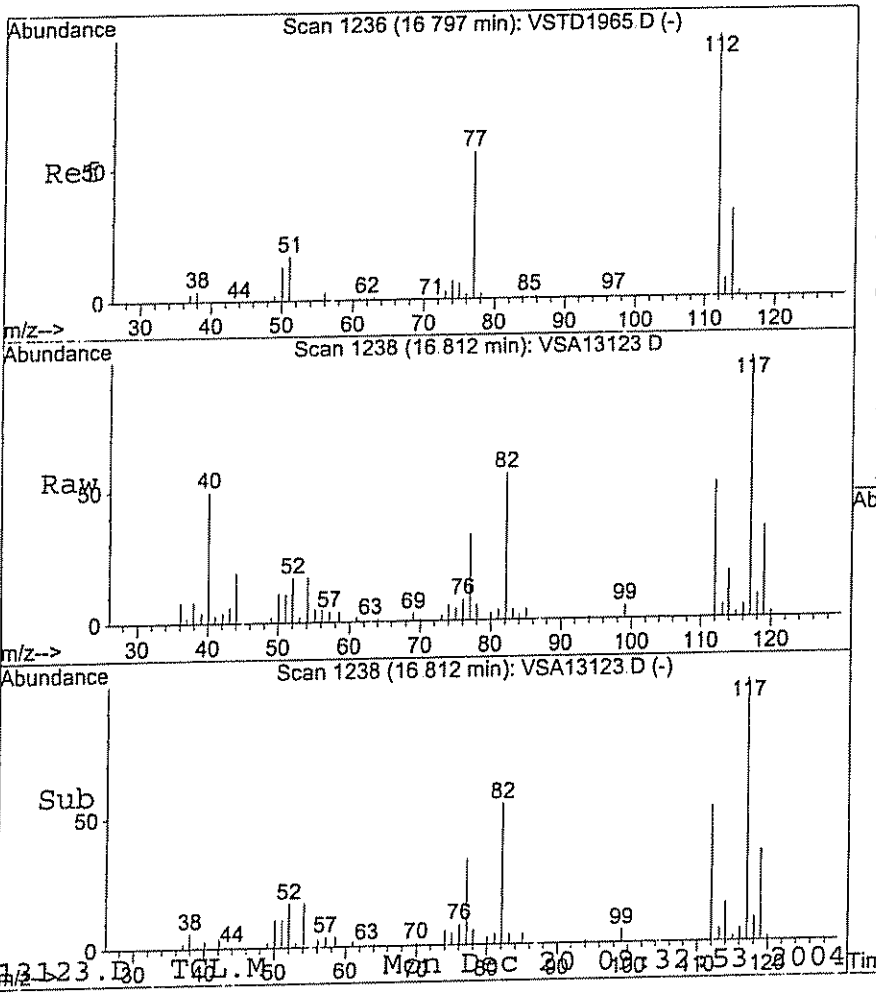


#37
Ethyl benzene
Concen: 42.61 ug/L
RT: 17.04 min Scan# 1261
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 91 Resp: 556058

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	33.4	4.8	64.8

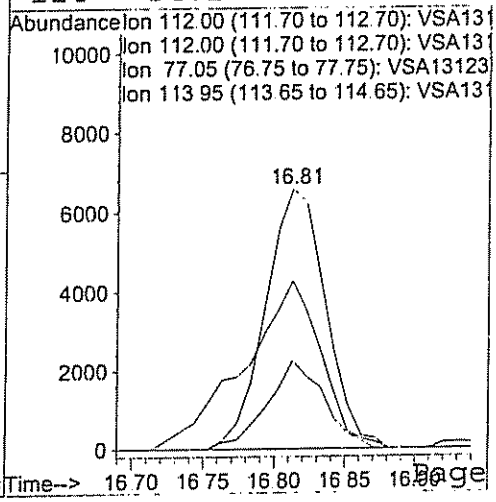


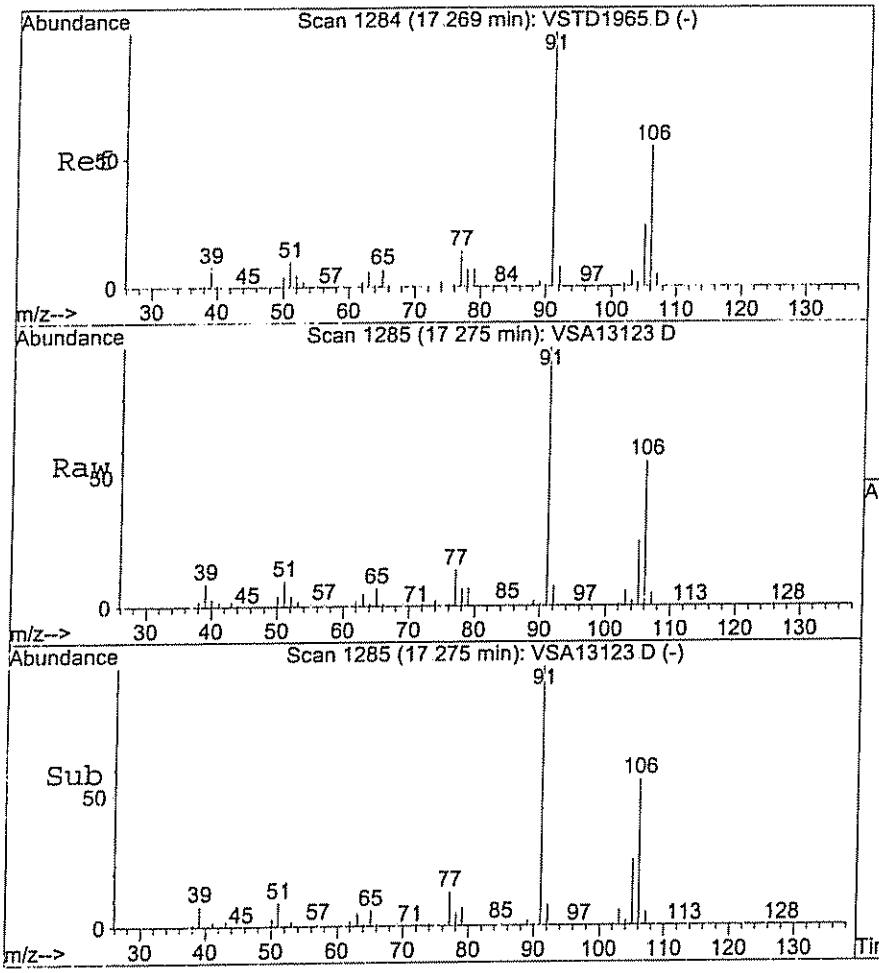


#38
Chlorobenzene
Concen: 2.41 ug/L
RT: 16.81 min Scan# 1238
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion:112 Resp: 19483

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	55.8	29.8	89.8
114	34.1	1.2	61.2

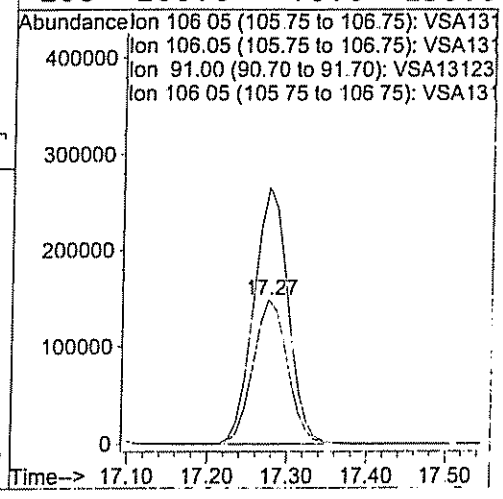


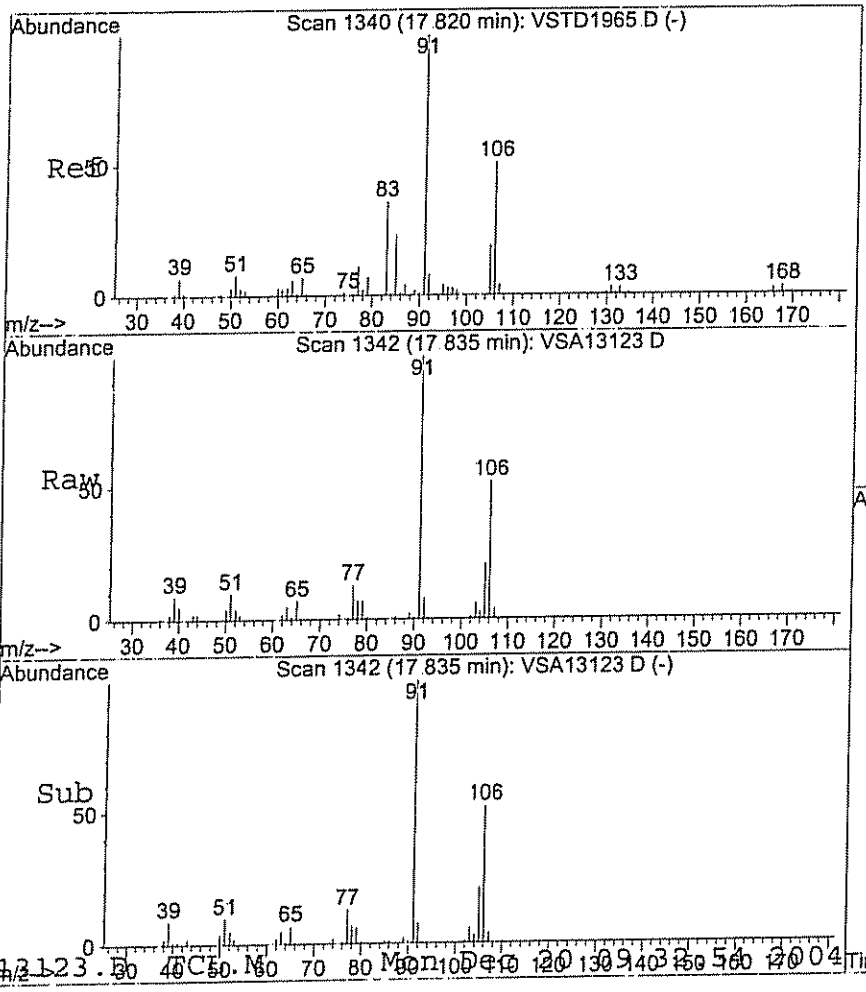


#39
m&p-Xylenes
Concen: 80.24 ug/L
RT: 17.27 min Scan# 1285
Delta R.T. -0.02 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion:106 Resp: 447408

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	178.4	144.3	204.3
106	100.0	70.0	130.0

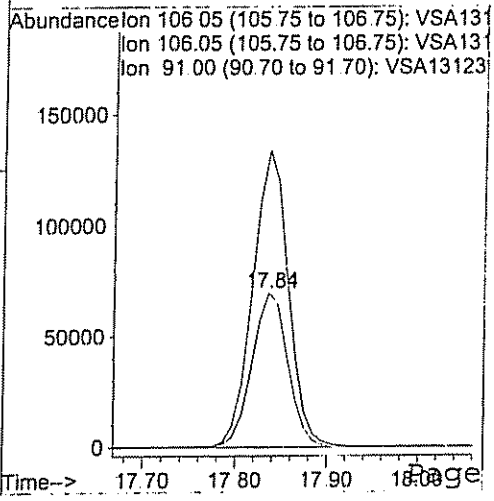


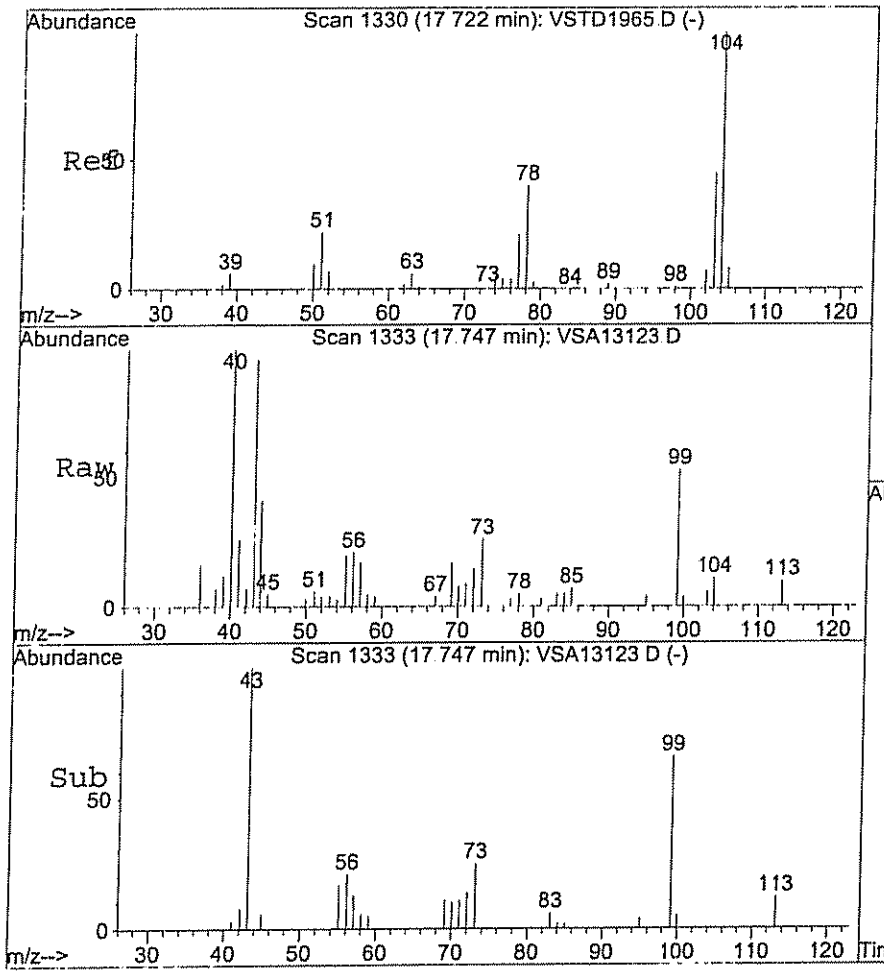


#40
o-Xylene
Concen: 35.37 ug/L
RT: 17.84 min Scan# 1342
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion:106 Resp: 191817

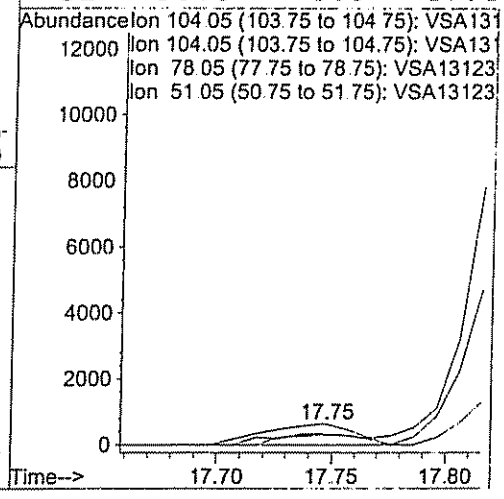
Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	191.5	157.0	217.0

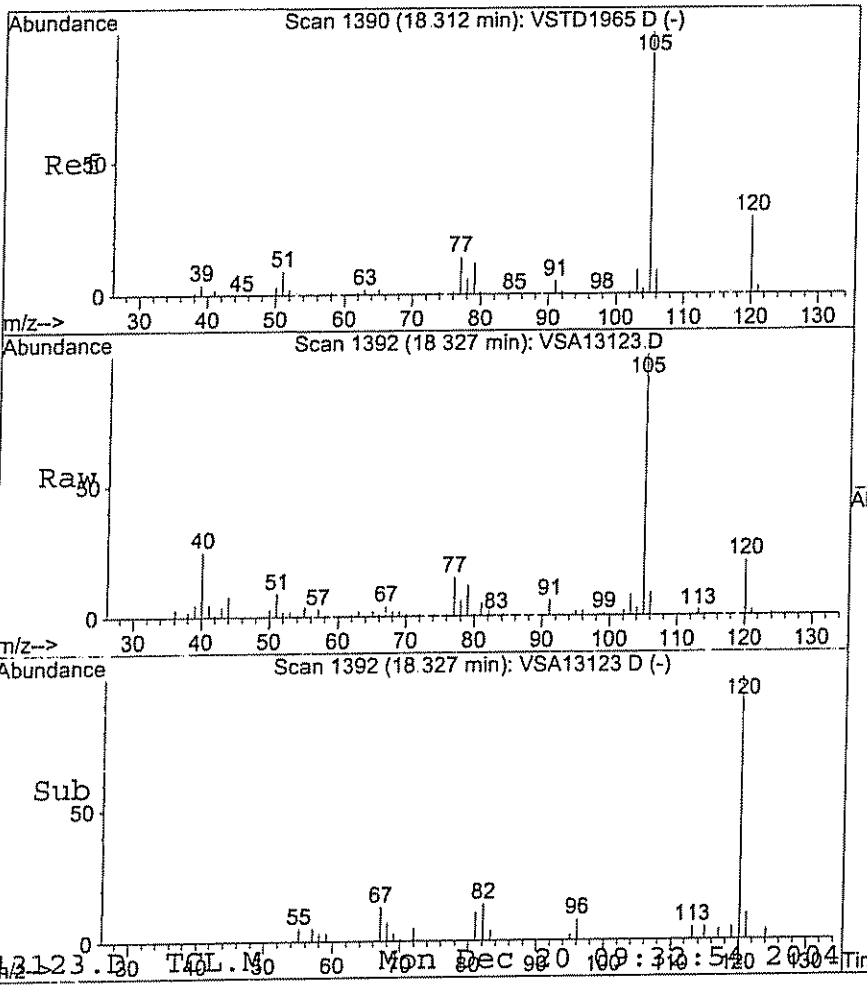




#41
Styrene
Concen: 0.19 ug/L
RT: 17.75 min Scan# 1333
Delta R.T. 0.00 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

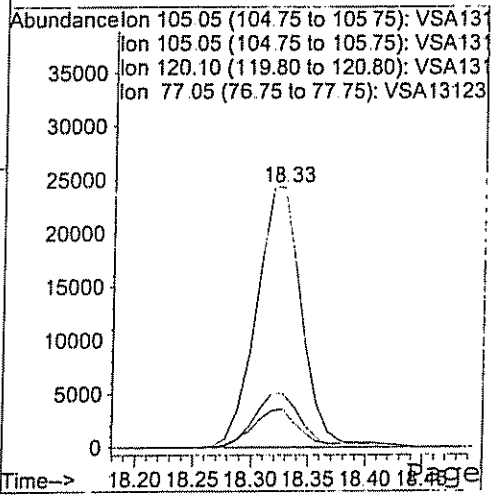
Tgt Ion:104	Resp:	1713	
Ion	Ratio	Lower	Upper
104	100		
104	100.0	70.0	130.0
78	46.4	6.9	66.9
51	30.6	0.0	47.4

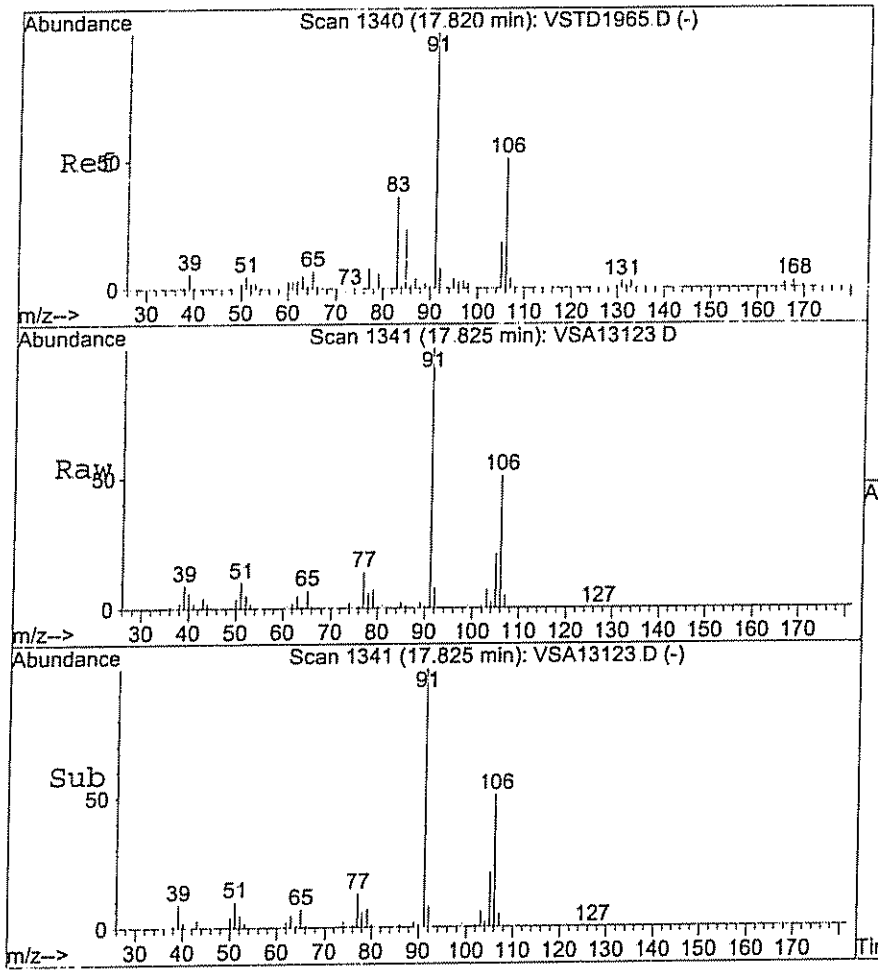




#42
Isopropylbenzene
Concen: 4.76 ug/L
RT: 18.33 min Scan# 1392
Delta R.T. -0.00 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion:105	Resp:	66393	
Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	21.1	0.0	51.3
77	1.8	0.0	30.0

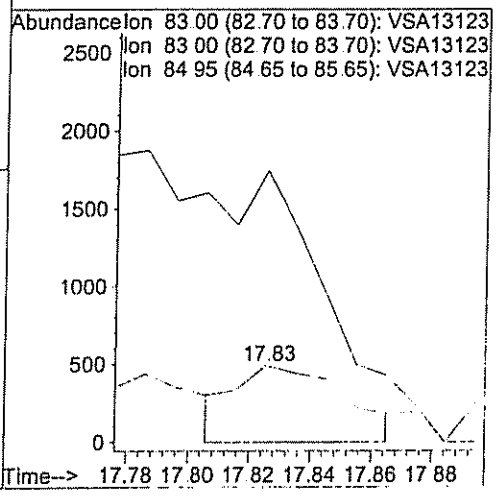


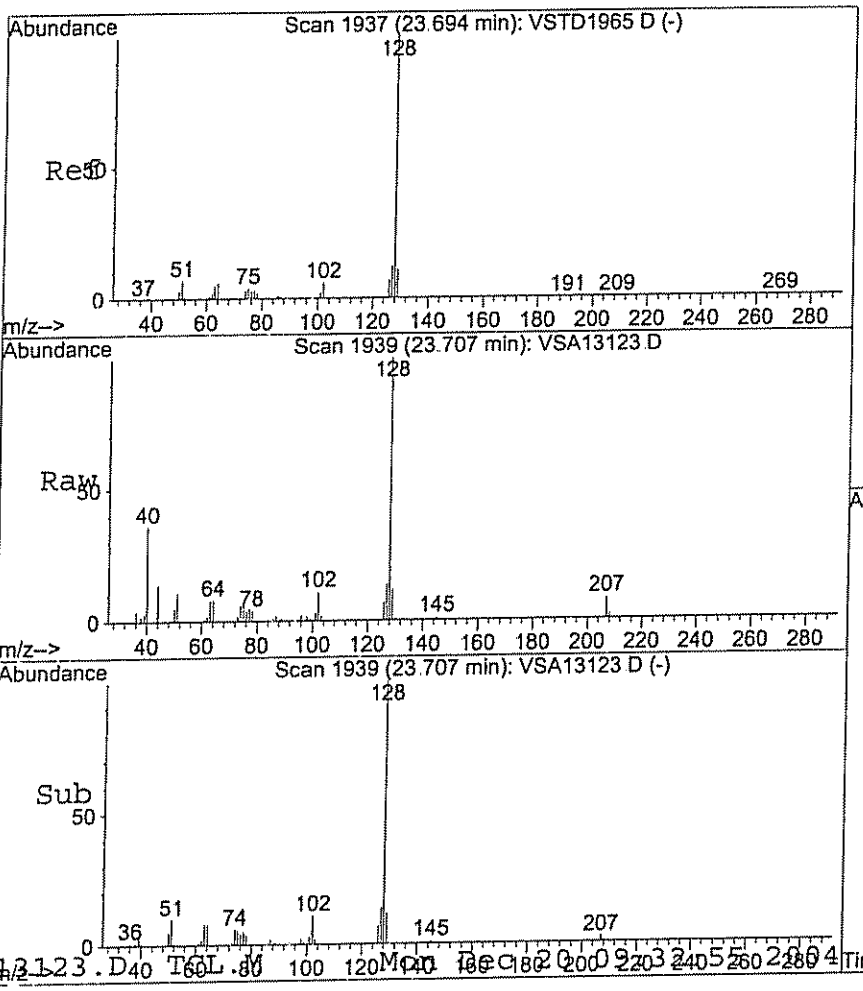


#44
1,1,2,2-Tetrachloroethane
Concen: 0.34 ug/L
RT: 17.83 min Scan# 1341
Delta R.T. -0.02 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion: 83 Resp: 1223

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	0.0	34.4	94.4#

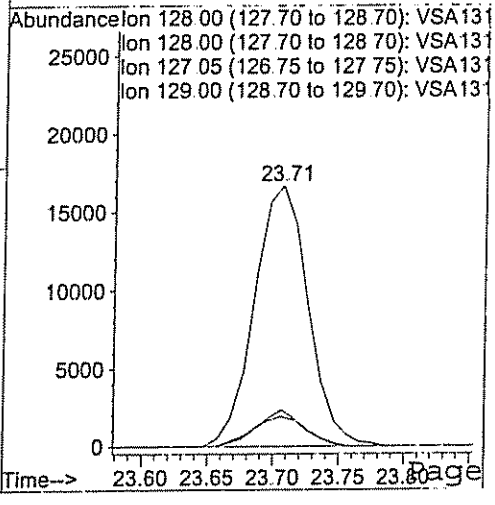




#45
Naphthalene
Concen: 6.51 ug/L
RT: 23.71 min Scan# 1939
Delta R.T. -0.01 min
Lab File: VSA13123.D
Acq: 14 Dec 2004 19:00

Tgt Ion:128 Resp: 47542

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	11.1	0.0	40.8



Non Target Peak Search Report

MWB-2

Data File : C:\HPCHEM\1\DATA\VSA13123.D
Acq On : 14 Dec 2004 19:00
Sample : P0412024-02A
Misc : WATER

Vial: 9
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Library : C:\DATABASE\NIST129K.L

****

Peak Number 1 Benzene, 1,2,3-trimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.86	96.78 ug/L	2924690	Chlorobenzene-d5	16.76

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	93
2	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	93
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93
4	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91

****

Peak Number 2 Benzene, 1,3,5-trimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.47	49.74 ug/L	1503160	Chlorobenzene-d5	16.76

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93
2	Benzene, 1,2,3-trimethyl- $$ Hemime	120	C9H12	000526-73-8	93
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91

VSA13123.D TCL.M Mon Dec 20 09:33:15 2004

Quantitation Report (QT Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSA13124.D
Acq On : 14 Dec 2004 19:32
Sample : P0412024-03A
Misc : WATER

Vial: 10
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:34 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	10.96	128	84243	50.00 ug/L	0.02
18) 1,4-Difluorobenzene	12.61	114	591795	50.00 ug/L	0.00
31) Chlorobenzene-d5	16.77	117	524925	50.00 ug/L	-0.01
System Monitoring Compounds					
16) 1,2-Dichloroethane-d4	11.67	65	125234	46.17 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 92.34%		
32) Toluene-d8	14.88	98	1005945	96.23 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 192.46%#		
43) 4-Bromofluorobenzene	18.40	95	195455	48.27 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.54%		
Target Compounds					Qvalue
2) Chloromethane	6.29	50	692	0.18 ug/L #	85
3) Vinyl chloride	6.56	62	1743780	473.08 ug/L	100
4) Bromomethane	7.14	94	506	0.23 ug/L	86
5) Chloroethane	7.36	64	201	0.08 ug/L #	66
6) 1,1-Dichloroethene	8.79	96	2969466	1038.89 ug/L	97
7) Carbon disulfide	9.31	76	19186	1.93 ug/L	100
8) Methylene chloride	8.95	84	1680392	504.46 ug/L	99
9) Acetone	8.28	43	3483	4.16 ug/L	95
10) trans-1,2-Dichloroethene	9.76	96	3884715	1183.21 ug/L	98
12) 1,1-Dichloroethane	10.06	63	2892330	570.92 ug/L	99
13) cis-1,2-Dichloroethene	10.63	96	14938064	3806.76 ug/L	95
14) Chloroform	10.99	83	59416	~~12.34~~ ug/L	97
15) 2-Butanone	10.59	43	6291	5.11 ug/L	89
17) 1,2-Dichloroethane	11.76	62	996872	298.99 ug/L	99
20) 1,1,1-Trichloroethane	11.89	97	4143403	951.92 ug/L	99
21) Benzene	12.38	78	1148501	92.54 ug/L	100
22) Trichloroethene	13.11	130	10870545	3955.73 ug/L	96
23) 1,2-Dichloropropane	13.11	63	14752	4.74 ug/L #	1
24) Bromodichloromethane	13.11	83	45470	~~11.76~~ ug/L #	1
27) 1,1,2-Trichloroethane	14.72	97	56434	19.96 ug/L	97
33) Toluene	14.96	92	19361311	2574.19 ug/L #	58
34) 4-methyl-2-Pentanone	14.14	43	51447	21.96 ug/L	98
35) Tetrachloroethene	15.92	164	58495	30.97 ug/L	94

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

* See DC-100

Data File : C:\HPCHEM\1\DATA\VSA13124.D
Acq On : 14 Dec 2004 19:32
Sample : P0412024-03A
Misc : WATER

Vial: 10
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:34 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
36) 2-Hexanone	15.14	43	77666	48.19 ug/L	86
37) Ethyl benzene	17.04	91	3435466	252.00 ug/L	100
38) Chlorobenzene	16.82	112	63472	7.50 ug/L	98
39) m&p-Xylenes	17.28	106	1798363	308.71 ug/L	98
40) o-Xylene	17.84	106	659468	116.38 ug/L	100
41) Styrene	17.74	104	9611	1.01 ug/L	97
42) Isopropylbenzene	18.32	105	187730	12.89 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	1200	0.32 ug/L #	68
45) Naphthalene	23.70	128	257975	33.83 ug/L #	100

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

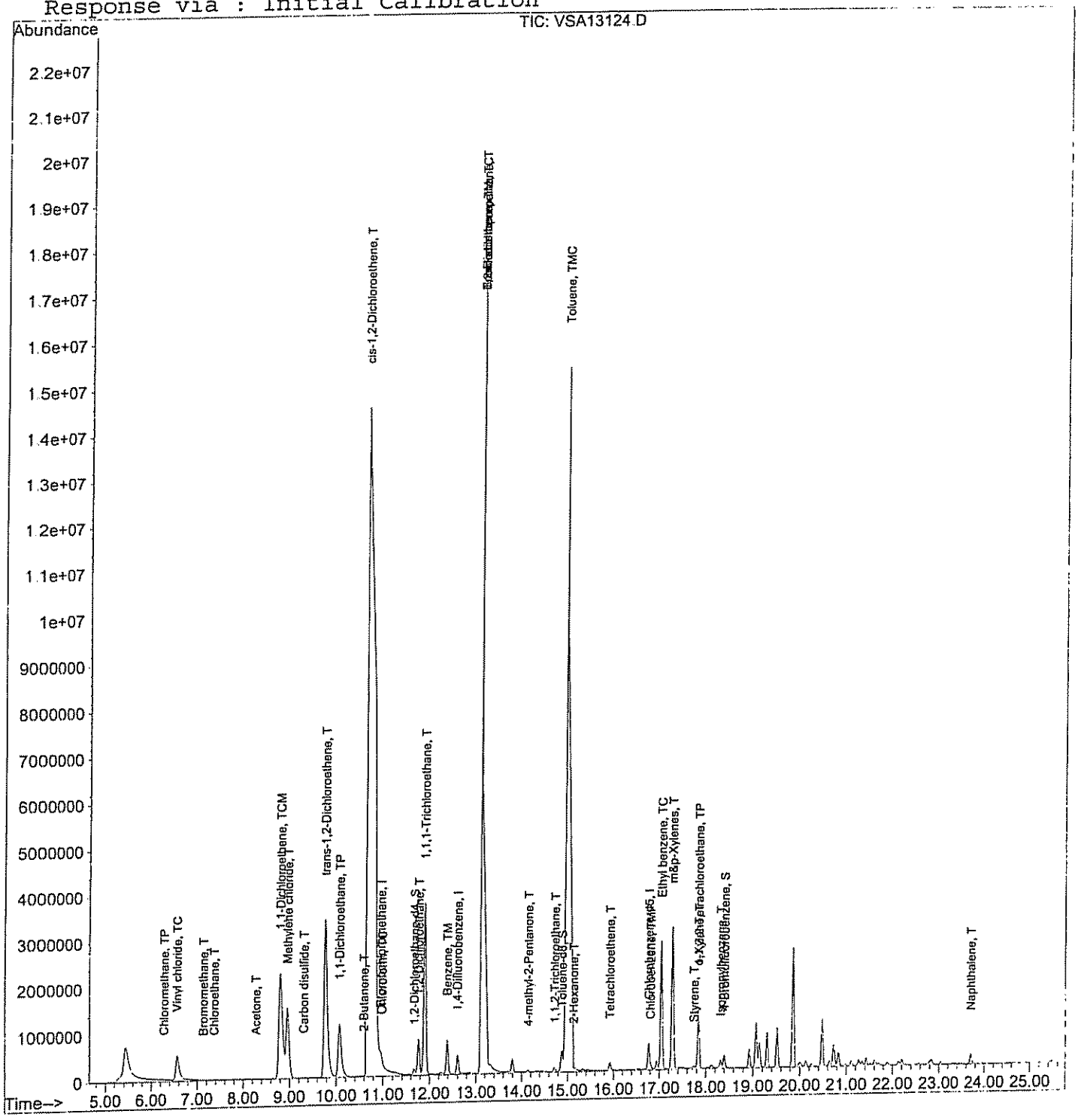
Data File : C:\HPCHEM\1\DATA\VSA13124.D
Acq On : 14 Dec 2004 19:32
Sample : P0412024-03A
Misc : WATER

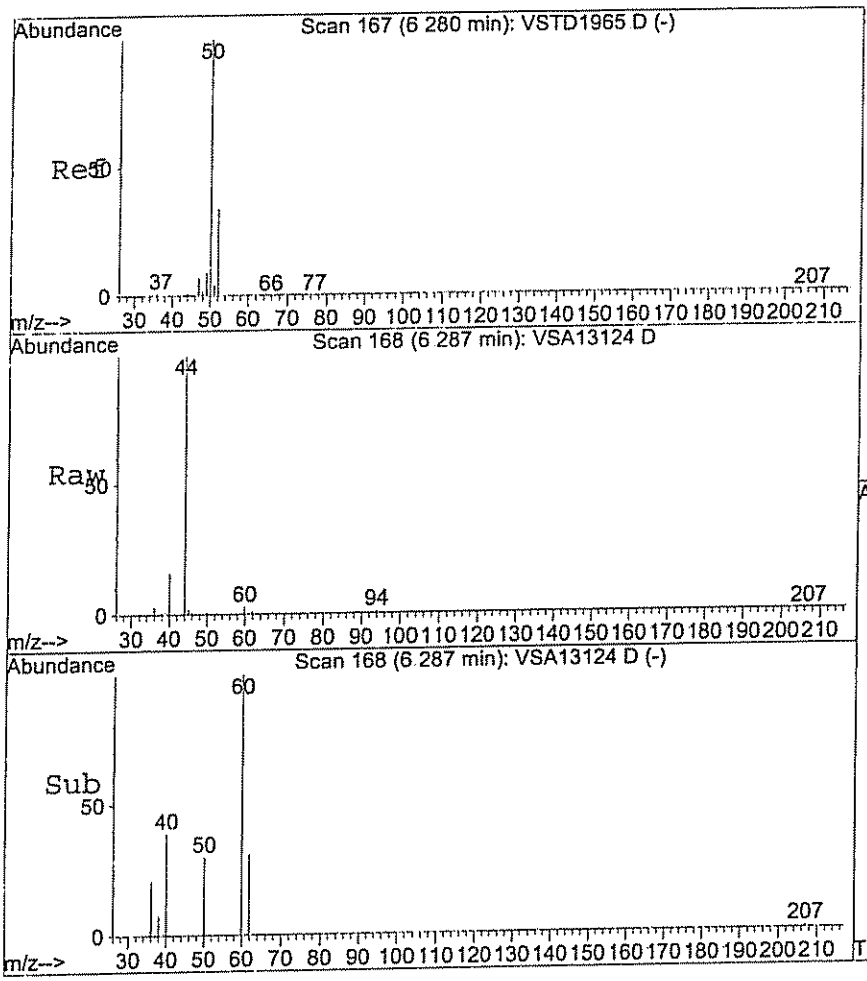
Vial: 10
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:34 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration

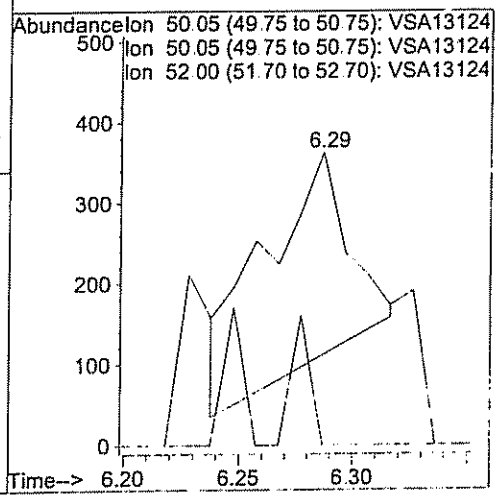


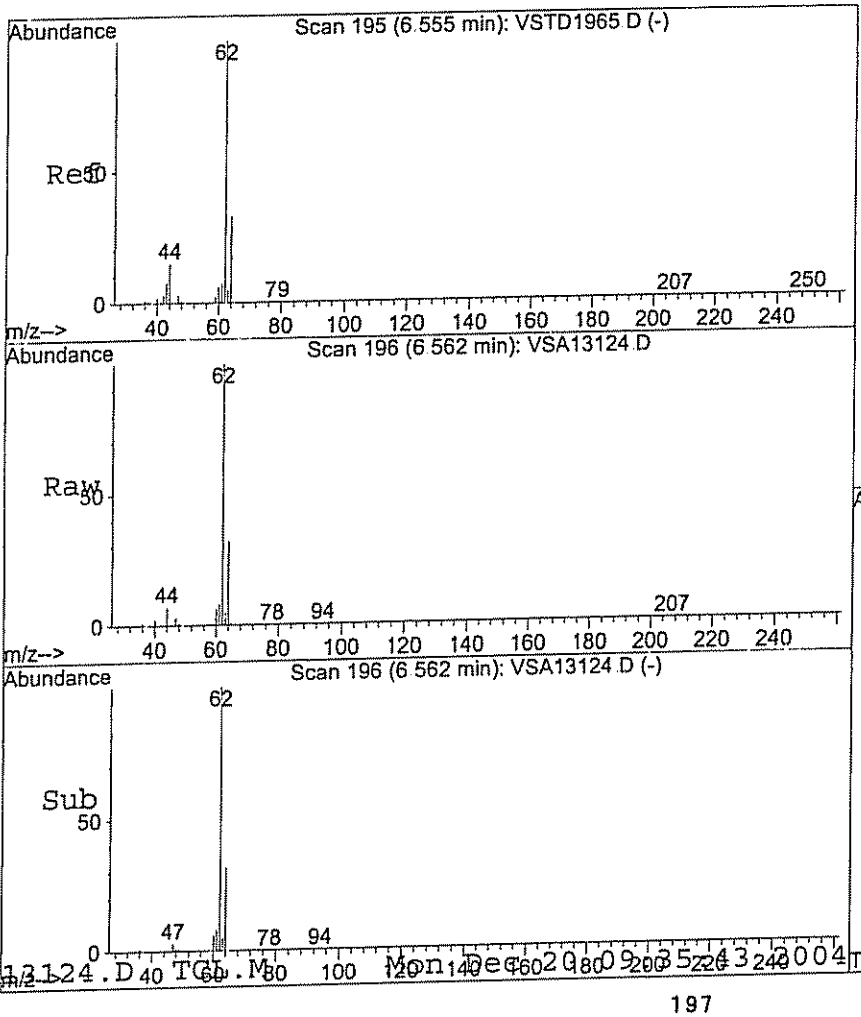


#2
Chloromethane
Concen: 0.18 ug/L
RT: 6.29 min Scan# 168
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 50 Resp: 692

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.5	63.5#

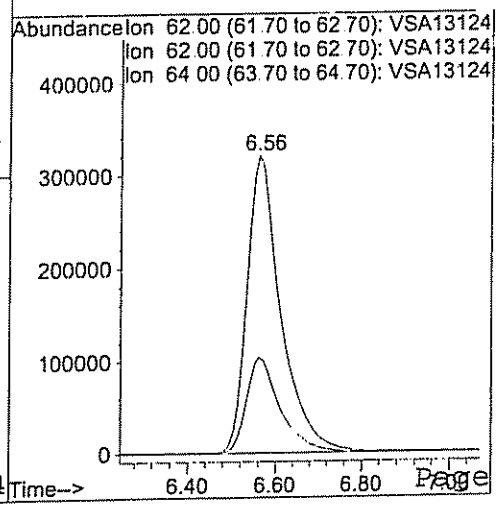


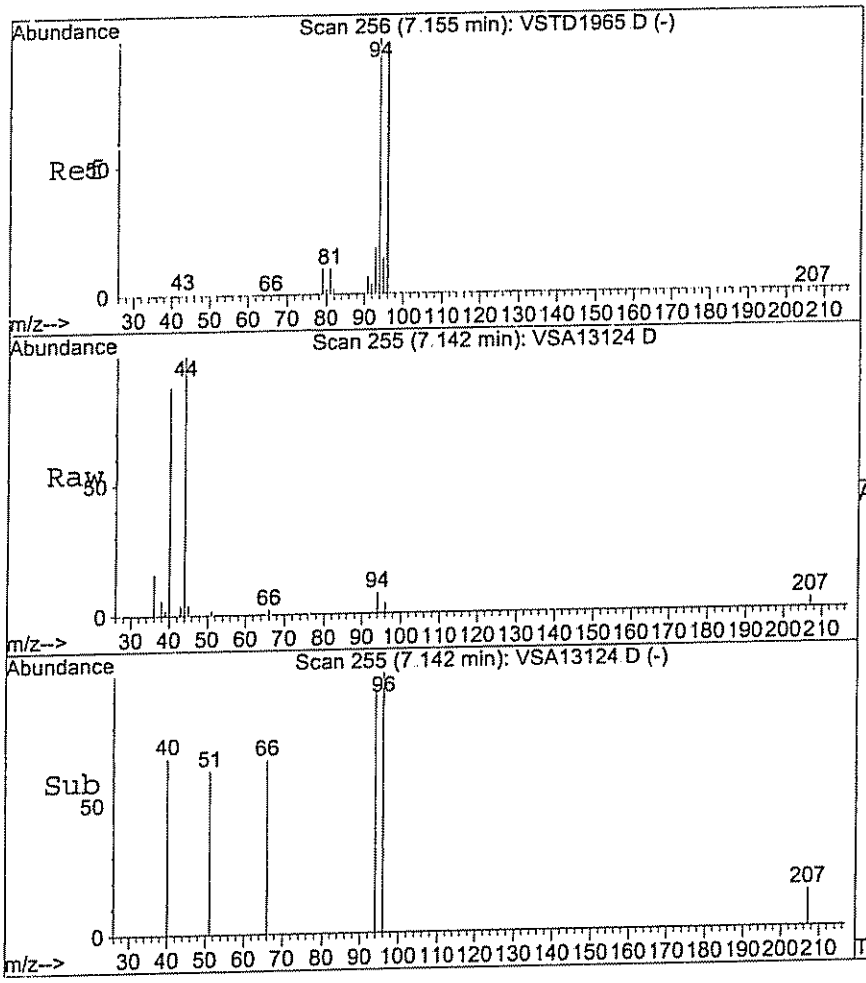


#3
Vinyl chloride
Concen: 473.08 ug/L
RT: 6.56 min Scan# 196
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 62 Resp: 1743780

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	32.4	2.0	62.0

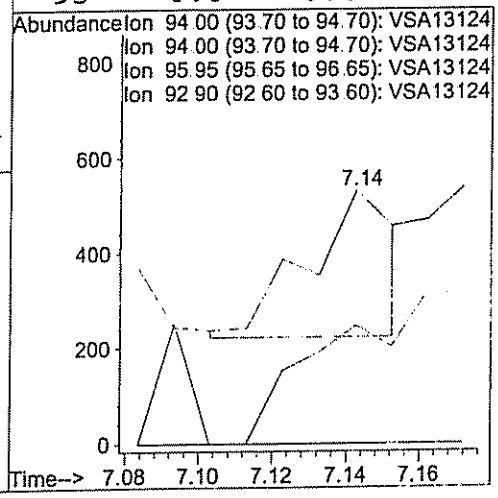


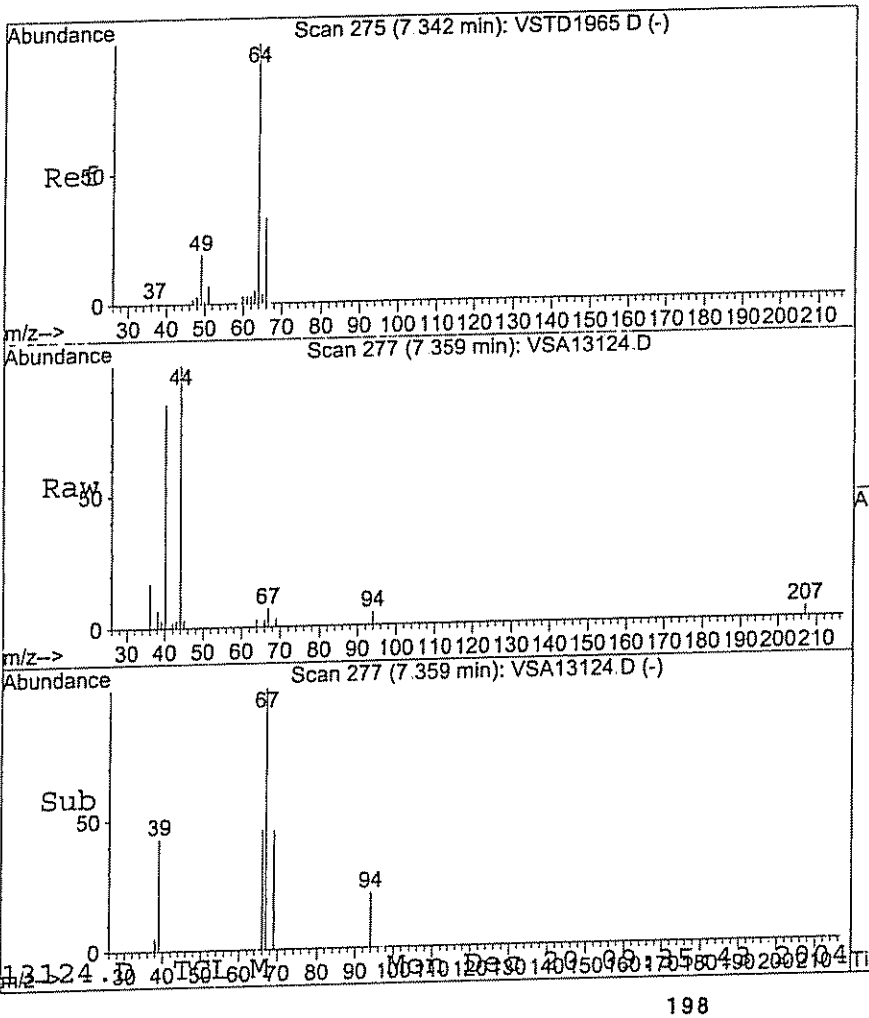


#4
Bromomethane
Concen: 0.23 ug/L
RT: 7.14 min Scan# 255
Delta R.T. -0.04 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 94 Resp: 506

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	78.6	70.5	130.5
93	0.0	0.0	50.2

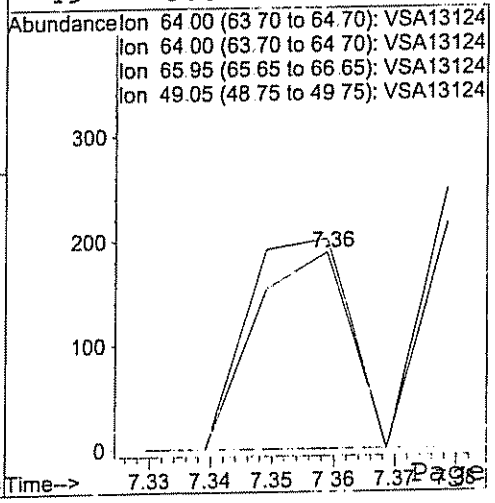


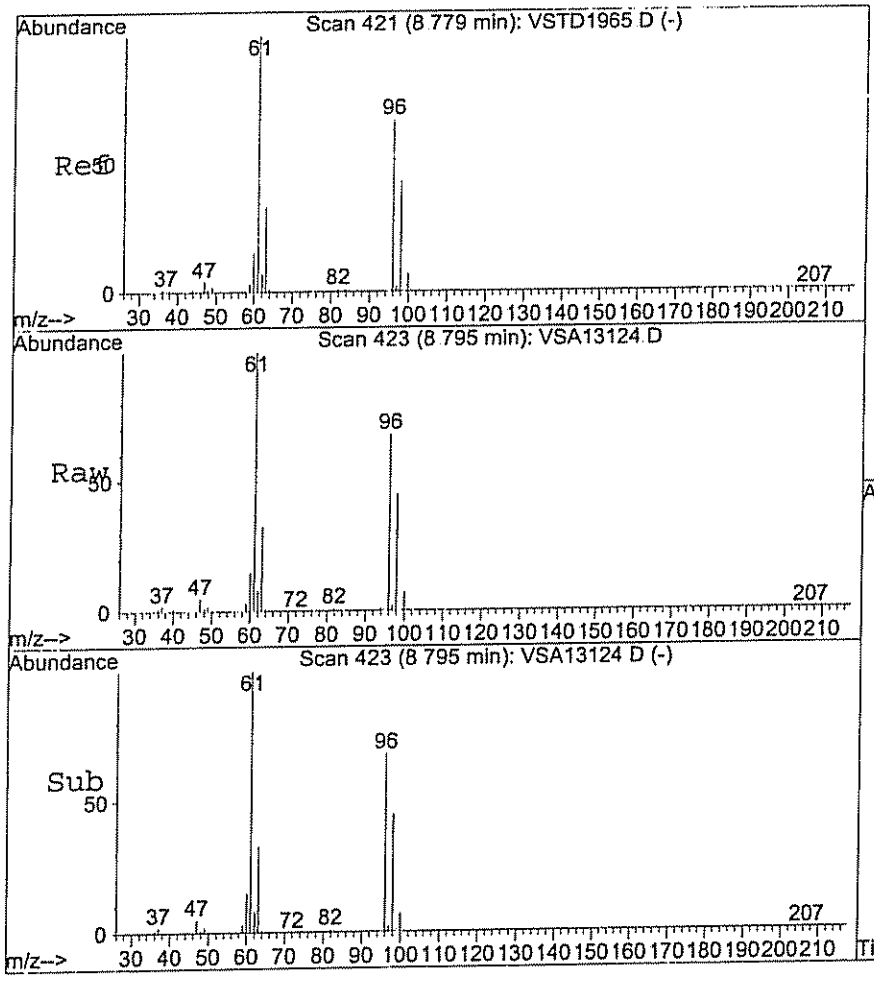


#5
Chloroethane
Concen: 0.08 ug/L
RT: 7.36 min Scan# 277
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 64 Resp: 201

Ion	Ratio	Lower	Upper
64	100		
64	100.0	70.0	130.0
66	106.9	1.9	61.9#
49	0.0	0.0	49.6

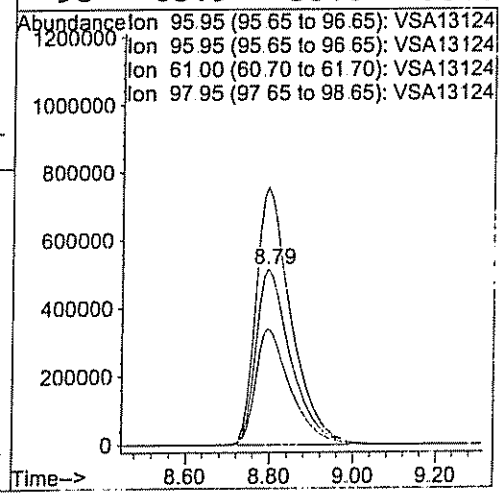


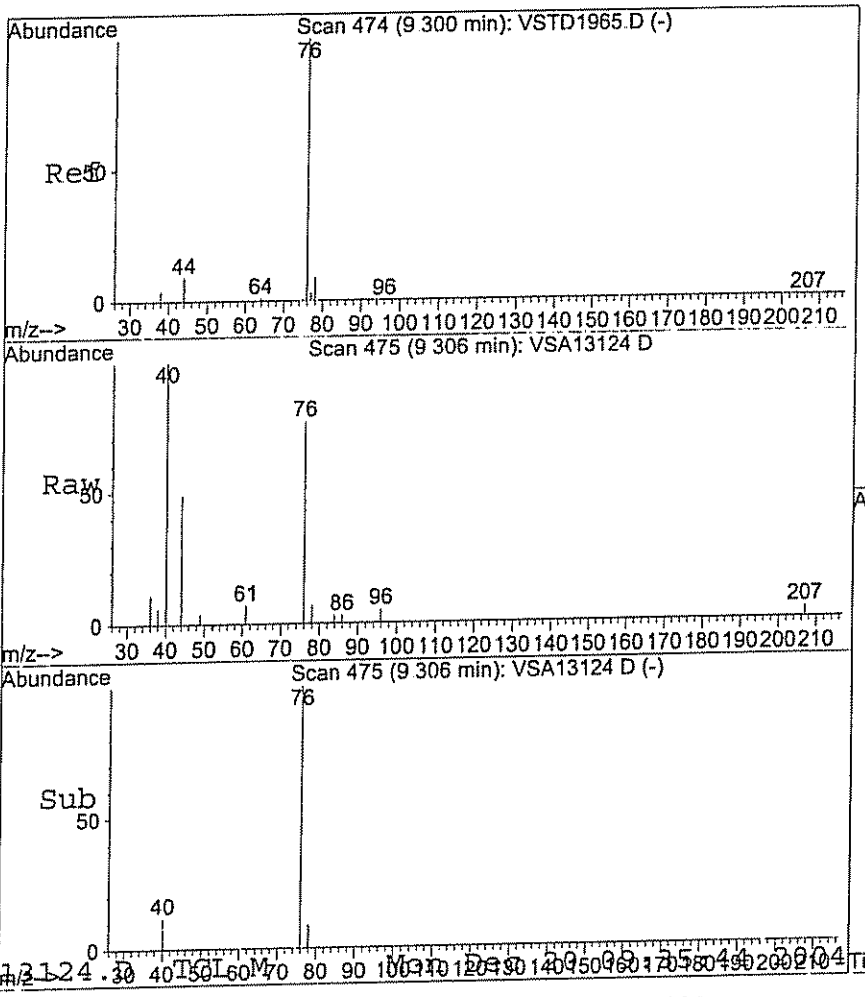


#6
1,1-Dichloroethene
Concen: 1038.89 ug/L
RT: 8.79 min Scan# 423
Delta R.T. -0.00 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 96 Resp: 2969466

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	146.6	108.4	168.4
98	65.9	35.8	95.8

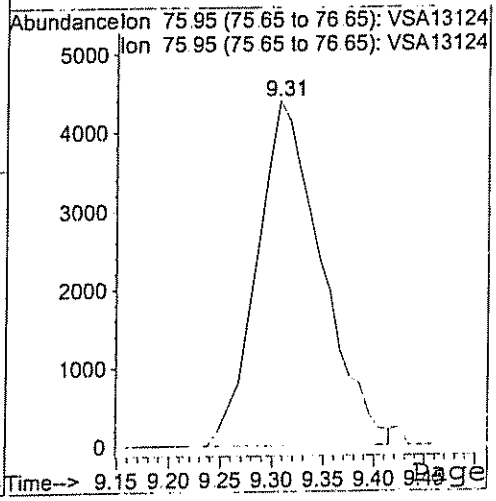


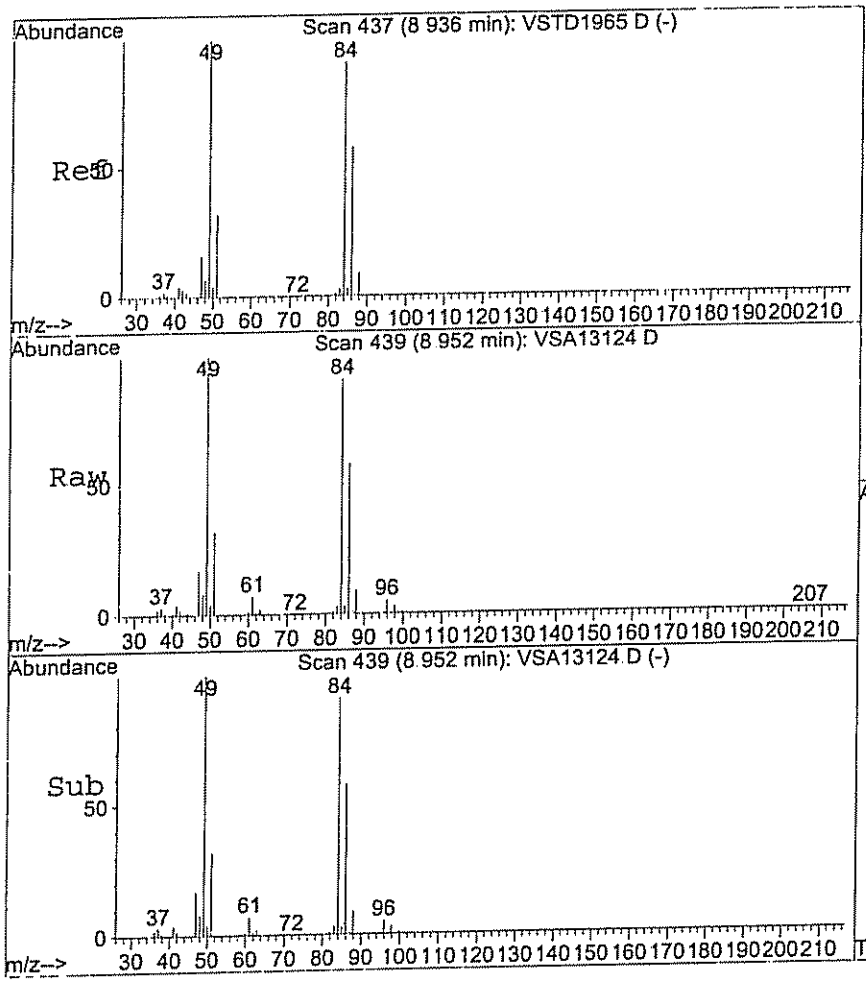


#7
Carbon disulfide
Concen: 1.93 ug/L
RT: 9.31 min Scan# 475
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 76 Resp: 19186

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

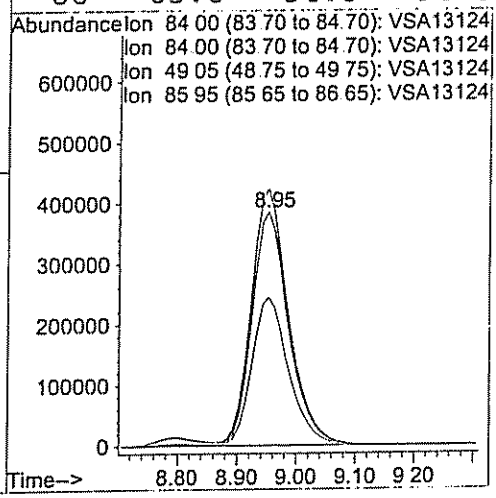


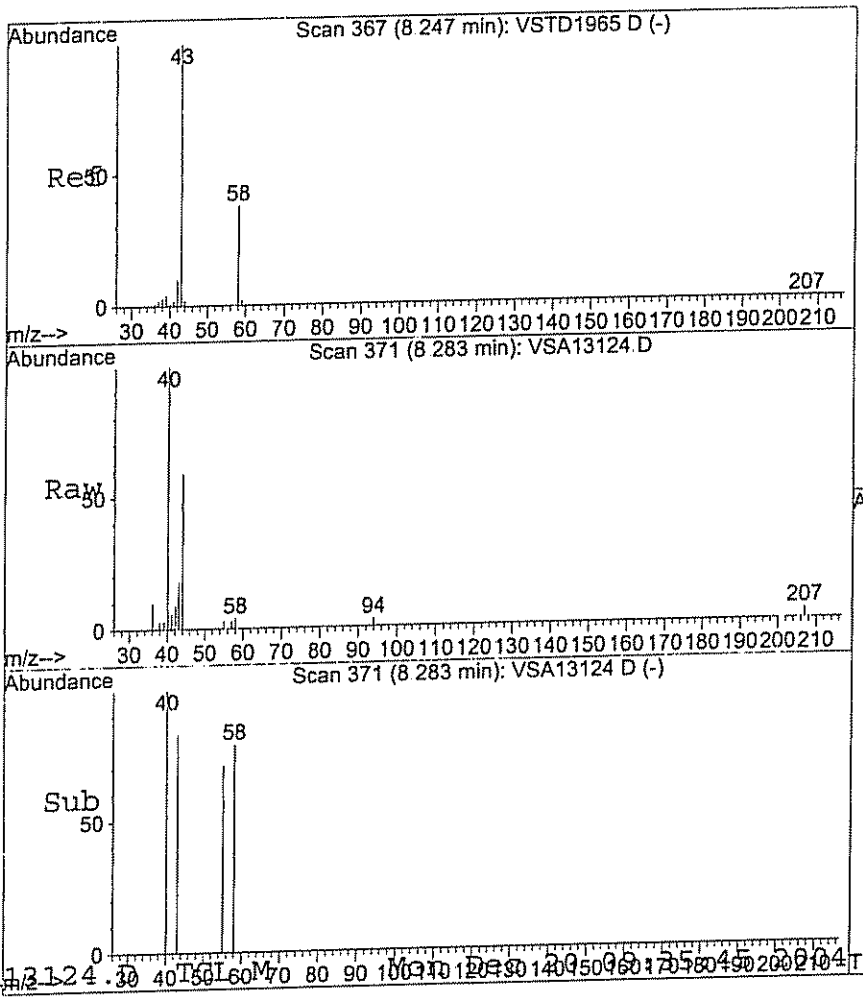


#8
Methylene chloride
Concen: 504.46 ug/L
RT: 8.95 min Scan# 439
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 84 Resp: 1680392

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	109.3	76.9	136.9
86	63.6	34.8	94.8

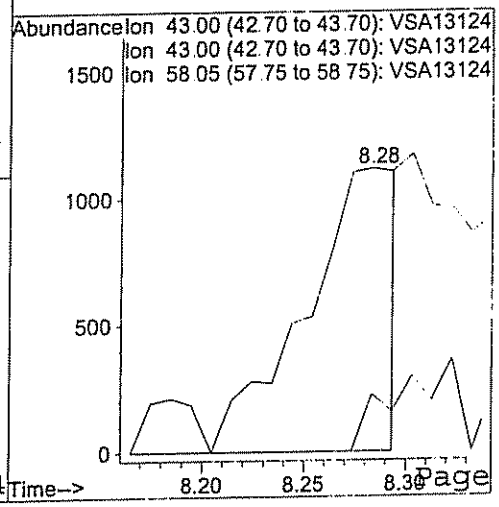


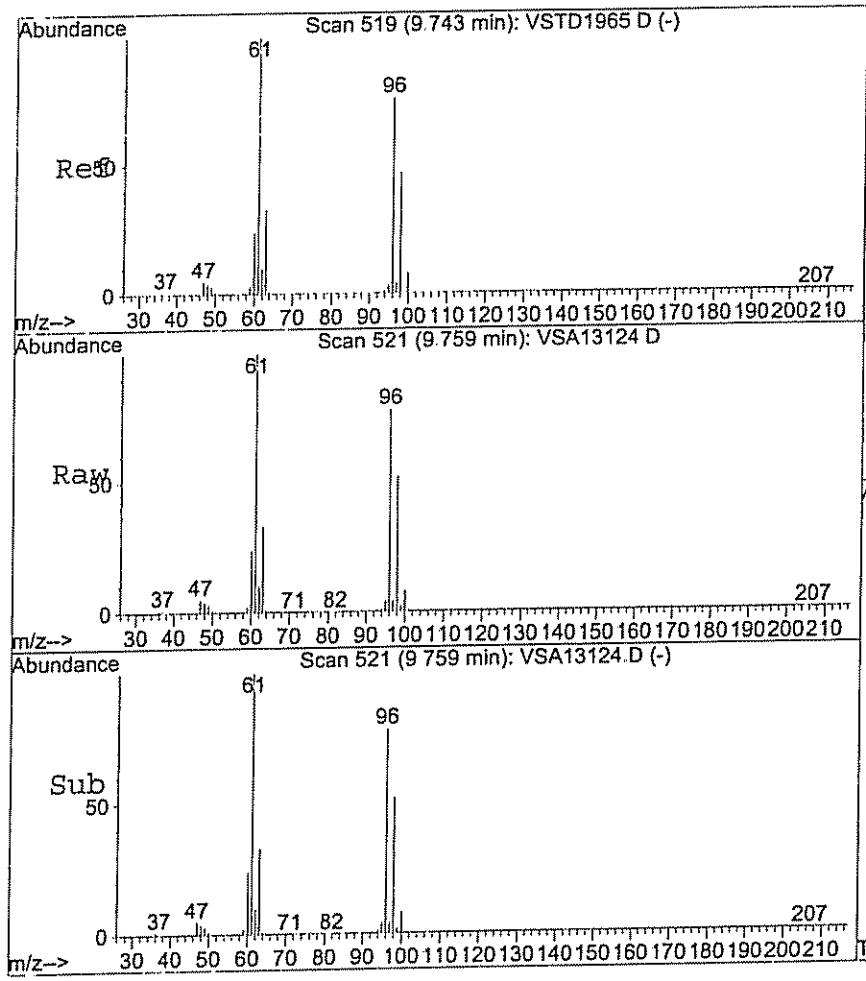


#9
Acetone
Concen: 4.16 ug/L
RT: 8.28 min Scan# 371
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 43 Resp: 3483

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	26.2	6.8	66.8

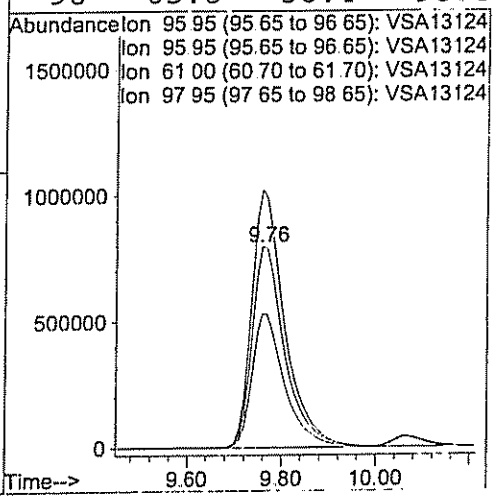


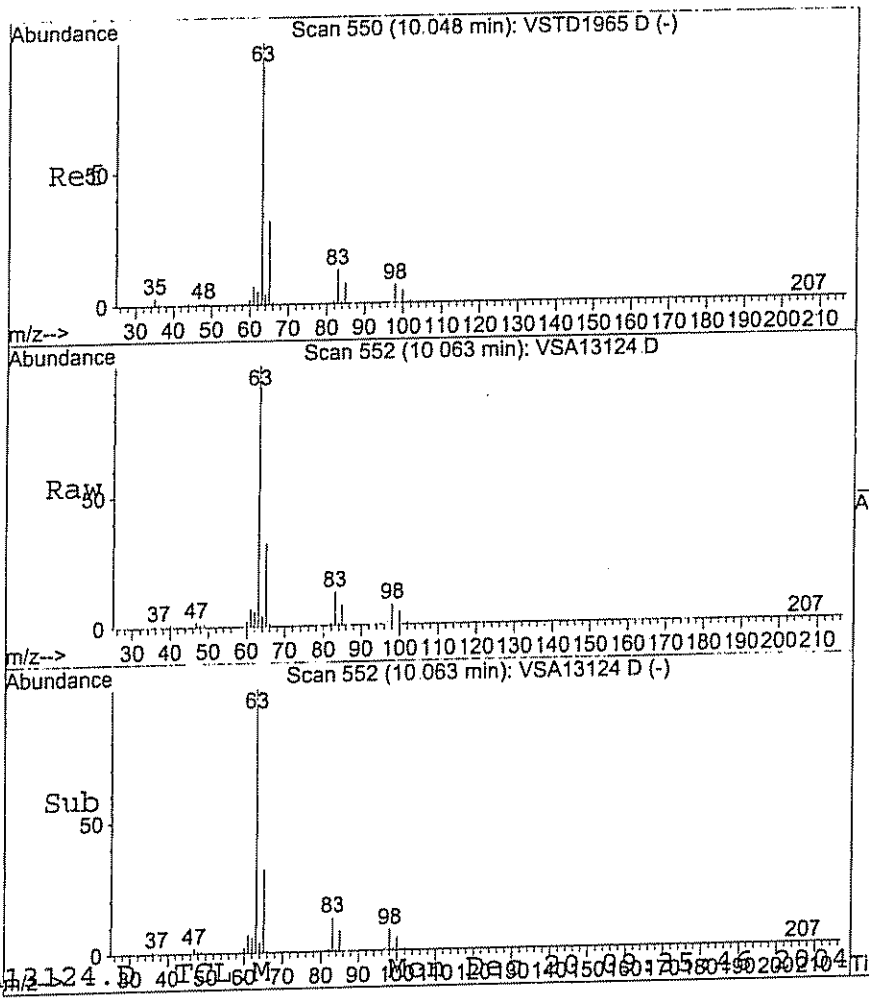


#10
trans-1,2-Dichloroethene
Concen: 1183.21 ug/L
RT: 9.76 min Scan# 521
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 96 Resp: 3884715

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	128.0	93.5	153.5
98	65.8	36.4	96.4

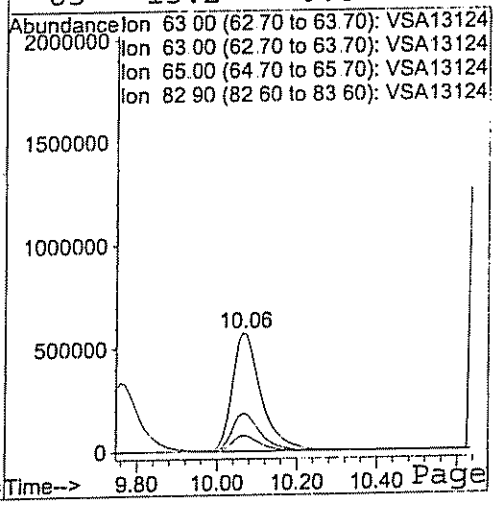


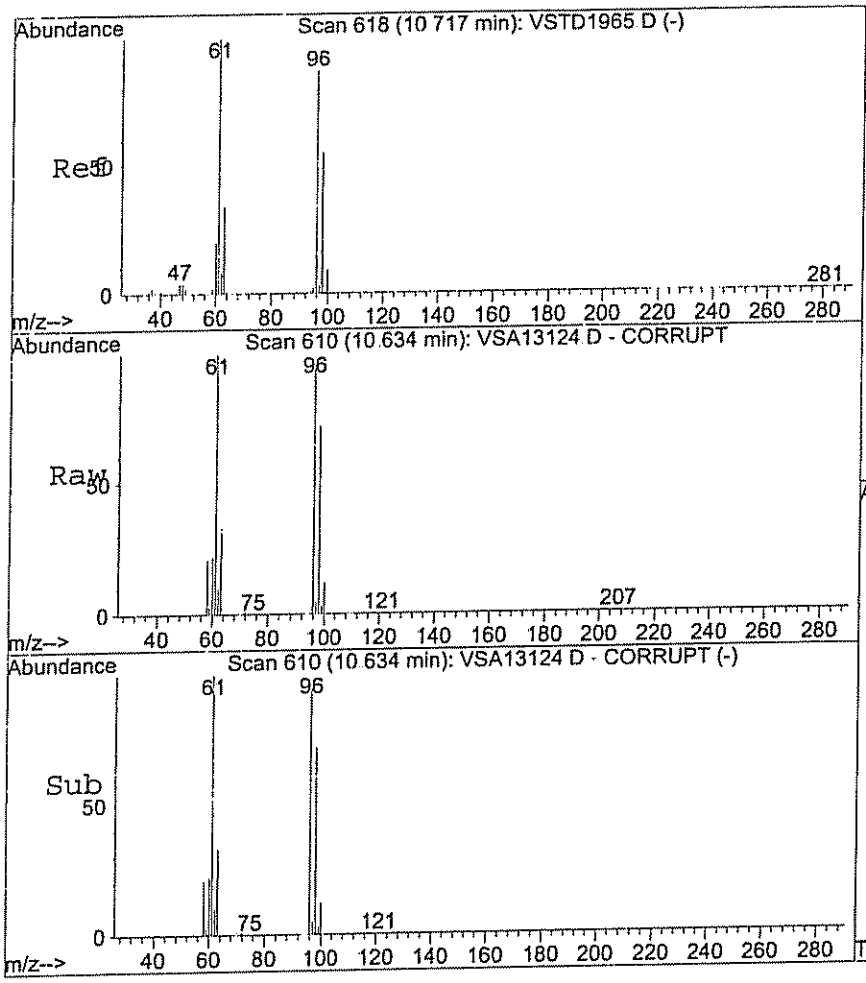


#12
1,1-Dichloroethane
Concen: 570.92 ug/L
RT: 10.06 min Scan# 552
Delta R.T. -0.00 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 63 Resp: 2892330

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	31.6	2.8	62.8
83	13.2	0.0	43.5

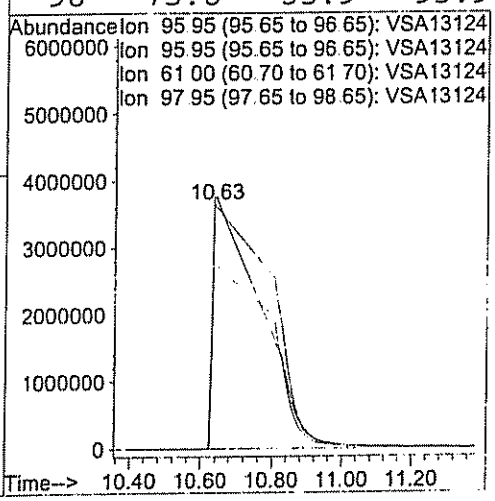


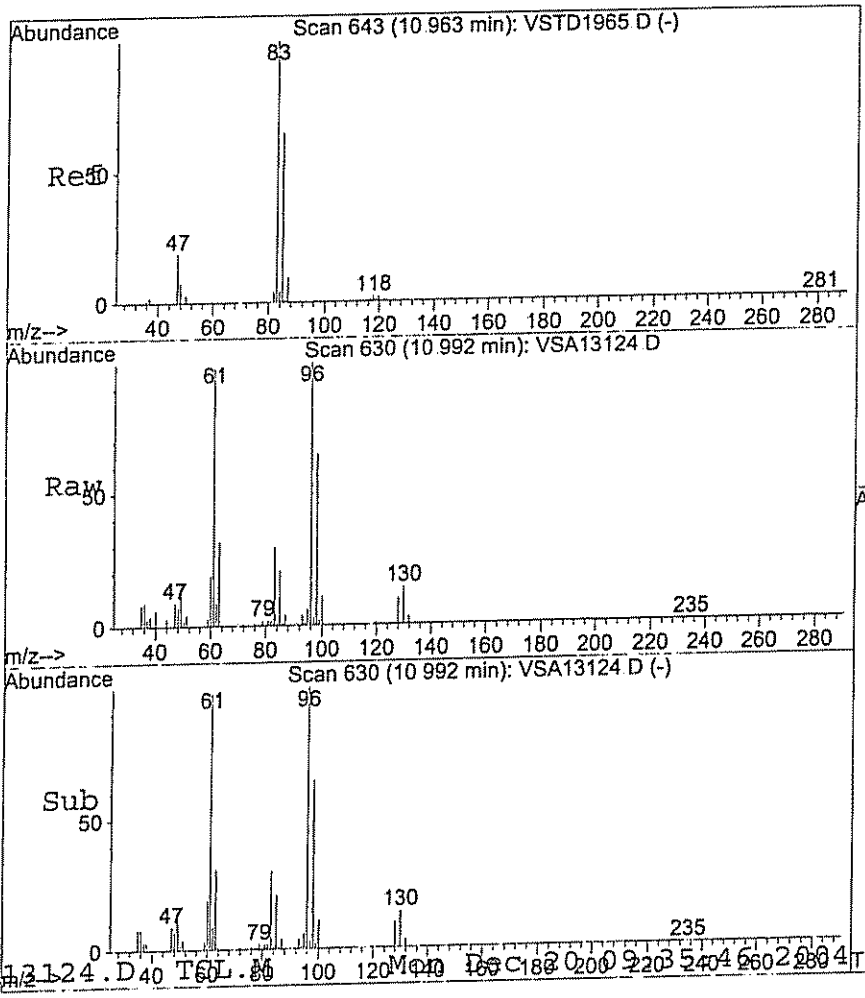


#13
cis-1,2-Dichloroethene
Concen: 3806.76 ug/L
RT: 10.63 min Scan# 610
Delta R.T. -0.10 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 96 Resp:14938064

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	104.7	81.4	141.4
98	75.8	35.9	95.9

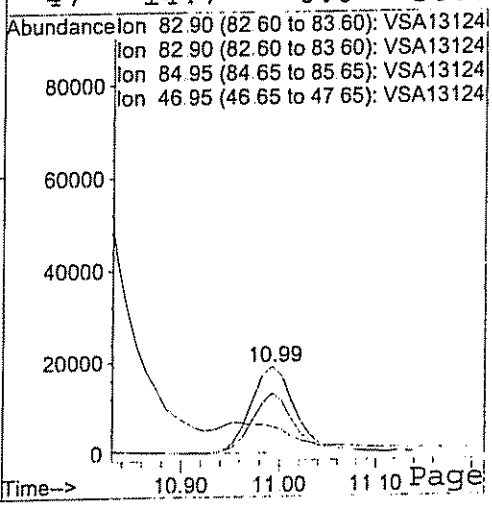


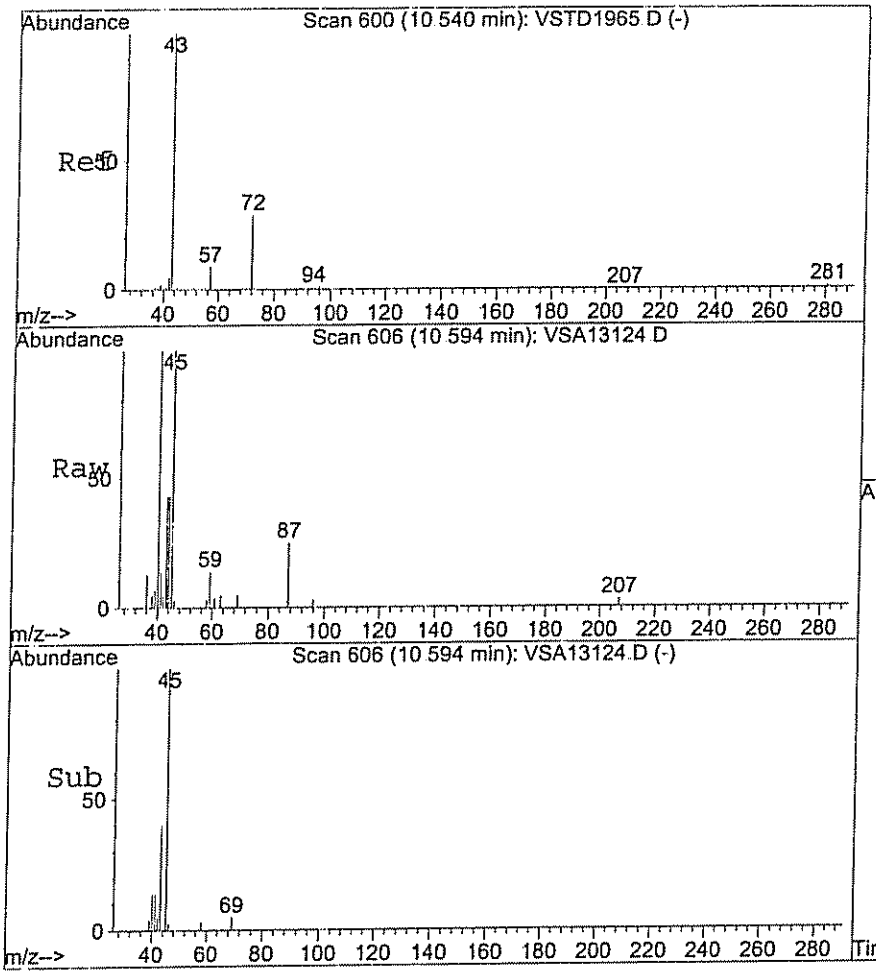


#14
Chloroform
Concen: 12.34 ug/L
RT: 10.99 min Scan# 630
Delta R.T. 0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 83 Resp: 59416

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	68.8	35.2	95.2
47	14.7	0.0	50.7

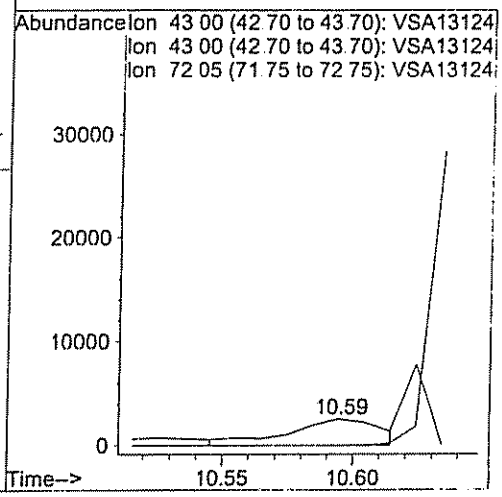


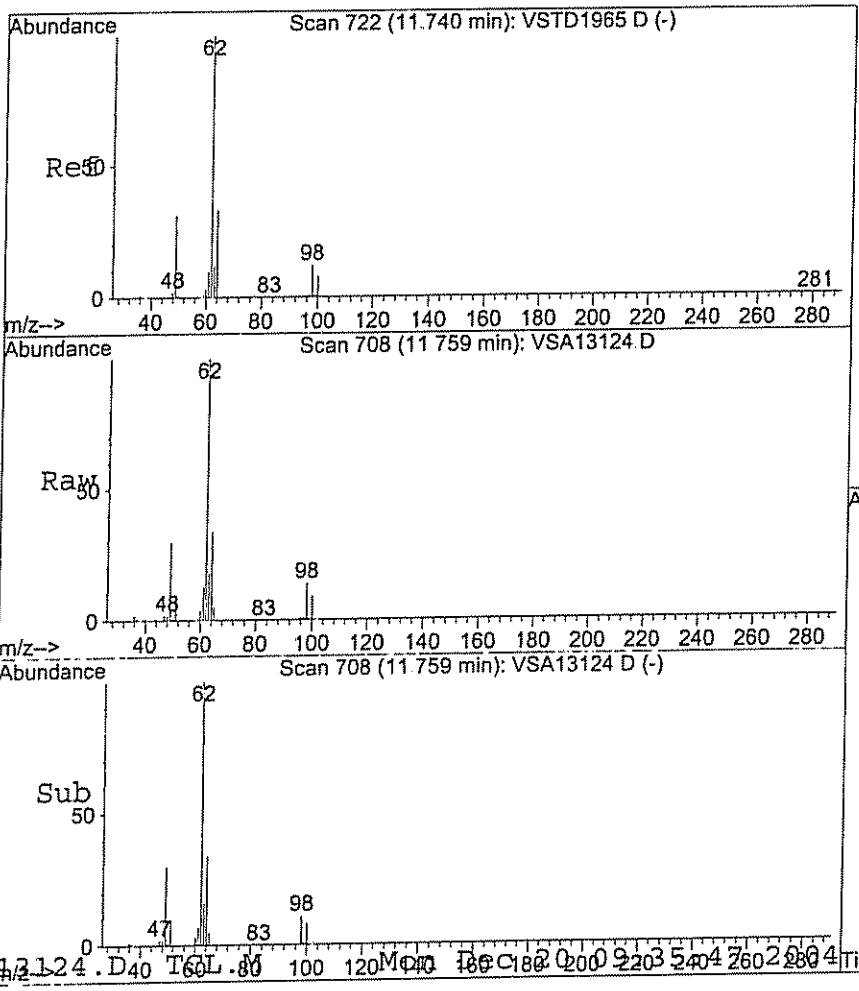


#15
2-Butanone
Concen: 5.11 ug/L
RT: 10.59 min Scan# 606
Delta R.T. 0.02 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 43 Resp: 6291

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	57.1

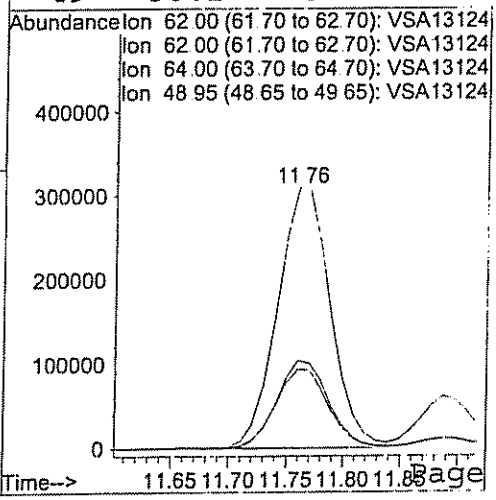


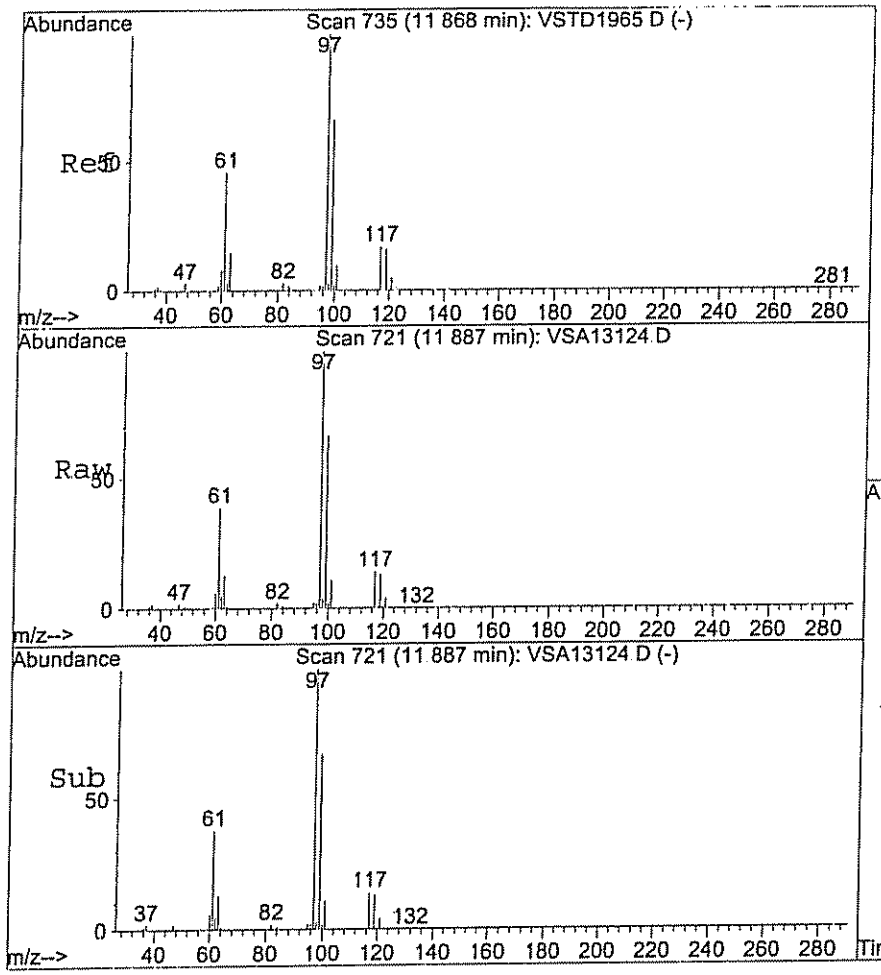


#17
1,2-Dichloroethane
Concen: 298.99 ug/L
RT: 11.76 min Scan# 708
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 62 Resp: 996872

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	33.6	2.3	62.3
49	30.1	0.0	58.2

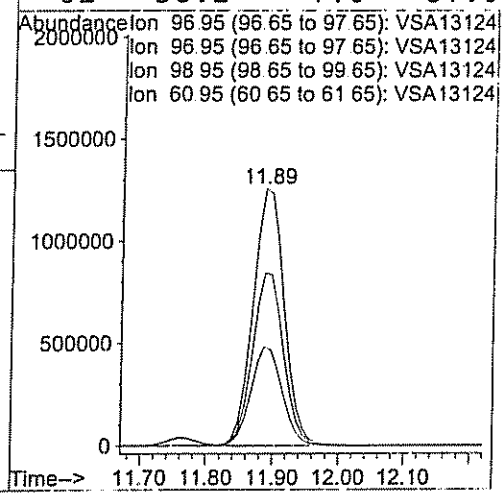


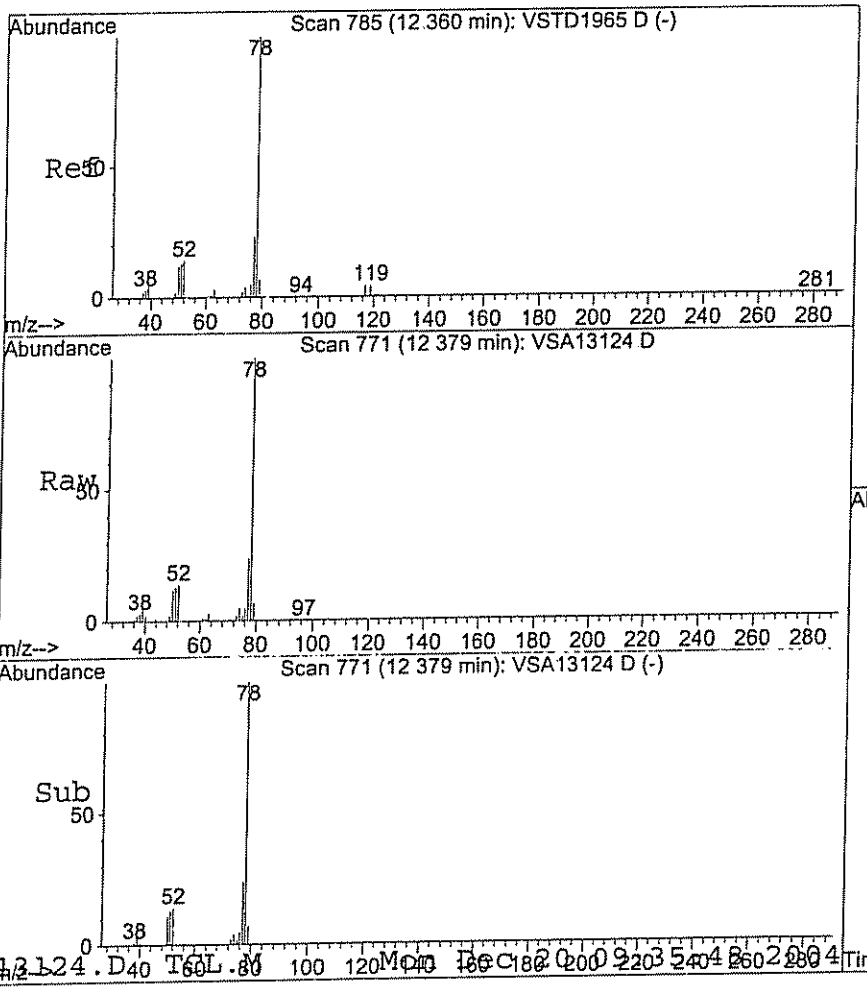


#20
1,1,1-Trichloroethane
Concen: 951.92 ug/L
RT: 11.89 min Scan# 721
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 97 Resp: 4143403

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	67.0	36.4	96.4
61	38.2	7.0	67.0

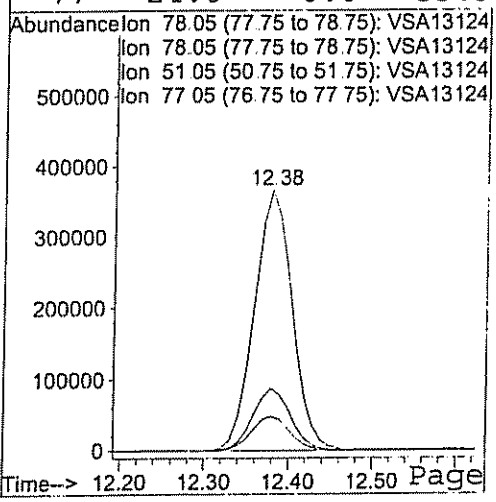


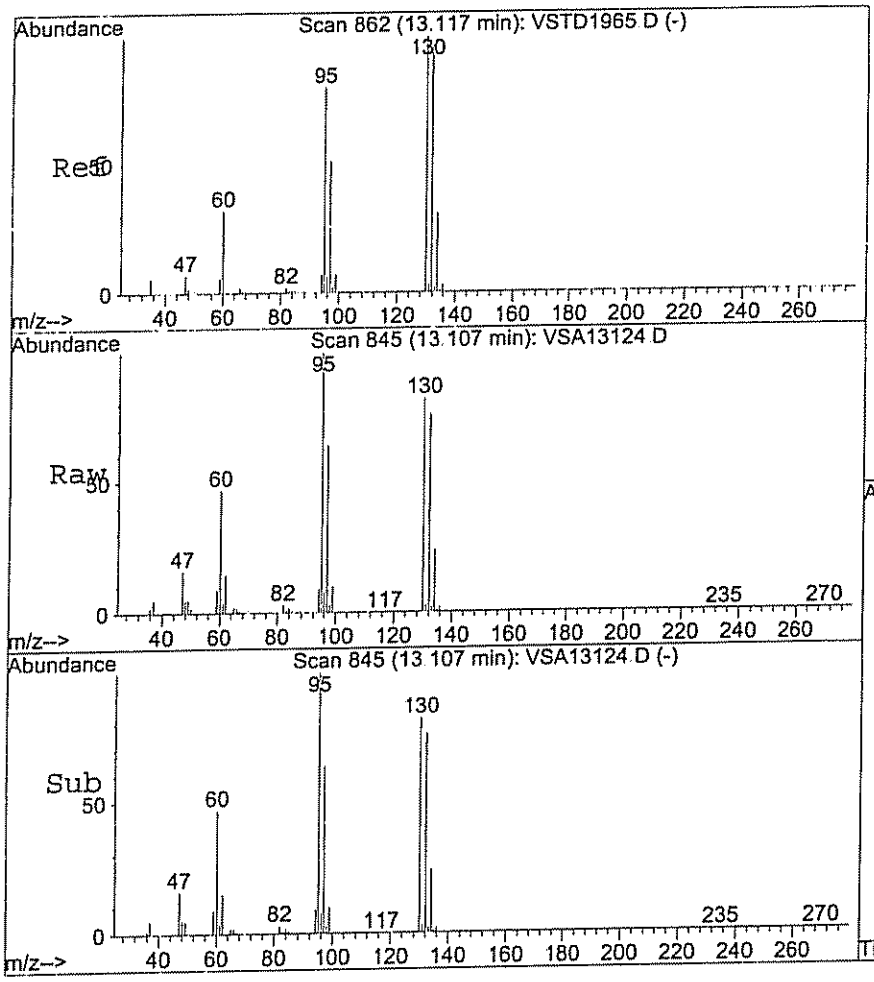


#21
Benzene
Concen: 92.54 ug/L
RT: 12.38 min Scan# 771
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 78 Resp: 1148501

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	13.1	0.0	42.7
77	24.0	0.0	53.3

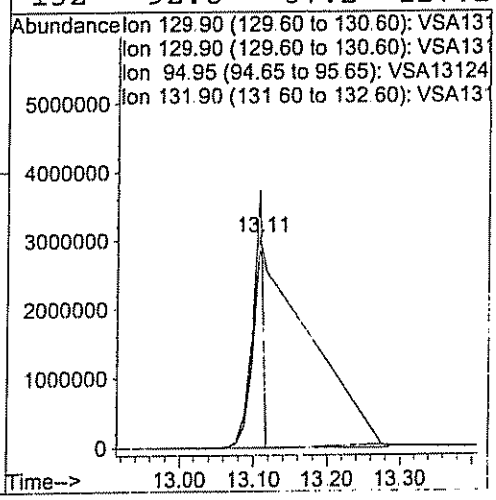


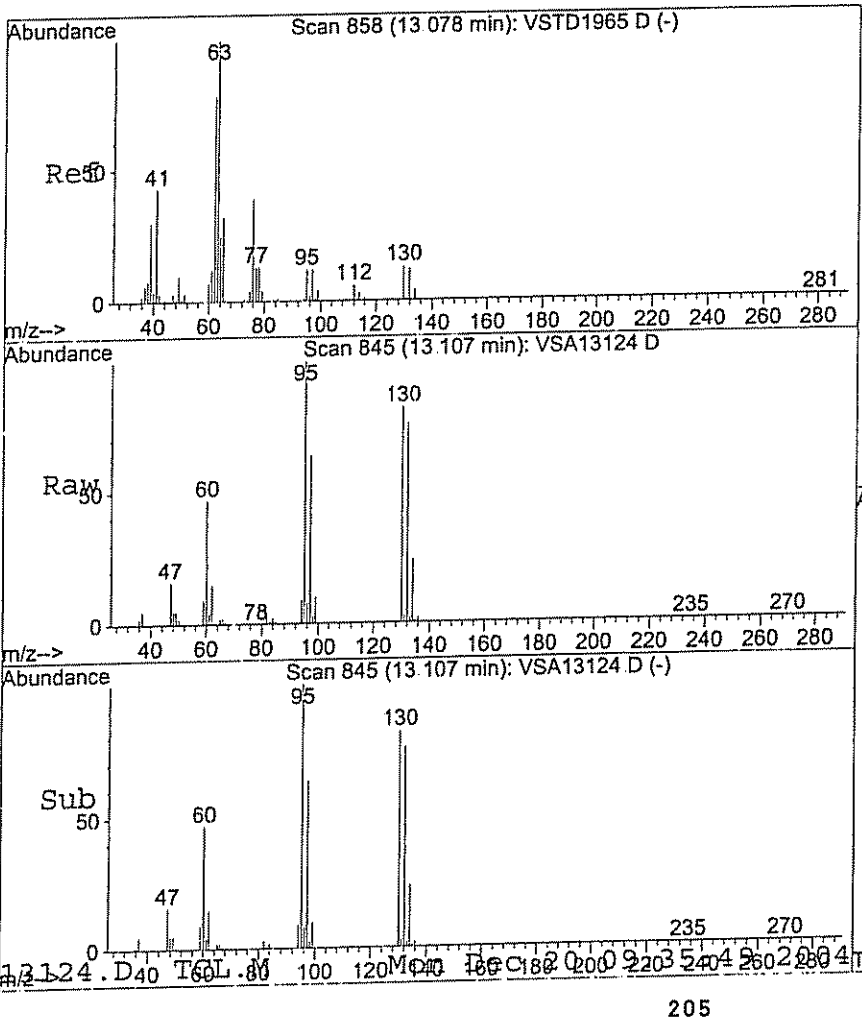


#22
Trichloroethene
Concen: 3955.73 ug/L
RT: 13.11 min Scan# 845
Delta R.T. -0.04 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion:130 Resp:10870545

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	122.3	84.6	144.6
132	92.8	67.2	127.2

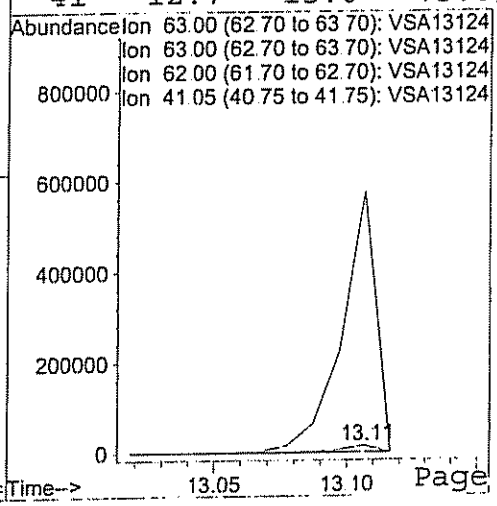


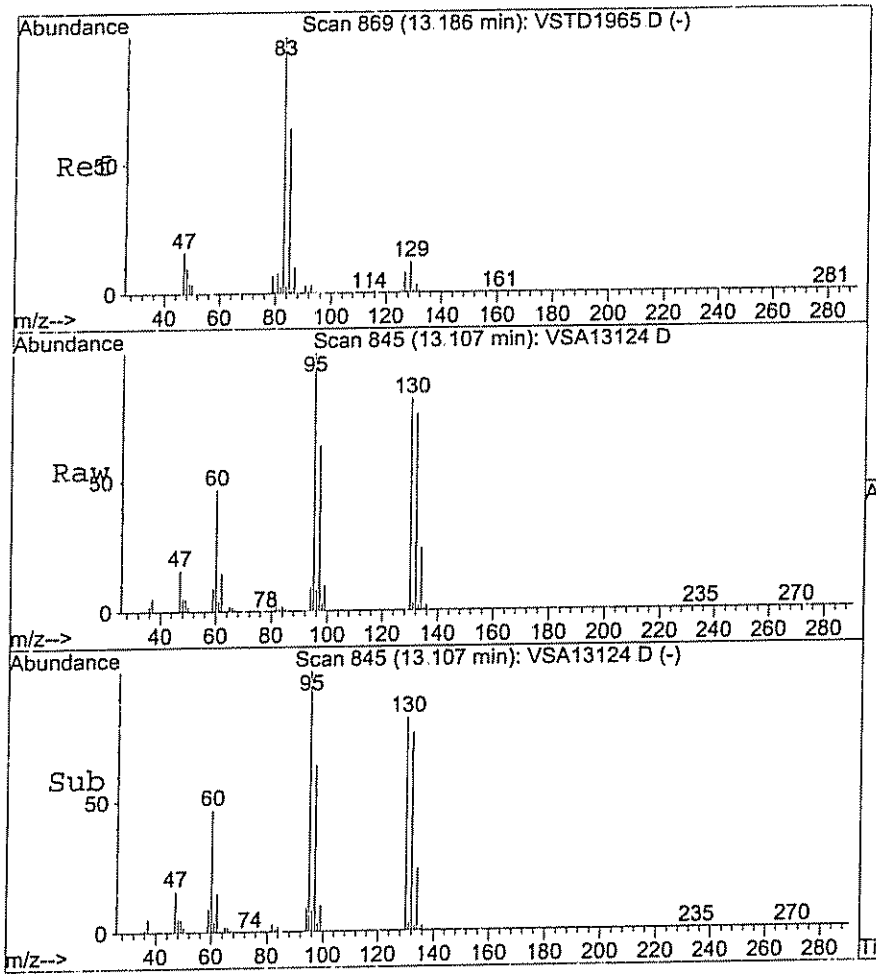


#23
1,2-Dichloropropane
Concen: 4.74 ug/L
RT: 13.11 min Scan# 845
Delta R.T. 0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 63 Resp: 14752

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
62	3762.5	44.6	104.6#
41	12.7	15.0	75.0#

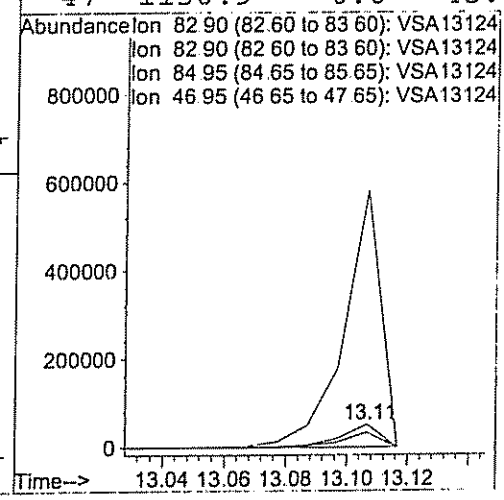


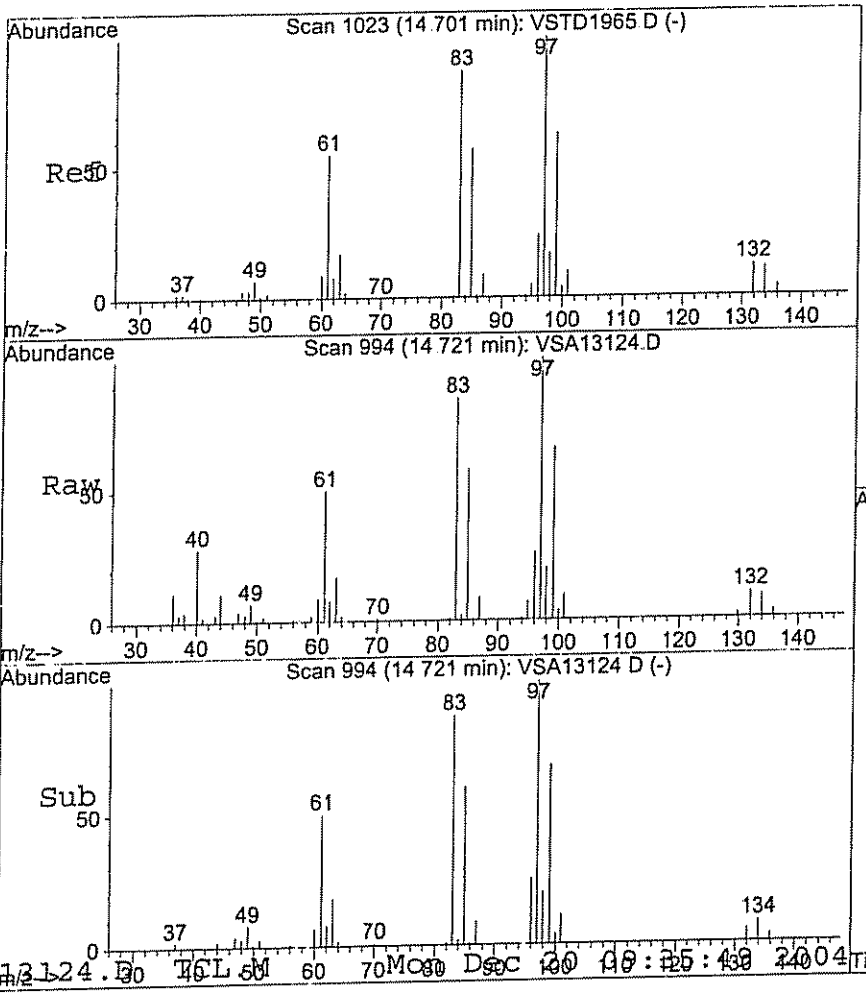


#24
Bromodichloromethane
Concen: 11.76 ug/L
RT: 13.11 min Scan# 845
Delta R.T. -0.10 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 83 Resp: 45470

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	64.6	33.5	93.5
47	1130.9	0.0	45.4#

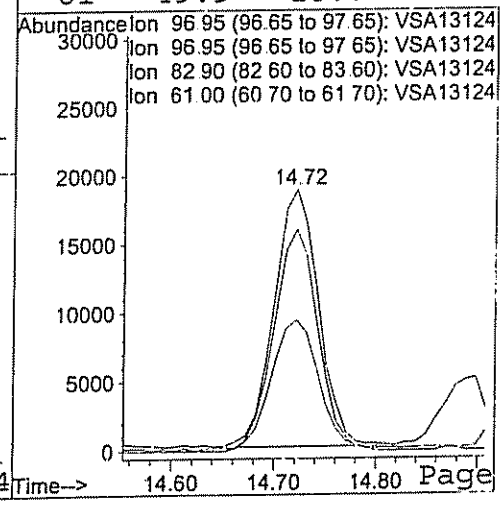


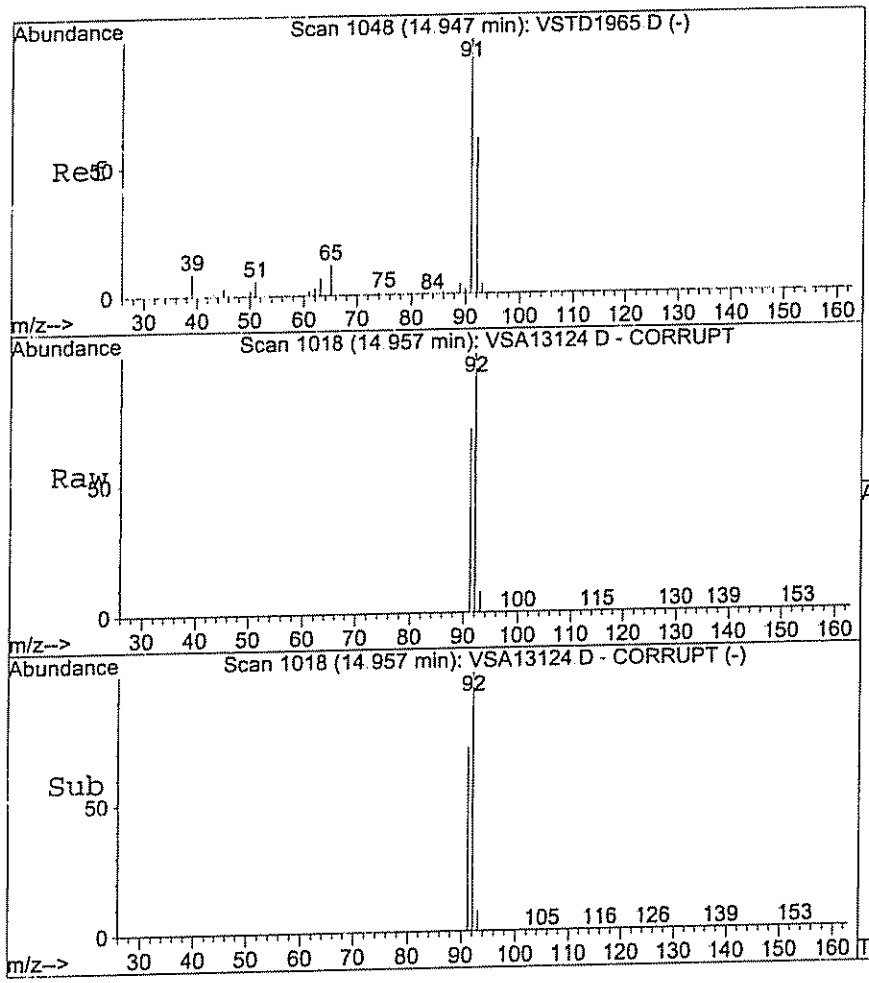


#27
1,1,2-Trichloroethane
Concen: 19.96 ug/L
RT: 14.72 min Scan# 994
Delta R.T. -0.00 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 97 Resp: 56434

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	86.3	50.2	110.2
61	49.9	18.7	78.7

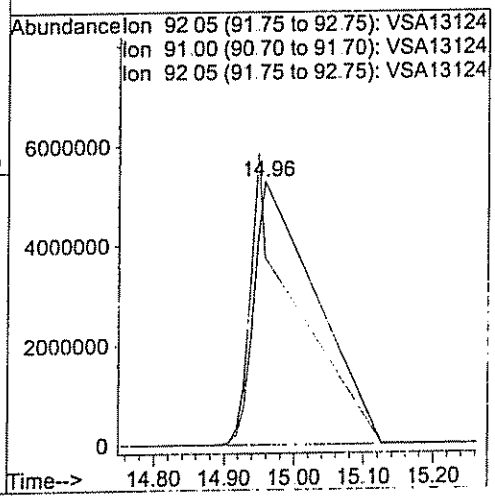


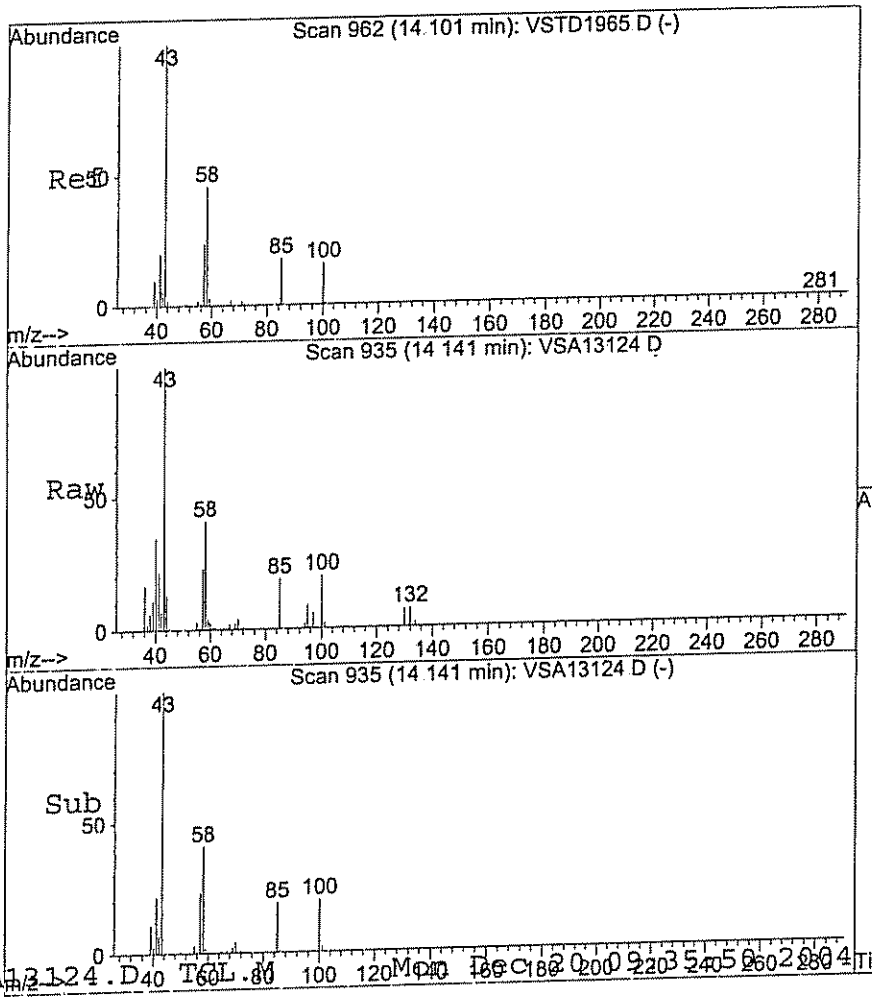


#33
Toluene
Concen: 2574.19 ug/L
RT: 14.96 min Scan# 1018
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 92 Resp:19361311

Ion	Ratio	Lower	Upper
92	100		
91	70.9	132.3	192.3#
92	100.0	70.0	130.0

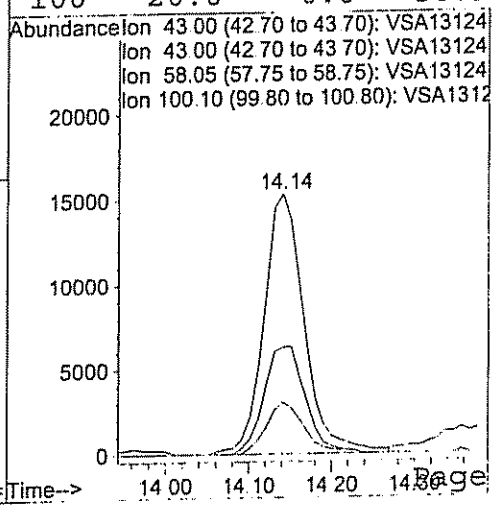


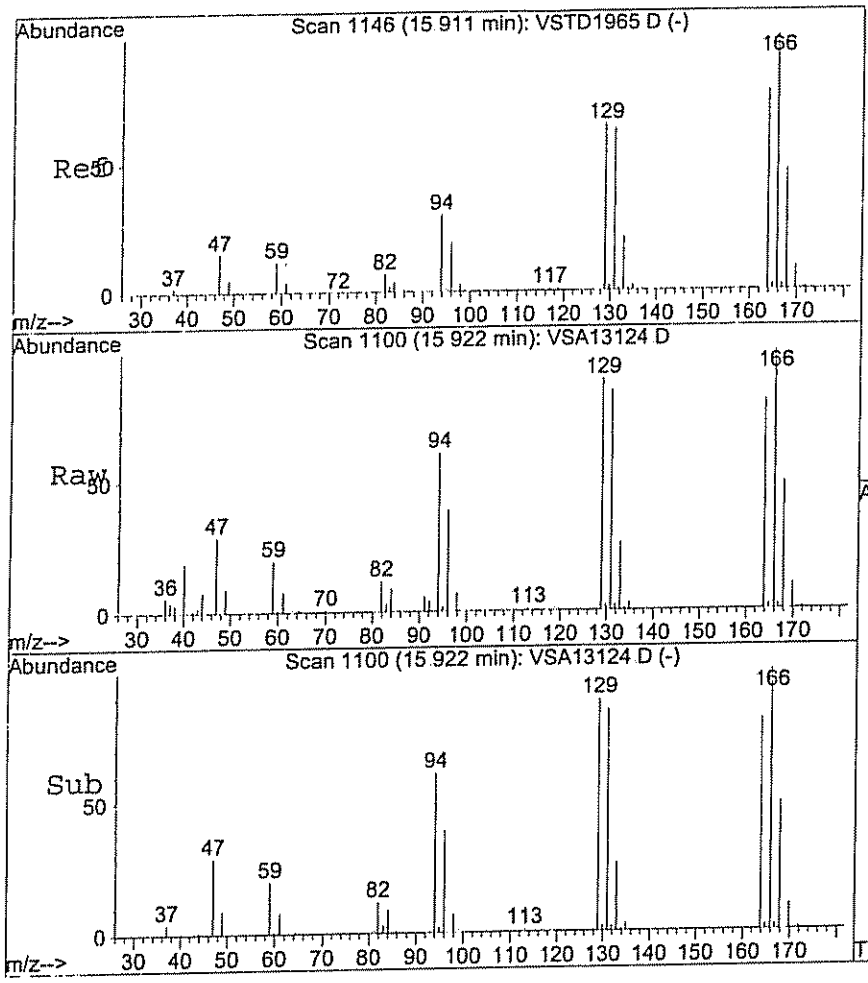


#34
4-methyl-2-Pentanone
Concen: 21.96 ug/L
RT: 14.14 min Scan# 935
Delta R.T. -0.00 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 43 Resp: 51447

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	41.3	15.5	75.5
100	20.0	0.0	50.9

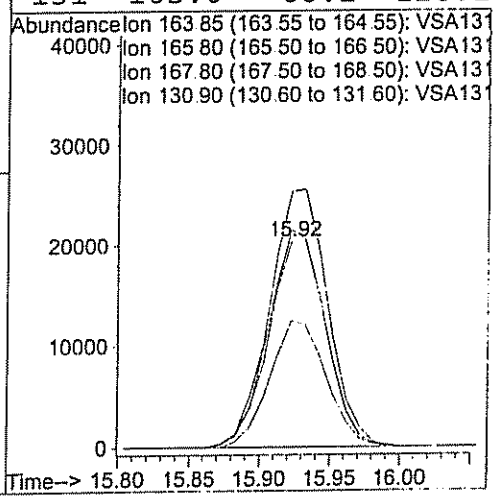


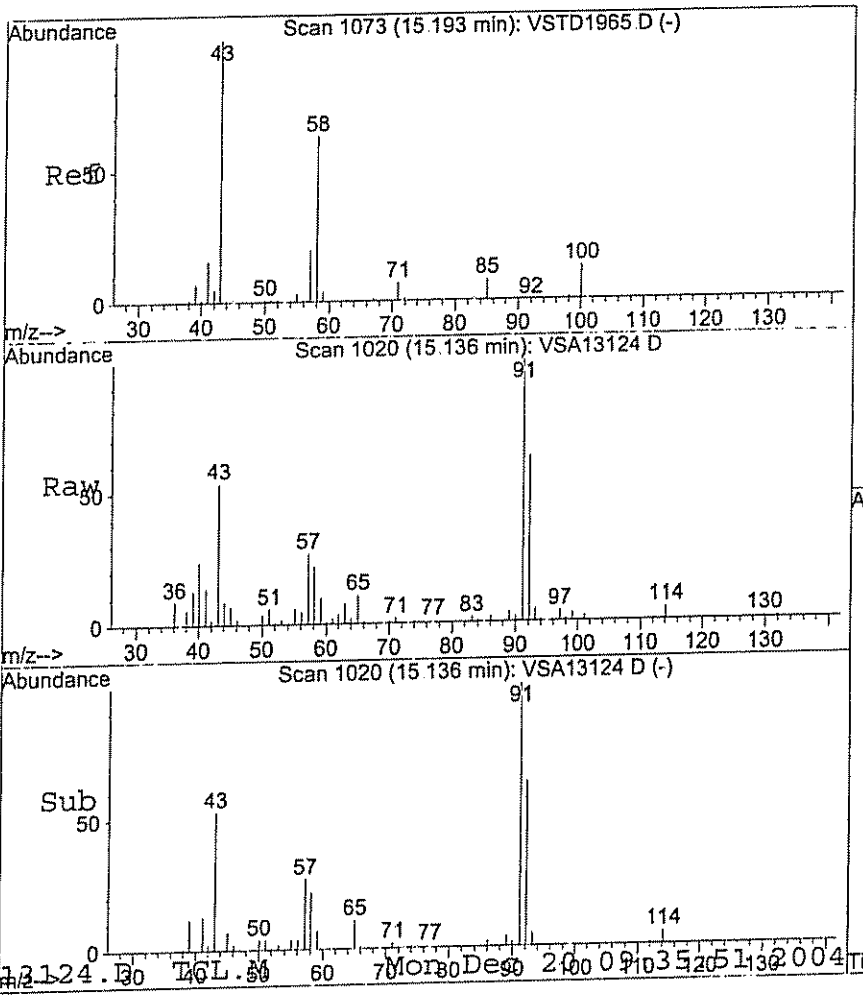


#35
Tetrachloroethene
Concen: 30.97 ug/L
RT: 15.92 min Scan# 1100
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion:164 Resp: 58495

Ion	Ratio	Lower	Upper
164	100		
166	123.6	100.8	160.8
168	60.7	30.1	90.1
131	105.0	66.1	126.1

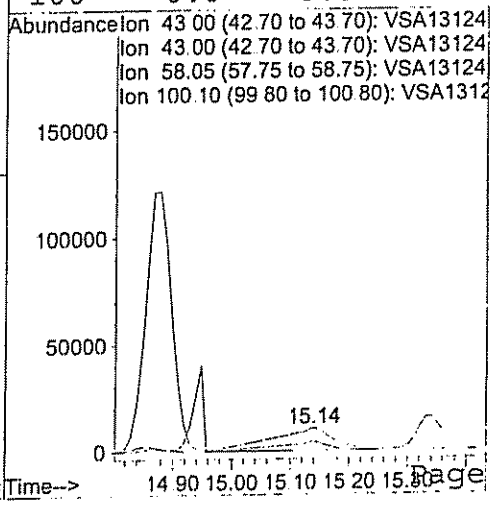


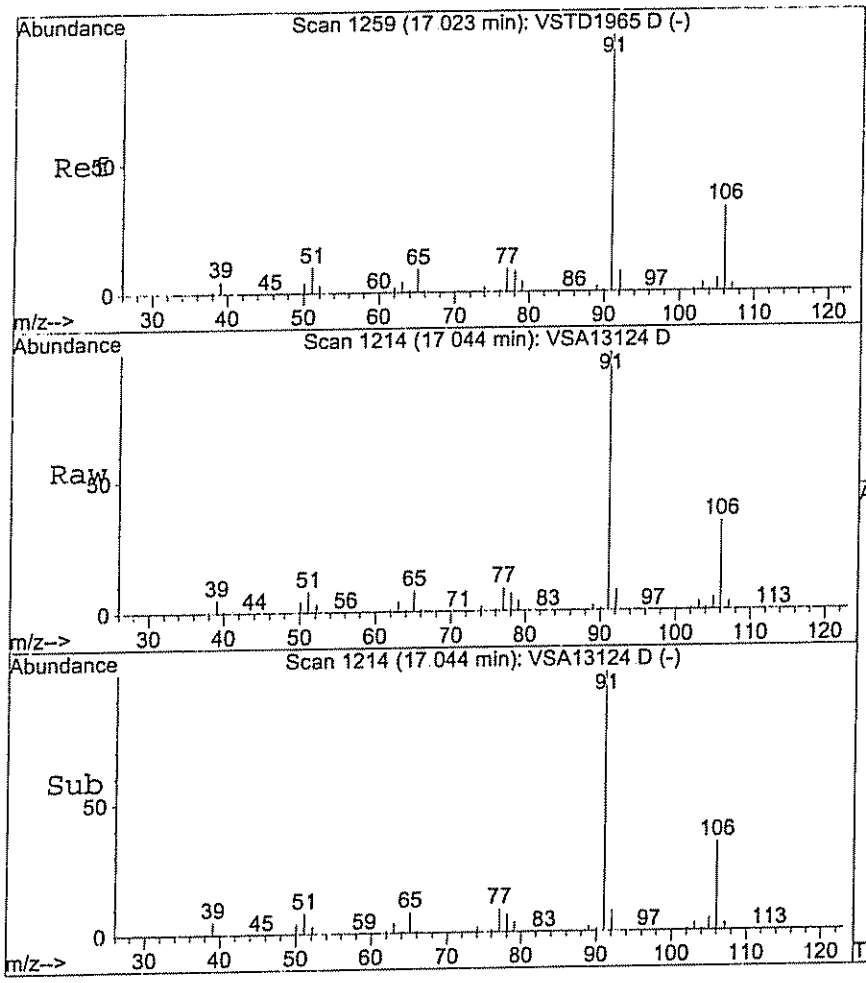


#36
2-Hexanone
Concen: 48.19 ug/L
RT: 15.14 min Scan# 1020
Delta R.T. -0.09 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 43 Resp: 77666

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	41.6	34.3	94.3
100	0.0	0.0	46.8

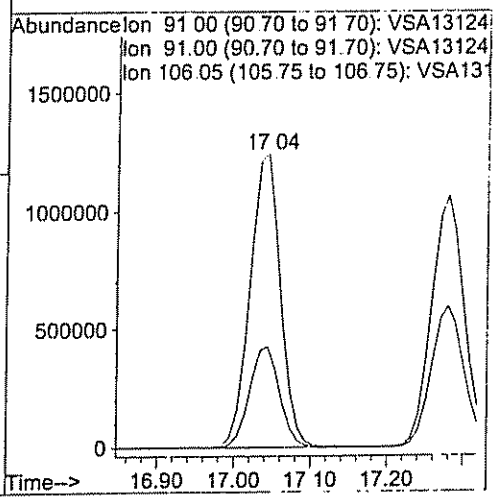


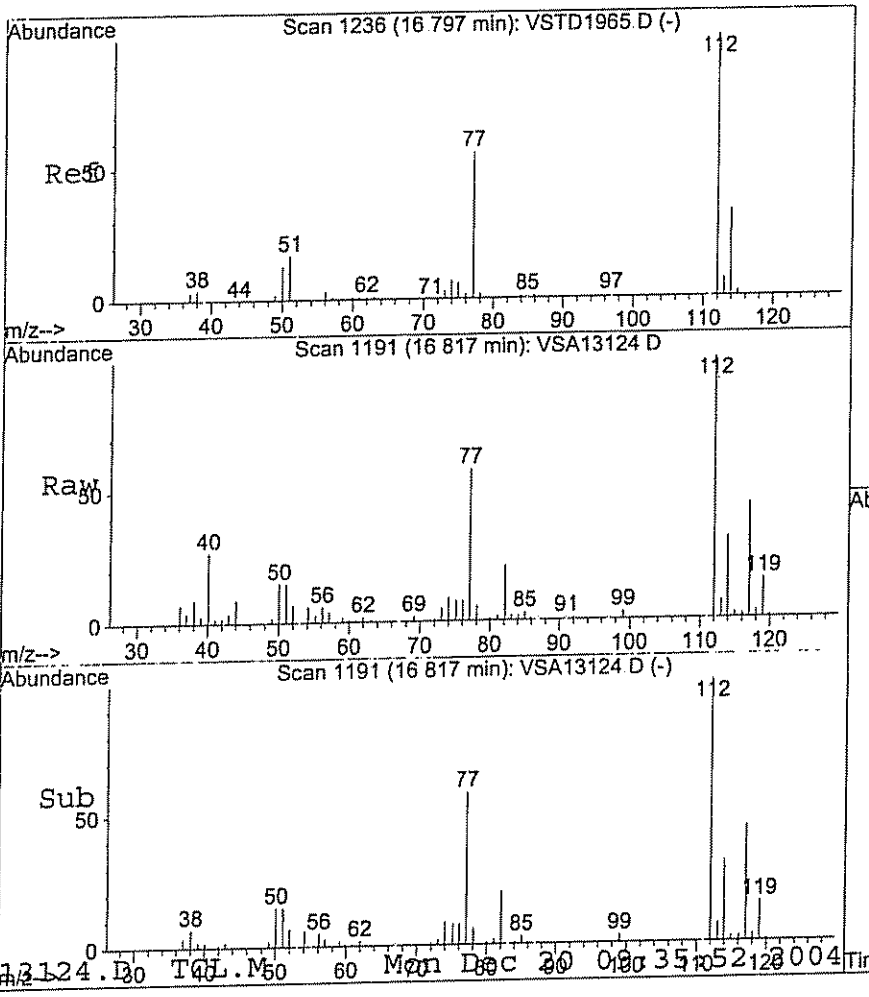


#37
Ethyl benzene
Concen: 252.00 ug/L
RT: 17.04 min Scan# 1214
Delta R.T. -0.00 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 91 Resp: 3435466

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	34.4	4.8	64.8

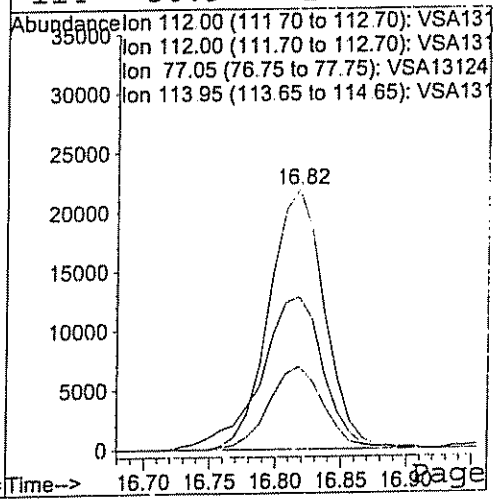


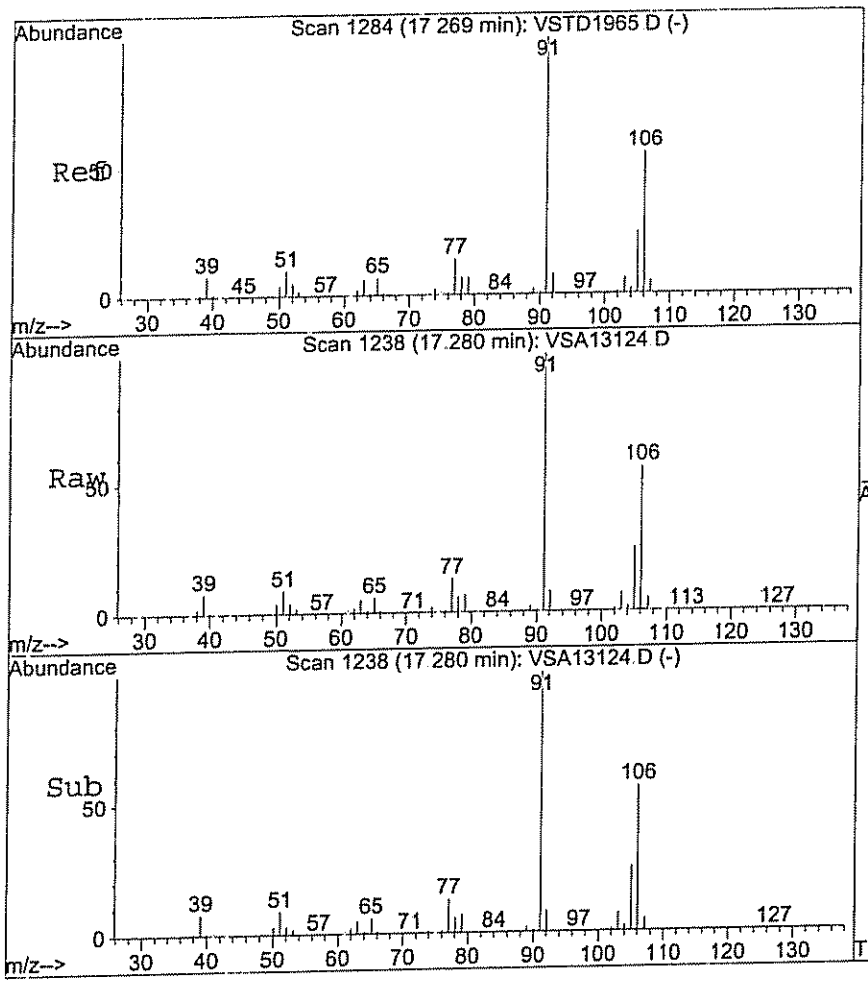


#38
Chlorobenzene
Concen: 7.50 ug/L
RT: 16.82 min Scan# 1191
Delta R.T. -0.00 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion:112 Resp: 63472

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	55.8	29.8	89.8
114	30.9	1.2	61.2

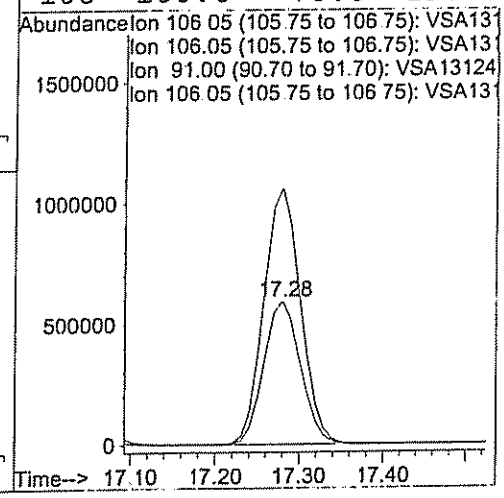


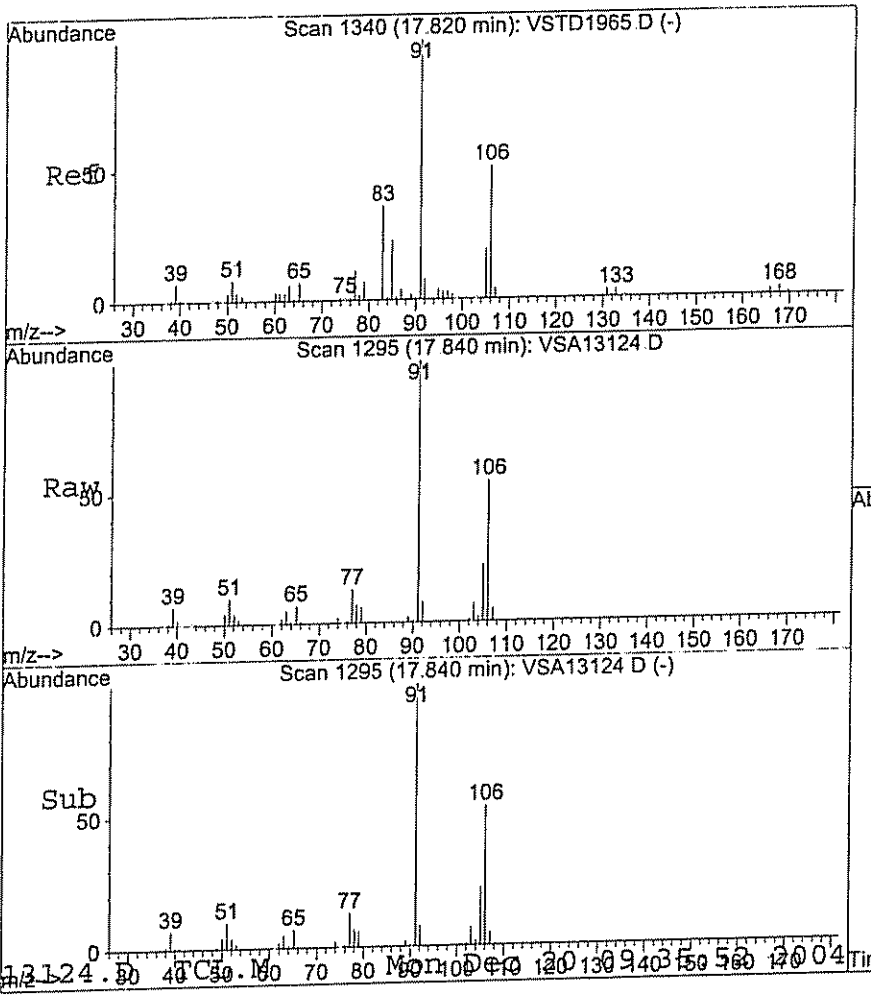


#39
m&p-Xylenes
Concen: 308.71 ug/L
RT: 17.28 min Scan# 1238
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion:106 Resp: 1798363

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	179.1	144.3	204.3
106	100.0	70.0	130.0

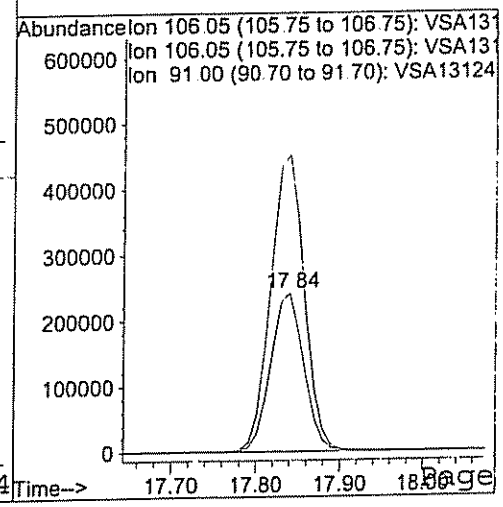


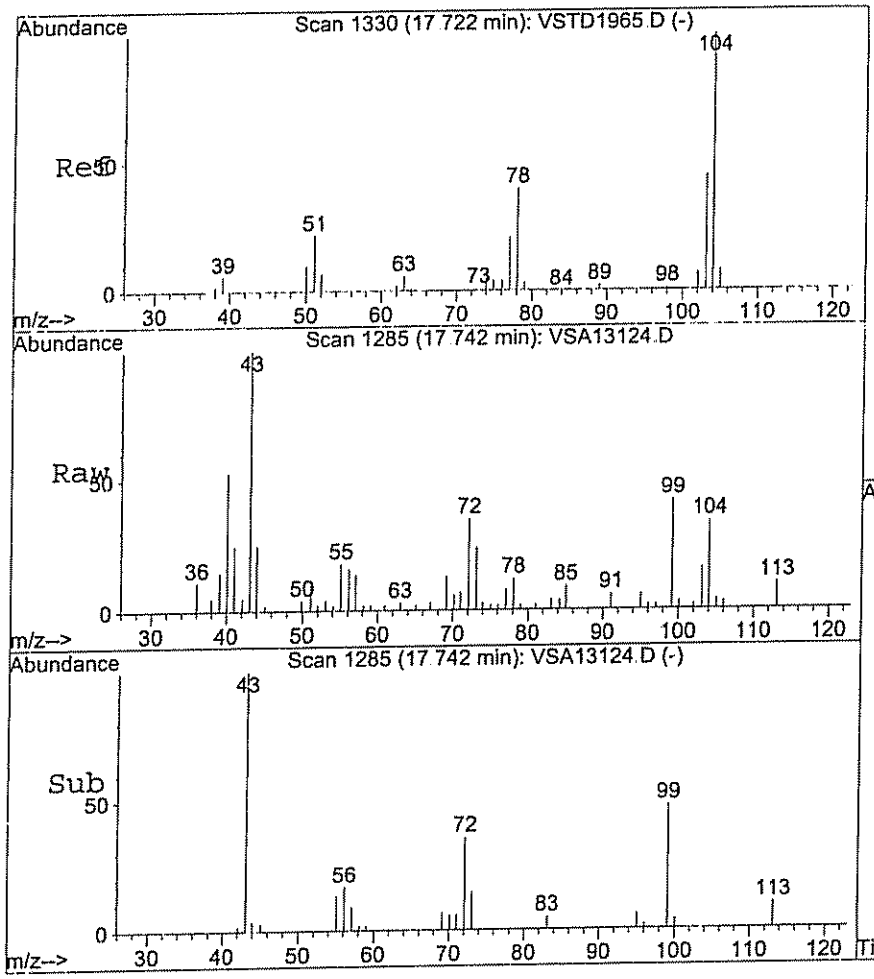


#40
o-Xylene
Concen: 116.38 ug/L
RT: 17.84 min Scan# 1295
Delta R.T. -0.00 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion:106 Resp: 659468

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	186.6	157.0	217.0

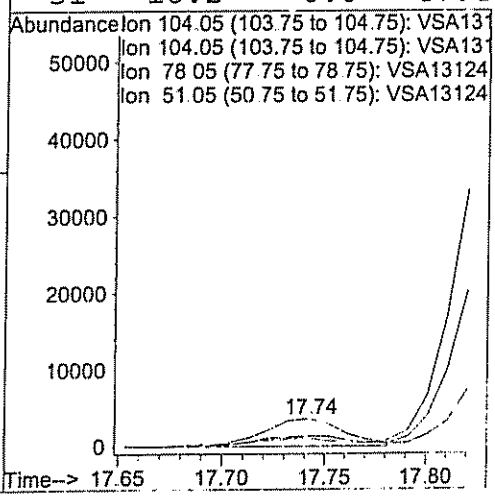


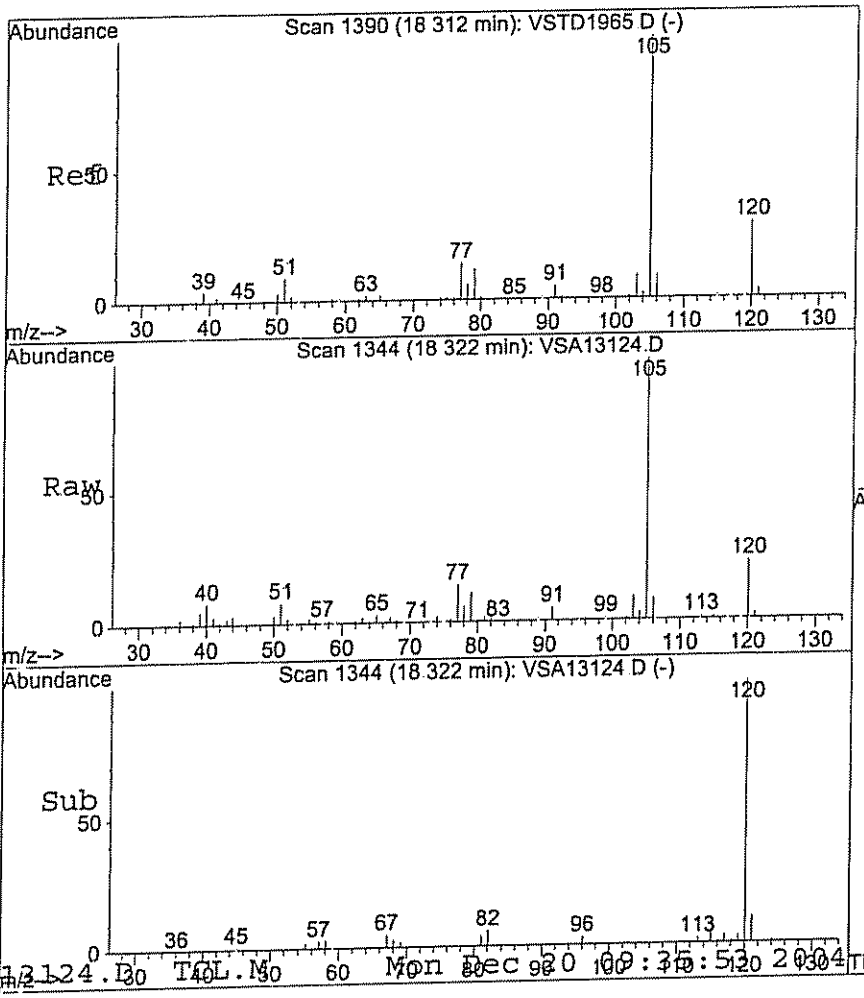


#41
Styrene
Concen: 1.01 ug/L
RT: 17.74 min Scan# 1285
Delta R.T. -0.00 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion:104 Resp: 9611

Ion	Ratio	Lower	Upper
104	100		
104	100.0	70.0	130.0
78	30.6	6.9	66.9
51	16.2	0.0	47.4

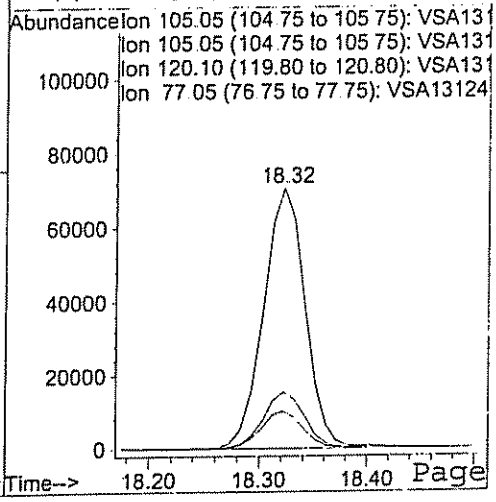


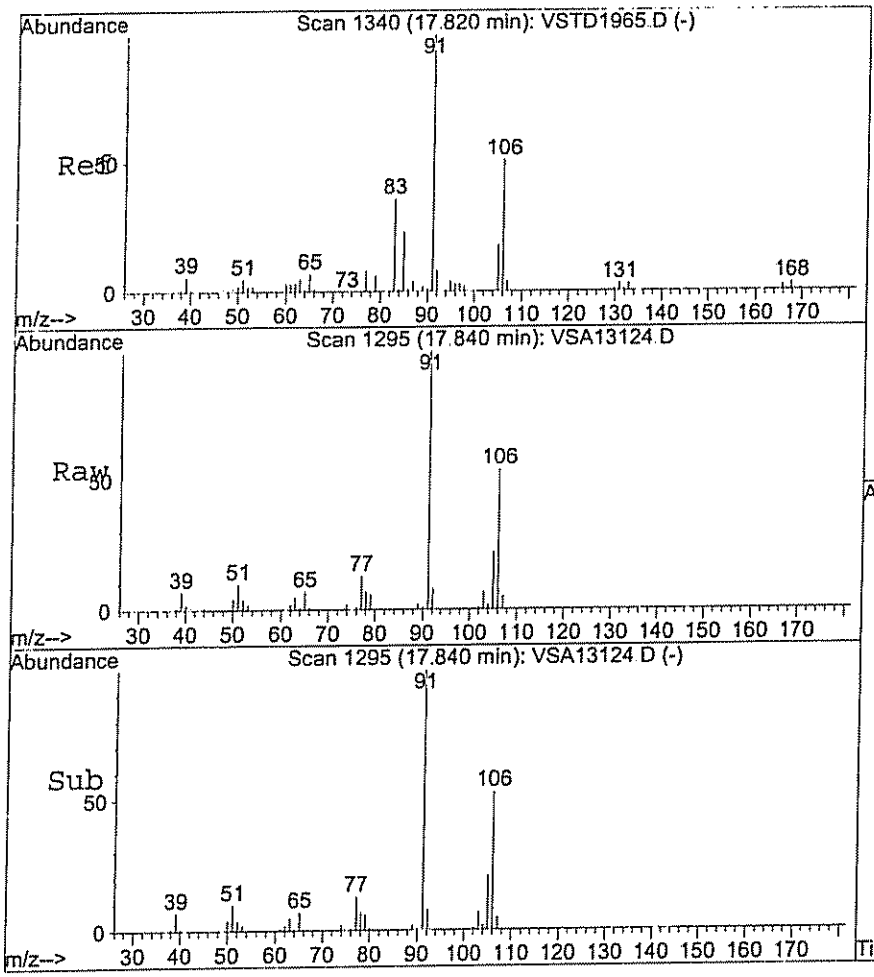


#42
Isopropylbenzene
Concen: 12.89 ug/L
RT: 18.32 min Scan# 1344
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion:105 Resp: 187730

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	21.5	0.0	51.3
77	0.0	0.0	30.0

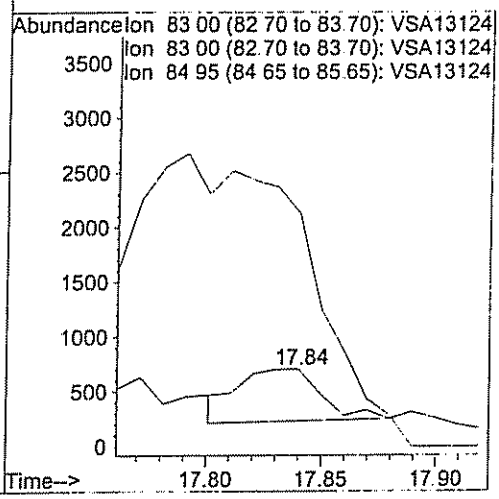


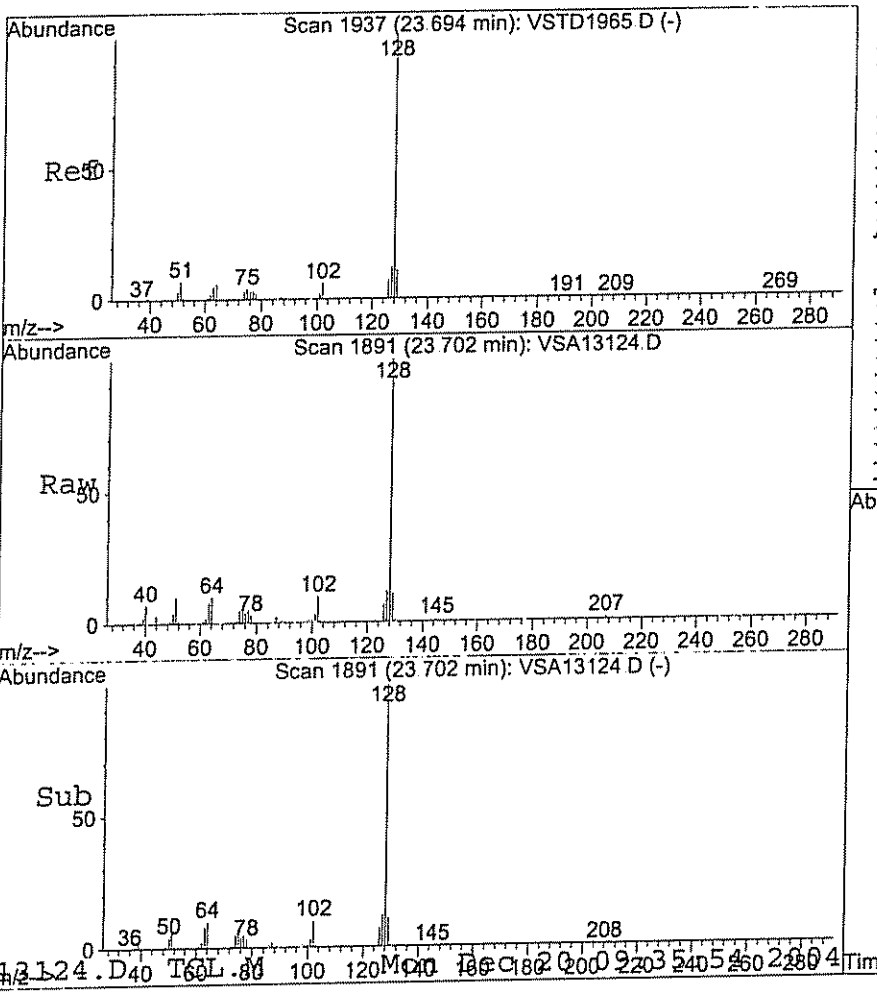


#44
1,1,2,2-Tetrachloroethane
Concen: 0.32 ug/L
RT: 17.84 min Scan# 1295
Delta R.T. -0.00 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion: 83 Resp: 1200

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	0.0	34.4	94.4#

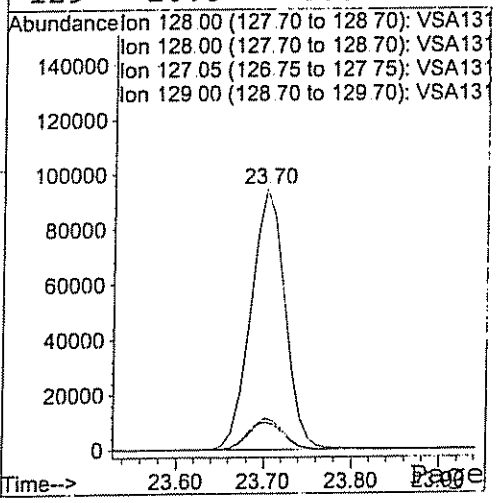




#45
Naphthalene
Concen: 33.83 ug/L
RT: 23.70 min Scan# 1891
Delta R.T. -0.01 min
Lab File: VSA13124.D
Acq: 14 Dec 2004 19:32

Tgt Ion:128 Resp: 257975

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	10.8	0.0	40.8



Non Target Peak Search Report

Data File : C:\HPCHEM\1\DATA\VSA13124.D
Acq On : 14 Dec 2004 19:32
Sample : P0412024-03A
Misc : WATER

Vial: 10
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Library : C:\DATABASE\NIST129K.L

****

Peak Number 1 Carbon dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.43	9.10 ug/L	9128300	Bromochloromethane	10.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	4
2	Carbon dioxide $$ Carbon oxide (CO2	44	CO2	000124-38-9	4
3	Nitrous Oxide	44	N2O	010024-97-2	3
4	Nitrous Oxide	44	N2O	010024-97-2	3
5	Nitrous Oxide $$ Nitrogen oxide (N2	44	N2O	010024-97-2	3

****

Peak Number 2 Benzene, 1,3,5-trimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.86	44.63 ug/L	6847110	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	93
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93
4	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	93
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93

VSA13124.D TCL.M Mon Dec 20 09:36:10 2004

Quantitation Report (Not Reviewed)

MWB-2

Data File : C:\HPCHEM\1\DATA\VSA13118.D
Acq On : 14 Dec 2004 16:18
Sample : P0412024-04A
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 15 14:53 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	85218	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	568175	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.77	117	472532	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	136660	49.80	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.60%			
32) Toluene-d8	14.86	98	491556	52.24	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.48%			
43) 4-Bromofluorobenzene	18.41	95	187635	51.47	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.94%			
Target Compounds						Qvalue
2) Chloromethane	6.29	50	117	0.03	ug/L #	85
4) Bromomethane	7.38	94	389	0.17	ug/L	89
6) 1,1-Dichloroethene	8.80	96	317	0.11	ug/L #	30
7) Carbon disulfide	9.31	76	997	0.10	ug/L	100
8) Methylene chloride	8.96	84	674	0.20	ug/L #	85
9) Acetone	8.29	43	1979	2.34	ug/L #	85
13) cis-1,2-Dichloroethene	10.74	96	5155	1.30	ug/L	95
20) 1,1,1-Trichloroethane	11.88	97	359	0.09	ug/L #	64
21) Benzene	12.37	78	202	0.02	ug/L	89
22) Trichloroethene	13.14	130	1488	0.56	ug/L #	74
27) 1,1,2-Trichloroethane	14.88	97	15310	5.64	ug/L #	53
33) Toluene	14.96	92	6935	1.02	ug/L	91
37) Ethyl benzene	17.28	91	220	0.02	ug/L #	84
45) Naphthalene	23.73	128	209	0.03	ug/L #	97

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

Quantitation Report

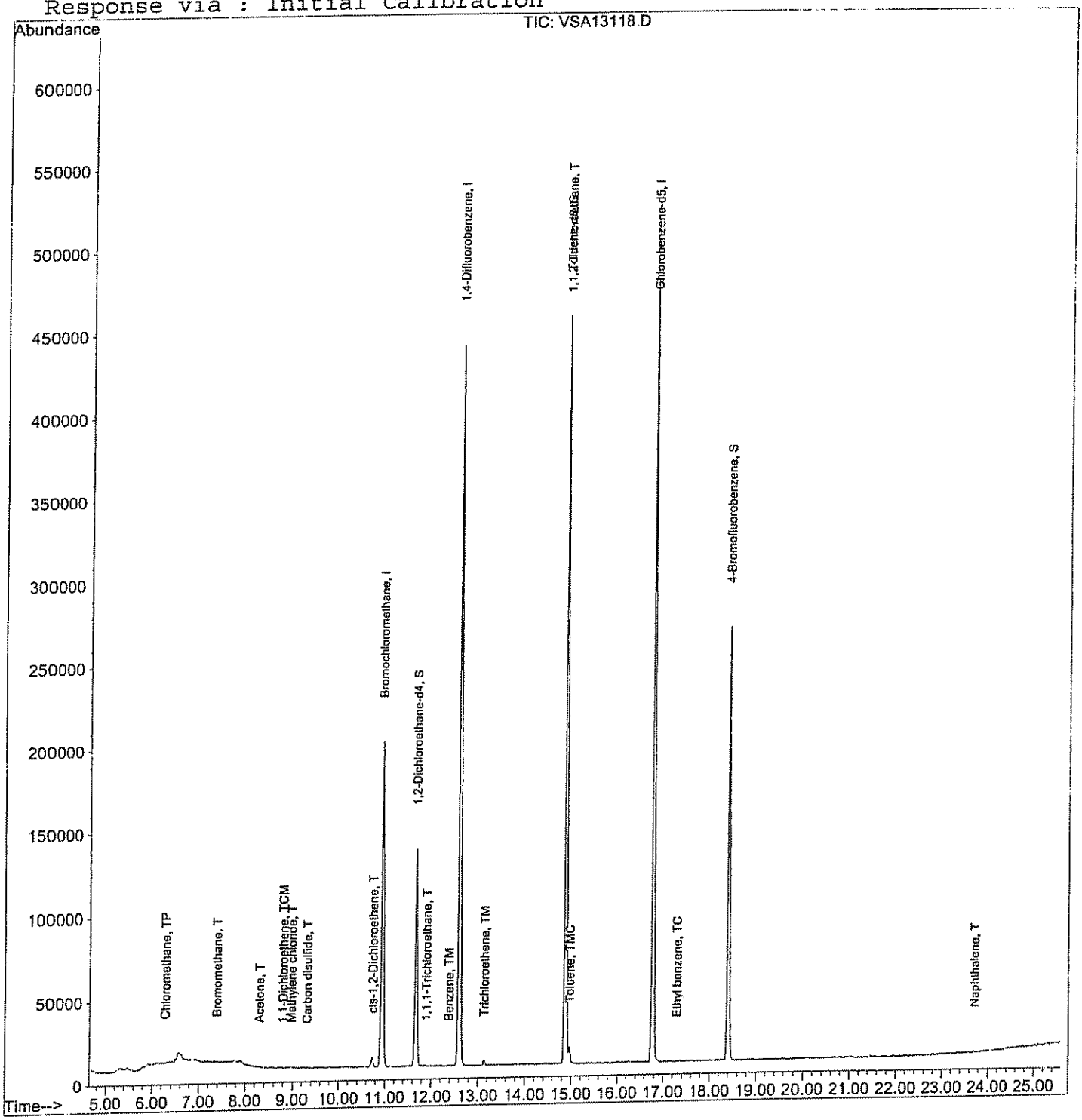
Data File : C:\HPCHEM\1\DATA\VSA13118.D
Acq On : 14 Dec 2004 16:18
Sample : P0412024-04A
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 15 14:53 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Non Target Peak Search Report

MWB-2

Data File : C:\HPCHEM\1\DATA\VSA13118.D
Acq On : 14 Dec 2004 16:18
Sample : P0412024-04A
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Library : C:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****

VSA13118.D TCL.M Wed Dec 15 14:54:49 2004

Tune File : C:\HPCHEM\1\DATA\BF122104.D
Tune Time : 21 Dec 2004 10:39

Daily Calibration File : C:\HPCHEM\1\DATA\VSTD1965.D

File	Sample	Surrogate Recovery %			Internal Standard Responses		
					193087	988291	929660
LCSW1432.D	50UG/L TCL LCS	108	105	105	168881	895260	845064
VBLK1450.D	WATER METHOD BLK	107	104	101	167295	907742	848570
VCAL1456.D	50UG/L TCL/PAUST/DCB CCAL	109	103	101	166530	894040	851307
VSA13189.D	P0412041-01A DF100	113	104	103	160586	882397	823240
VSA13190.D	P0412041-02A DF100	114	104	102	160521	883065	818788
VSA13191.D	P0412024-01A DF100	115	107	104	158941	892145	807430
VSA13192.D	P0412024-02A DF100	114	106	101	159272	884134	812319
VSA13193.D	P0412024-03A DF500	117	107	101	155031	872620	804831
VSA13194.D	P0412077-02A DF500	114	105	100	158745	868000	800606
VSA13195.D	P0412077-03A DF500	113	104	100	155851	845757	790998

t - fails 12hr time check * - fails criteria

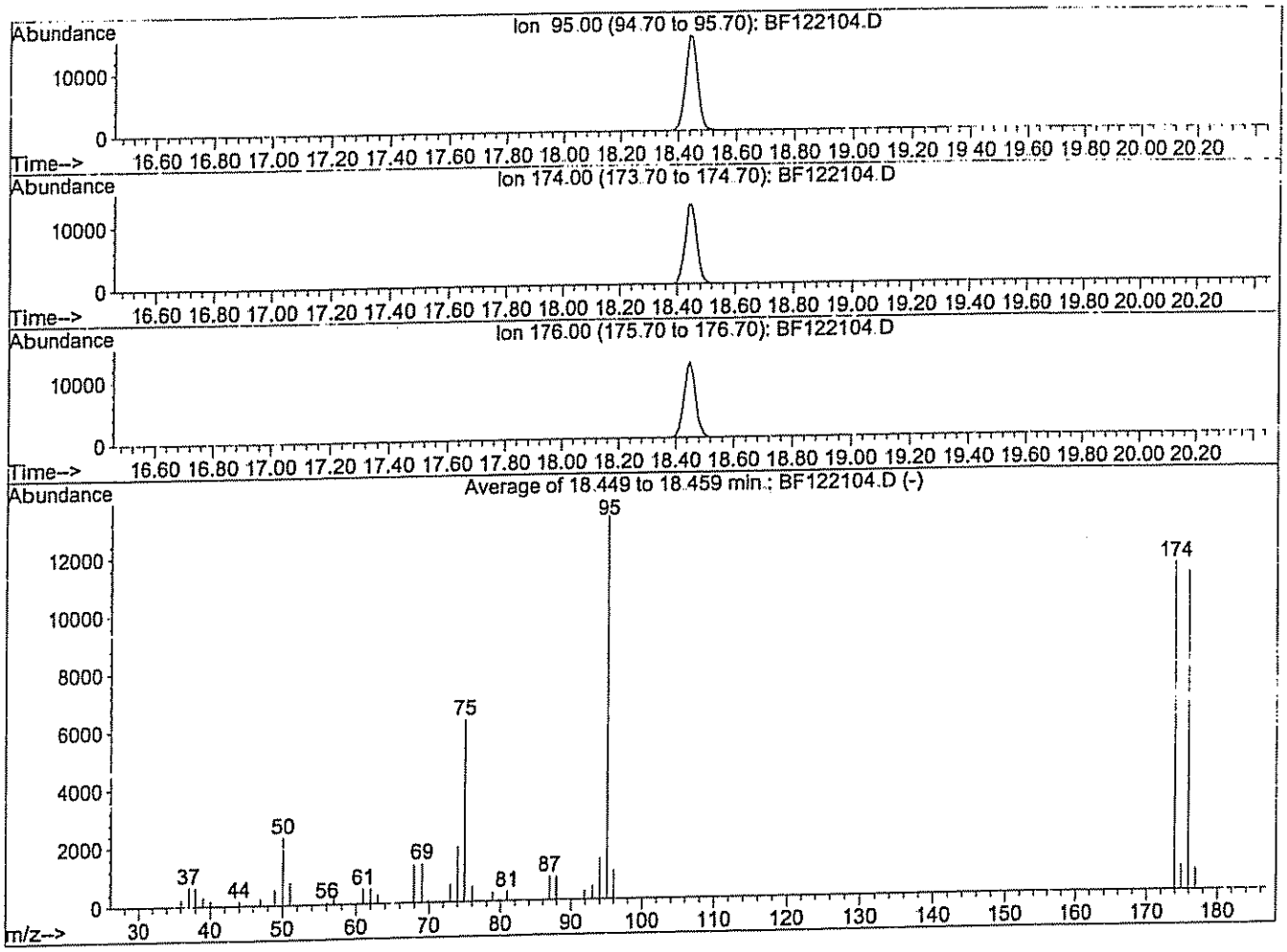
Created: Tue Dec 28 09:40:41 2004 GC
MS Ins

BFB

Data File : C:\HPCHEM\1\DATA\BF122104.D
Acq On : 21 Dec 2004 10:39
Sample : 50NG BFB TUNING STD
Misc : WATER

Vial: 1
Operator: hfg system
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

Method : C:\HPCHEM\1\METHODS\BFB.M (Chemstation Integrator)
Title :



Spectrum Information: Average of 18.449 to 18.459 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	2314	PASS
75	95	30	60	47.3	6274	PASS
95	95	100	100	100.0	13270	PASS
96	95	5	9	7.6	1006	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	85.9	11398	PASS
175	174	5	9	7.5	860	PASS
176	174	95	101	97.2	11082	PASS
177	176	5	9	6.3	702	PASS

BF122104.D BFB.M Tue Dec 21 11:46:12 2004

verage of 18.449 to 18.459 min.: BF122104.D
50NG BFB TUNING STD

odified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	250	56.05	87	74.95	6274	96.00	1006
37.05	655	56.95	347	76.05	522	173.95	11398
37.95	625	61.00	515	78.90	321	174.90	860
39.05	313	62.00	510	79.80	81	175.90	11082
40.05	176	63.00	320	80.90	327	176.90	702
44.00	166	65.10	76	86.95	818		
45.00	90	67.95	1297	87.95	798		
46.95	224	69.05	1342	91.90	300		
48.95	532	69.95	83	93.00	471		
50.05	2314	73.00	598	94.00	1427		
51.05	781	74.00	1905	95.05	13270		

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:48:41 2004
Response via : Initial Calibration

Calibration Files
5 =VSTD1968.D 10 =VSTD1967.D 20 =VSTD1966.D
50 =VSTD1965.D 100 =VSTD1964.D 200 =VSTD1963.D

		Compound	5	10	20	50	100	200	Avg	%RSD
			ISTD							
1)	I	Bromochloromethane								
2)	TP	Chloromethane	1.372	1.406	1.428	1.541	1.548	1.458	1.459	4.93
3)	TC	Vinyl chloride	1.357	1.470	1.459	1.547	1.496	1.410	1.456	4.56
4)	T	Bromomethane	0.907	0.947	0.874	0.928	0.935	0.855	0.908	4.00
5)	T	Chloroethane	0.941	0.998	0.979	1.034	1.017	0.991	0.993	3.22
6)	TCM	1,1-Dichloroethene	1.109	1.160	1.091	1.116	1.112	1.115	1.117	2.05
7)	T	Carbon disulfide	3.973	4.317	4.010	4.085	4.060	4.026	4.078	3.02
8)	T	Methylene chloride	1.439	1.649	1.349	1.377	1.373	1.308	1.416	8.62
9)	T	Acetone		0.473	0.435	0.339	0.344	0.331	0.384	16.98
10)	T	trans-1,2-Dichloroe	1.373	1.471	1.284	1.322	1.307	1.295	1.342	5.24
11)	T	methyl-tert-butyl-E	3.035	3.361	3.121	3.100	3.148	3.070	3.139	3.68
12)	TP	1,1-Dichloroethane	2.246	2.510	2.176	2.186	2.188	2.125	2.238	6.18
13)	T	cis-1,2-Dichloroeth	1.803	1.811	1.503	1.430	1.412	1.377	1.556	12.79
14)	TC	Chloroform	2.001	2.273	1.932	1.916	1.945	1.917	1.997	6.94
15)	T	2-Butanone		0.715	0.644	0.555	0.561	0.525	0.600	12.98
16)	S	1,2-Dichloroethane-	1.317	1.258	1.214	1.197	1.188	1.179	1.225	4.31
17)	T	1,2-Dichloroethane	1.416	1.566	1.395	1.367	1.368	1.339	1.409	5.79
			ISTD							
18)	I	1,4-Difluorobenzene								
19)	T	Carbon tetrachlorid	0.231	0.251	0.244	0.243	0.243	0.244	0.243	2.63
20)	T	1,1,1-Trichloroetha	0.285	0.310	0.285	0.283	0.279	0.276	0.286	4.25
21)	TM	Benzene	0.995	1.143	0.992	0.983	0.964	0.909	0.998	7.84
22)	TM	Trichloroethene	0.391	0.365	0.344	0.295	0.282	0.275	0.325	14.79
23)	TC	1,2-Dichloropropane	0.253	0.293	0.250	0.253	0.251	0.241	0.257	7.18
24)	T	Bromodichloromethan	0.289	0.336	0.281	0.286	0.288	0.274	0.292	7.60
25)	T	cis-1,3-Dichloropro	0.389	0.459	0.415	0.418	0.420	0.400	0.417	5.71
26)	T	trans-1,3-Dichlorop	0.329	0.367	0.357	0.348	0.354	0.338	0.349	3.90
27)	T	1,1,2-Trichloroetha	0.201	0.228	0.217	0.204	0.202	0.192	0.207	6.13
28)	T	Dibromochloromethan	0.260	0.287	0.266	0.262	0.263	0.251	0.265	4.52
29)		1,2-Dibromoethane	0.229	0.254	0.239	0.236	0.239	0.224	0.237	4.32
30)	TP	Bromoform	0.175	0.186	0.186	0.179	0.185	0.178	0.181	2.71
			ISTD							
31)	I	Chlorobenzene-d5								
32)	S	Toluene-d8	0.834	0.841	0.839	0.819	0.797	0.762	0.816	3.79
33)	TMC	Toluene	0.605	0.691	0.605	0.579	0.570	0.549	0.600	8.27
34)	T	4-methyl-2-Pentanon		0.217	0.219	0.208	0.215	0.202	0.212	3.39
35)	T	Tetrachloroethene	0.222	0.242	0.222	0.223	0.223	0.221	0.226	3.62
36)	T	2-Hexanone		0.142	0.151	0.144	0.147	0.142	0.145	2.57
37)	TC	Ethyl benzene	1.056	1.210	1.113	1.082	1.082	1.016	1.093	6.01
38)	TMP	Chlorobenzene	0.726	0.829	0.724	0.703	0.707	0.671	0.727	7.42
39)	T	m&p-Xylenes	0.441	0.502	0.448	0.438	0.425	0.401	0.442	7.56
40)	T	o-Xylene	0.430	0.494	0.436	0.414	0.415	0.390	0.430	8.19
41)	T	Styrene	0.662	0.807	0.722	0.718	0.718	0.678	0.718	7.02
42)	T	Isopropylbenzene	1.012	1.185	1.091	1.072	1.065	1.008	1.072	6.03
43)	S	4-Bromofluorobenzen	0.336	0.323	0.311	0.305	0.295	0.286	0.309	5.99

44	TP	1,1,2,2-Tetrachloro	0.334	0.337	0.335	0.294	0.290	0.258	0.308	10.57
45)	T	Naphthalene	0.886	0.961	0.956	0.899	0.896	0.763	0.893	8.02

MW3-2

(#) = Out of Range

TCL.M Mon Dec 20 08:48:47 2004

Data File : C:\HPCHEM\1\DATA\VSTD1968.D
Acq On : 15 Dec 2004 16:37
Sample : 5UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.91	128	193100	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	1015128	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.76	117	916078	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	25428	5.45	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 10.90%#			
32) Toluene-d8	14.86	98	76424	5.14	ug/L	0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 10.28%#			
43) 4-Bromofluorobenzene	18.38	95	30824	5.54	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 11.08%#			
Target Compounds						Qvalue
2) Chloromethane	6.27	50	26502	4.65	ug/L	99
3) Vinyl chloride	6.56	62	26202	4.60	ug/L	99
4) Bromomethane	7.16	94	17519	5.00	ug/L	99
5) Chloroethane	7.34	64	18176	4.69	ug/L	99
6) 1,1-Dichloroethene	8.77	96	21412	4.96	ug/L	99
7) Carbon disulfide	9.30	76	76718	4.85	ug/L	100
8) Methylene chloride	8.94	84	27791	5.10	ug/L	94
9) Acetone	8.29	43	12793	8.62	ug/L	99
10) trans-1,2-Dichloroethene	9.74	96	26504	5.14	ug/L	99
11) methyl-tert-butyl-Ether	9.85	73	58613	4.80	ug/L	99
12) 1,1-Dichloroethane	10.05	63	43371	5.02	ug/L	99
13) cis-1,2-Dichloroethene	10.72	96	34818	5.98	ug/L	96
14) Chloroform	10.96	83	38646	5.01	ug/L	97
15) 2-Butanone	10.58	43	16694	7.20	ug/L	98
17) 1,2-Dichloroethane	11.75	62	27348	5.03	ug/L	98
19) Carbon tetrachloride	12.32	117	23476	4.72	ug/L	98
20) 1,1,1-Trichloroethane	11.87	97	28972	4.98	ug/L	99
21) Benzene	12.36	78	101009	4.98	ug/L	99
22) Trichloroethene	13.12	130	39683m	6.12	ug/L	98
23) 1,2-Dichloropropane	13.08	63	25646	4.90	ug/L	97
24) Bromodichloromethane	13.19	83	29380	4.94	ug/L	99
25) cis-1,3-Dichloropropene	13.94	75	39478	4.60	ug/L	99
26) trans-1,3-Dichloropropene	14.48	75	33381	4.66	ug/L	98

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

Data File : C:\HPCHEM\1\DATA\VSTD1968.D
Acq On : 15 Dec 2004 16:37
Sample : 5UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.70	97	20398	4.82	ug/L		96
28) Dibromochloromethane	15.39	129	26389	4.89	ug/L		100
29) 1,2-Dibromoethane	15.73	107	23273	4.81	ug/L		98
30) Bromoform	17.51	173	17755	4.79	ug/L		96
33) Toluene	14.95	92	55467	5.06	ug/L		97
34) 4-methyl-2-Pentanone	14.14	43	17756	4.57	ug/L		99
35) Tetrachloroethene	15.91	164	20323	4.90	ug/L		95
36) 2-Hexanone	15.22	43	12193	4.58	ug/L		99
37) Ethyl benzene	17.03	91	96701	4.79	ug/L		100
38) Chlorobenzene	16.80	112	66492	4.99	ug/L		99
39) m&p-Xylenes	17.28	106	80865	9.97	ug/L		99
40) o-Xylene	17.83	106	39393	5.00	ug/L		99
41) Styrene	17.73	104	60688	4.55	ug/L		99
42) Isopropylbenzene	18.31	105	92749	4.67	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	30616	5.52	ug/L		100
45) Naphthalene	23.69	128	81150	4.95	ug/L		100

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

Quantitation Report

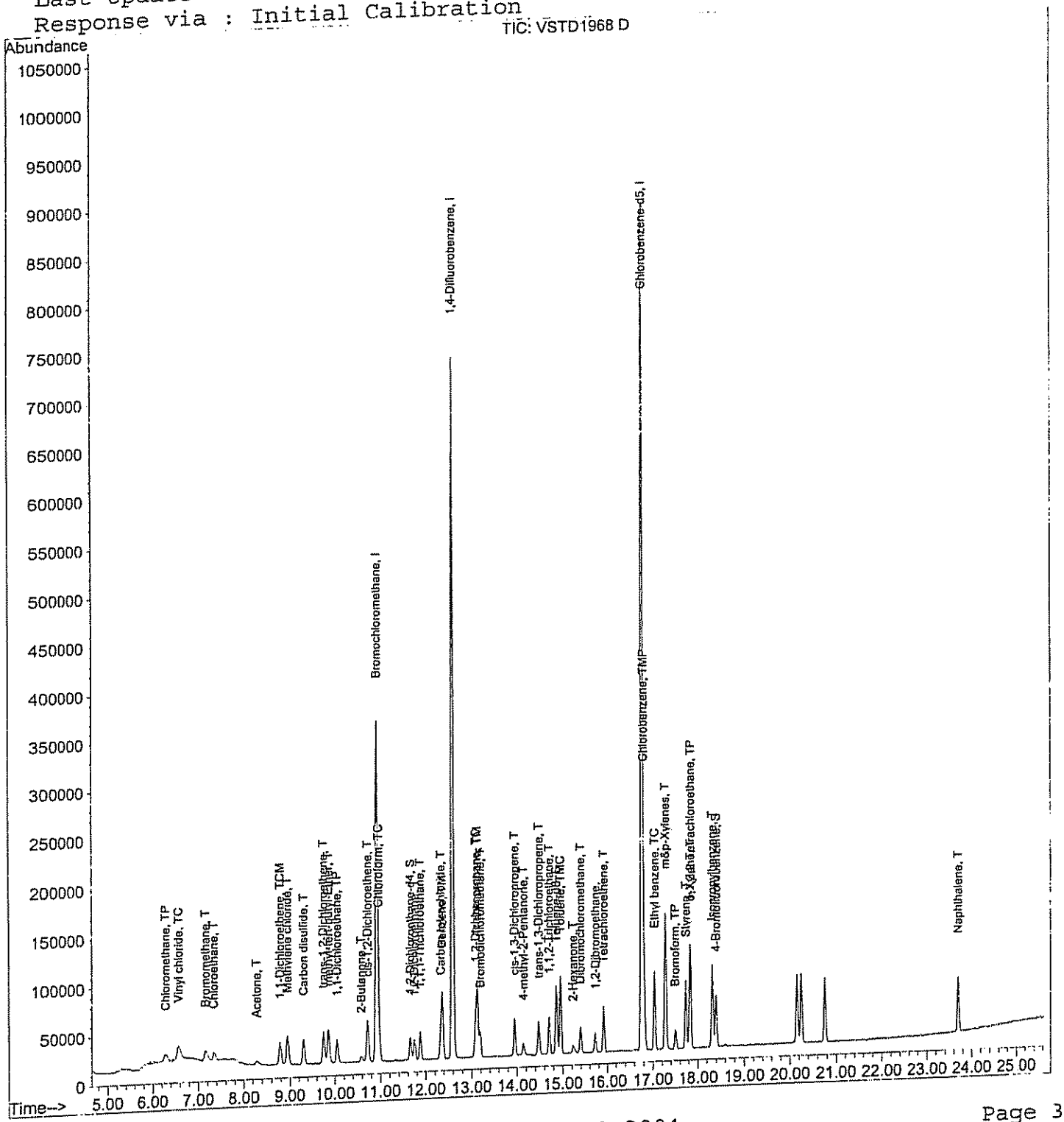
Data File : C:\HPCHEM\1\DATA\VSTD1968.D
Acq On : 15 Dec 2004 16:37
Sample : 5UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSTD1967.D
Acq On : 15 Dec 2004 16:05
Sample : 10UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.91	128	196714	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	1006711	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.76	117	930168	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	49493	10.53	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 21.06%#			
32) Toluene-d8	14.85	98	156494	10.46	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 20.92%#			
43) 4-Bromofluorobenzene	18.39	95	60045	10.79	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 21.58%#			
Target Compounds						Qvalue
2) Chloromethane	6.28	50	55304	9.41	ug/L	100
3) Vinyl chloride	6.55	62	57817	9.94	ug/L	99
4) Bromomethane	7.16	94	37246	10.54	ug/L	94
5) Chloroethane	7.34	64	39249	9.93	ug/L	98
6) 1,1-Dichloroethene	8.78	96	45632	10.46	ug/L	97
7) Carbon disulfide	9.30	76	169831	10.67	ug/L	100
8) Methylene chloride	8.94	84	64890	12.20	ug/L	97
9) Acetone	8.28	43	18624	13.08	ug/L	100
10) trans-1,2-Dichloroethene	9.75	96	57866	11.30	ug/L	98
11) methyl-tert-butyl-Ether	9.85	73	132224	10.81	ug/L	99
12) 1,1-Dichloroethane	10.05	63	98736	11.57	ug/L	100
13) cis-1,2-Dichloroethene	10.72	96	71269	12.66	ug/L	97
14) Chloroform	10.96	83	89422	11.79	ug/L	99
15) 2-Butanone	10.56	43	28135	12.51	ug/L	99
17) 1,2-Dichloroethane	11.74	62	61613	11.45	ug/L	100
19) Carbon tetrachloride	12.32	117	50541	10.30	ug/L	98
20) 1,1,1-Trichloroethane	11.88	97	62446	11.05	ug/L	98
21) Benzene	12.36	78	230233	11.89	ug/L	100
22) Trichloroethene	13.12	130	73513m	12.21	ug/L	99
23) 1,2-Dichloropropane	13.08	63	59052	11.79	ug/L	100
24) Bromodichloromethane	13.19	83	67730	11.92	ug/L	99
25) cis-1,3-Dichloropropene	13.94	75	92390	11.10	ug/L	100
26) trans-1,3-Dichloropropene	14.46	75	73856	10.51	ug/L	98

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

Data File : C:\HPCHEM\1\DATA\VSTD1967.D
Acq On : 15 Dec 2004 16:05
Sample : 10UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.70	97	45827	11.16 ug/L	99
28) Dibromochloromethane	15.39	129	57795	11.02 ug/L	99
29) 1,2-Dibromoethane	15.71	107	51160	10.83 ug/L	99
30) Bromoform	17.50	173	37448	10.22 ug/L	99
33) Toluene	14.95	92	128525	12.00 ug/L	99
34) 4-methyl-2-Pentanone	14.12	43	40281	10.27 ug/L	99
35) Tetrachloroethene	15.91	164	45040	10.89 ug/L	92
36) 2-Hexanone	15.21	43	26423	9.73 ug/L	99
37) Ethyl benzene	17.02	91	225089	11.27 ug/L	100
38) Chlorobenzene	16.80	112	154231	11.82 ug/L	100
39) m&p-Xylenes	17.27	106	186757	23.46 ug/L	99
40) o-Xylene	17.83	106	91895	11.94 ug/L	98
41) Styrene	17.72	104	150198	11.39 ug/L	99
42) Isopropylbenzene	18.31	105	220497	11.19 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	62672	11.46 ug/L	100
45) Naphthalene	23.69	128	178704	10.94 ug/L #	100

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

Quantitation Report

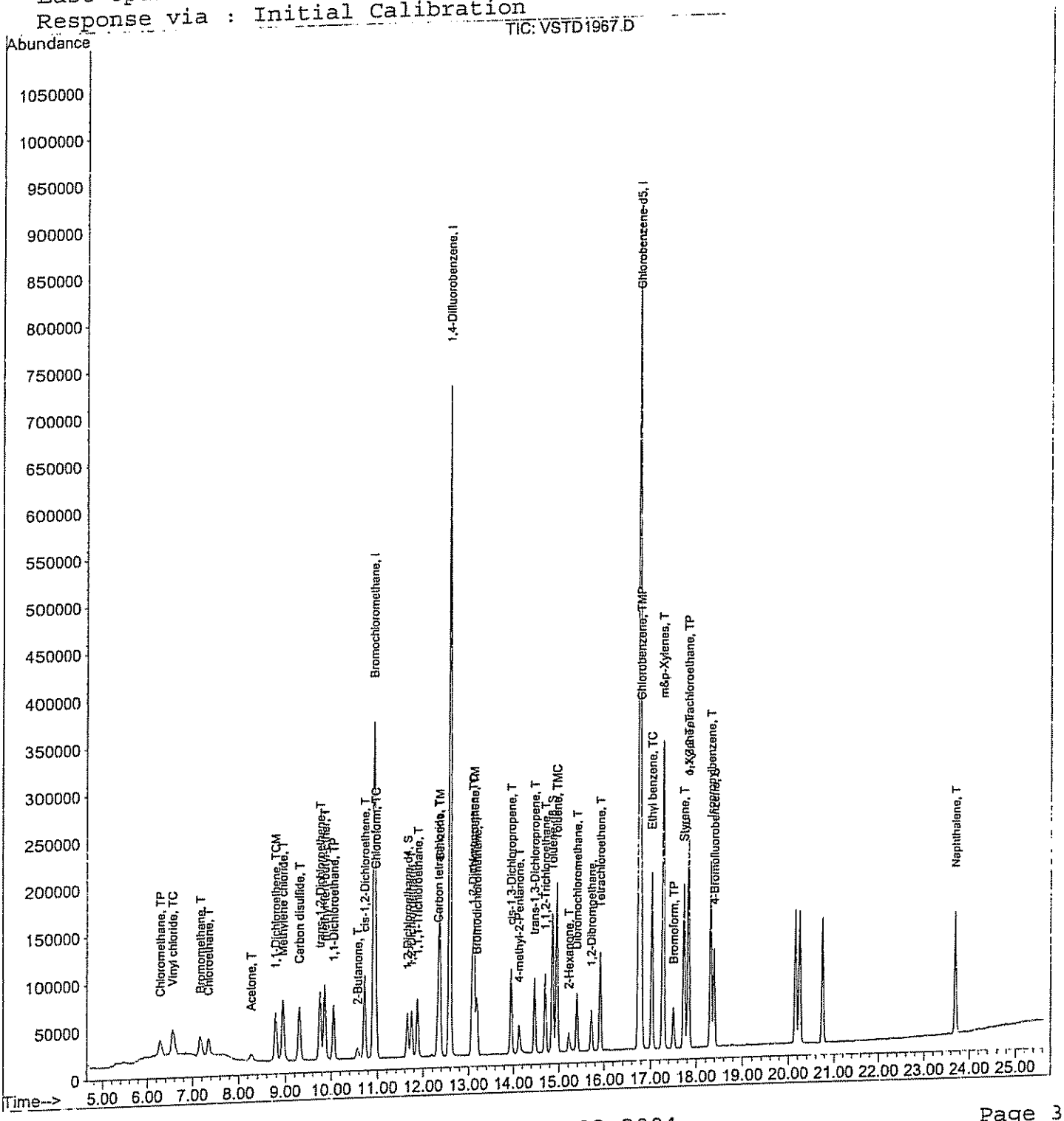
Data File : C:\HPCHEM\1\DATA\VSTD1967.D
Acq On : 15 Dec 2004 16:05
Sample : 10UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSTD1966.D
Acq On : 15 Dec 2004 15:33
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:44 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.92	128	197262	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	1007114	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.75	117	925104	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	95761	20.43	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 40.86%#			
32) Toluene-d8	14.85	98	310560	21.17	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 42.34%#			
43) 4-Bromofluorobenzene	18.39	95	115129	21.09	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 42.18%#			
Target Compounds						Qvalue
2) Chloromethane	6.27	50	112670	18.85	ug/L	99
3) Vinyl chloride	6.55	62	115154	19.67	ug/L	99
4) Bromomethane	7.16	94	68950	19.28	ug/L	99
5) Chloroethane	7.34	64	77231	19.31	ug/L	98
6) 1,1-Dichloroethene	8.77	96	86079	19.58	ug/L	98
7) Carbon disulfide	9.30	76	316426	19.77	ug/L	100
8) Methylene chloride	8.94	84	106422	19.94	ug/L	97
9) Acetone	8.27	43	34293	25.73	ug/L	98
10) trans-1,2-Dichloroethene	9.75	96	101299	19.63	ug/L	98
11) methyl-tert-butyl-Ether	9.85	73	246285	20.10	ug/L	99
12) 1,1-Dichloroethane	10.04	63	171696	20.09	ug/L	100
13) cis-1,2-Dichloroethene	10.71	96	118596	21.38	ug/L	97
14) Chloroform	10.96	83	152432	20.06	ug/L	99
15) 2-Butanone	10.54	43	50824	23.54	ug/L	99
17) 1,2-Dichloroethane	11.73	62	110040	20.54	ug/L	99
19) Carbon tetrachloride	12.32	117	98390	20.07	ug/L	98
20) 1,1,1-Trichloroethane	11.87	97	114830	20.41	ug/L	99
21) Benzene	12.36	78	399818	20.85	ug/L	100
22) Trichloroethene	13.11	130	138753	24.25	ug/L	99
23) 1,2-Dichloropropane	13.07	63	100893	20.18	ug/L	99
24) Bromodichloromethane	13.18	83	113076	19.85	ug/L	99
25) cis-1,3-Dichloropropene	13.95	75	167008	20.09	ug/L	99
26) trans-1,3-Dichloropropene	14.47	75	143825	20.60	ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1966.D
Acq On : 15 Dec 2004 15:33
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:44 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.70	97	87402	21.74 ug/L	98
28) Dibromochloromethane	15.38	129	107258	20.59 ug/L	99
29) 1,2-Dibromoethane	15.72	107	96462	20.55 ug/L	99
30) Bromoform	17.50	173	75107	20.67 ug/L	100
33) Toluene	14.95	92	223884	21.39 ug/L	100
34) 4-methyl-2-Pentanone	14.13	43	81145	21.09 ug/L	99
35) Tetrachloroethene	15.92	164	82277	20.00 ug/L	97
36) 2-Hexanone	15.21	43	55722	20.85 ug/L	98
37) Ethyl benzene	17.03	91	412016	21.00 ug/L	100
38) Chlorobenzene	16.80	112	267890	20.87 ug/L	99
39) m&p-Xylenes	17.27	106	331286	42.50 ug/L	99
40) o-Xylene	17.82	106	161432	21.47 ug/L	99
41) Styrene	17.73	104	267148	20.49 ug/L	99
42) Isopropylbenzene	18.31	105	403712	20.82 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	123851	23.86 ug/L	99
45) Naphthalene	23.70	128	353883	22.44 ug/L #	97

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

Quantitation Report

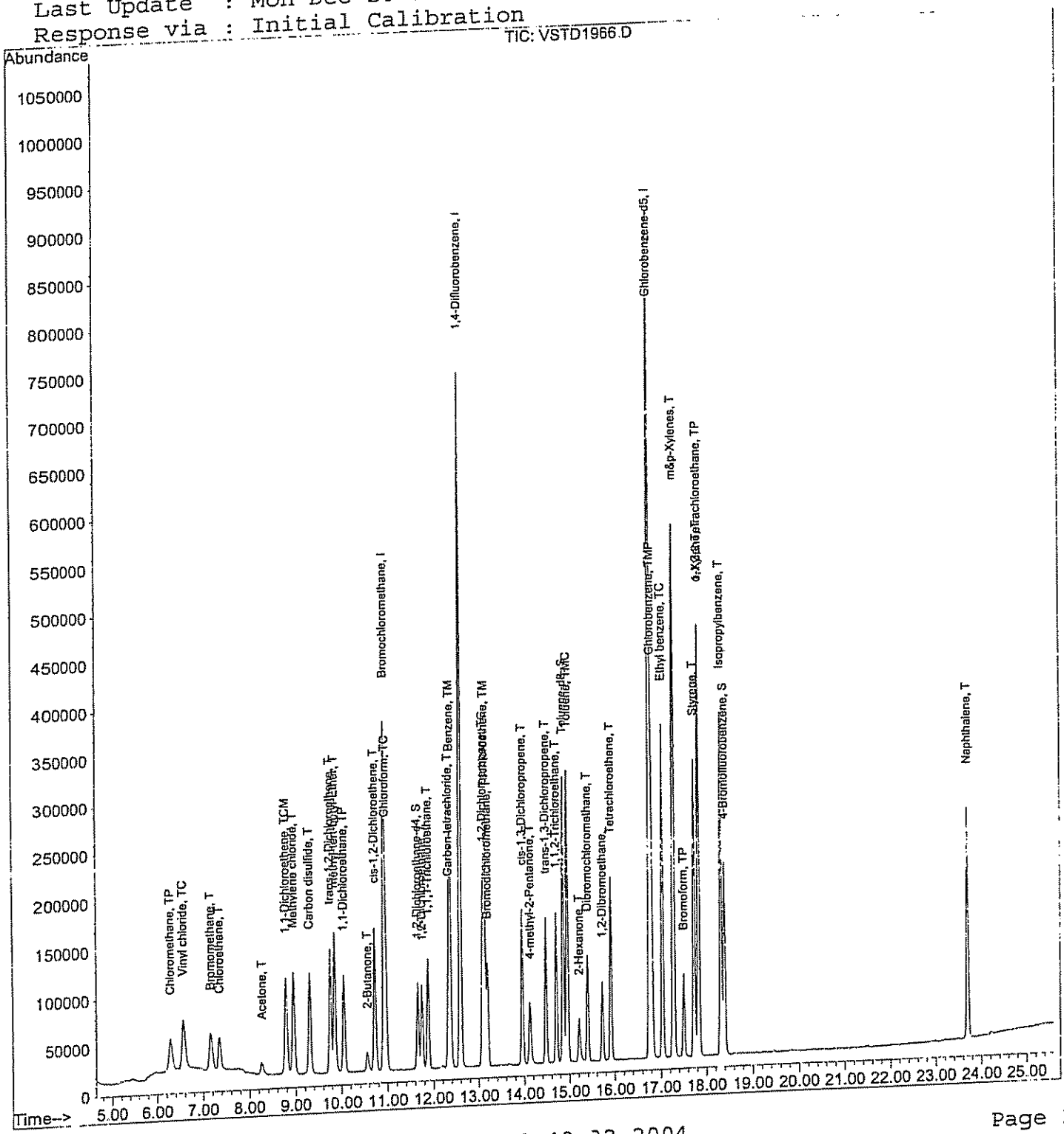
Data File : C:\HPCHEM\1\DATA\VSTD1966.D
Acq On : 15 Dec 2004 15:33
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:44 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



VSTD1966.D TCL.M Mon Dec 20 08:49:32 2004

Quantitation Report (Not Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSTD1965.D
Acq On : 15 Dec 2004 14:57
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:43 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:03 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.91	128	193087	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	988291	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.76	117	929660	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	231066	50.37	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.74%			
32) Toluene-d8	14.85	98	761579	51.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.32%			
43) 4-Bromofluorobenzene	18.39	95	283199	51.63	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.26%			
Target Compounds						Qvalue
2) Chloromethane	6.28	50	297514	50.84	ug/L	100
3) Vinyl chloride	6.56	62	298666	52.11	ug/L	100
4) Bromomethane	7.16	94	179249	51.21	ug/L	100
5) Chloroethane	7.34	64	199574	50.98	ug/L	100
6) 1,1-Dichloroethene	8.78	96	215505	50.08	ug/L	100
7) Carbon disulfide	9.30	76	788721	50.34	ug/L	100
8) Methylene chloride	8.94	84	265922	50.91	ug/L	100
9) Acetone	8.25	43	65483	50.19	ug/L	100
10) trans-1,2-Dichloroethene	9.74	96	255170	50.52	ug/L	100
11) methyl-tert-butyl-Ether	9.85	73	598639	49.91	ug/L	100
12) 1,1-Dichloroethane	10.05	63	422007	50.45	ug/L	100
13) cis-1,2-Dichloroethene	10.72	96	276117	50.85	ug/L	100
14) Chloroform	10.96	83	369881	49.74	ug/L	100
15) 2-Butanone	10.54	43	107191	50.72	ug/L	100
17) 1,2-Dichloroethane	11.74	62	264013	50.34	ug/L	100
19) Carbon tetrachloride	12.32	117	240072	49.89	ug/L	100
20) 1,1,1-Trichloroethane	11.87	97	279411	50.61	ug/L	100
21) Benzene	12.36	78	971606	51.64	ug/L	100
22) Trichloroethene	13.12	130	291710	51.96	ug/L	100
23) 1,2-Dichloropropane	13.08	63	249864	50.93	ug/L	100
24) Bromodichloromethane	13.19	83	283135	50.65	ug/L	100
25) cis-1,3-Dichloropropene	13.94	75	412835	50.60	ug/L	100
26) trans-1,3-Dichloropropene	14.47	75	343850	50.20	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1965.D
Acq On : 15 Dec 2004 14:57
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:43 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:03 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.70	97	201888	51.18	ug/L		100
28) Dibromochloromethane	15.39	129	258748	50.62	ug/L		100
29) 1,2-Dibromoethane	15.71	107	233377	50.67	ug/L		100
30) Bromoform	17.51	173	176574	49.51	ug/L		100
33) Toluene	14.95	92	538391	51.17	ug/L		100
34) 4-methyl-2-Pentanone	14.10	43	193175	49.95	ug/L		100
35) Tetrachloroethene	15.91	164	206896	50.06	ug/L		100
36) 2-Hexanone	15.19	43	134102	49.93	ug/L		100
37) Ethyl benzene	17.02	91	1005972	51.03	ug/L		100
38) Chlorobenzene	16.80	112	653325	50.65	ug/L		100
39) m&p-Xylenes	17.27	106	813474	103.85	ug/L		100
40) o-Xylene	17.82	106	384507	50.89	ug/L		100
41) Styrene	17.72	104	667188	50.92	ug/L		100
42) Isopropylbenzene	18.31	105	996145	51.12	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	273721	52.47	ug/L		100
45) Naphthalene	23.69	128	835396	52.71	ug/L	#	100

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

Quantitation Report

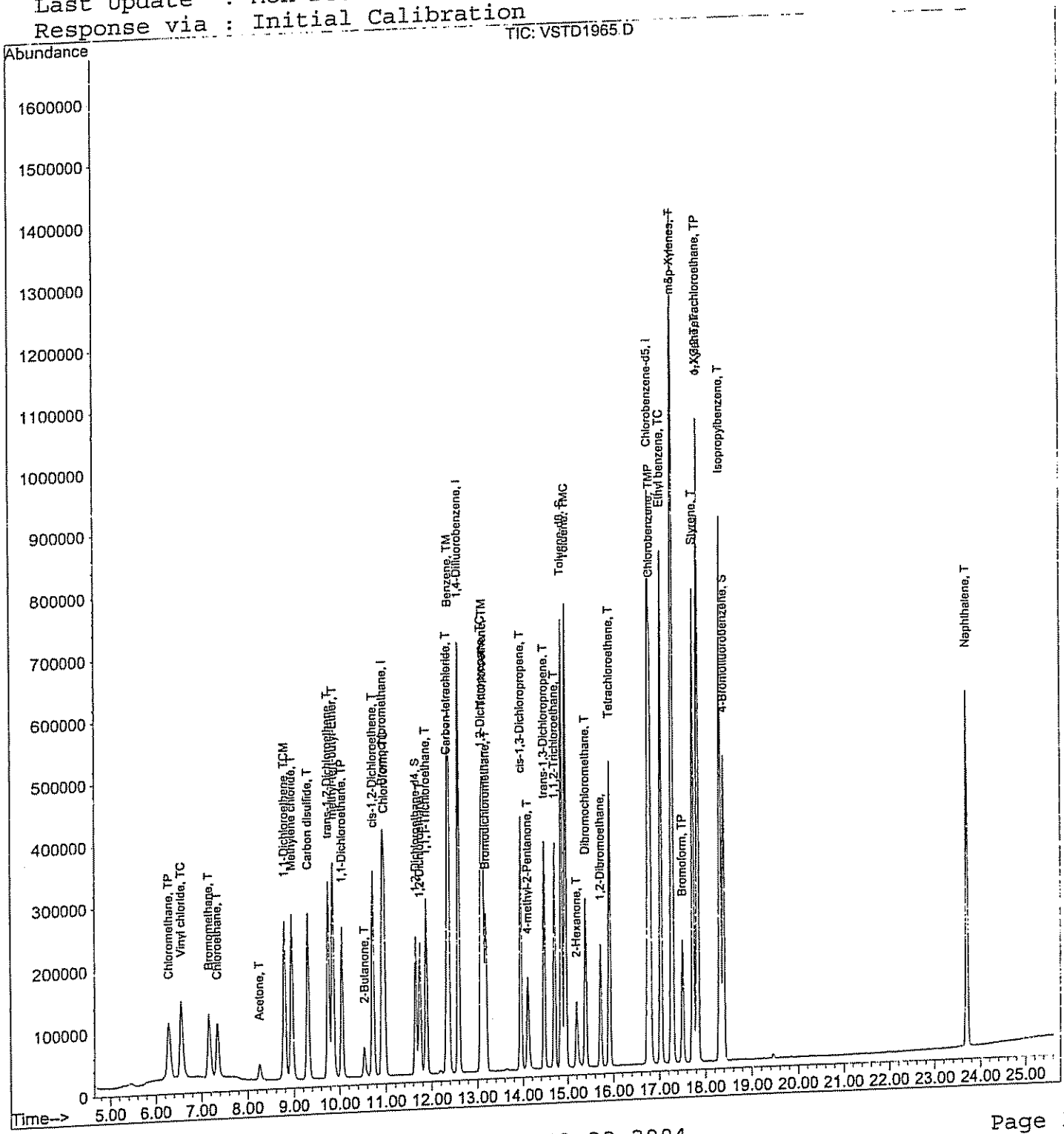
Data File : C:\HPCHEM\1\DATA\VSTD1965.D
Acq On : 15 Dec 2004 14:57
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:43 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSTD1964.D
Acq On : 15 Dec 2004 14:24
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:34:39 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.92	128	197106	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	1018412	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.75	117	949917	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	468320	100.02	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 200.04%#			
32) Toluene-d8	14.85	98	1514995	100.87	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 201.74%#			
43) 4-Bromofluorobenzene	18.39	95	560175	99.92	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 199.84%#			
Target Compounds						Qvalue
2) Chloromethane	6.28	50	610112	103.23	ug/L	99
3) Vinyl chloride	6.55	62	589731	101.20	ug/L	100
4) Bromomethane	7.16	94	368749	104.89	ug/L	99
5) Chloroethane	7.35	64	400831	100.44	ug/L	100
6) 1,1-Dichloroethene	8.77	96	438536	99.73	ug/L	99
7) Carbon disulfide	9.30	76	1600613	100.13	ug/L	100
8) Methylene chloride	8.94	84	541060	102.22	ug/L	99
9) Acetone	8.24	43	135475	102.60	ug/L	100
10) trans-1,2-Dichloroethene	9.75	96	515394	99.94	ug/L	99
11) methyl-tert-butyl-Ether	9.85	73	1240832	102.03	ug/L	100
12) 1,1-Dichloroethane	10.04	63	862355	101.49	ug/L	100
13) cis-1,2-Dichloroethene	10.71	96	556445	100.58	ug/L	98
14) Chloroform	10.96	83	766702	101.50	ug/L	100
15) 2-Butanone	10.53	43	221349	103.94	ug/L	100
17) 1,2-Dichloroethane	11.75	62	539331	101.10	ug/L	99
19) Carbon tetrachloride	12.33	117	495711	99.96	ug/L	99
20) 1,1,1-Trichloroethane	11.87	97	569111	100.04	ug/L	99
21) Benzene	12.36	78	1963345	101.91	ug/L	100
22) Trichloroethene	13.12	130	574538	98.98	ug/L	99
23) 1,2-Dichloropropane	13.07	63	511663	101.84	ug/L	99
24) Bromodichloromethane	13.18	83	585848	102.59	ug/L	99
25) cis-1,3-Dichloropropene	13.94	75	855814	102.71	ug/L	99
26) trans-1,3-Dichloropropene	14.47	75	720161	103.06	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1964.D
Acq On : 15 Dec 2004 14:24
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:34:39 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.70	97	411875	102.00	ug/L		100
28) Dibromochloromethane	15.39	129	535016	102.38	ug/L		100
29) 1,2-Dibromoethane	15.72	107	486114	103.67	ug/L		99
30) Bromoform	17.50	173	376415	103.69	ug/L		100
33) Toluene	14.94	92	1082684	101.08	ug/L		100
34) 4-methyl-2-Pentanone	14.07	43	407682	104.83	ug/L		99
35) Tetrachloroethene	15.91	164	424132	100.65	ug/L		98
36) 2-Hexanone	15.17	43	279870	103.00	ug/L		100
37) Ethyl benzene	17.03	91	2056049	103.15	ug/L		100
38) Chlorobenzene	16.80	112	1343796	102.97	ug/L		99
39) m&p-Xylenes	17.27	106	1616068	202.88	ug/L		99
40) o-Xylene	17.83	106	788337	103.21	ug/L		99
41) Styrene	17.73	104	1364559	102.93	ug/L		100
42) Isopropylbenzene	18.31	105	2023658	102.46	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.83	83	550364	104.97	ug/L		100
45) Naphthalene	23.69	128	1702294	107.88	ug/L	#	100

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

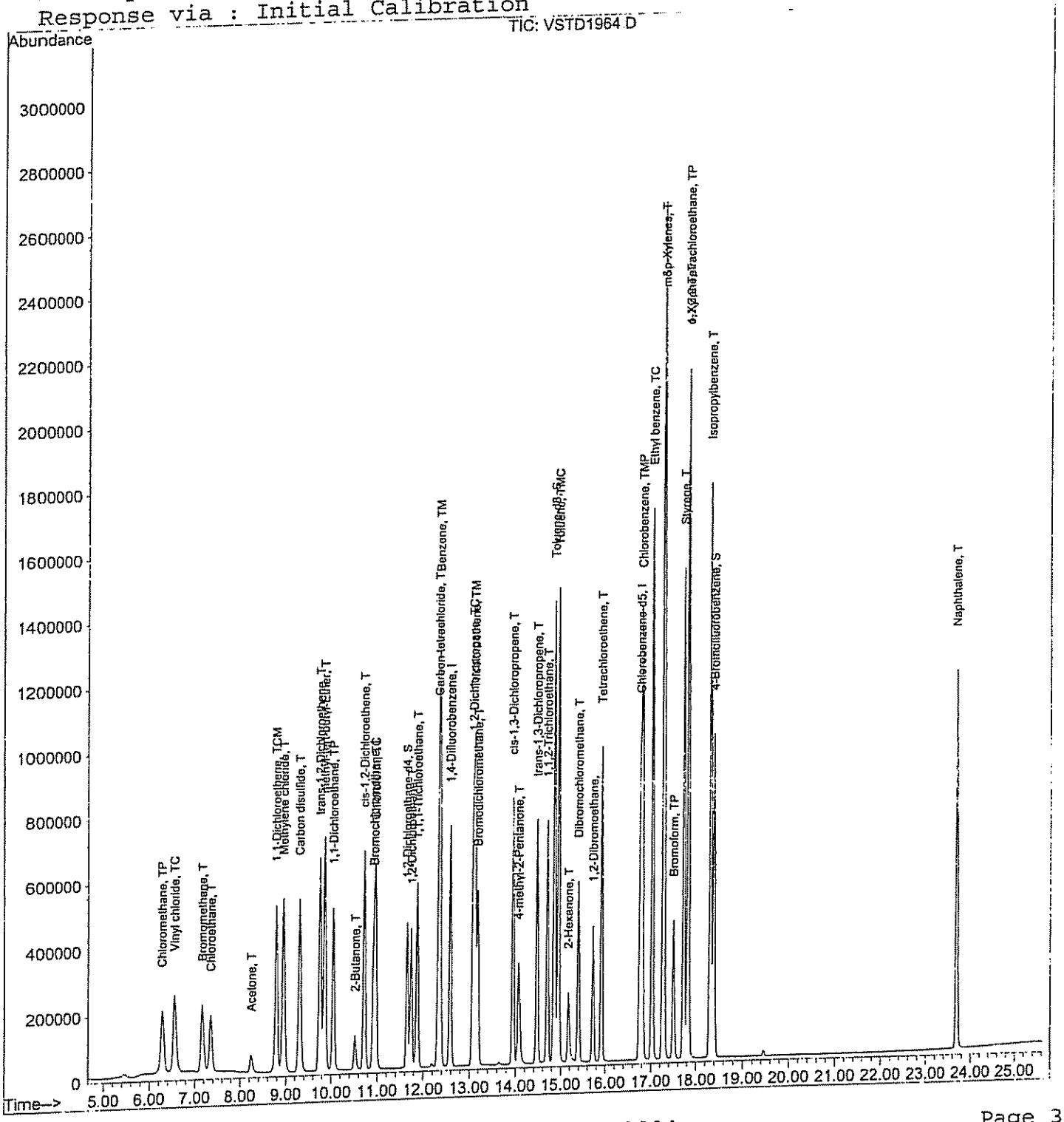
Data File : C:\HPCHEM\1\DATA\VSTD1964.D
Acq On : 15 Dec 2004 14:24
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSTD1963.D
Acq On : 15 Dec 2004 13:52
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:34:39 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.91	128	198434	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.59	114	1048497	50.00	ug/L	0.01
31) Chlorobenzene-d5	16.76	117	974620	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.64	65	935677	197.01	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 394.02%#			
32) Toluene-d8	14.85	98	2970294	186.01	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 372.02%#			
43) 4-Bromofluorobenzene	18.39	95	1113305	187.49	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 374.98%#			
Target Compounds						Qvalue
2) Chloromethane	6.28	50	1156906	189.19	ug/L	100
3) Vinyl chloride	6.54	62	1118848	182.26	ug/L	100
4) Bromomethane	7.16	94	678918	184.28	ug/L	99
5) Chloroethane	7.34	64	786620	191.76	ug/L	100
6) 1,1-Dichloroethene	8.78	96	884767	199.75	ug/L	100
7) Carbon disulfide	9.30	76	3195254	197.10	ug/L	100
8) Methylene chloride	8.94	84	1038375	189.98	ug/L	98
9) Acetone	8.23	43	262539	195.06	ug/L	99
10) trans-1,2-Dichloroethene	9.74	96	1027858	195.98	ug/L	98
11) methyl-tert-butyl-Ether	9.84	73	2436698	198.04	ug/L	100
12) 1,1-Dichloroethane	10.05	63	1686805	194.47	ug/L	100
13) cis-1,2-Dichloroethene	10.72	96	1092715	192.54	ug/L	99
14) Chloroform	10.95	83	1521349	200.11	ug/L	99
15) 2-Butanone	10.51	43	416908	189.23	ug/L	99
17) 1,2-Dichloroethane	11.74	62	1062920	195.88	ug/L	99
19) Carbon tetrachloride	12.32	117	1023437	200.91	ug/L	100
20) 1,1,1-Trichloroethane	11.87	97	1157073	195.17	ug/L	98
21) Benzene	12.36	78	3810676	184.84	ug/L	100
22) Trichloroethene	13.12	130	1152480	186.20	ug/L	98
23) 1,2-Dichloropropane	13.08	63	1008777	190.27	ug/L	99
24) Bromodichloromethane	13.19	83	1150255	191.46	ug/L	100
25) cis-1,3-Dichloropropene	13.94	75	1679467	191.73	ug/L	99
26) trans-1,3-Dichloropropene	14.47	75	1418440	194.41	ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1963.D
Acq On : 15 Dec 2004 13:52
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:34:39 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
27) 1,1,2-Trichloroethane	14.70	97	806145	188.19 ug/L		99
28) Dibromochloromethane	15.39	129	1054087	191.99 ug/L		100
29) 1,2-Dibromoethane	15.72	107	940699	189.97 ug/L		100
30) Bromoform	17.51	173	745679	199.03 ug/L		99
33) Toluene	14.95	92	2138336	189.42 ug/L		99
34) 4-methyl-2-Pentanone	14.05	43	785917	194.04 ug/L		99
35) Tetrachloroethene	15.91	164	861858	198.67 ug/L		100
36) 2-Hexanone	15.14	43	552838	196.62 ug/L		100
37) Ethyl benzene	17.03	91	3962075	187.84 ug/L		100
38) Chlorobenzene	16.81	112	2616128	190.98 ug/L		99
39) m&p-Xylenes	17.27	106	3126871	366.65 ug/L		99
40) o-Xylene	17.83	106	1522175	188.81 ug/L		99
41) Styrene	17.72	104	2643151	188.94 ug/L		100
42) Isopropylbenzene	18.31	105	3928318	188.08 ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	1004008	174.94 ug/L		100
45) Naphthalene	23.69	128	2972983	169.73 ug/L	#	100

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

Quantitation Report

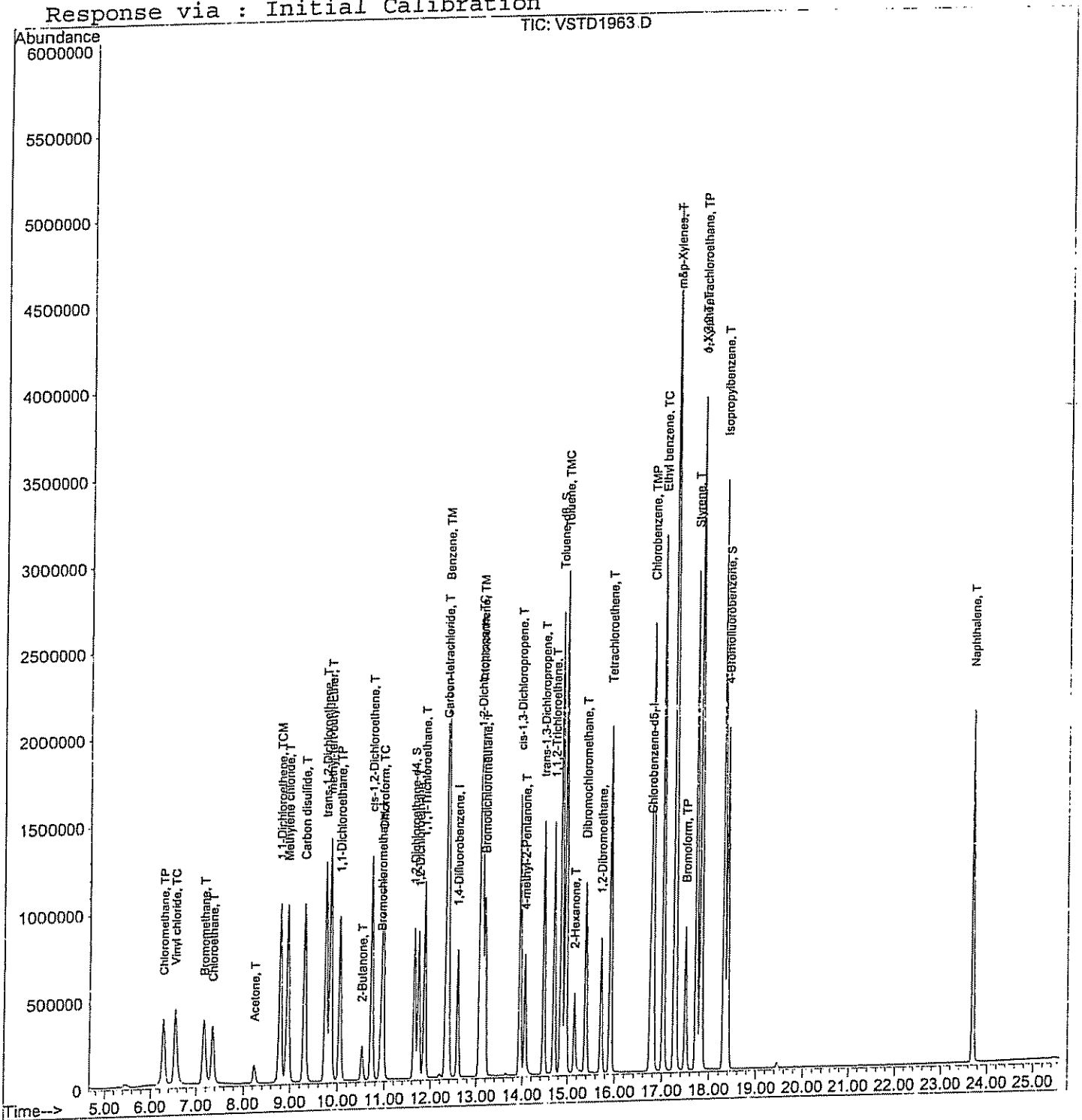
Data File : C:\HPCHEM\1\DATA\VSTD1963.D
Acq On : 15 Dec 2004 13:52
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Continuing Calibration Report GC/MS 1.0

MWB-2

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Jan 03 11:12:32 2005
Response via : Initial Calibration

Continuing Calibration File: VCAL1456.D

Min. RRF : 0.100 Min. Rel. Area : 50%
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%
1	I	Bromochloromethane	1.000	1.000	0.0	86
2	TP	Chloromethane	1.459	1.370	6.1	77
3	TC	Vinyl chloride	1.456	1.458	-0.1	81
4	T	Bromomethane	0.908	0.798	12.1	74
5	T	Chloroethane	0.993	1.082	-8.9	90
6	TCM	1,1-Dichloroethene	1.117	1.130	-1.1	87
7	T	Carbon disulfide	4.078	4.156	-1.9	88
8	T	Methylene chloride	1.416	1.467	-3.6	92
9	T	Acetone	0.384	0.382	0.7	97
10	T	trans-1,2-Dichloroethene	1.342	1.356	-1.1	88
11	T	methyl-tert-butyl-Ether	3.139	3.392	-8.0	94
12	TP	1,1-Dichloroethane	2.238	2.459	-9.9	97
13	T	cis-1,2-Dichloroethene	1.556	1.446	7.1	87
14	TC	Chloroform	1.997	2.084	-4.3	94
15	T	2-Butanone	0.600	0.593	1.1	92
16	S	1,2-Dichloroethane-d4	1.225	1.341	-9.4	97
17	T	1,2-Dichloroethane	1.409	1.601	-13.7	101
18	I	1,4-Difluorobenzene	1.000	1.000	0.0	90
19	T	Carbon tetrachloride	0.243	0.244	-0.5	91
20	T	1,1,1-Trichloroethane	0.286	0.289	-1.0	93
21	TM	Benzene	0.998	1.010	-1.2	93
22	TM	Trichloroethene	0.325	0.269	17.4	82
23	TC	1,2-Dichloropropane	0.257	0.274	-6.7	98
24	T	Bromodichloromethane	0.292	0.298	-1.9	94
25	T	cis-1,3-Dichloropropene	0.417	0.429	-2.9	93
26	T	trans-1,3-Dichloropropene	0.349	0.353	-1.3	92
27	T	1,1,2-Trichloroethane	0.207	0.216	-4.2	96
28	T	Dibromochloromethane	0.265	0.254	4.2	88
29		1,2-Dibromoethane	0.237	0.243	-2.4	93
30	TP	Bromoform	0.181	0.161	11.4	81
31	I	Chlorobenzene-d5	1.000	1.000	0.0	92
32	S	Toluene-d8	0.816	0.842	-3.2	94
33	TMC	Toluene	0.600	0.586	2.3	93
34	T	4-methyl-2-Pentanone	0.212	0.219	-3.5	97
35	T	Tetrachloroethene	0.226	0.195	13.3	80
36	T	2-Hexanone	0.145	0.150	-3.5	95
37	TC	Ethyl benzene	1.093	1.089	0.4	92
38	TMP	Chlorobenzene	0.727	0.702	3.3	92
39	T	m&p-Xylenes	0.442	0.437	1.3	91
40	T	o-Xylene	0.430	0.426	1.0	94
41	T	Styrene	0.718	0.719	-0.1	92
42	T	Isopropylbenzene	1.072	1.077	-0.4	92
43	S	4-Bromofluorobenzene	0.309	0.312	-0.8	94

44 TP	1,1,2,2-Tetrachloroethane	0.308	0.308	-0.0	96	MWB-2
45 T	Naphthalene	0.893	0.772	13.6	79	

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

VCAL1456.D TCL.M Mon Jan 03 11:12:41 2005

Data File : C:\HPCHEM\1\DATA\VCAL1456.D
Acq On : 21 Dec 2004 11:21
Sample : 50UG/L TCL/PAUST CCAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Jan 3 11:12 2005

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Wed Dec 29 09:25:01 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.97	128	166530	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.63	114	894040	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.81	117	851307	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.71	65	223328	54.72	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 109.44%			
32) Toluene-d8	14.91	98	716725	51.62	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.24%			
43) 4-Bromofluorobenzene	18.44	95	265265	50.38	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.76%			
Target Compounds						Qvalue
2) Chloromethane	6.33	50	228072	46.94	ug/L	100
3) Vinyl chloride	6.60	62	242851	50.07	ug/L	100
4) Bromomethane	7.21	94	132884m	43.95	ug/L	97
5) Chloroethane	7.40	64	180186	54.47	ug/L	99
6) 1,1-Dichloroethene	8.84	96	188111	50.56	ug/L	95
7) Carbon disulfide	9.36	76	692114	50.95	ug/L	100
8) Methylene chloride	8.99	84	244332	51.81	ug/L	97
9) Acetone	8.31	43	63557	49.65	ug/L	100
10) trans-1,2-Dichloroethene	9.81	96	225805	50.53	ug/L	98
11) methyl-tert-butyl-Ether	9.91	73	564835	54.02	ug/L	99
12) 1,1-Dichloroethane	10.11	63	409491	54.93	ug/L	100
13) cis-1,2-Dichloroethene	10.78	96	240723	46.45	ug/L	94
14) Chloroform	11.02	83	346996	52.16	ug/L	99
15) 2-Butanone	10.59	43	98835	49.44	ug/L	99
17) 1,2-Dichloroethane	11.80	62	266629	56.83	ug/L	99
19) Carbon tetrachloride	12.38	117	218202	50.26	ug/L	100
20) 1,1,1-Trichloroethane	11.93	97	258568	50.48	ug/L	99
21) Benzene	12.42	78	902817	50.60	ug/L	100
22) Trichloroethene	13.18	130	240367	41.31	ug/L	98
23) 1,2-Dichloropropane	13.14	63	245043	53.36	ug/L	100
24) Bromodichloromethane	13.24	83	266573	50.97	ug/L	99
25) cis-1,3-Dichloropropene	14.00	75	383510	51.46	ug/L	99
26) trans-1,3-Dichloropropene	14.52	75	315809	50.65	ug/L	98

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

Data File : C:\HPCHEM\1\DATA\VCAL1456.D
Acq On : 21 Dec 2004 11:21
Sample : 50UG/L TCL/PAUST CCAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Jan 3 11:12 2005

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Wed Dec 29 09:25:01 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.75	97	193239	52.11 ug/L	97
28) Dibromochloromethane	15.45	129	226849	47.90 ug/L	99
29) 1,2-Dibromoethane	15.77	107	216987	51.21 ug/L	100
30) Bromoform	17.55	173	143658	44.28 ug/L	99
33) Toluene	15.01	92	498871	48.85 ug/L	100
34) 4-methyl-2-Pentanone	14.16	43	186816	51.77 ug/L	99
35) Tetrachloroethene	15.97	164	166416	43.34 ug/L	97
36) 2-Hexanone	15.24	43	127917	51.74 ug/L	99
37) Ethyl benzene	17.08	91	926853	49.79 ug/L	100
38) Chlorobenzene	16.86	112	597942	48.33 ug/L	100
39) m&p-Xylenes	17.33	106	743702	98.72 ug/L	99
40) o-Xylene	17.88	106	362245	49.49 ug/L	99
41) Styrene	17.78	104	611816	50.07 ug/L	99
42) Isopropylbenzene	18.36	105	916550	50.21 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.87	83	262228	50.02 ug/L	100
45) Naphthalene	23.74	128	657323	43.22 ug/L #	100

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

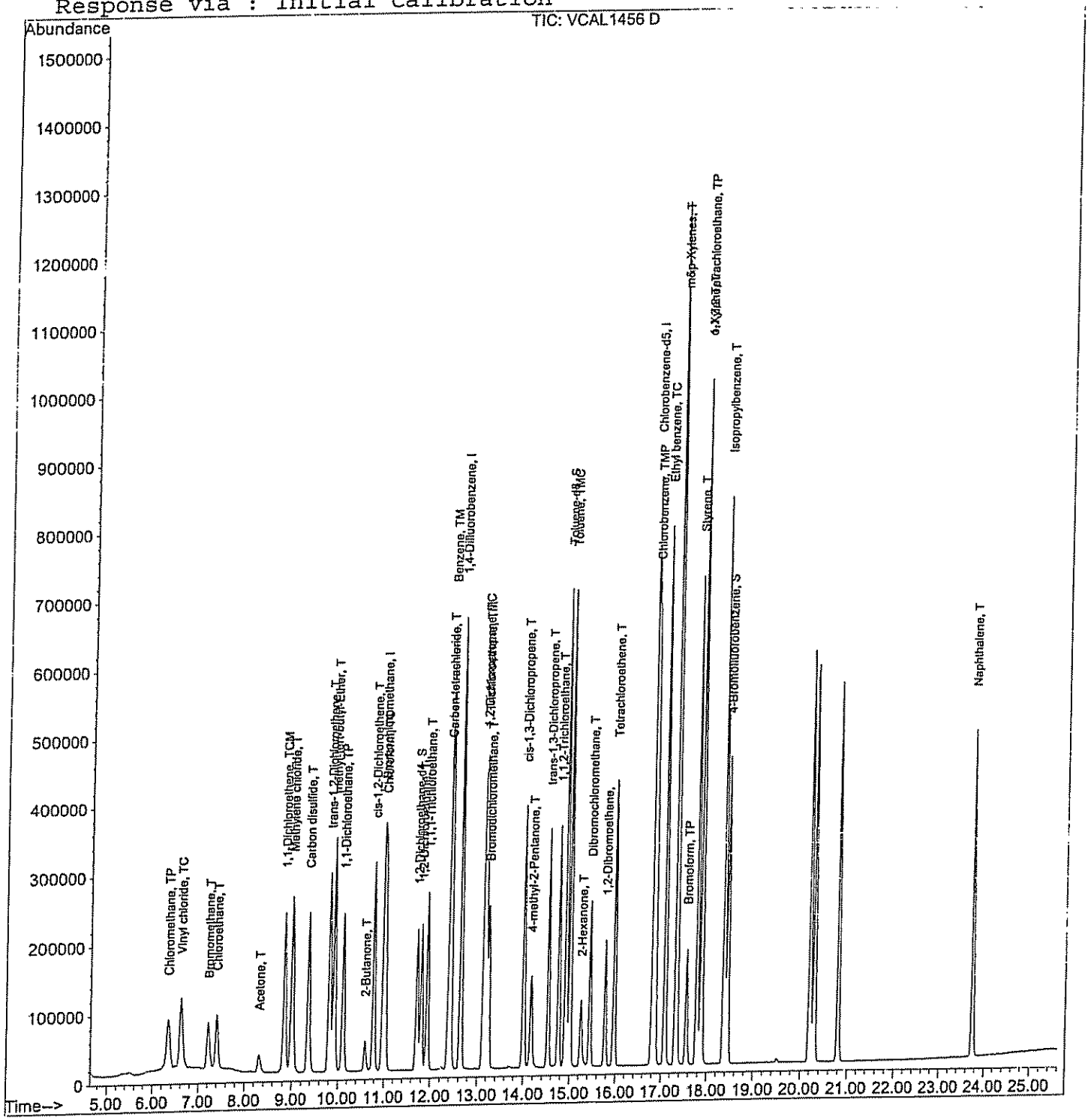
Data File : C:\HPCHEM\1\DATA\VCAL1456.D
Acq On : 21 Dec 2004 11:21
Sample : 50UG/L TCL/PAUST CCAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Jan 3 11:12 2005

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Wed Dec 29 09:25:01 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VBLK1450.D
Acq On : 21 Dec 2004 12:26
Sample : WATER METHOD BLK
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.97	128	167295	50.00	ug/L	0.06
18) 1,4-Difluorobenzene	12.63	114	907742	50.00	ug/L	0.06
31) Chlorobenzene-d5	16.81	117	848570	50.00	ug/L	0.05
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.71	65	218670	53.34	ug/L	0.06
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.68%			
32) Toluene-d8	14.91	98	720001	52.02	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.04%			
43) 4-Bromofluorobenzene	18.44	95	263950	50.29	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.58%			
Target Compounds						Qvalue
2) Chloromethane	6.31	50	208	0.04	ug/L #	85
4) Bromomethane	7.19	94	678	0.22	ug/L #	70
6) 1,1-Dichloroethene	8.84	96	491	0.13	ug/L #	35
7) Carbon disulfide	9.37	76	2001	0.15	ug/L	100
8) Methylene chloride	8.98	84	372	0.08	ug/L #	72
9) Acetone	8.33	43	2678	2.08	ug/L	99
13) cis-1,2-Dichloroethene	10.78	96	1726	0.33	ug/L	92
15) 2-Butanone	10.64	43	2689	1.34	ug/L	88
21) Benzene	12.41	78	1195	0.07	ug/L	89
22) Trichloroethene	13.18	130	5188	0.88	ug/L	89
27) 1,1,2-Trichloroethane	14.93	97	21637	5.75	ug/L #	50
33) Toluene	15.01	92	1275	0.13	ug/L	93
36) 2-Hexanone	15.17	43	237	0.10	ug/L #	68
37) Ethyl benzene	17.08	91	210	0.01	ug/L #	86
38) Chlorobenzene	16.87	112	1496	0.12	ug/L #	67
39) m&p-Xylenes	17.33	106	223	0.03	ug/L #	46
45) Naphthalene	23.75	128	1859	0.12	ug/L #	97

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

Quantitation Report

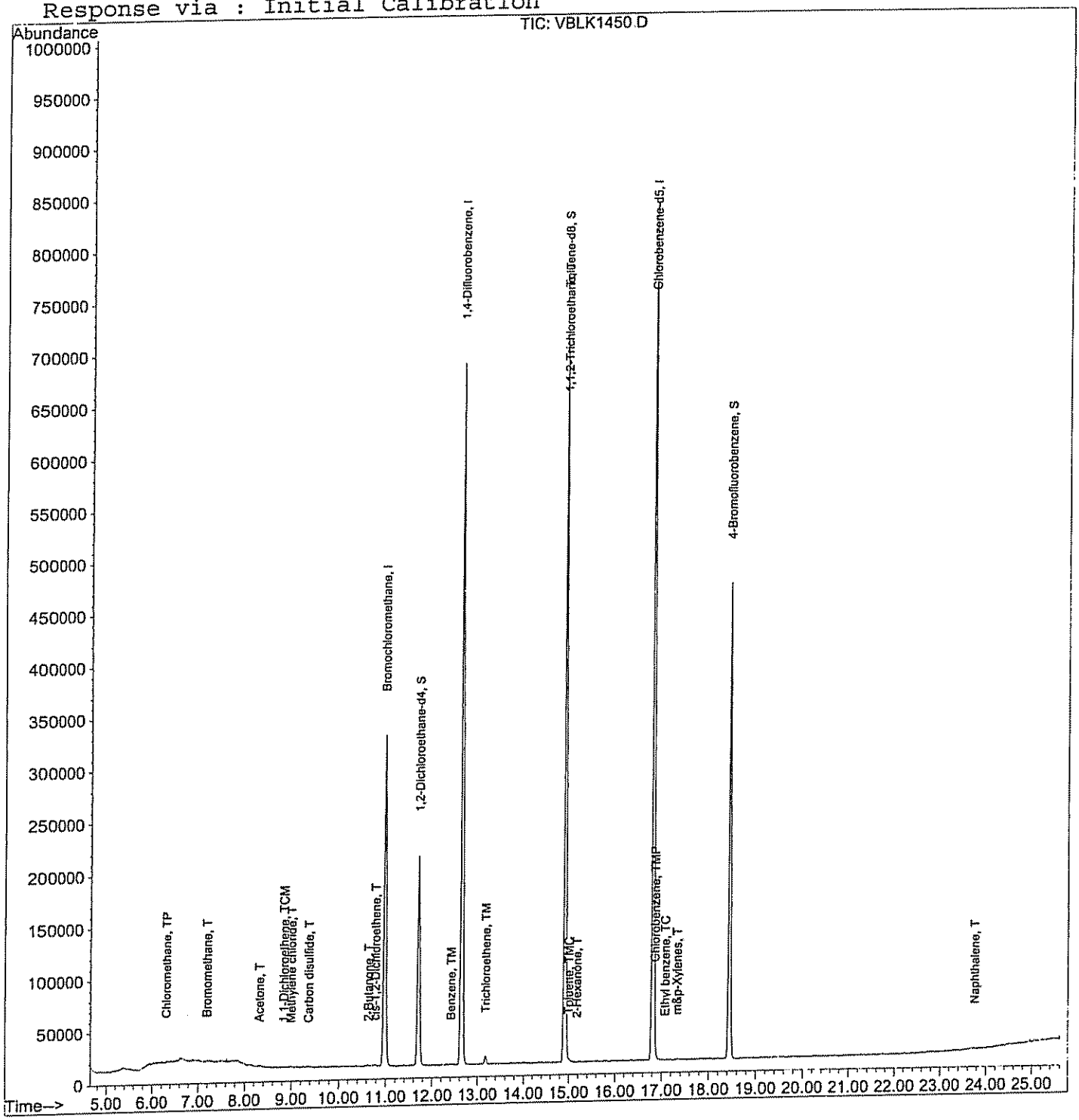
Data File : C:\HPCHEM\1\DATA\VBLK1450.D
Acq On : 21 Dec 2004 12:26
Sample : WATER METHOD BLK
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



LCS Blank Summary Report

Data File : C:\HPCHEM\1\DATA\LCSW1432.D
Acq On : 21 Dec 2004 11:54
Sample : 50UG/L TCL LCS
Misc : WATER
Matrix : WATER
Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Multiple Level Calibration

		Compound Name	Conc	Added	Recv(%)	QC Range	Q
6)	T	1,1-Dichloroethene	36.21	50.00	72.42	54 to 121%	[ ]
21)	T	Benzene	49.70	50.00	99.41	80 to 118%	[ ]
22)	T	Trichloroethene	38.81	50.00	77.62	67 to 118%	[ ]
33)	T	Toluene	48.94	50.00	97.89	73 to 124%	[ ]
38)	T	Chlorobenzene	49.28	50.00	98.55	80 to 117%	[ ]

* = out of control limits
Tue Dec 21 12:29:14 2004

Data File : C:\HPCHEM\1\DATA\LCSW1432.D
Acq On : 21 Dec 2004 11:54
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:28 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1
IS QA File : File name for IS QA unknown

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane	10.97	128	168881	50.00	ug/L	0.06 NA%
18) 1,4-Difluorobenzene	12.63	114	895260	50.00	ug/L	0.06 NA%
31) Chlorobenzene-d5	16.81	117	845064	50.00	ug/L	0.05 NA%
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.70	65	222710	53.81	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.62%			
32) Toluene-d8	14.91	98	723789	52.51	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.02%			
43) 4-Bromofluorobenzene	18.44	95	273248	52.28	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.56%			
Target Compounds						Qvalue
2) Chloromethane	6.31	50	781	0.16	ug/L #	85
3) Vinyl chloride	6.57	62	213	0.04	ug/L #	86
4) Bromomethane	7.04	94	209	0.07	ug/L	89
6) 1,1-Dichloroethene	8.84	96	136623	36.21	ug/L	92
7) Carbon disulfide	9.36	76	5124	0.37	ug/L	100
8) Methylene chloride	9.00	84	1349	0.28	ug/L	90
9) Acetone	8.31	43	3720	2.87	ug/L	95
10) trans-1,2-Dichloroethene	9.79	96	1276	0.28	ug/L #	70
13) cis-1,2-Dichloroethene	10.77	96	2197	0.42	ug/L	94
14) Chloroform	11.01	83	200	0.03	ug/L #	66
15) 2-Butanone	10.60	43	4456	2.20	ug/L	98
21) Benzene	12.42	78	887975	49.70	ug/L	100
22) Trichloroethene	13.18	130	226141	38.81	ug/L	98
24) Bromodichloromethane	13.17	83	2097	0.40	ug/L #	1
26) trans-1,3-Dichloropropene	14.52	75	356	0.06	ug/L #	77
27) 1,1,2-Trichloroethane	14.92	97	22783	6.14	ug/L #	50
33) Toluene	15.00	92	496182	48.94	ug/L	99
35) Tetrachloroethene	15.97	164	295	0.08	ug/L #	64

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

Data File : C:\HPCHEM\1\DATA\LCSW1432.D
Acq On : 21 Dec 2004 11:54
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:28 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
36) 2-Hexanone	15.00	43	7802	3.18	ug/L	#	68
37) Ethyl benzene	17.09	91	1815	0.10	ug/L		98
38) Chlorobenzene	16.85	112	605183	49.28	ug/L		100
39) m&p-Xylenes	17.09	106	237	0.03	ug/L		94
40) o-Xylene	17.88	106	360	0.05	ug/L	#	20
41) Styrene	17.79	104	577	0.05	ug/L	#	79
42) Isopropylbenzene	18.37	105	1207	0.07	ug/L	#	88
44) 1,1,2,2-Tetrachloroethane	17.88	83	450	0.09	ug/L	#	67
45) Naphthalene	23.75	128	15055	1.00	ug/L		100

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

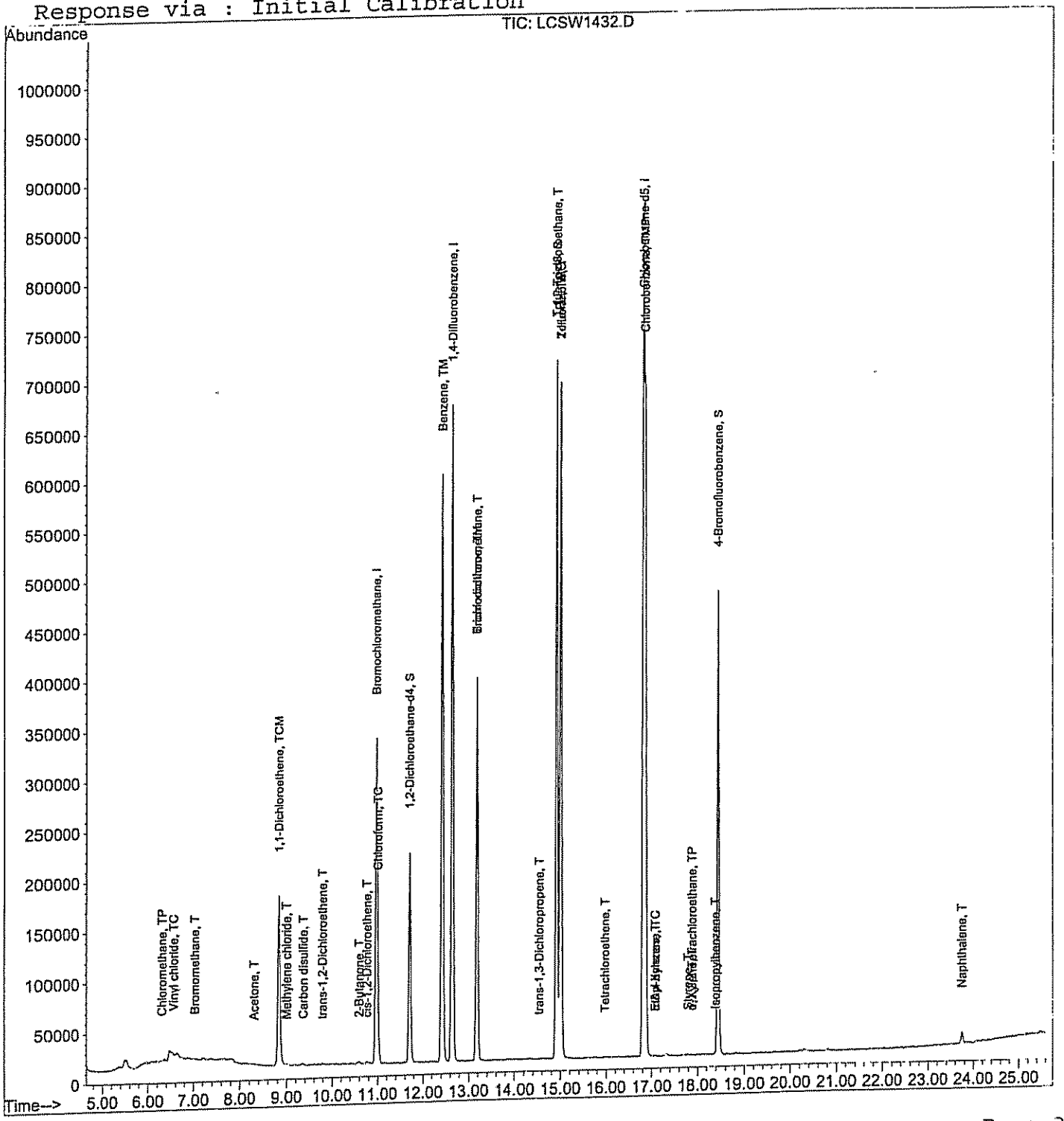
Data File : C:\HPCHEM\1\DATA\LCSW1432.D
Acq On : 21 Dec 2004 11:54
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:28 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSA13191.D
Acq On : 21 Dec 2004 18:58
Sample : P0412024-01A DF100 RE
Misc : WATER

Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	10.96	128	158941	50.00 ug/L	0.05
18) 1,4-Difluorobenzene	12.63	114	892145	50.00 ug/L	0.05
31) Chlorobenzene-d5	16.80	117	807430	50.00 ug/L	0.04
System Monitoring Compounds					
16) 1,2-Dichloroethane-d4	11.70	65	223970	57.50 ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 115.00%		
32) Toluene-d8	14.90	98	707566	53.73 ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.46%		
43) 4-Bromofluorobenzene	18.43	95	259200	51.90 ug/L	0.04
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.80%		
Target Compounds					Qvalue
2) Chloromethane	6.32	50	99	0.02 ug/L #	85
3) Vinyl chloride	6.60	62	17678	3.82 ug/L	98
4) Bromomethane	7.15	94	189	0.07 ug/L #	54
6) 1,1-Dichloroethene	8.83	96	45800	12.90 ug/L	95
7) Carbon disulfide	9.33	76	259	0.02 ug/L	100
8) Methylene chloride	8.99	84	20800	4.62 ug/L	98
9) Acetone	8.32	43	1851	1.52 ug/L	95
10) trans-1,2-Dichloroethene	9.80	96	41100	9.64 ug/L	98
12) 1,1-Dichloroethane	10.10	63	70918	9.97 ug/L	99
13) cis-1,2-Dichloroethene	10.77	96	3121801	631.16 ug/L	96
14) Chloroform	10.99	83	1148	0.18 ug/L	85
15) 2-Butanone	10.54	43	202	0.11 ug/L	88
17) 1,2-Dichloroethane	11.79	62	13952	3.12 ug/L	95
20) 1,1,1-Trichloroethane	11.92	97	132404	25.91 ug/L	98
21) Benzene	12.41	78	11205	0.63 ug/L	99
22) Trichloroethene	13.17	130	2033921	350.29 ug/L	99
24) Bromodichloromethane	13.16	83	20376	3.90 ug/L #	1
27) 1,1,2-Trichloroethane	14.74	97	1079	0.29 ug/L	87
33) Toluene	15.00	92	396584	40.94 ug/L	99
35) Tetrachloroethene	15.96	164	1518	0.42 ug/L #	74
36) 2-Hexanone	14.99	43	6396	2.73 ug/L #	68
37) Ethyl benzene	17.07	91	35017	1.98 ug/L	98
38) Chlorobenzene	16.86	112	433	0.04 ug/L #	67

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

See DF 500
HH 1/2/05

Data File : C:\HPCHEM\1\DATA\VSA13191.D
Acq On : 21 Dec 2004 18:58
Sample : P0412024-01A DF100 RE
Misc : WATER

Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
39) m&p-Xylenes	17.31	106	24324	3.40	ug/L		99
40) o-Xylene	17.87	106	9725	1.40	ug/L		98
42) Isopropylbenzene	18.35	105	1801	0.10	ug/L	#	95
45) Naphthalene	23.74	128	5205	0.36	ug/L		99

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

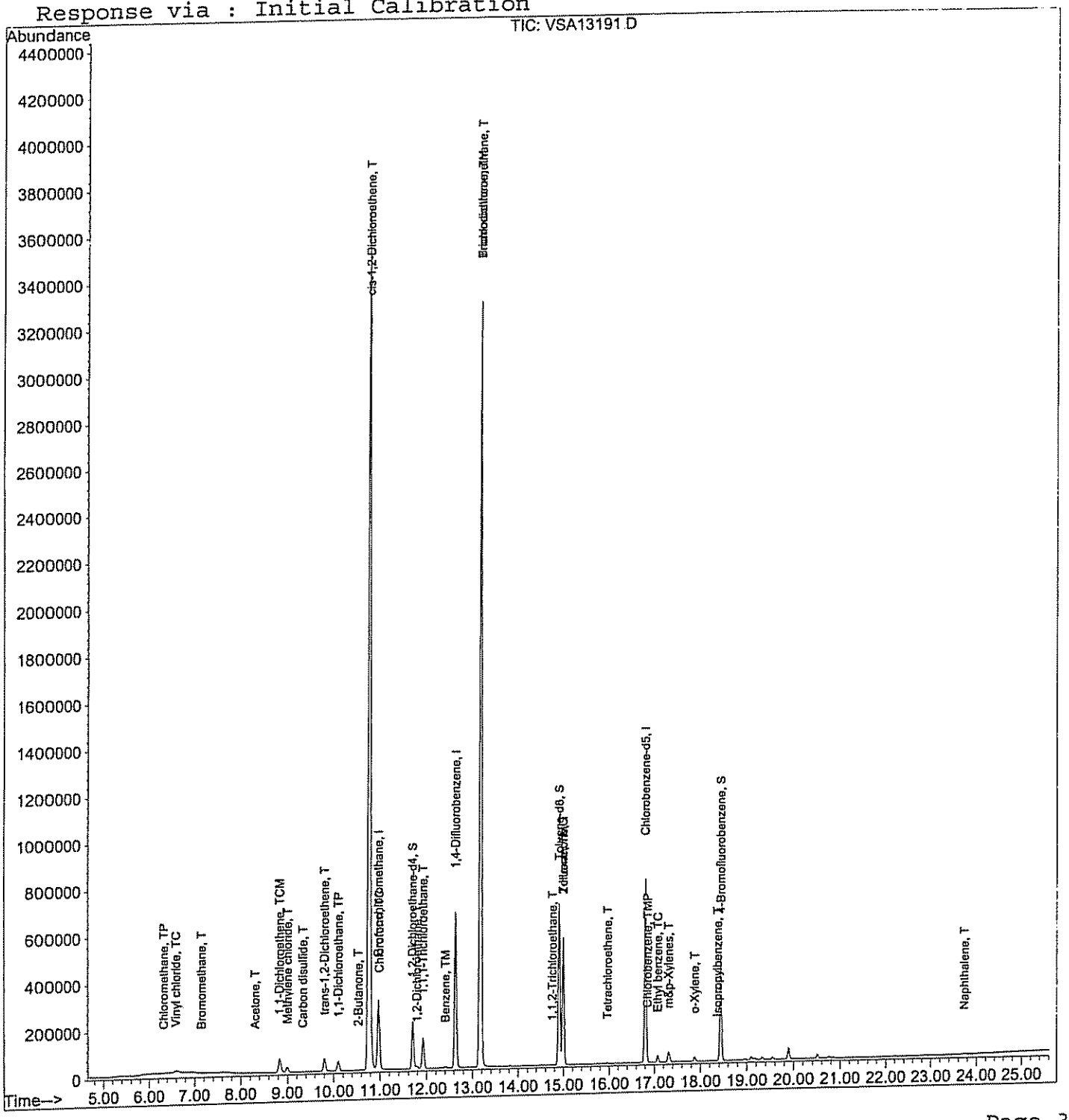
Data File : C:\HPCHEM\1\DATA\VSA13191.D
Acq On : 21 Dec 2004 18:58
Sample : P0412024-01A DF100 RE
Misc : WATER

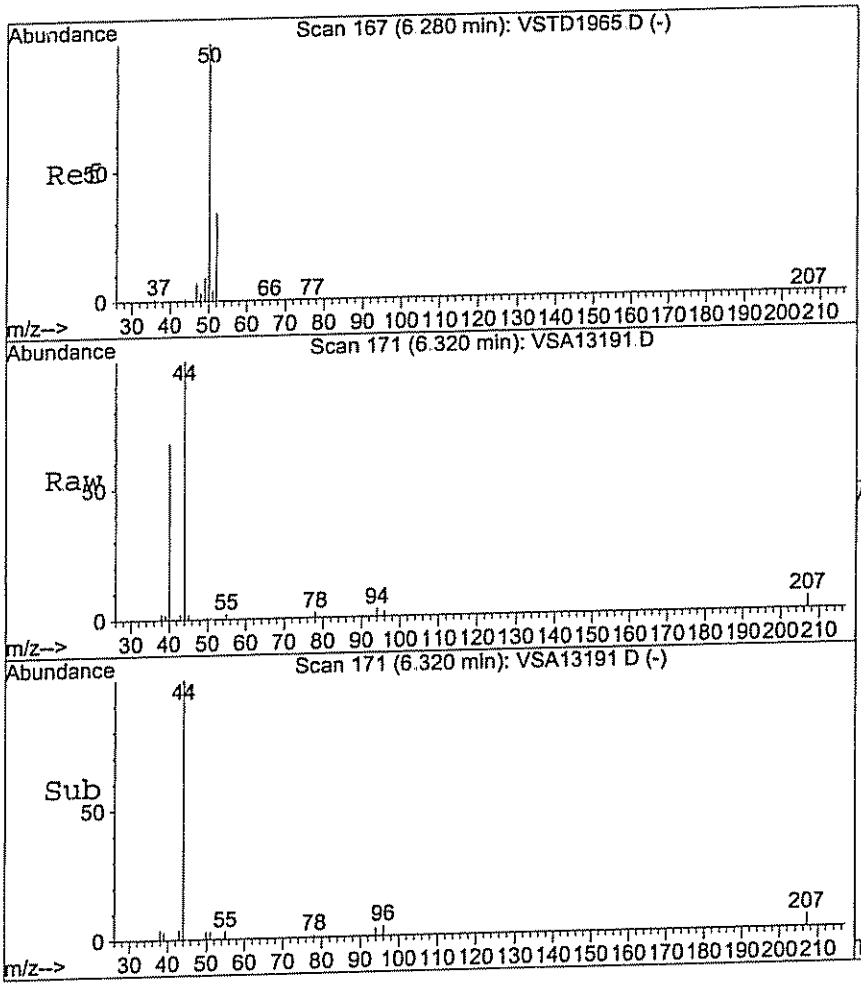
Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration

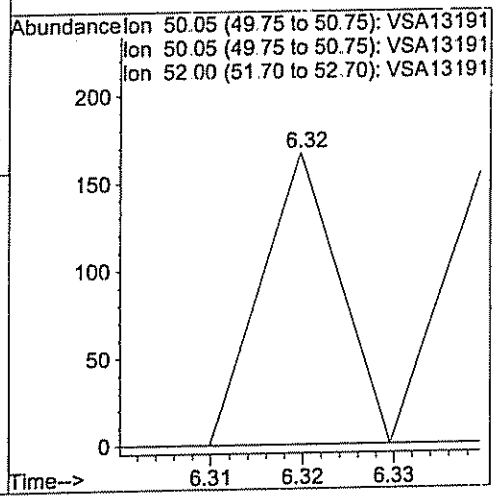


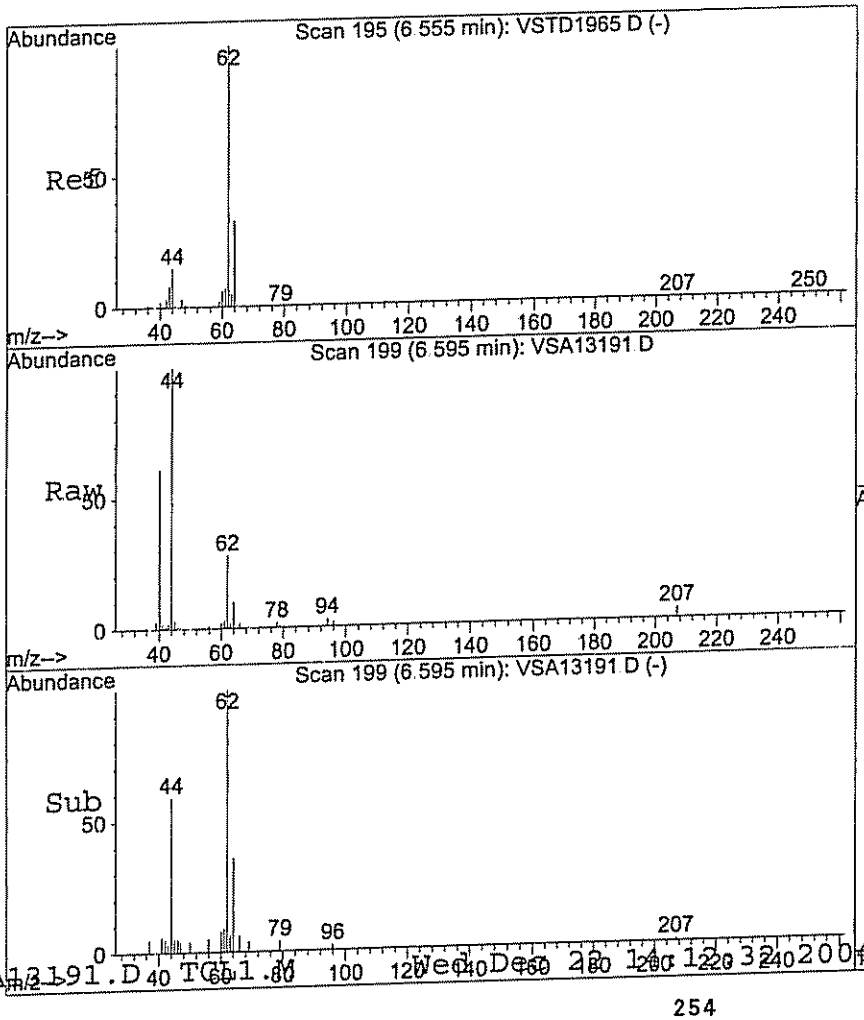


#2
Chloromethane
Concen: 0.02 ug/L
RT: 6.32 min Scan# 171
Delta R.T. 0.04 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 50 Resp: 99

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.9	63.9#

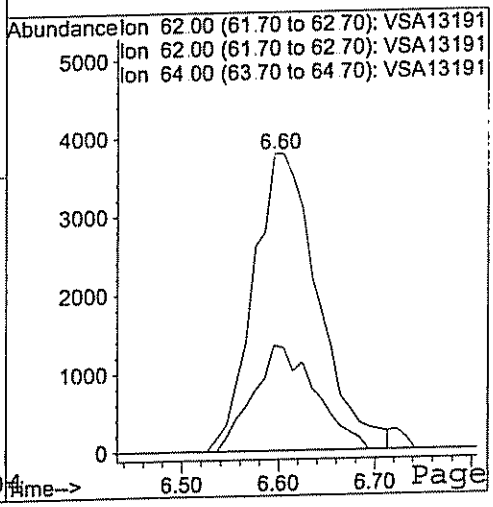


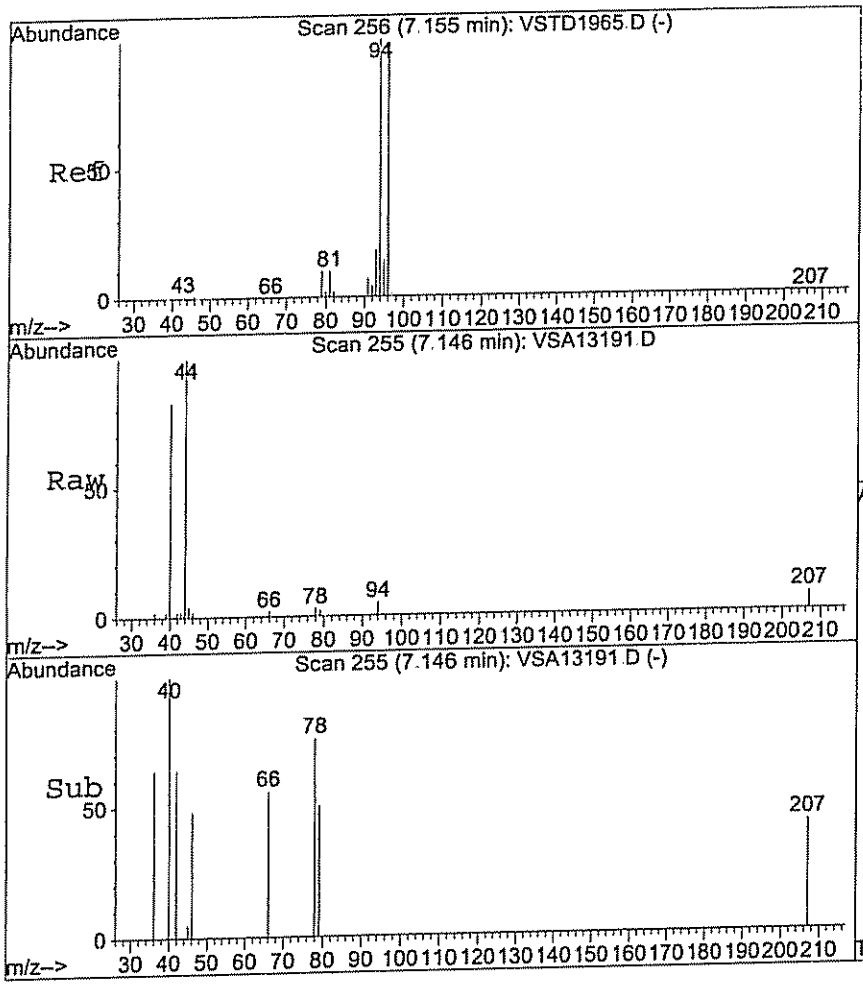


#3
Vinyl chloride
Concen: 3.82 ug/L
RT: 6.60 min Scan# 199
Delta R.T. 0.04 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 62 Resp: 17678

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	36.7	2.4	62.4

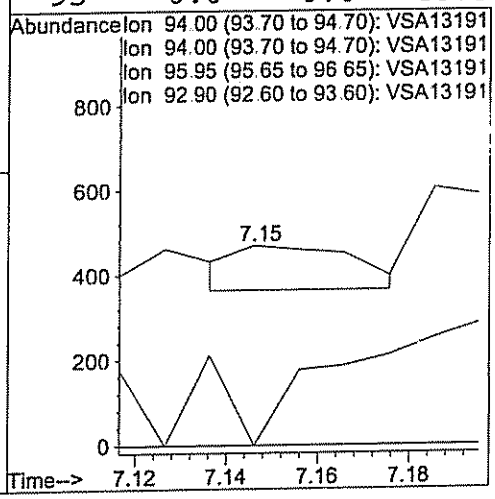


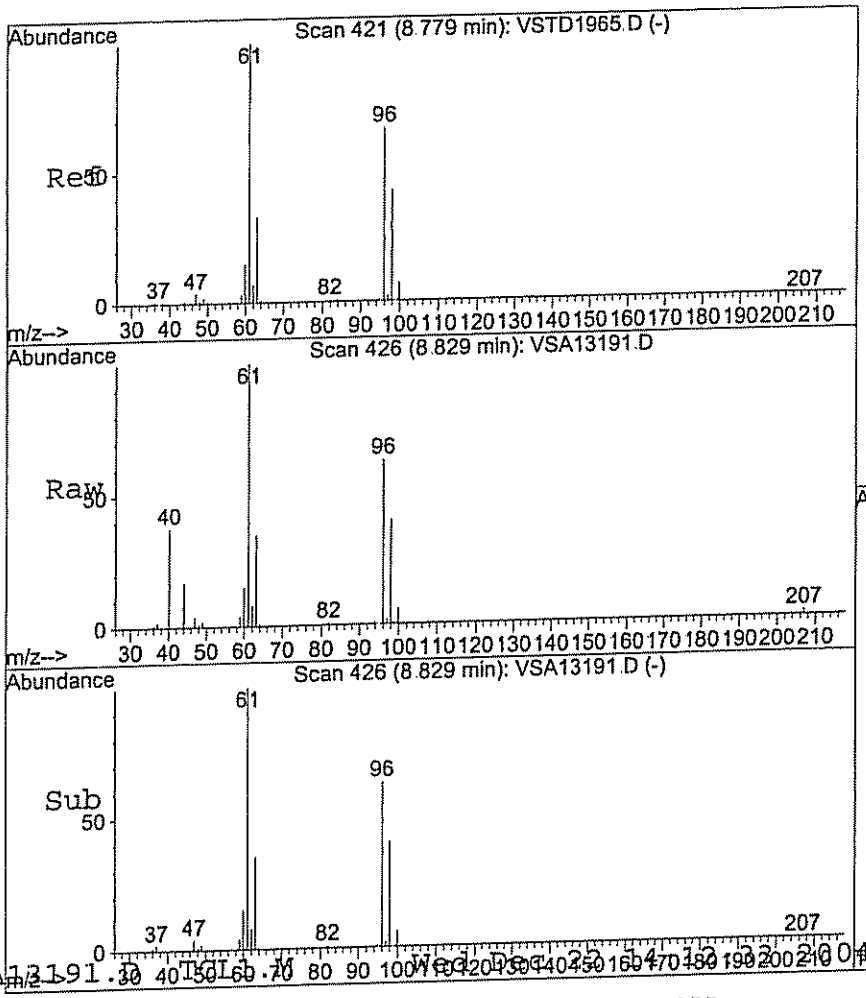


#4
Bromomethane
Concen: 0.07 ug/L
RT: 7.15 min Scan# 255
Delta R.T. -0.01 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 94 Resp: 189

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	0.0	63.6	123.6#
93	0.0	0.0	48.5

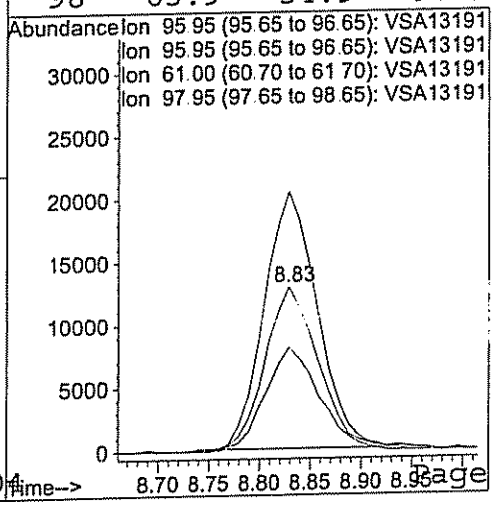


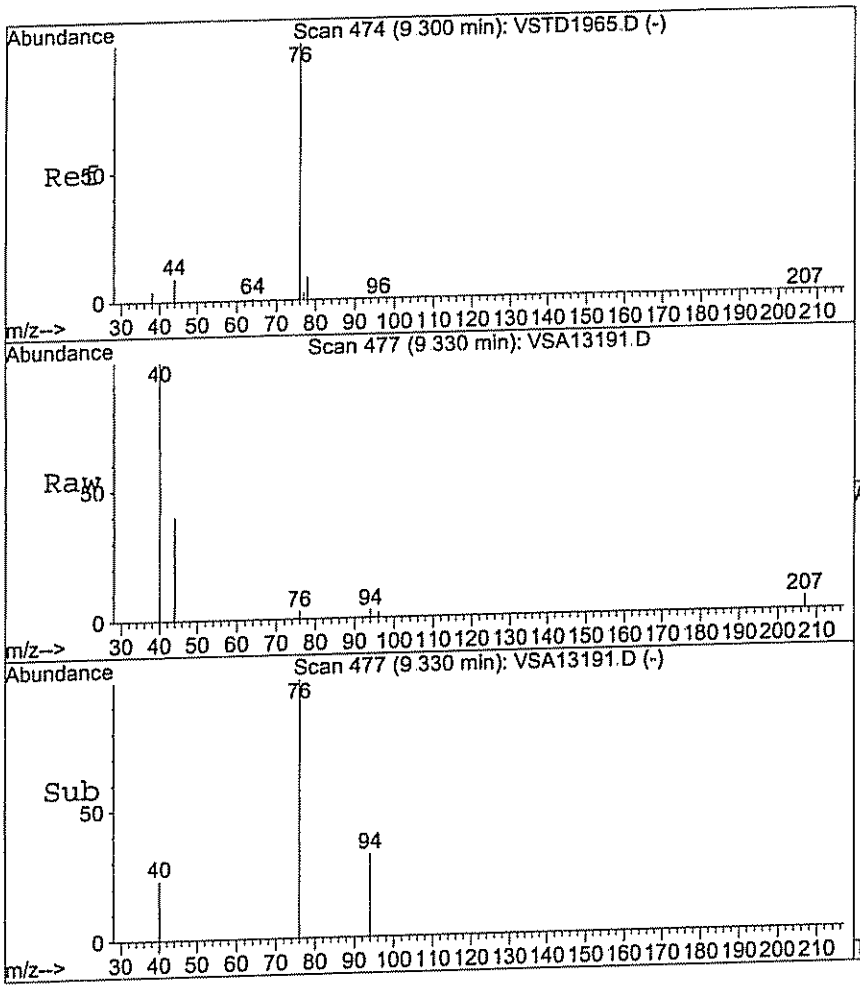


#6
1,1-Dichloroethene
Concen: 12.90 ug/L
RT: 8.83 min Scan# 426
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 96 Resp: 45800

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	160.5	118.9	178.9
98	63.9	34.9	94.9

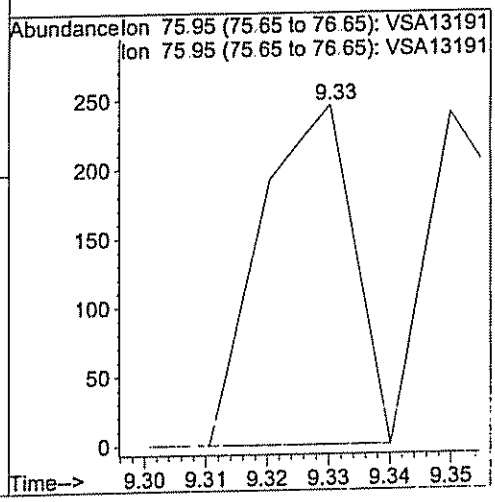


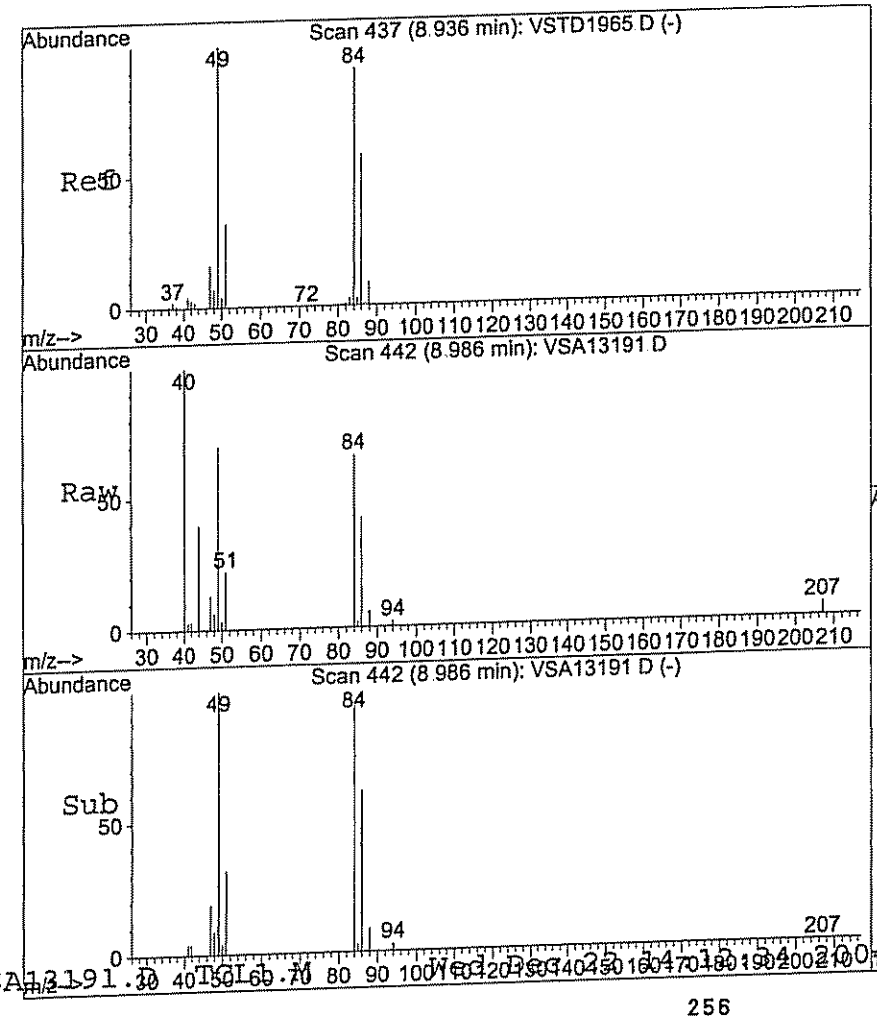


#7
Carbon disulfide
Concen: 0.02 ug/L
RT: 9.33 min Scan# 477
Delta R.T. 0.03 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 76 Resp: 259

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

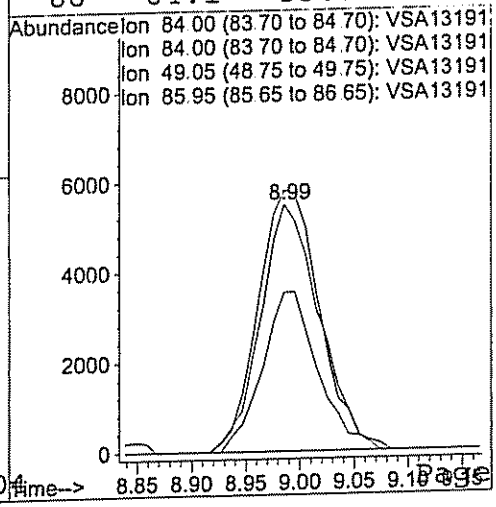


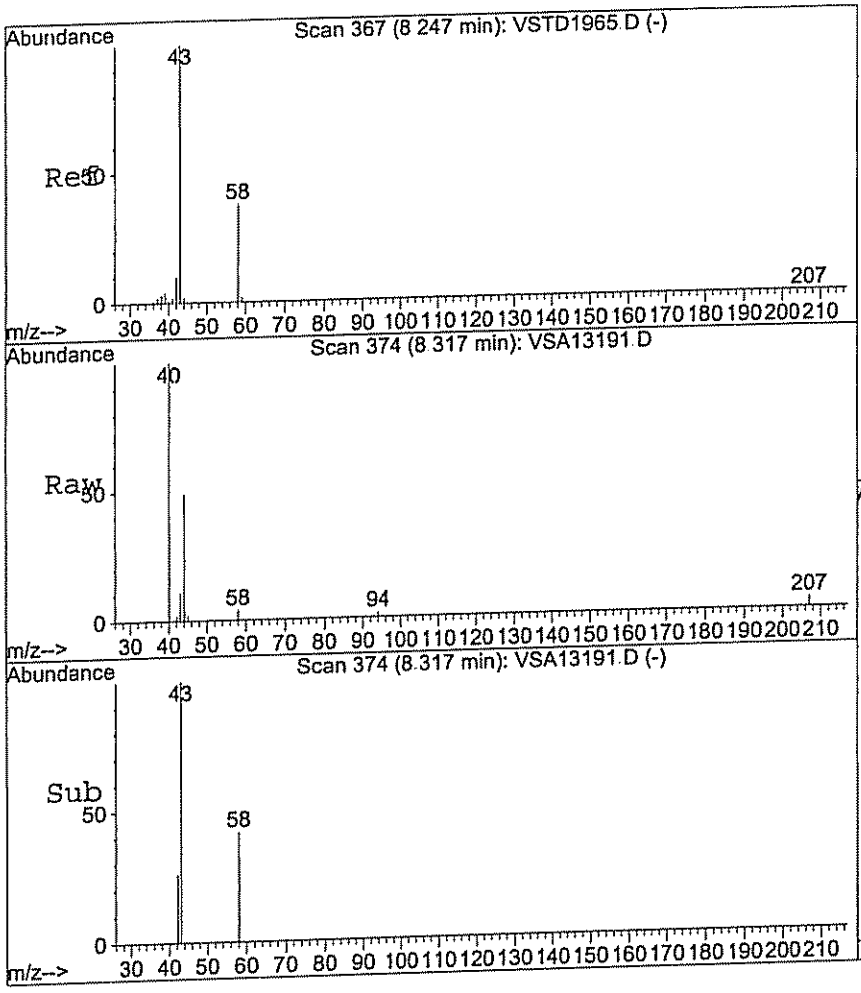


#8
Methylene chloride
Concen: 4.62 ug/L
RT: 8.99 min Scan# 442
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 84 Resp: 20800

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	105.7	80.0	140.0
86	64.1	33.4	93.4

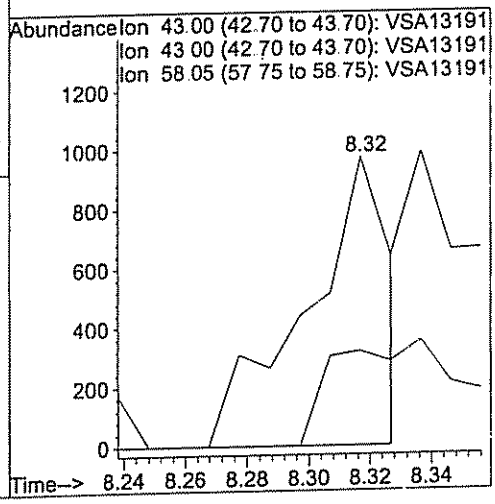


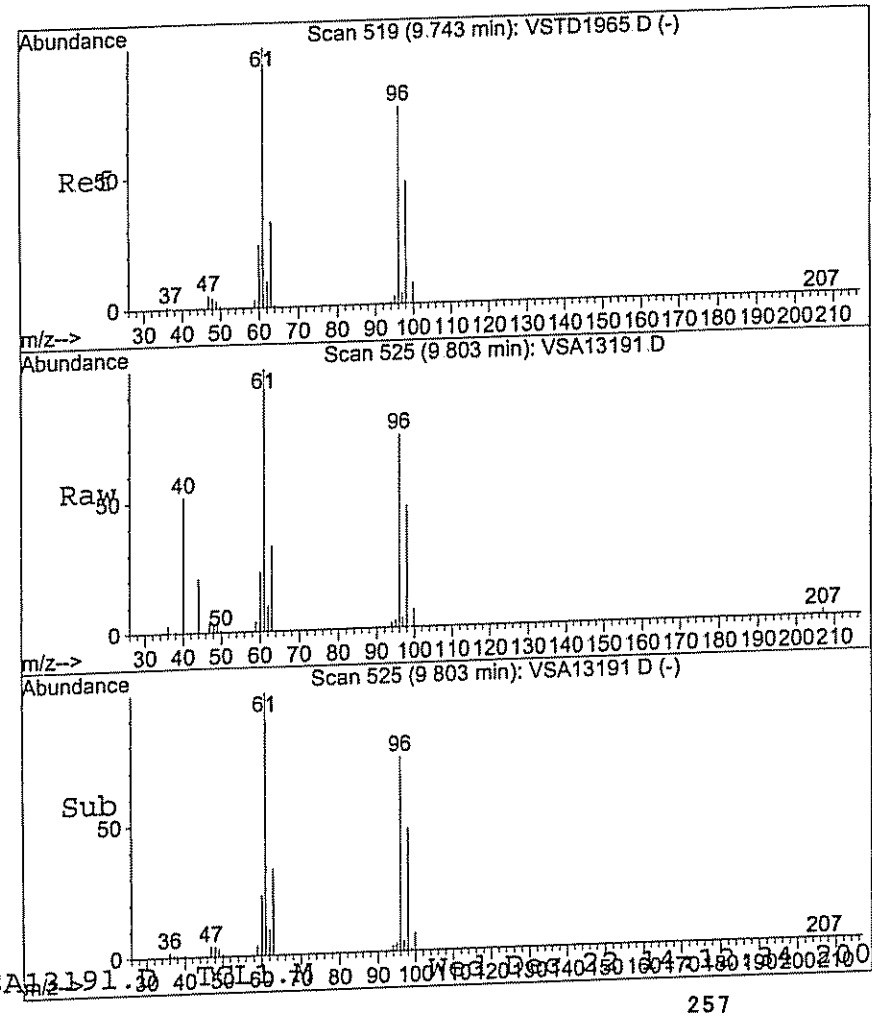


#9
Acetone
Concen: 1.52 ug/L
RT: 8.32 min Scan# 374
Delta R.T. 0.04 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 43 Resp: 1851

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	27.1	7.8	67.8

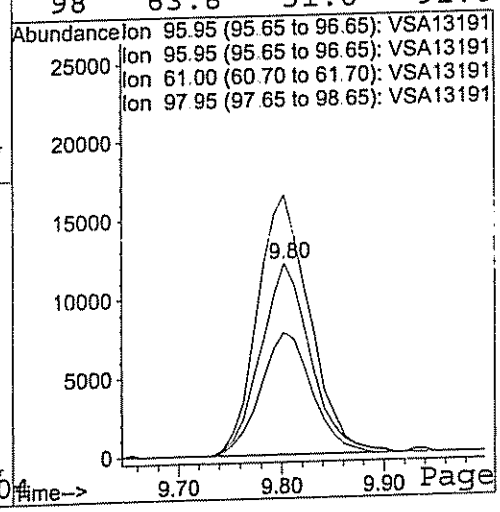


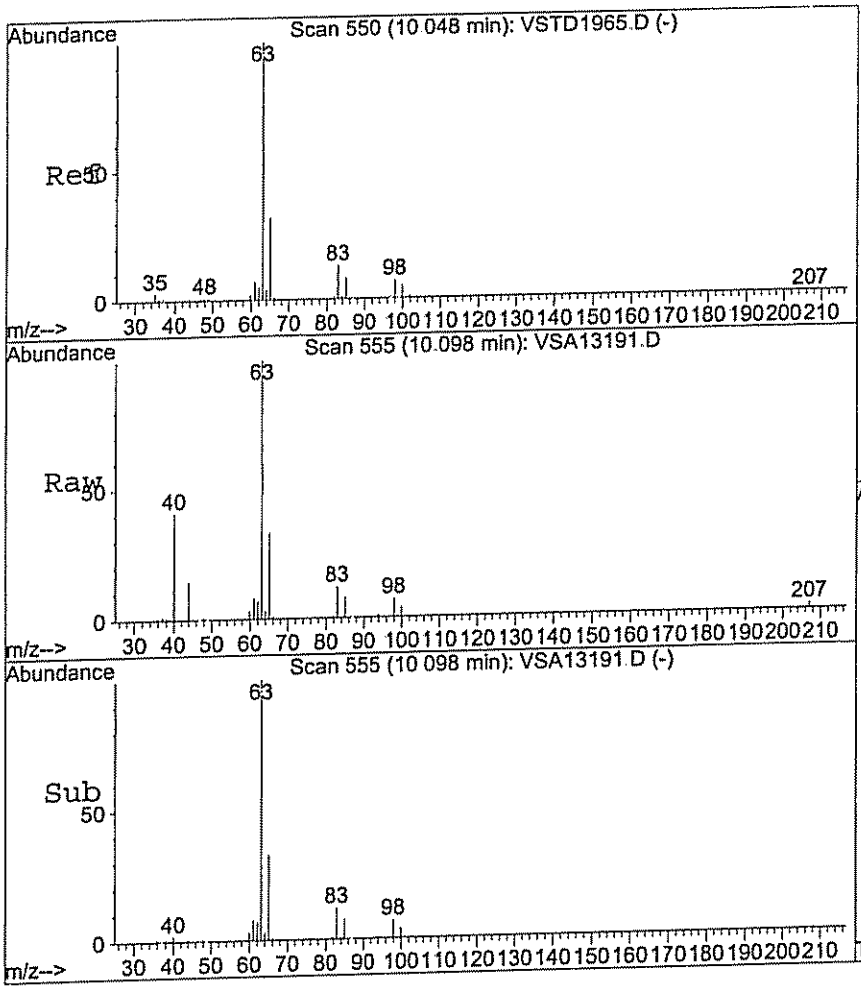


#10
trans-1,2-Dichloroethene
Concen: 9.64 ug/L
RT: 9.80 min Scan# 525
Delta R.T. 0.06 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 96 Resp: 41100

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	135.8	102.4	162.4
98	63.8	31.6	91.6

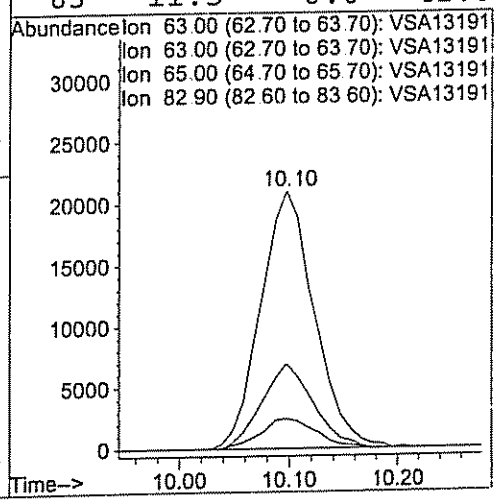


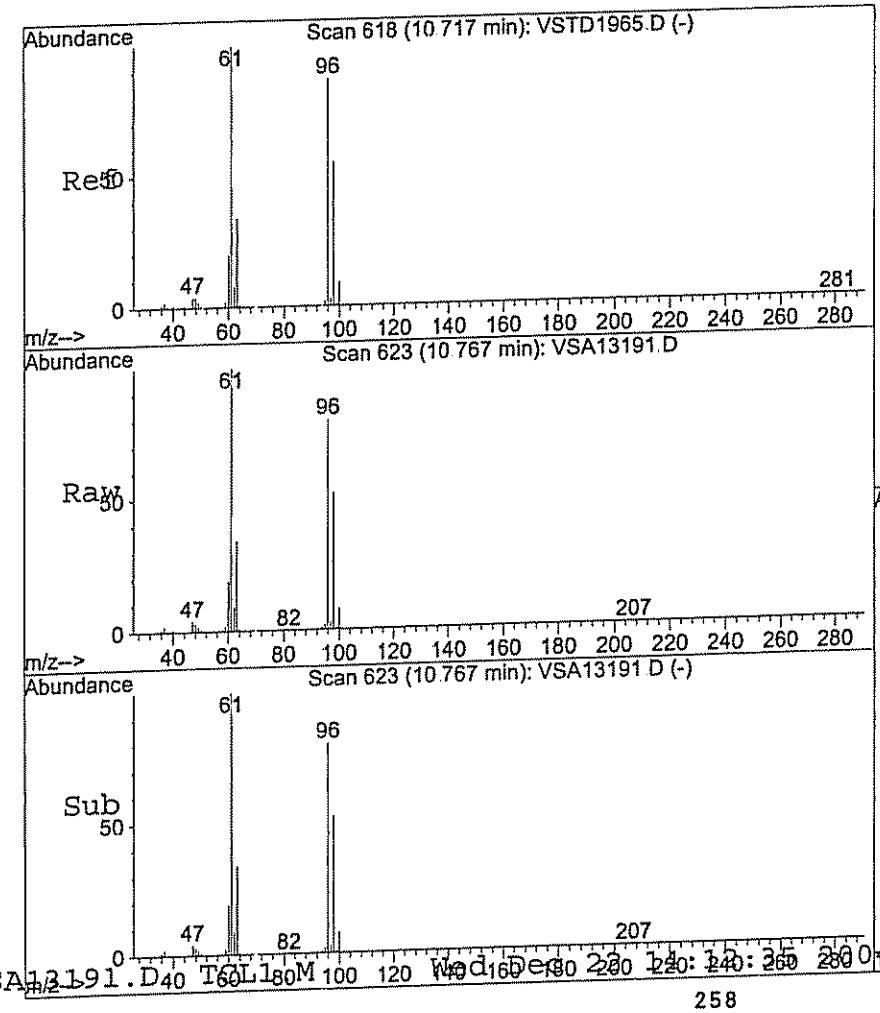


#12
1,1-Dichloroethane
Concen: 9.97 ug/L
RT: 10.10 min Scan# 555
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 63 Resp: 70918

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	33.0	2.1	62.1
83	11.5	0.0	42.6

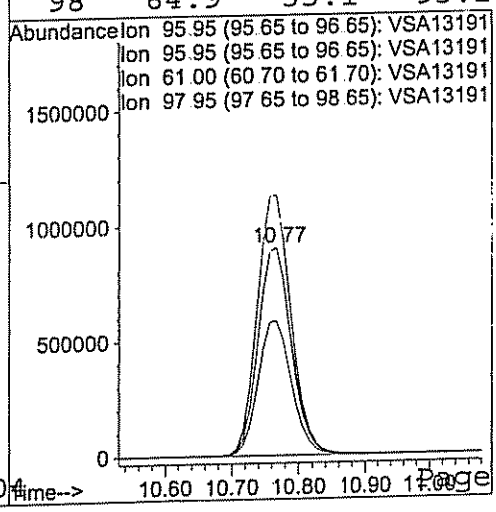


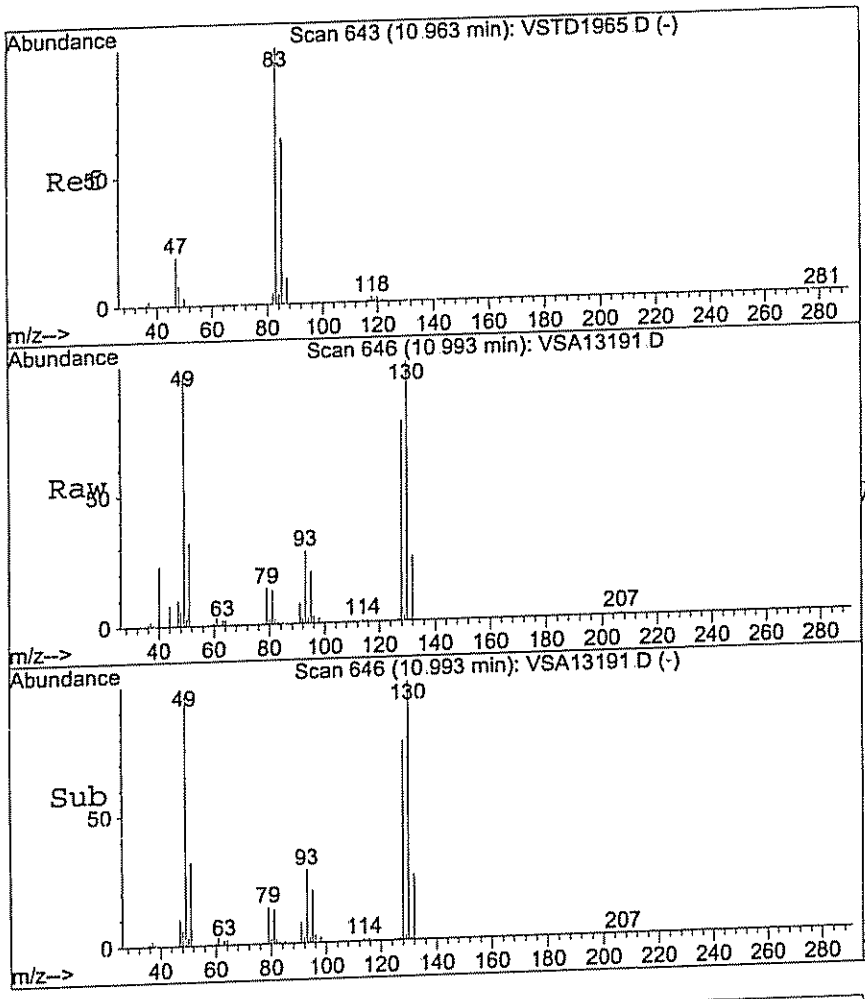


#13
cis-1,2-Dichloroethene
Concen: 631.16 ug/L
RT: 10.77 min Scan# 623
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 96 Resp: 3121801

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	125.0	85.2	145.2
98	64.9	33.1	93.1

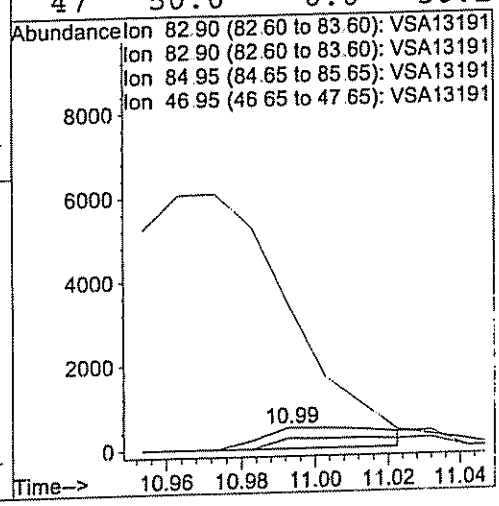


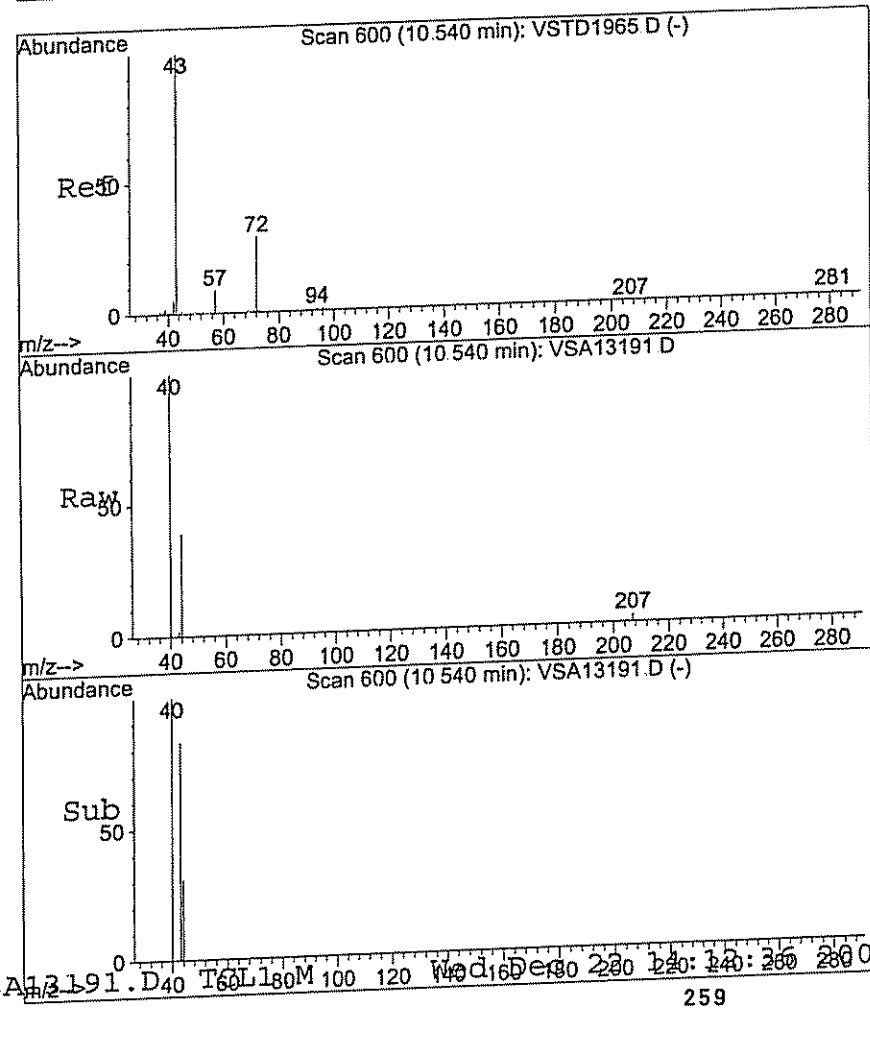


#14
Chloroform
Concen: 0.18 ug/L
RT: 10.99 min Scan# 646
Delta R.T. 0.03 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 83 Resp: 1148

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	47.6	34.7	94.7
47	50.0	0.0	50.1

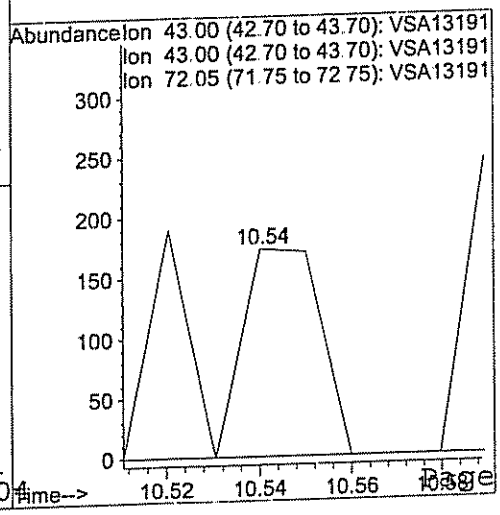


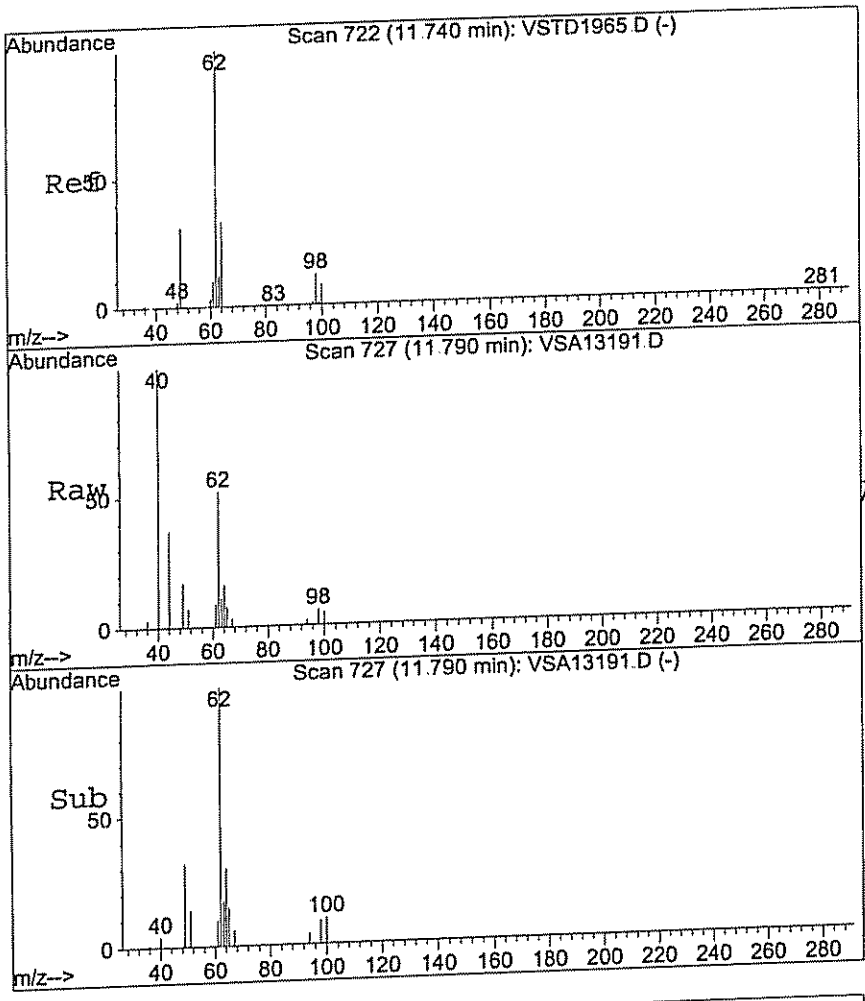


#15
2-Butanone
Concen: 0.11 ug/L
RT: 10.54 min Scan# 600
Delta R.T. -0.02 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 43 Resp: 202

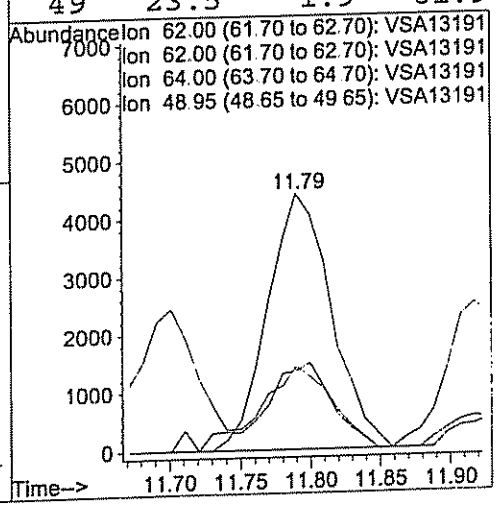
Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	59.3

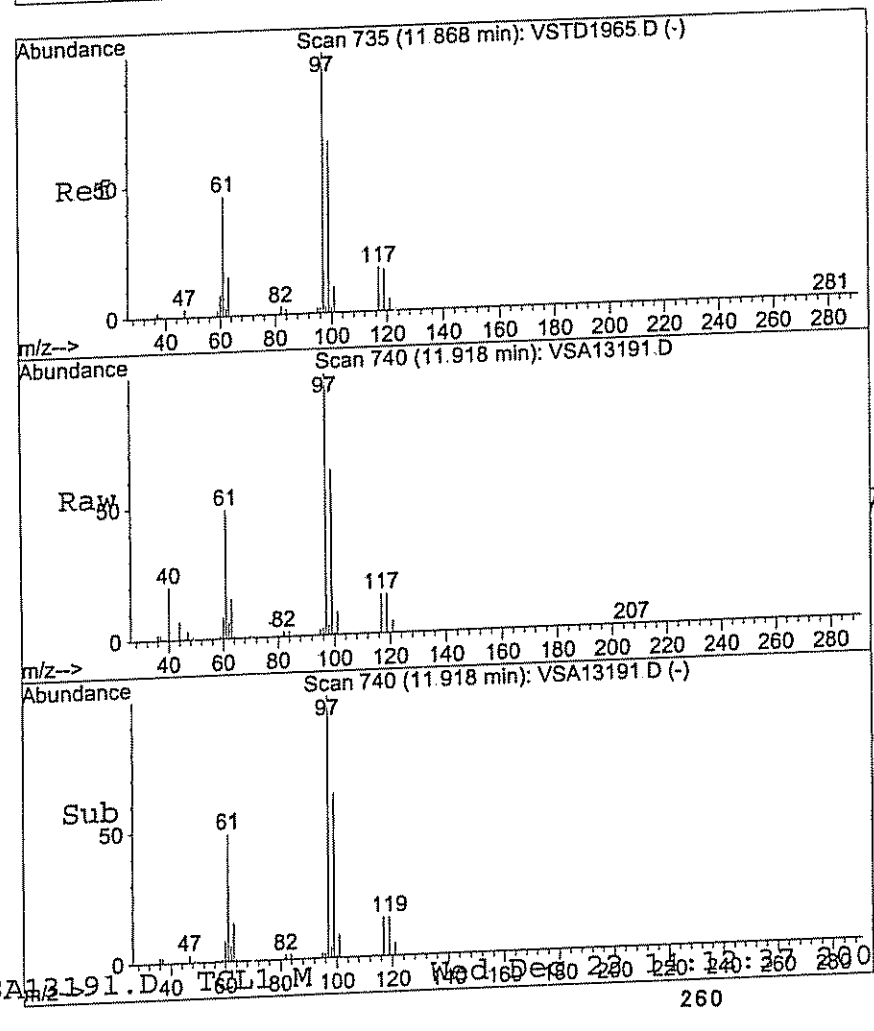




#17
1,2-Dichloroethane
Concen: 3.12 ug/L
RT: 11.79 min Scan# 727
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

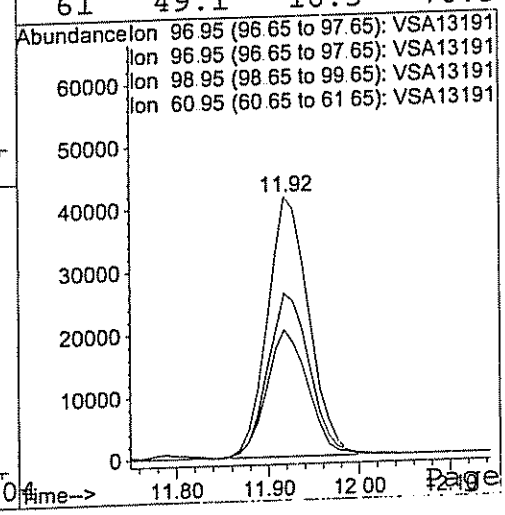
Tgt Ion: 62	Resp:	13952	
Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	27.1	2.9	62.9
49	23.5	1.9	61.9

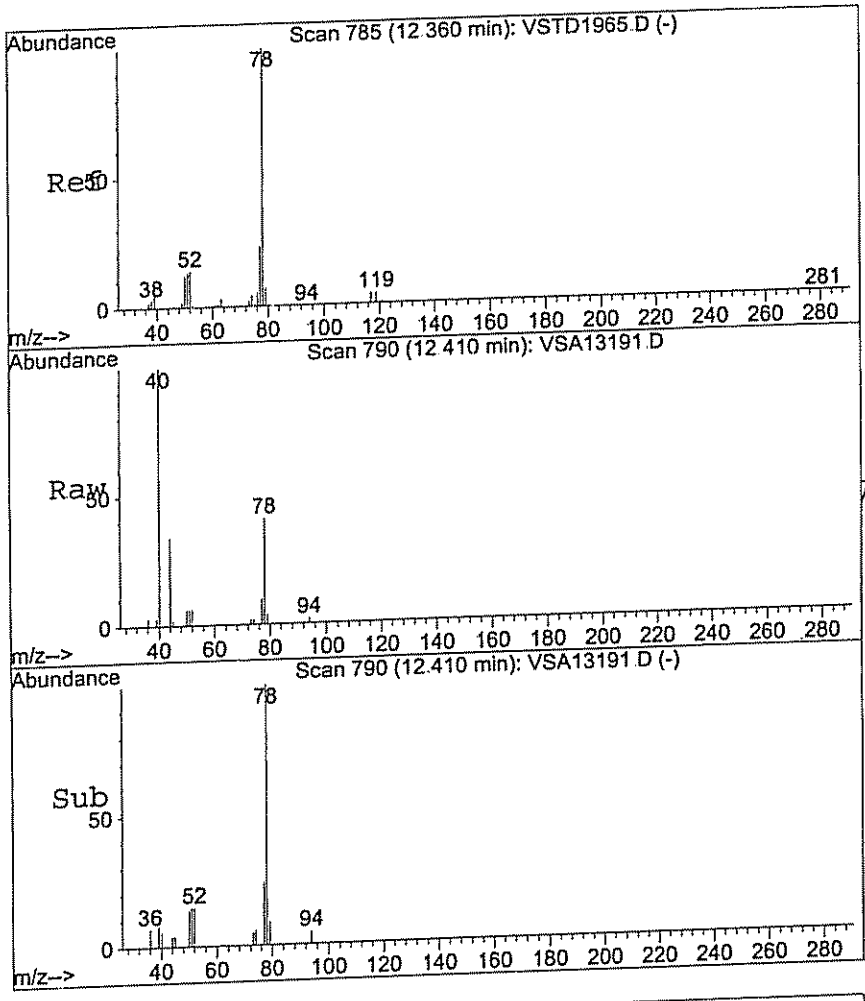




#20
1,1,1-Trichloroethane
Concen: 25.91 ug/L
RT: 11.92 min Scan# 740
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 97	Resp:	132404	
Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	63.0	35.6	95.6
61	49.1	16.5	76.5

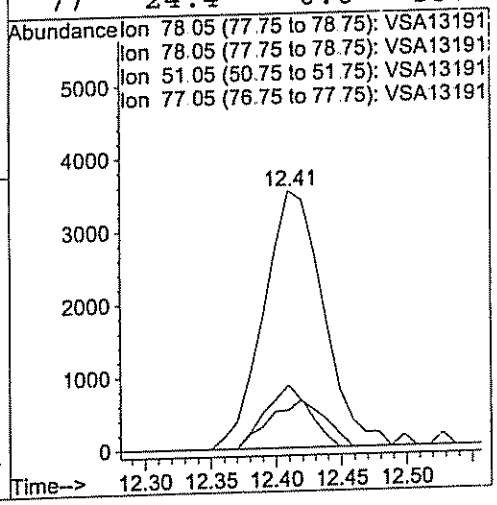


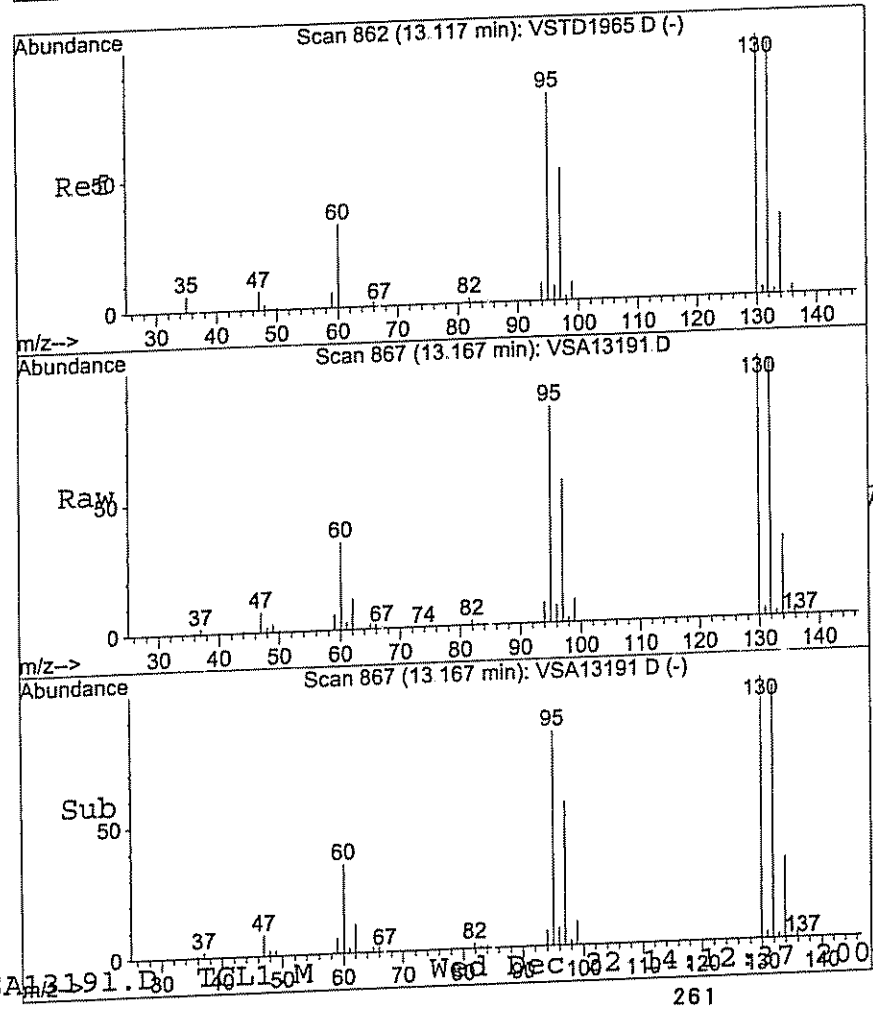


#21
Benzene
Concen: 0.63 ug/L
RT: 12.41 min Scan# 790
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 78 Resp: 11205

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	14.6	0.0	43.2
77	24.4	0.0	53.2

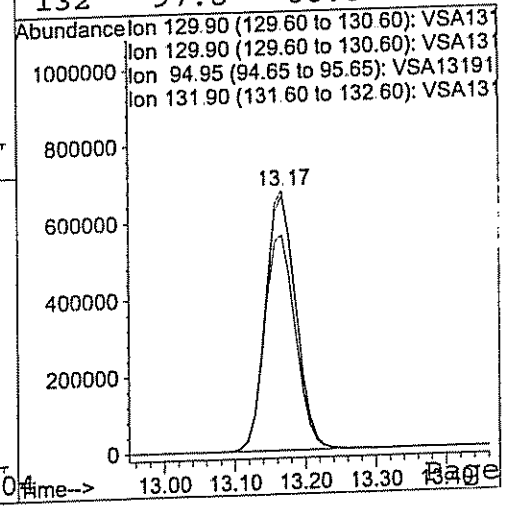


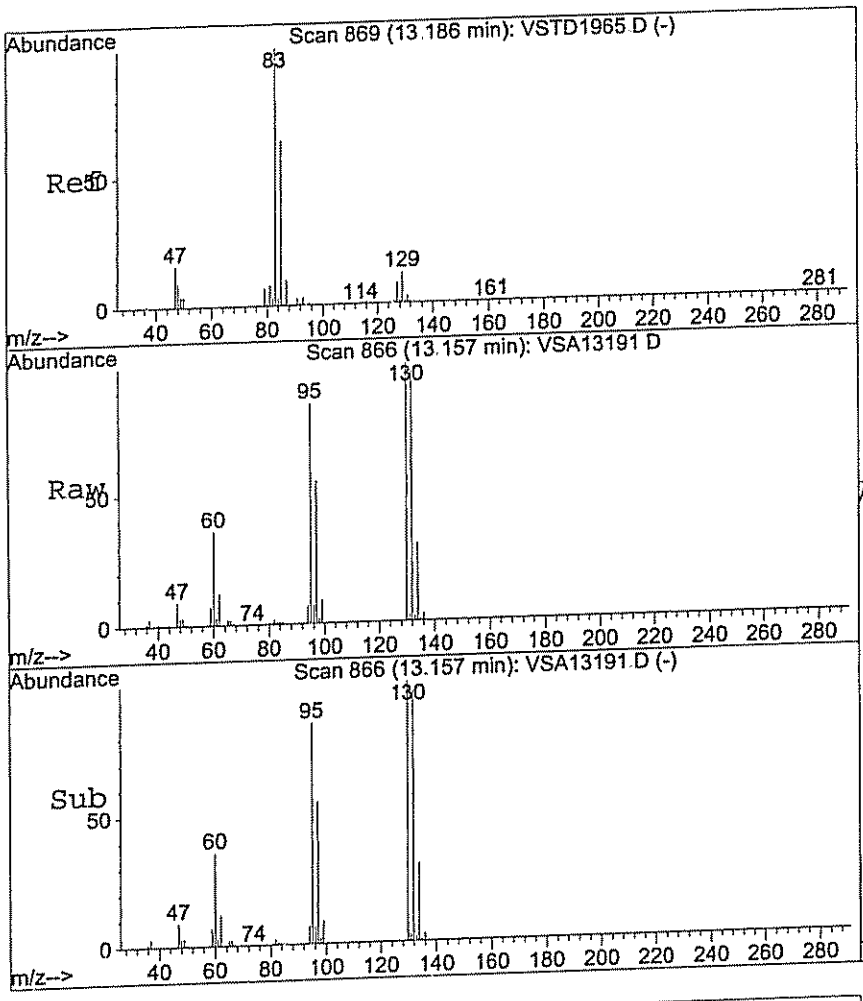


#22
Trichloroethene
Concen: 350.29 ug/L
RT: 13.17 min Scan# 867
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion:130 Resp: 2033921

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	83.0	50.4	110.4
132	97.8	66.6	126.6

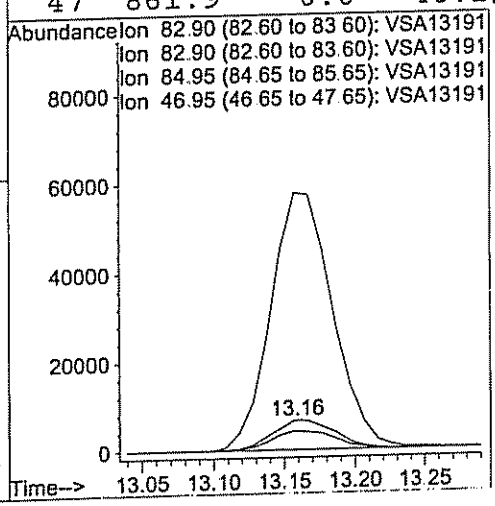


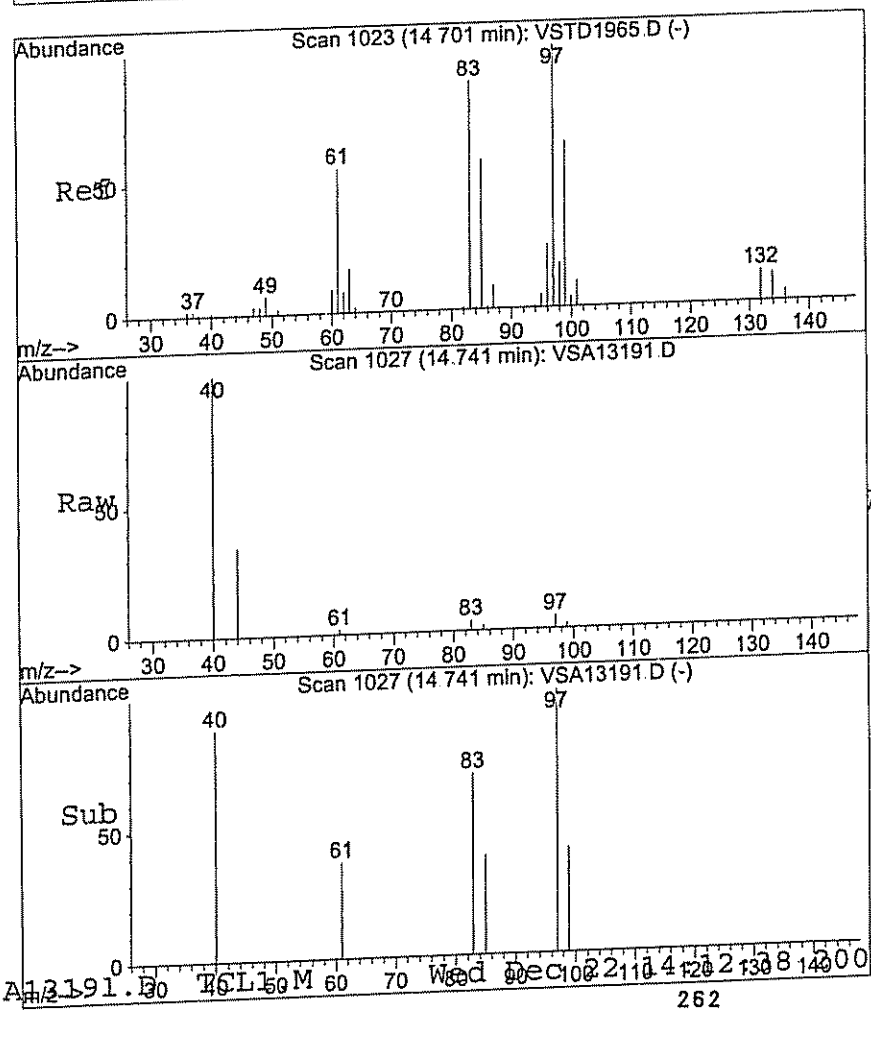


#24
Bromodichloromethane
Concen: 3.90 ug/L
RT: 13.16 min Scan# 866
Delta R.T. -0.03 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 83 Resp: 20376

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	63.4	33.9	93.9
47	861.9	0.0	46.1#

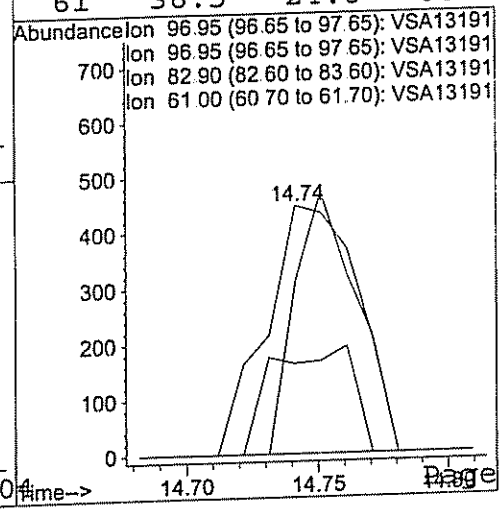


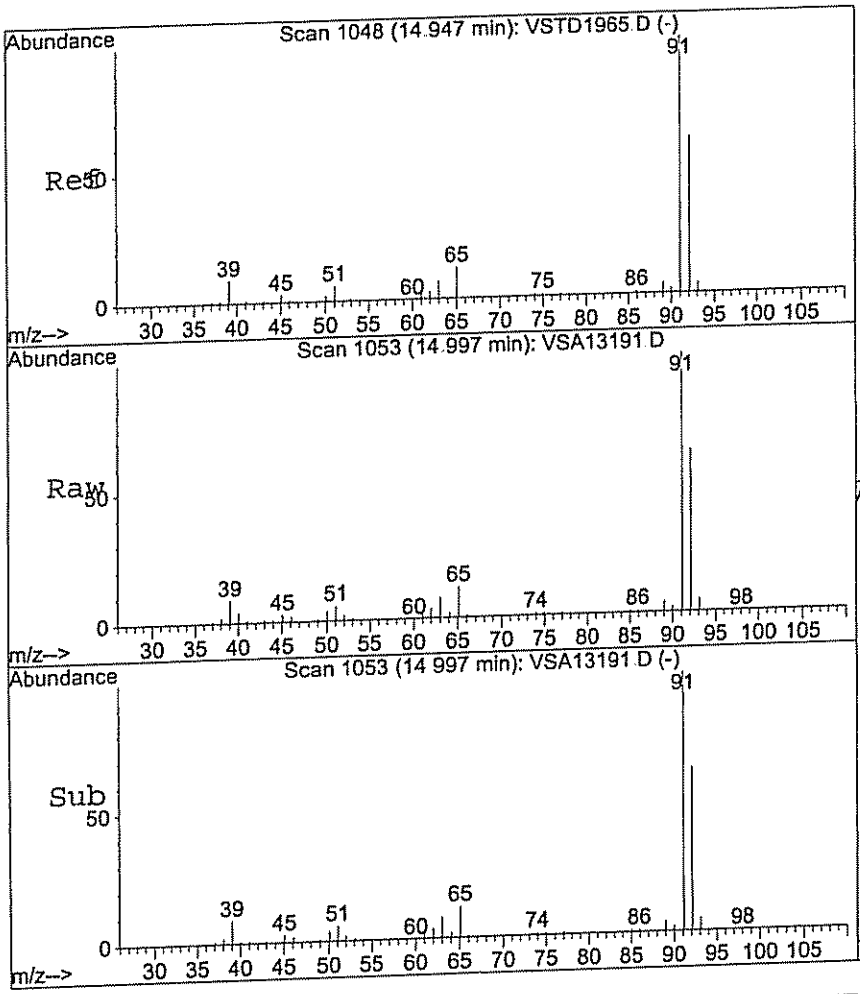


#27
1,1,2-Trichloroethane
Concen: 0.29 ug/L
RT: 14.74 min Scan# 1027
Delta R.T. 0.04 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 97 Resp: 1079

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	69.1	56.9	116.9
61	36.5	24.6	84.6

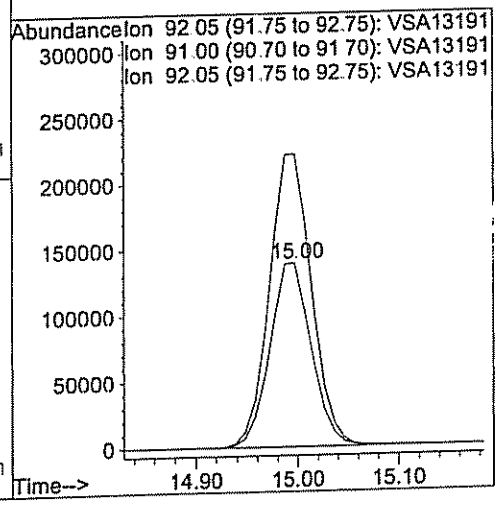


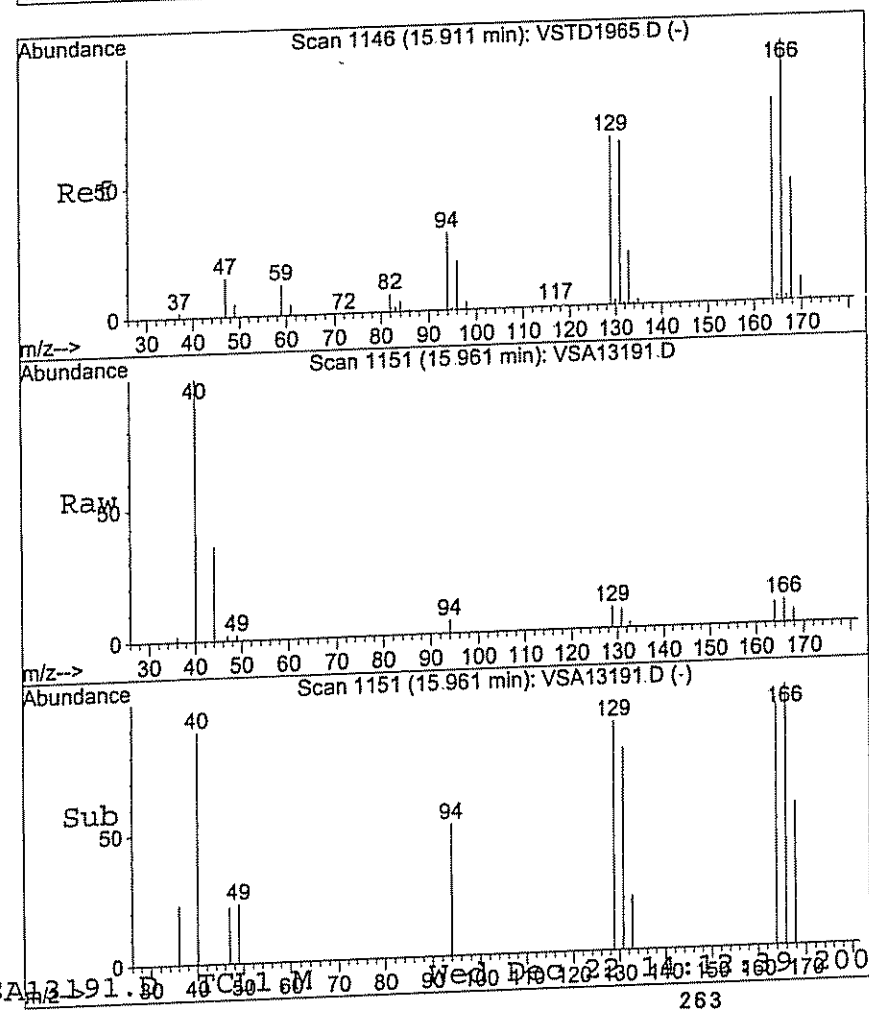


#33
Toluene
Concen: 40.94 ug/L
RT: 15.00 min Scan# 1053
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 92 Resp: 396584

Ion	Ratio	Lower	Upper
92	100		
91	159.6	132.6	192.6
92	100.0	70.0	130.0

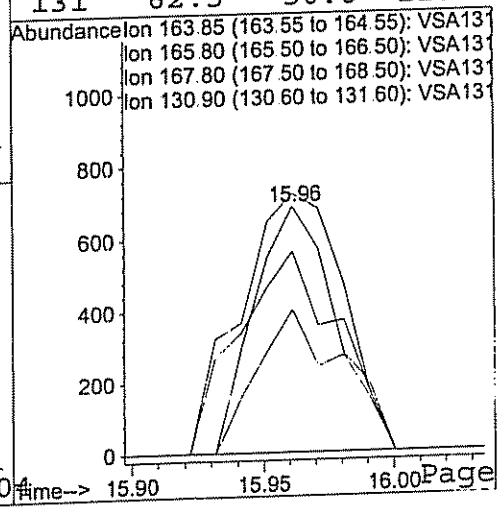


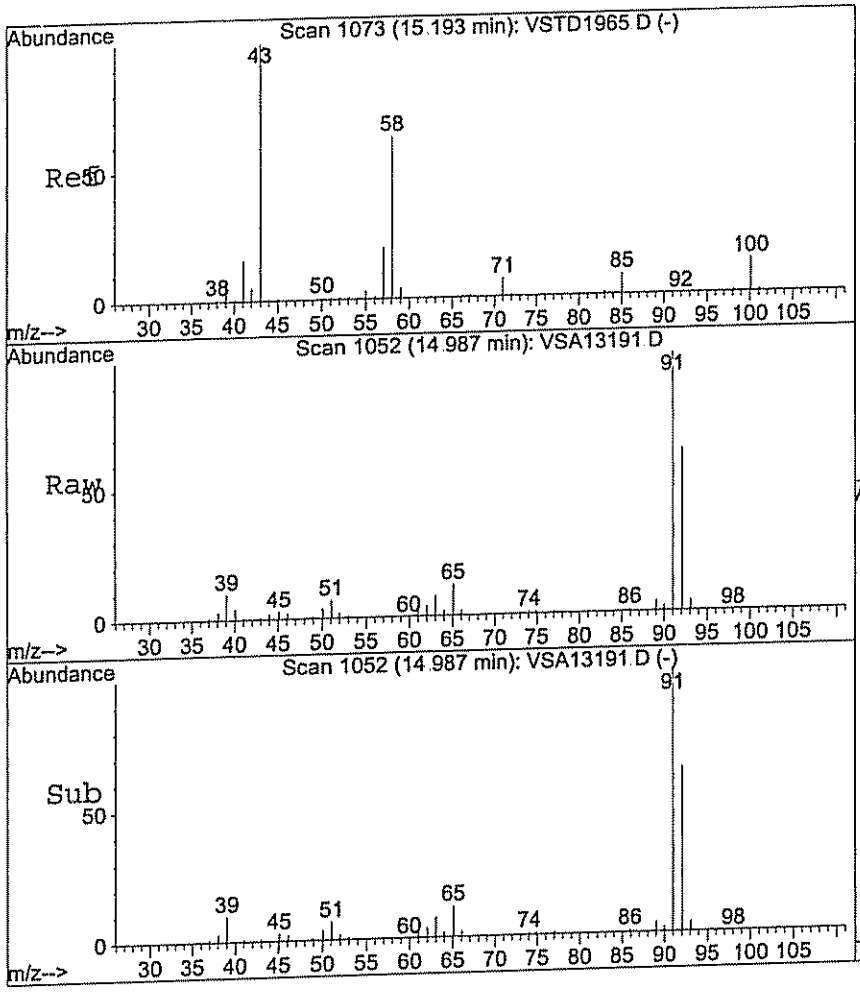


#35
Tetrachloroethene
Concen: 0.42 ug/L
RT: 15.96 min Scan# 1151
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion:164 Resp: 1518

Ion	Ratio	Lower	Upper
164	100		
166	81.8	98.3	158.3#
168	58.3	30.5	90.5
131	62.5	50.6	110.6

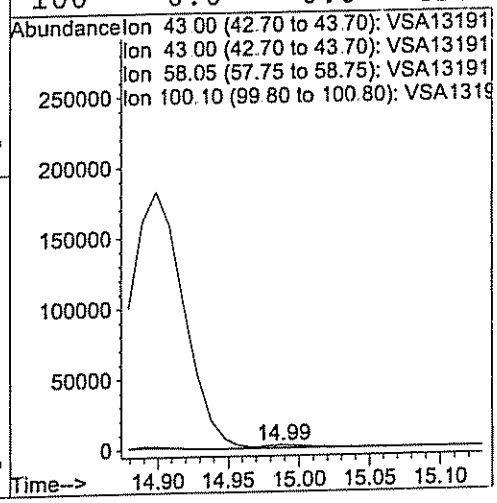


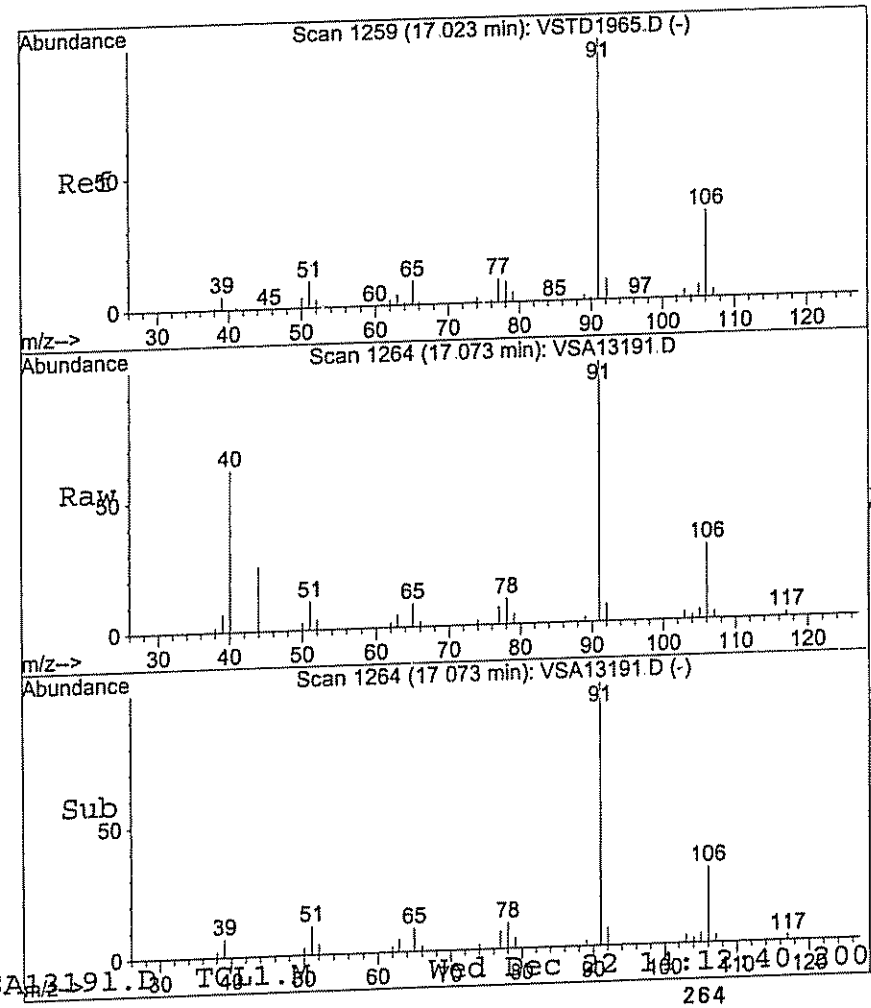


#36
2-Hexanone
Concen: 2.73 ug/L
RT: 14.99 min Scan# 1052
Delta R.T. -0.22 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 43 Resp: 6396

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	33.5	93.5#
100	0.0	0.0	43.5

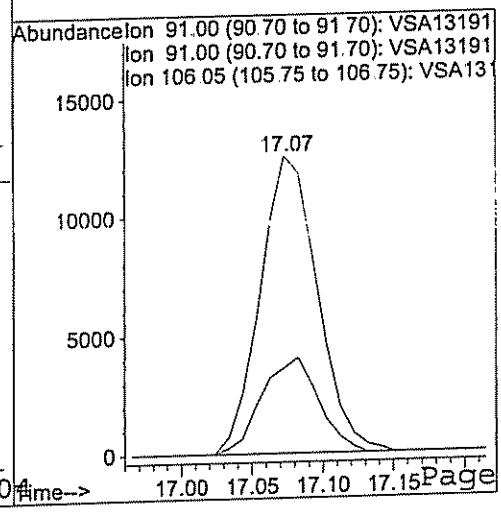


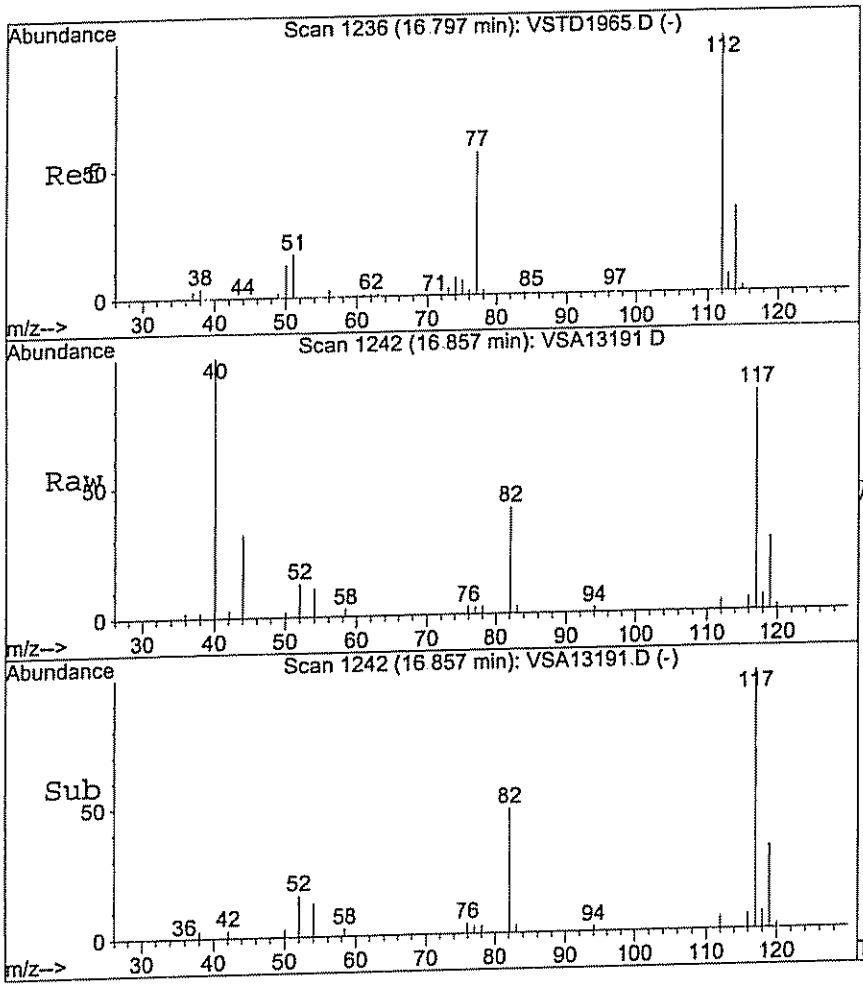


#37
Ethyl benzene
Concen: 1.98 ug/L
RT: 17.07 min Scan# 1264
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion: 91 Resp: 35017

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	28.9	2.9	62.9

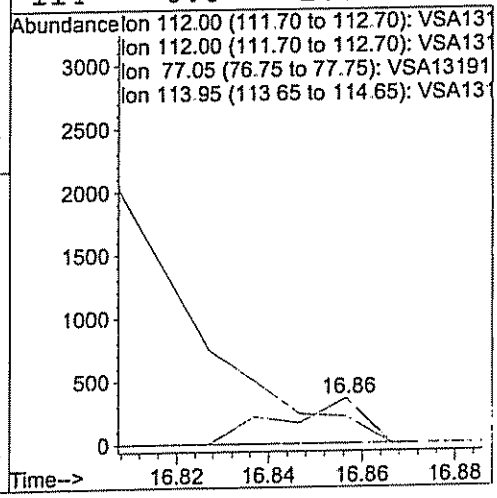


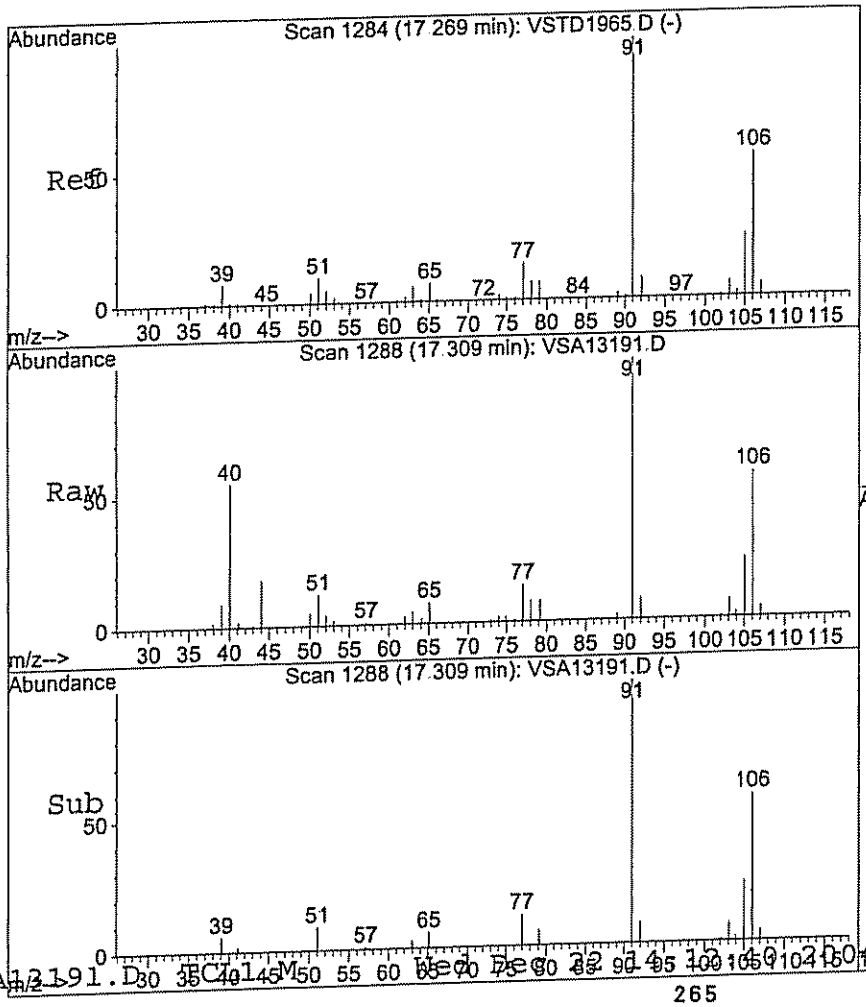


#38
Chlorobenzene
Concen: 0.04 ug/L
RT: 16.86 min Scan# 1242
Delta R.T. 0.06 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion:112 Resp: 433

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	0.0	26.0	86.0#
114	0.0	2.7	62.7#

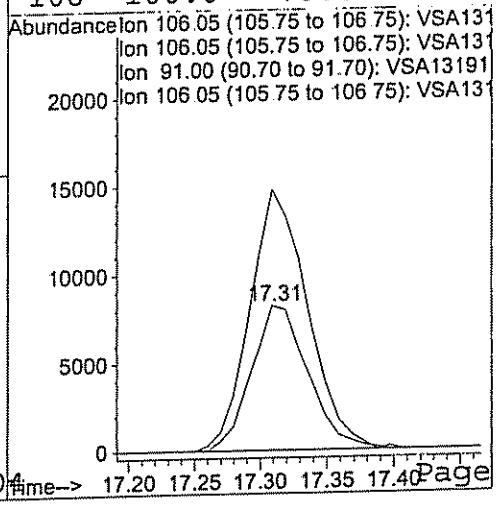


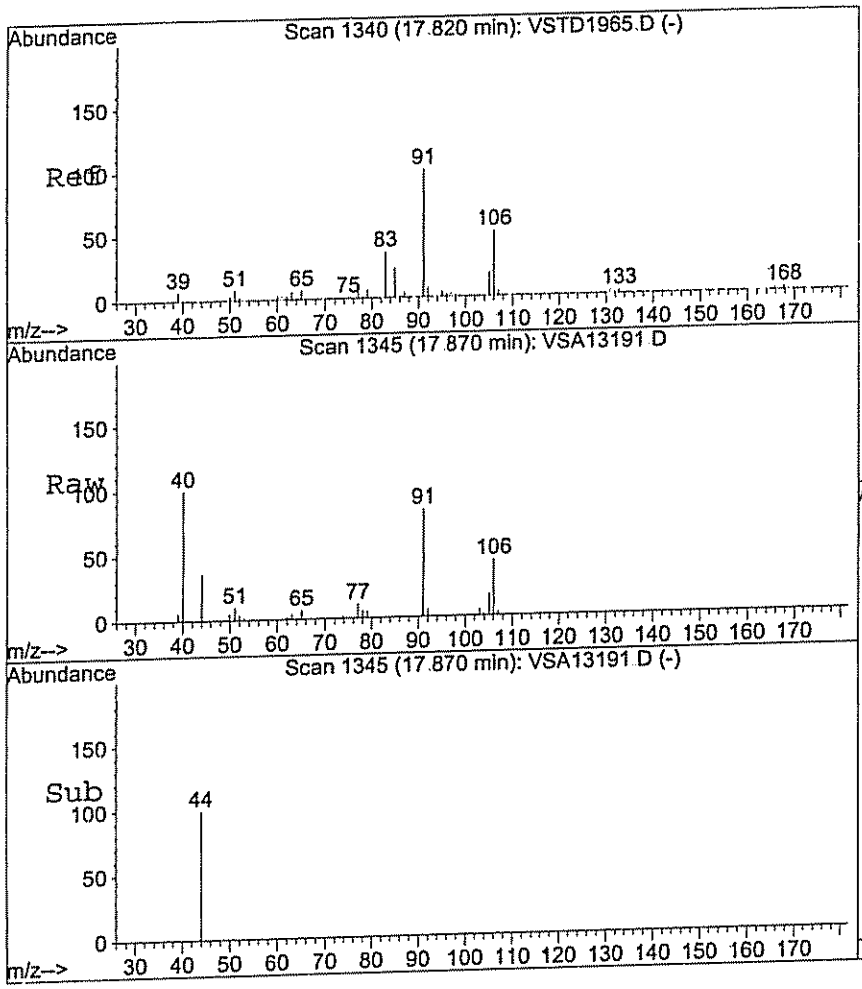


#39
m&p-Xylenes
Concen: 3.40 ug/L
RT: 17.31 min Scan# 1288
Delta R.T. 0.04 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion:106 Resp: 24324

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	177.3	150.2	210.2
106	100.0	70.0	130.0

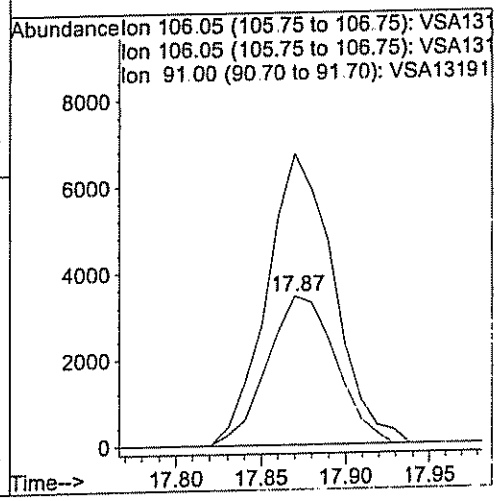


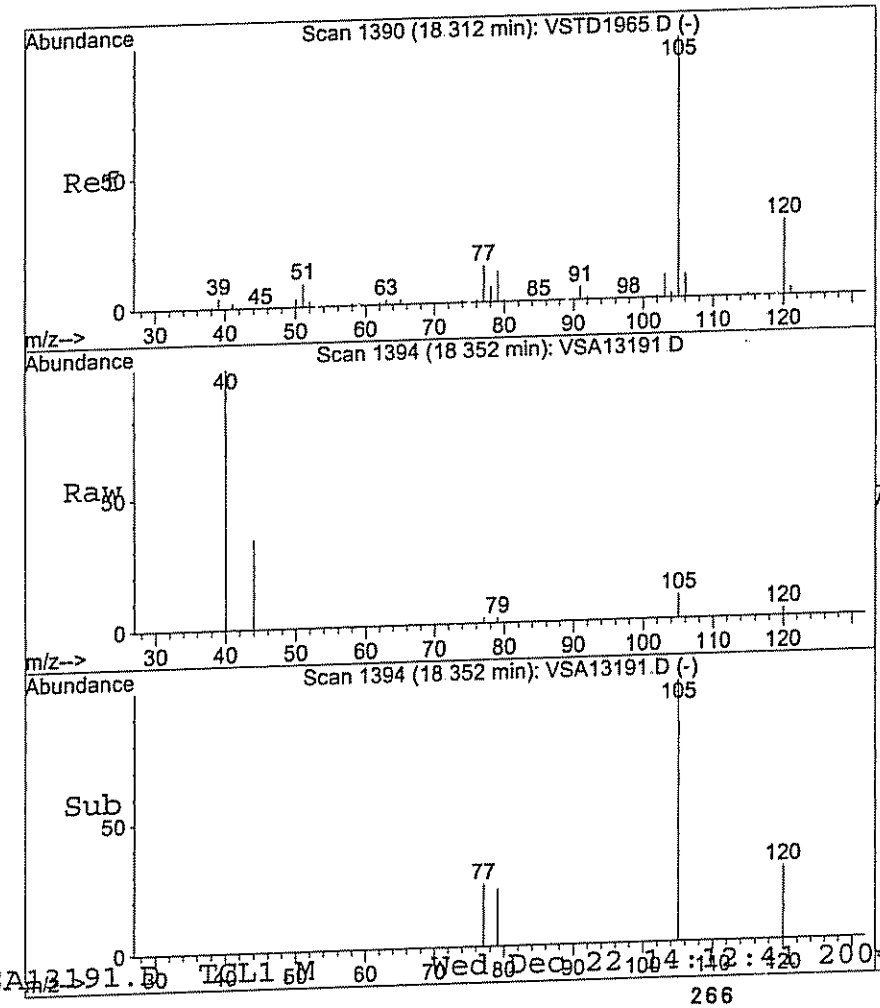


#40
o-Xylene
Concen: 1.40 ug/L
RT: 17.87 min Scan# 1345
Delta R.T. 0.04 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion:106 Resp: 9725

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	190.6	164.9	224.9

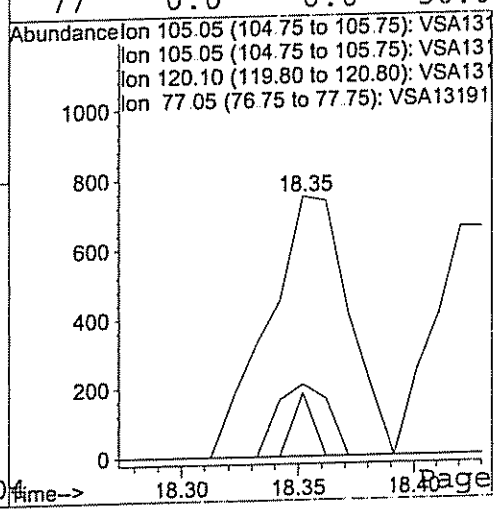


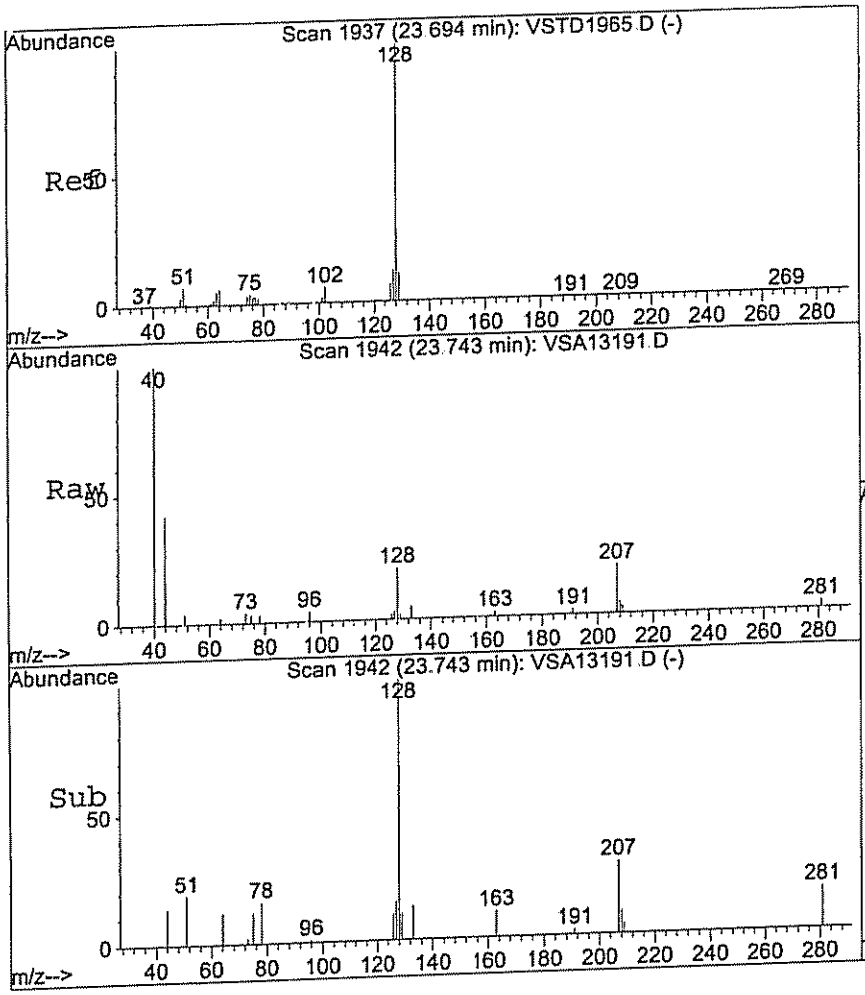


#42
Isopropylbenzene
Concen: 0.10 ug/L
RT: 18.35 min Scan# 1394
Delta R.T. 0.04 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion:105 Resp: 1801

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	17.6	0.0	59.3
77	0.0	0.0	30.0

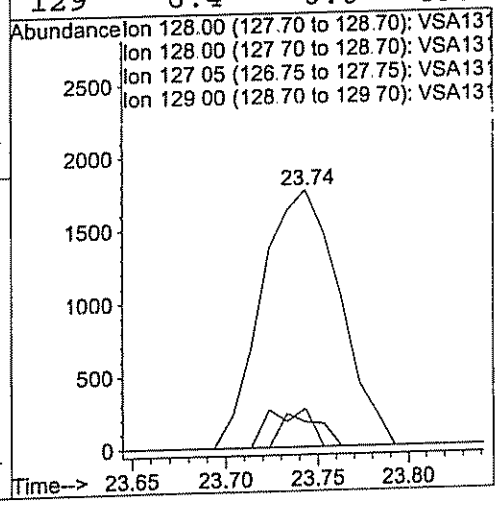




#45
Naphthalene
Concen: 0.36 ug/L
RT: 23.74 min Scan# 1942
Delta R.T. 0.05 min
Lab File: VSA13191.D
Acq: 21 Dec 2004 18:58

Tgt Ion:128 Resp: 5205

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	7.9	0.0	30.0
129	6.4	0.0	40.8



Quantitation Report (QT Reviewed)

MWB-2

Data File : C:\HPCHEM\1\DATA\VSA13192.D
Acq On : 21 Dec 2004 19:30
Sample : P0412024-02A DF500 RE
Misc : WATER

Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:13 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.96	128	159272	50.00	ug/L		0.05
18) 1,4-Difluorobenzene	12.62	114	884134	50.00	ug/L		0.05
31) Chlorobenzene-d5	16.81	117	812319	50.00	ug/L		0.05
System Monitoring Compounds							
16) 1,2-Dichloroethane-d4	11.70	65	223190	57.18	ug/L		0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 114.36%				
32) Toluene-d8	14.90	98	703347	53.08	ug/L		0.04
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.16%				
43) 4-Bromofluorobenzene	18.43	95	254736	50.70	ug/L		0.04
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.40%				
Target Compounds							Qvalue
2) Chloromethane	6.48	50	290	0.06	ug/L	#	85
3) Vinyl chloride	6.59	62	3129	0.67	ug/L		98
4) Bromomethane	7.24	94	281	0.10	ug/L		93
6) 1,1-Dichloroethene	8.83	96	3288	0.92	ug/L		92
7) Carbon disulfide	9.37	76	328	0.03	ug/L		100
8) Methylene chloride	8.99	84	1922	0.43	ug/L	#	85
9) Acetone	8.33	43	4168	3.40	ug/L		96
10) trans-1,2-Dichloroethene	9.81	96	2211	0.52	ug/L	#	71
12) 1,1-Dichloroethane	10.10	63	3408	0.48	ug/L		95
13) cis-1,2-Dichloroethene	10.77	96	232503	46.91	ug/L	✓	93
15) 2-Butanone	10.62	43	1480	0.77	ug/L		88
17) 1,2-Dichloroethane	11.79	62	1961	0.44	ug/L		83
20) 1,1,1-Trichloroethane	11.92	97	7264	1.43	ug/L		95
21) Benzene	12.38	78	114	0.01	ug/L		89
22) Trichloroethene	13.17	130	133098	23.13	ug/L		97
24) Bromodichloromethane	13.18	83	1408	0.27	ug/L	#	1
27) 1,1,2-Trichloroethane	14.91	97	20709	5.65	ug/L	#	50
33) Toluene	15.00	92	7777	0.80	ug/L	#	84
37) Ethyl benzene	17.08	91	997	0.06	ug/L	#	86
39) m&p-Xylenes	17.33	106	698	0.10	ug/L	#	58
45) Naphthalene	23.73	128	407	0.03	ug/L	#	97

(#) = qualifier out of range (m) = manual integration
VSA13192.D TCL1.M Wed Dec 22 14:13:34 2004

DF500

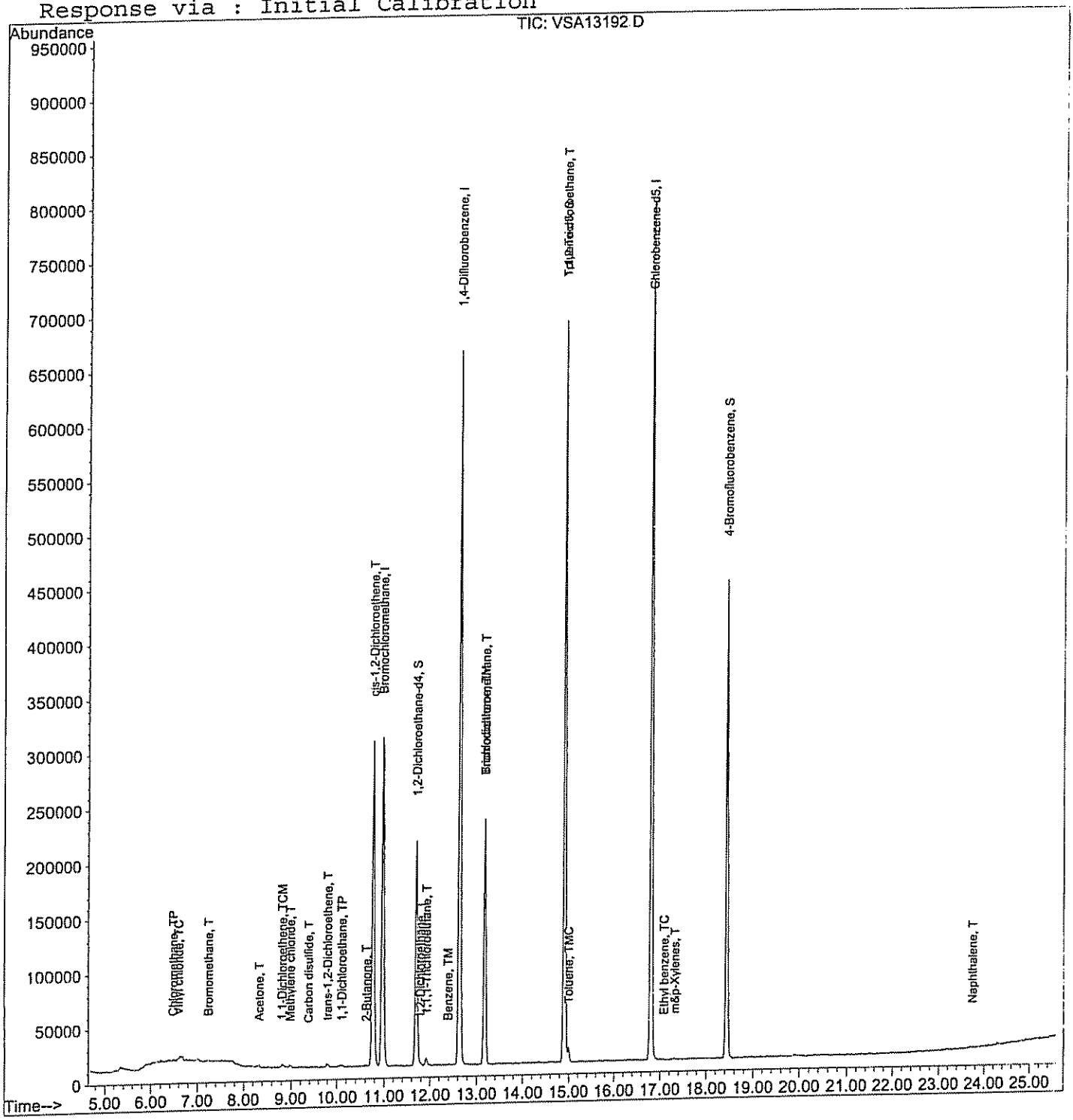
Data File : C:\HPCHEM\1\DATA\VSA13192.D
Acq On : 21 Dec 2004 19:30
Sample : P0412024-02A DF500 RE
Misc : WATER

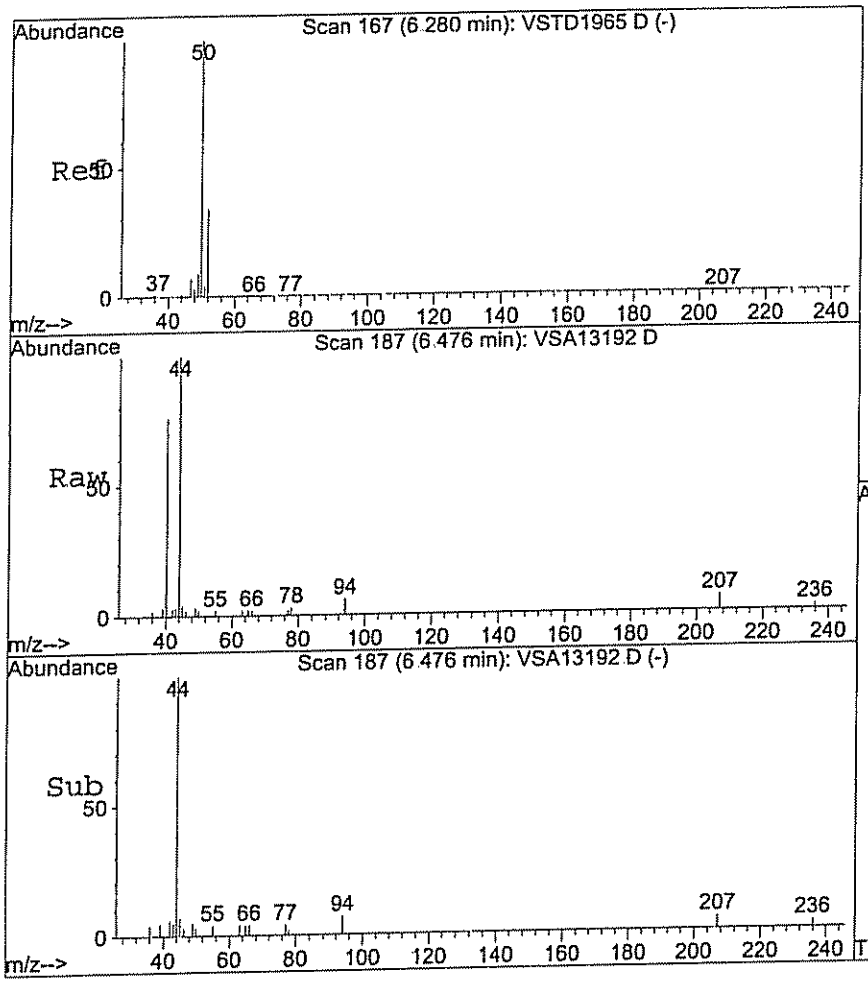
Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:13 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration

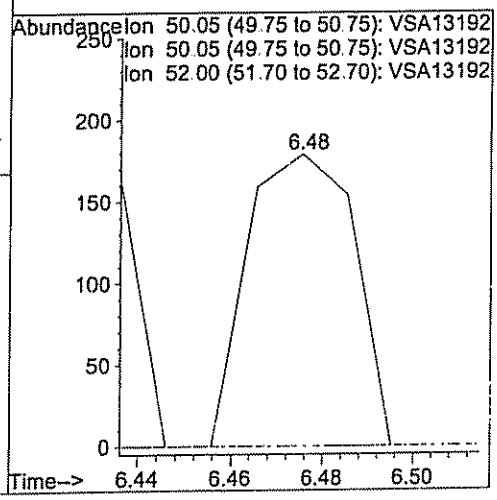


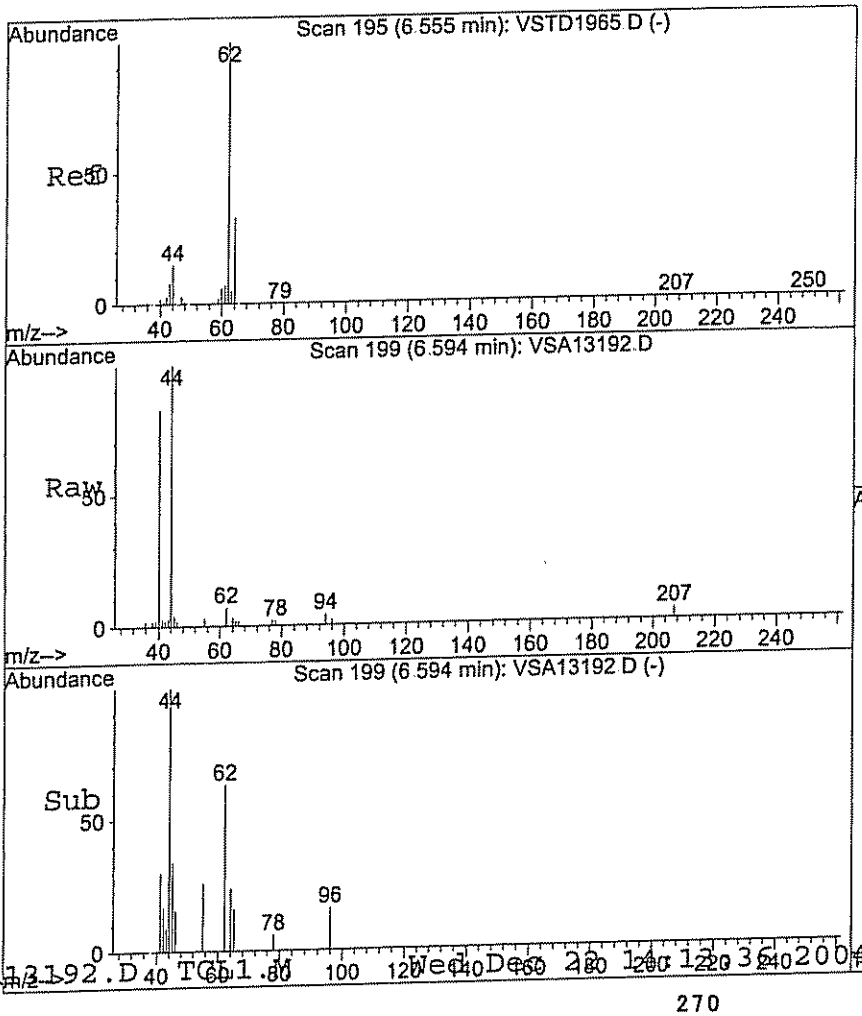


#2
Chloromethane
Concen: 0.06 ug/L
RT: 6.48 min Scan# 187
Delta R.T. 0.20 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 50 Resp: 290

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.9	63.9#

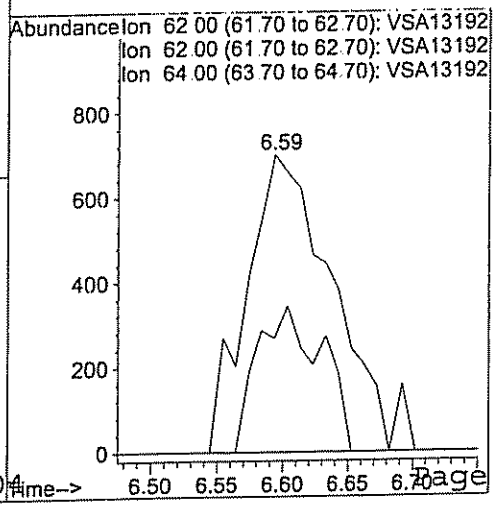


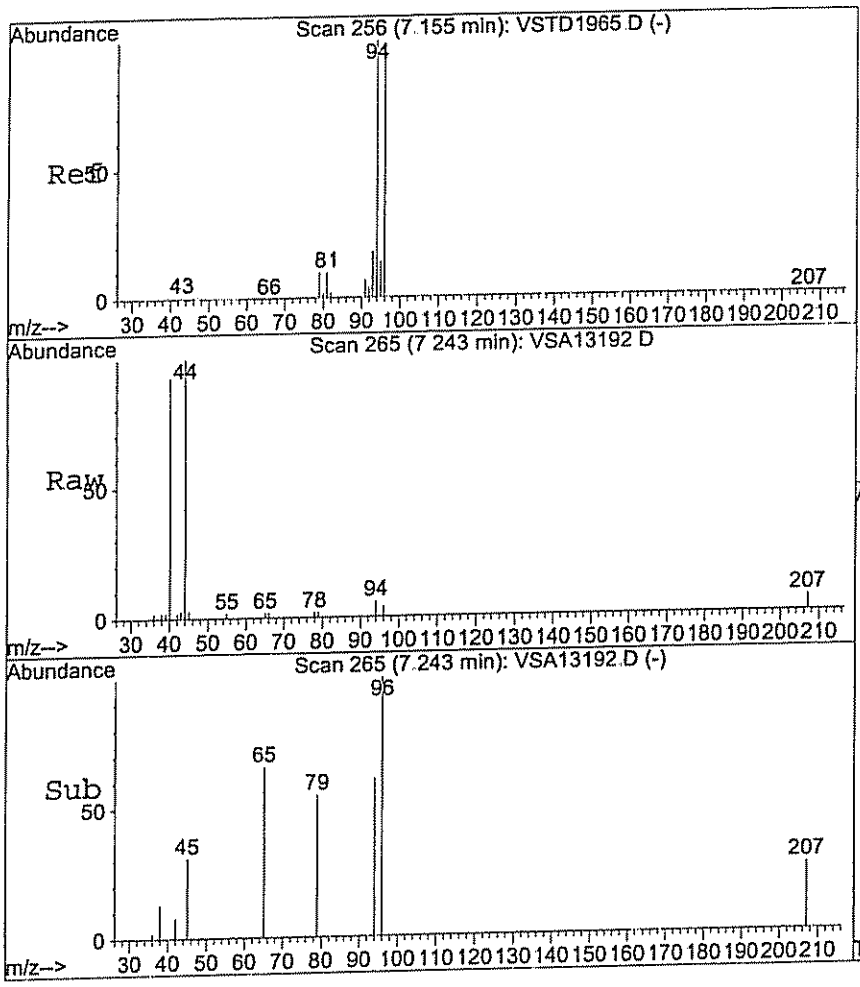


#3
Vinyl chloride
Concen: 0.67 ug/L
RT: 6.59 min Scan# 199
Delta R.T. 0.04 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 62 Resp: 3129

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	38.1	2.4	62.4

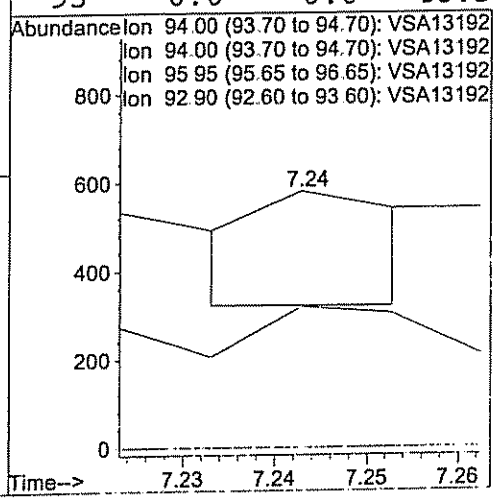


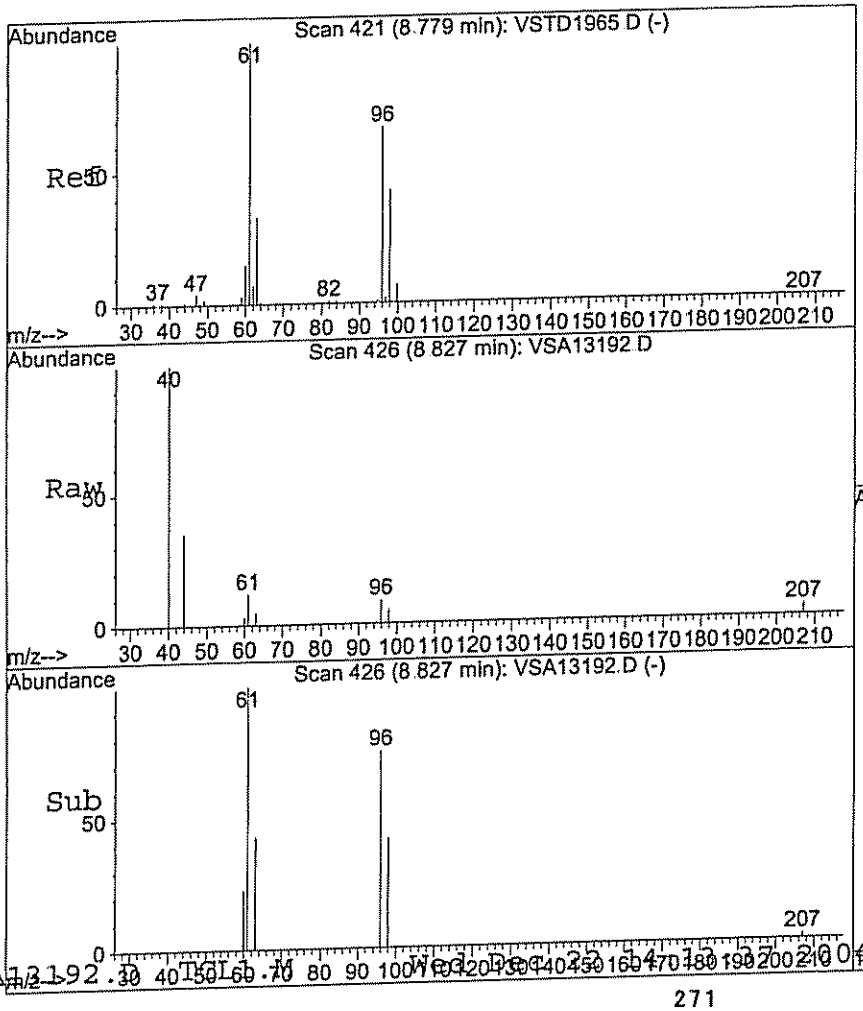


#4
Bromomethane
Concen: 0.10 ug/L
RT: 7.24 min Scan# 265
Delta R.T. 0.08 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 94 Resp: 281

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	100.8	63.6	123.6
93	0.0	0.0	48.5

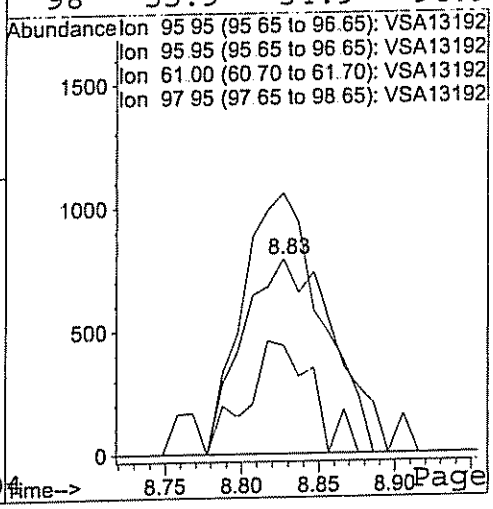


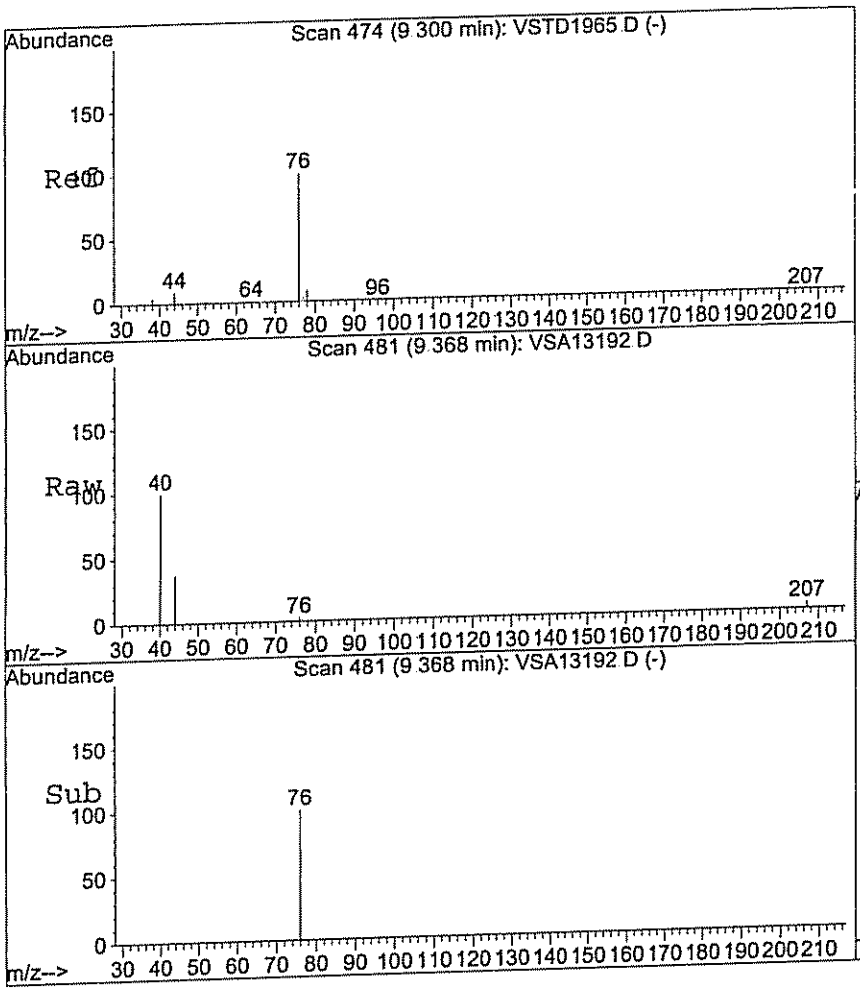


#6
1,1-Dichloroethene
Concen: 0.92 ug/L
RT: 8.83 min Scan# 426
Delta R.T. 0.05 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 96 Resp: 3288

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	134.0	118.9	178.9
98	55.9	34.9	94.9

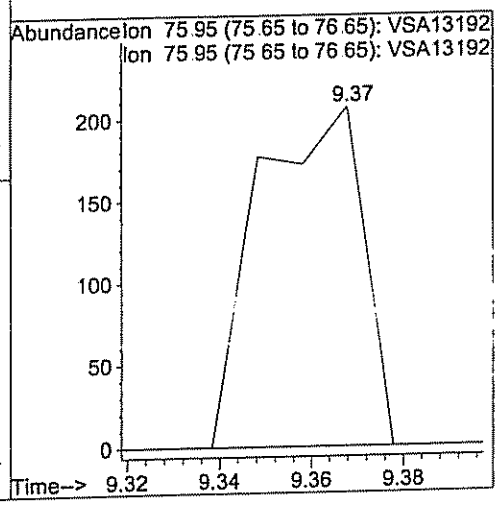


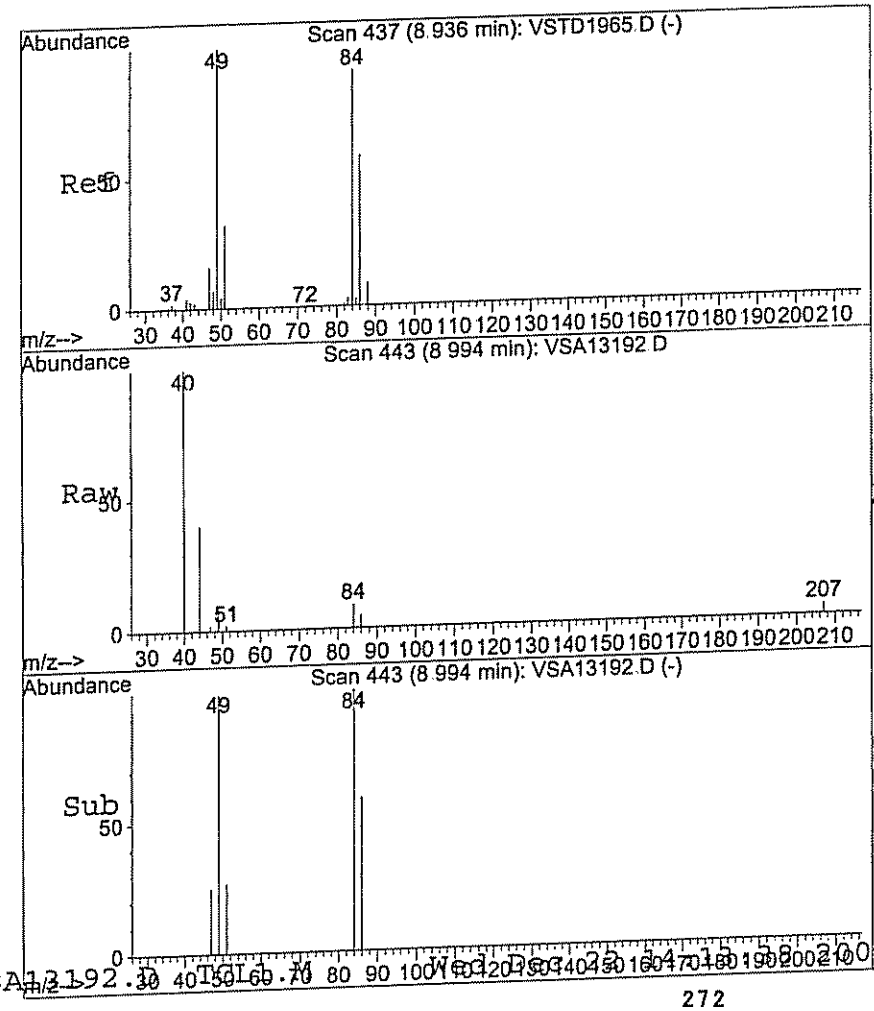


#7
Carbon disulfide
Concen: 0.03 ug/L
RT: 9.37 min Scan# 481
Delta R.T. 0.07 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 76 Resp: 328

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

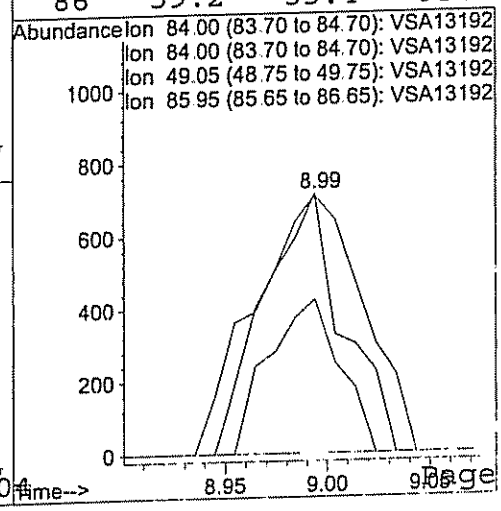


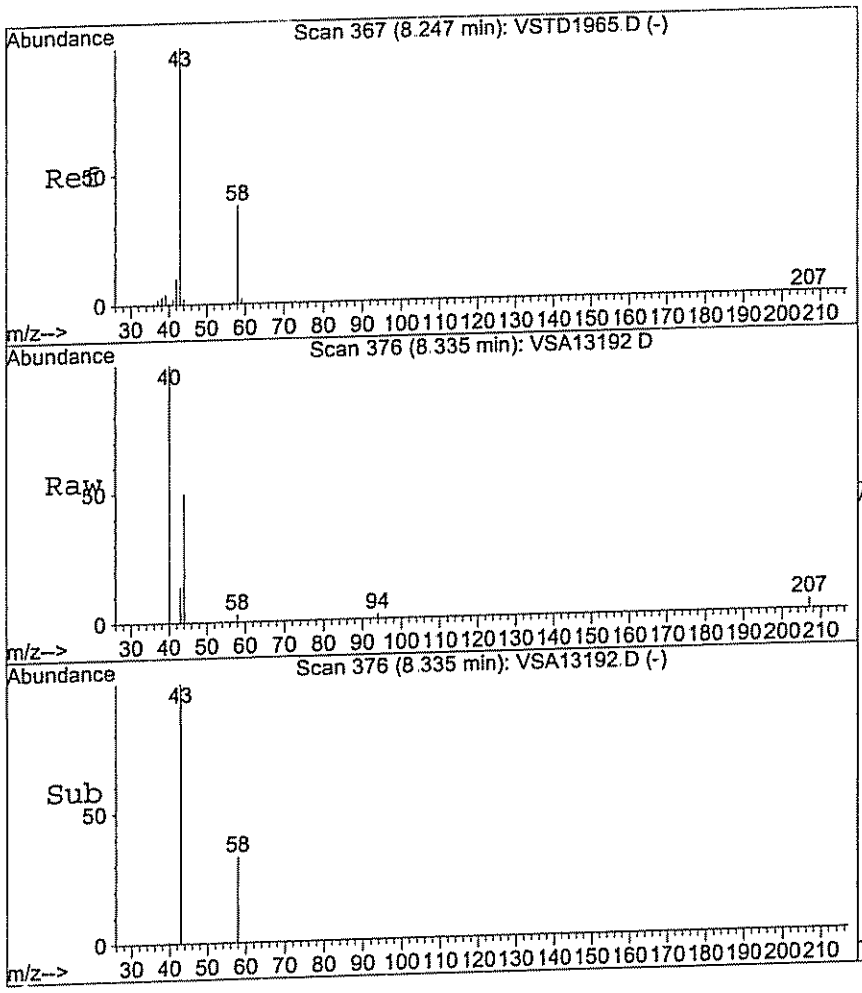


#8
Methylene chloride
Concen: 0.43 ug/L
RT: 8.99 min Scan# 443
Delta R.T. 0.06 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 84 Resp: 1922

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	73.2	80.0	140.0#
86	59.2	33.4	93.4

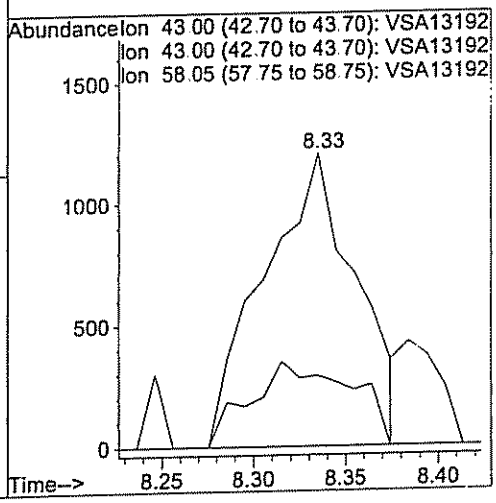


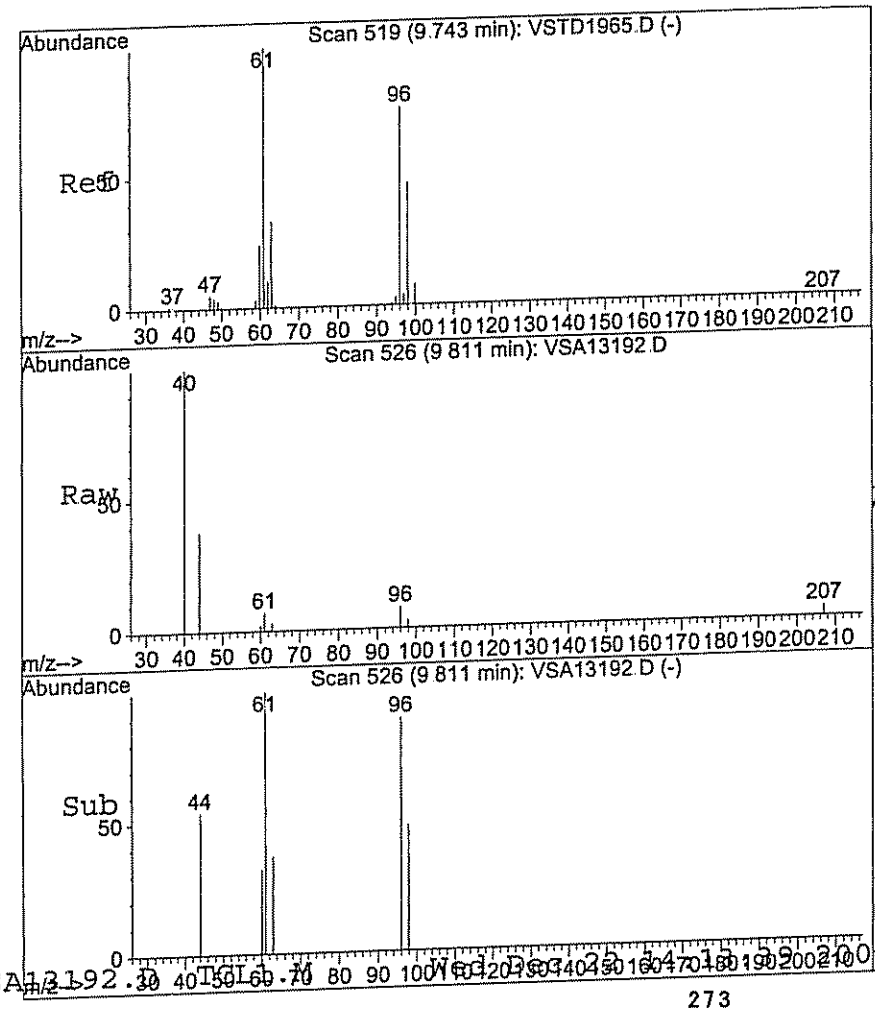


#9
Acetone
Concen: 3.40 ug/L
RT: 8.33 min Scan# 376
Delta R.T. 0.06 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 43 Resp: 4168

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	28.2	7.8	67.8

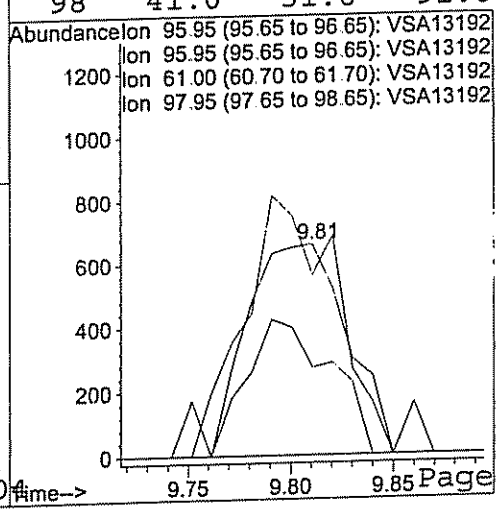


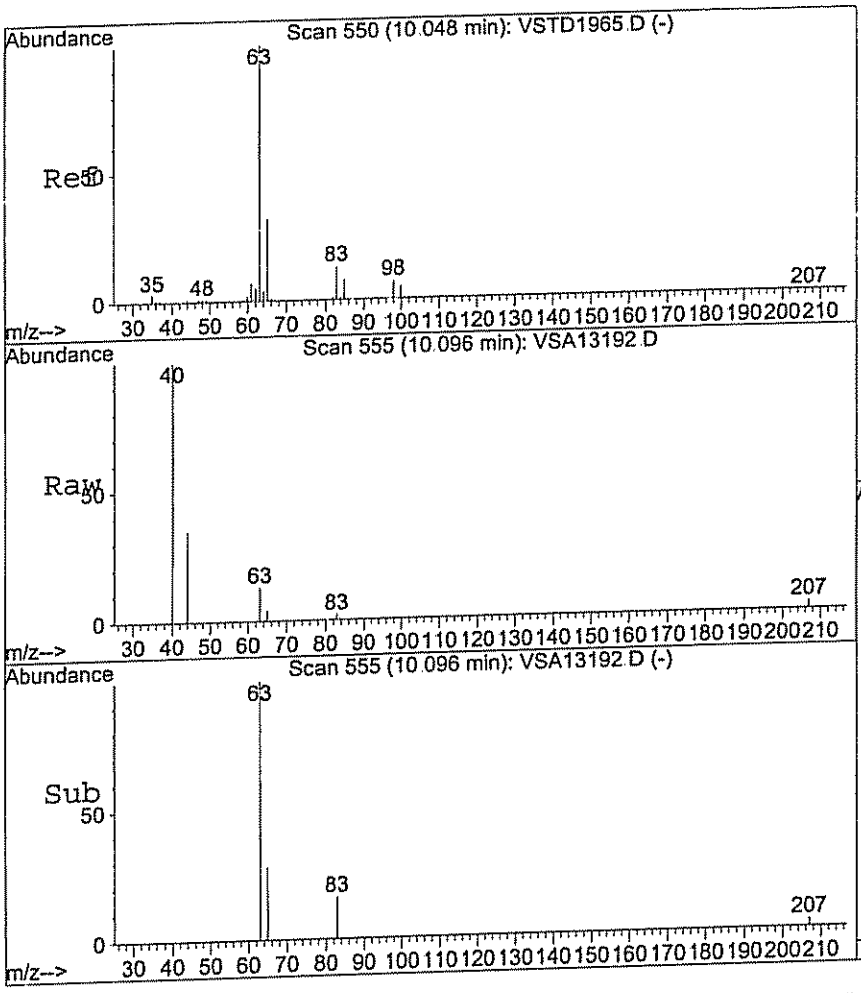


#10
trans-1,2-Dichloroethene
Concen: 0.52 ug/L
RT: 9.81 min Scan# 526
Delta R.T. 0.06 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 96 Resp: 2211

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	70.2	102.4	162.4#
98	41.0	31.6	91.6

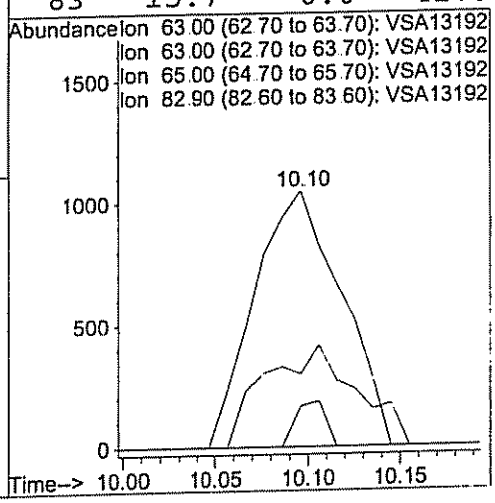


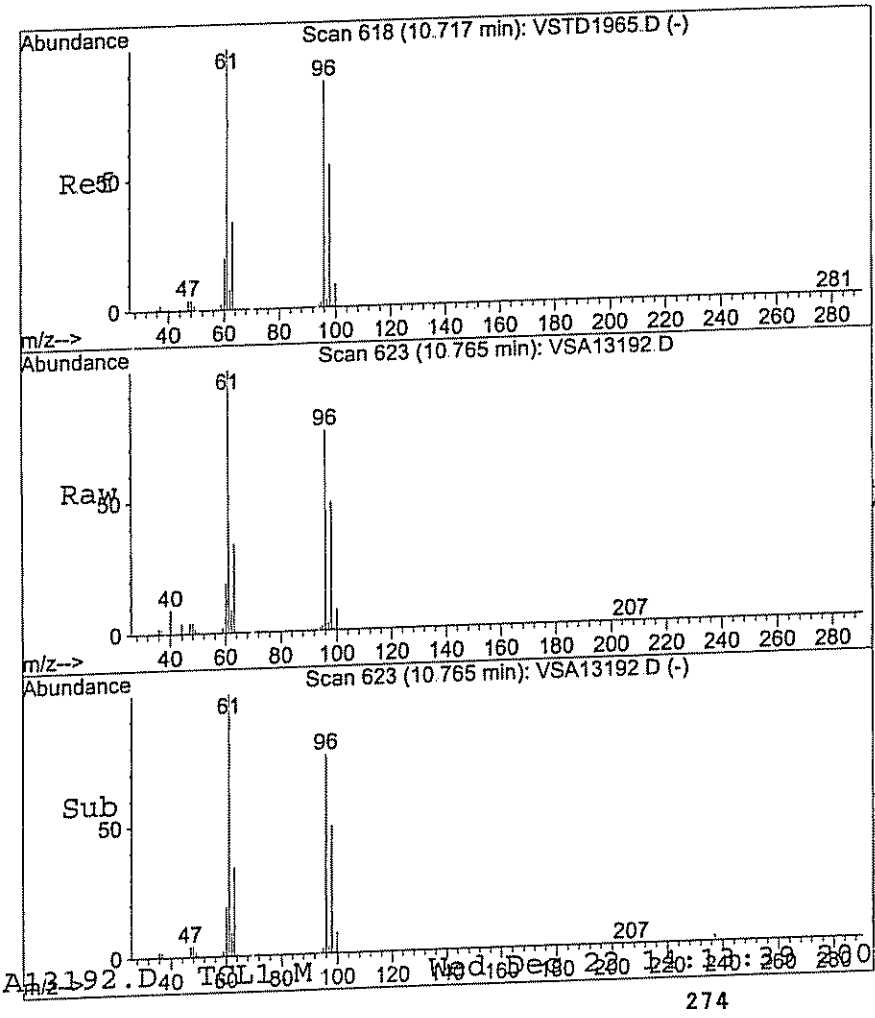


#12
1,1-Dichloroethane
Concen: 0.48 ug/L
RT: 10.10 min Scan# 555
Delta R.T. 0.05 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 63 Resp: 3408

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	20.0	2.1	62.1
83	15.7	0.0	42.6

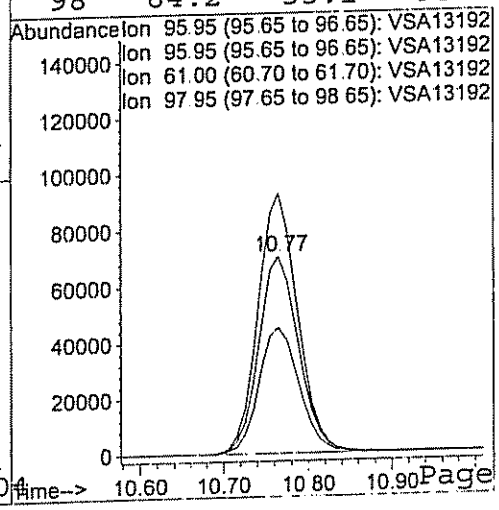


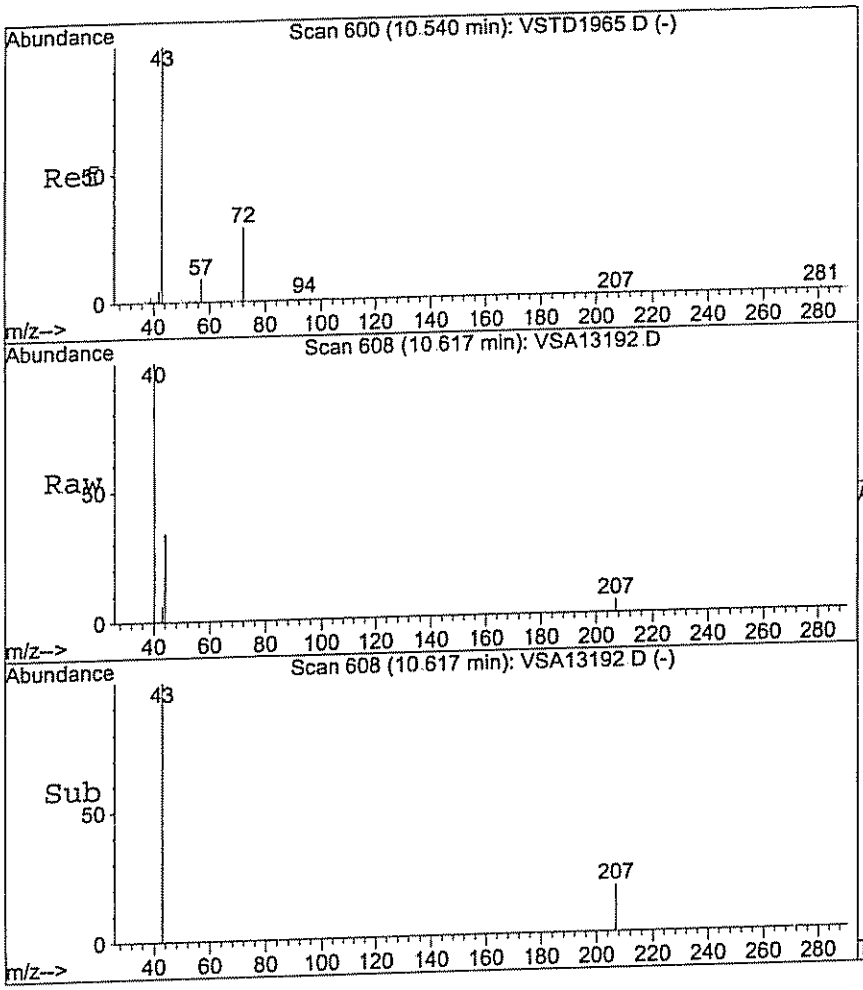


#13
cis-1,2-Dichloroethene
Concen: 46.91 ug/L
RT: 10.77 min Scan# 623
Delta R.T. 0.05 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 96 Resp: 232503

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	131.8	85.2	145.2
98	64.2	33.1	93.1

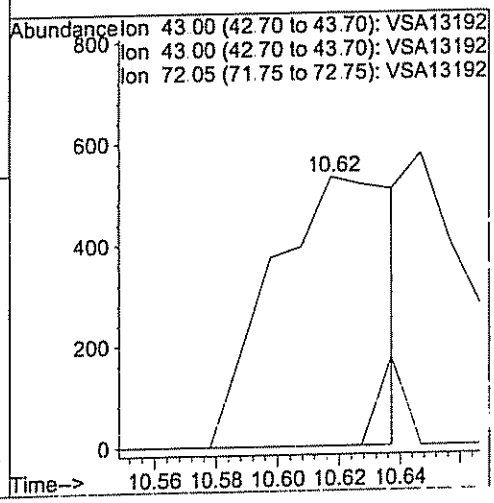


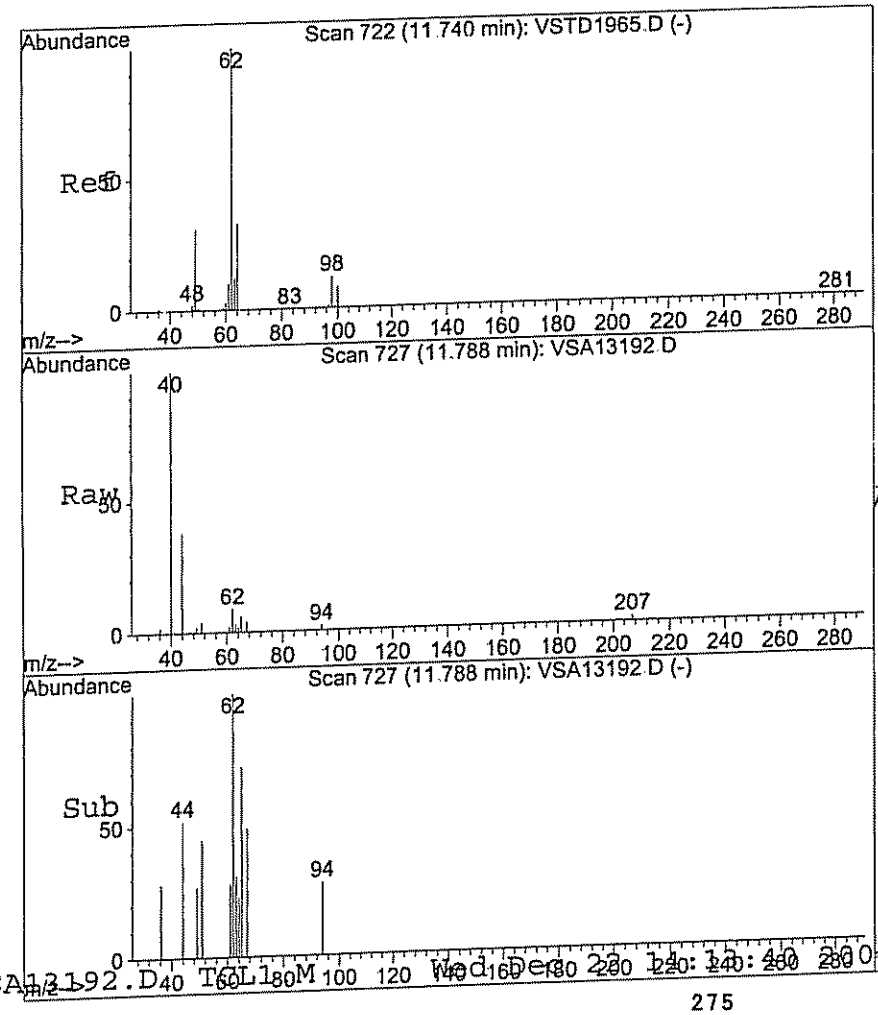


#15
2-Butanone
Concen: 0.77 ug/L
RT: 10.62 min Scan# 608
Delta R.T. 0.06 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 43 Resp: 1480

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	59.3

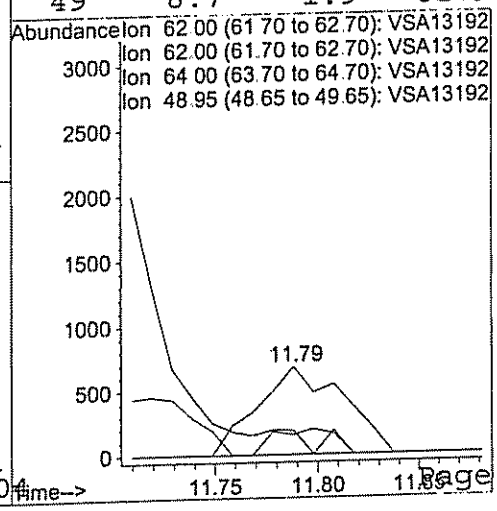


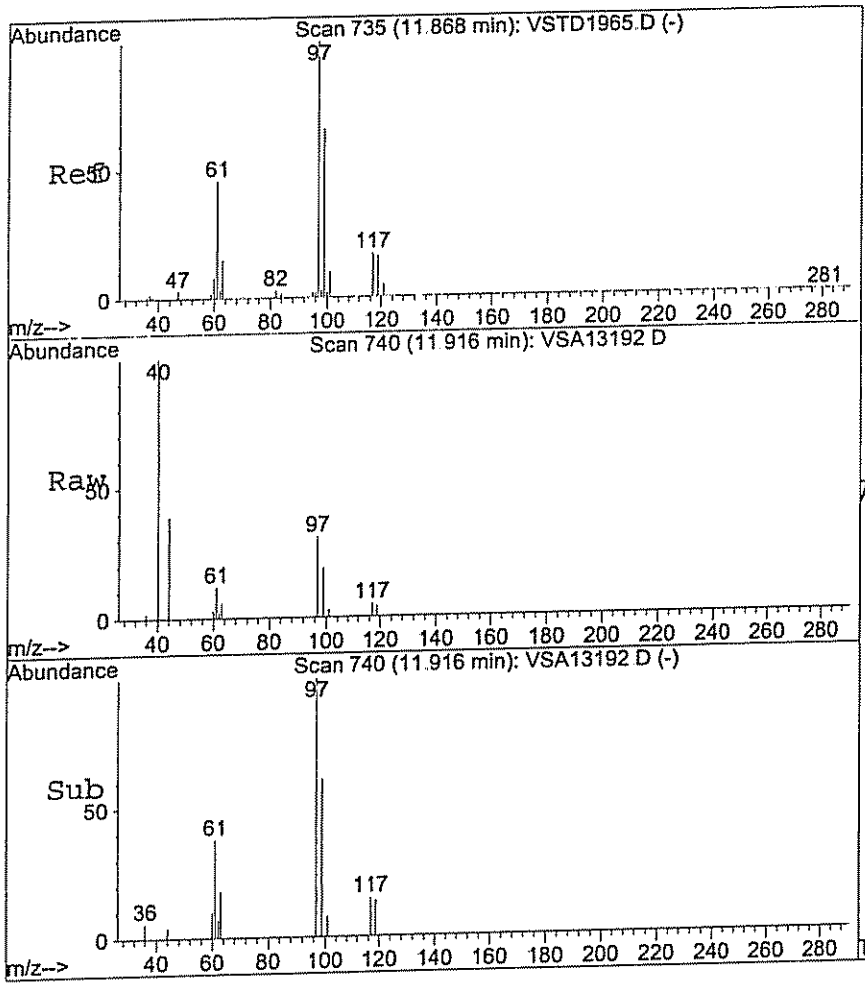


#17
1,2-Dichloroethane
Concen: 0.44 ug/L
RT: 11.79 min Scan# 727
Delta R.T. 0.05 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 62 Resp: 1961

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	8.7	2.9	62.9
49	8.7	1.9	61.9

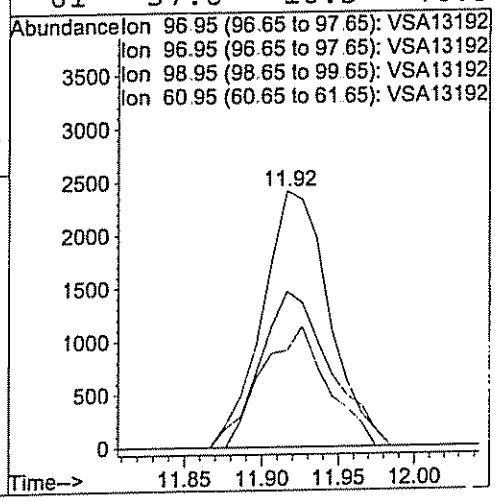


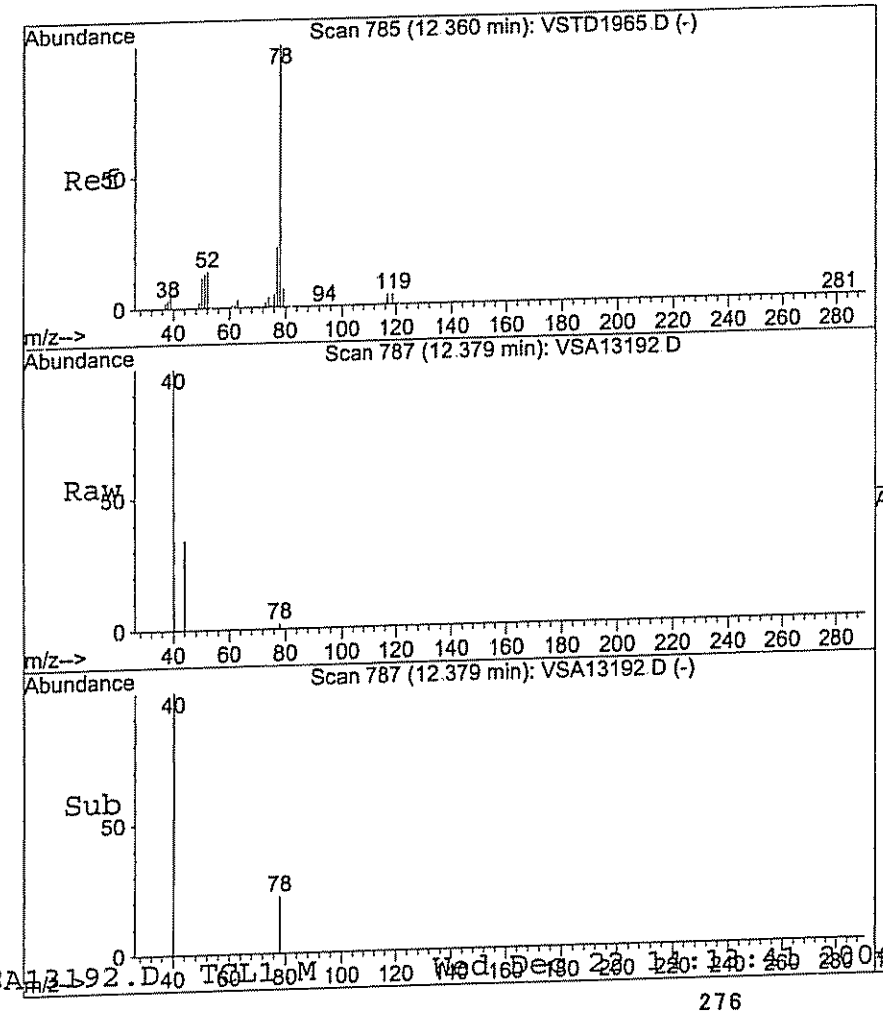


#20
1,1,1-Trichloroethane
Concen: 1.43 ug/L
RT: 11.92 min Scan# 740
Delta R.T. 0.04 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 97 Resp: 7264

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	60.7	35.6	95.6
61	37.6	16.5	76.5

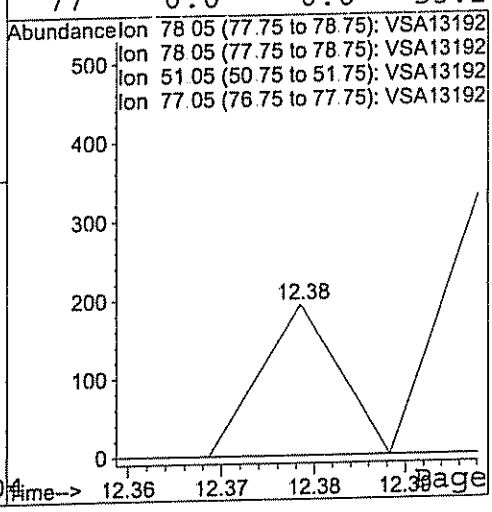


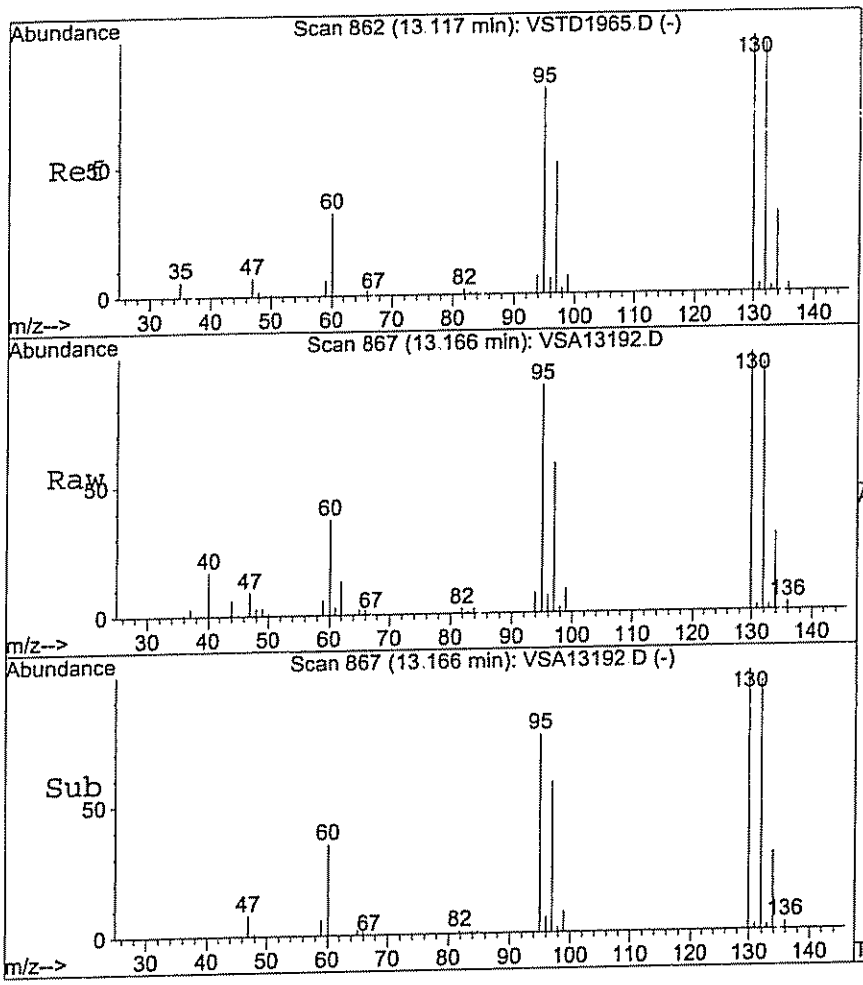


#21
Benzene
Concen: 0.01 ug/L
RT: 12.38 min Scan# 787
Delta R.T. 0.02 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 78 Resp: 114

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	0.0	0.0	43.2
77	0.0	0.0	53.2

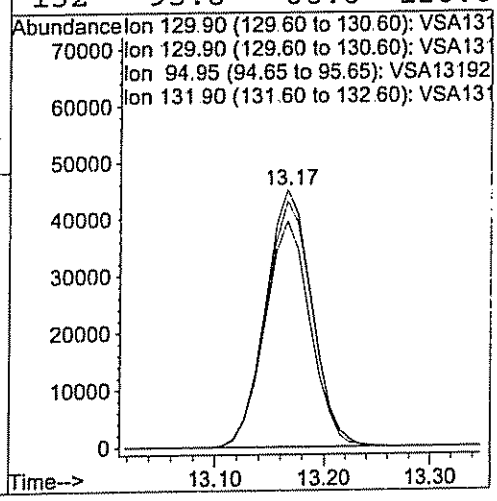


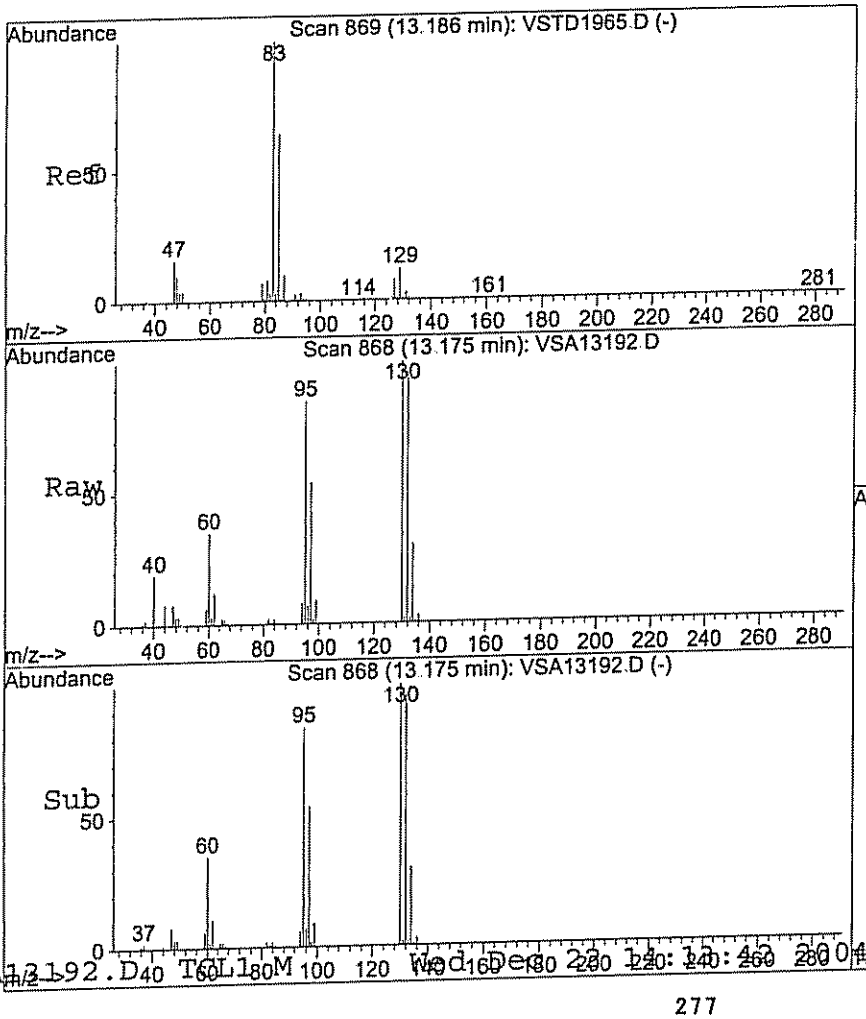


#22
Trichloroethene
Concen: 23.13 ug/L
RT: 13.17 min Scan# 867
Delta R.T. 0.05 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion:130 Resp: 133098

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	87.8	50.4	110.4
132	95.6	66.6	126.6

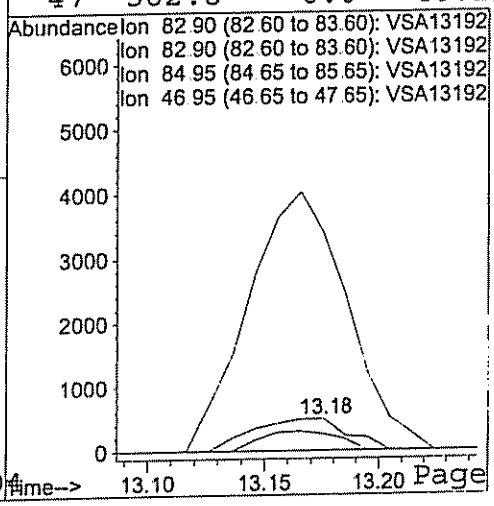


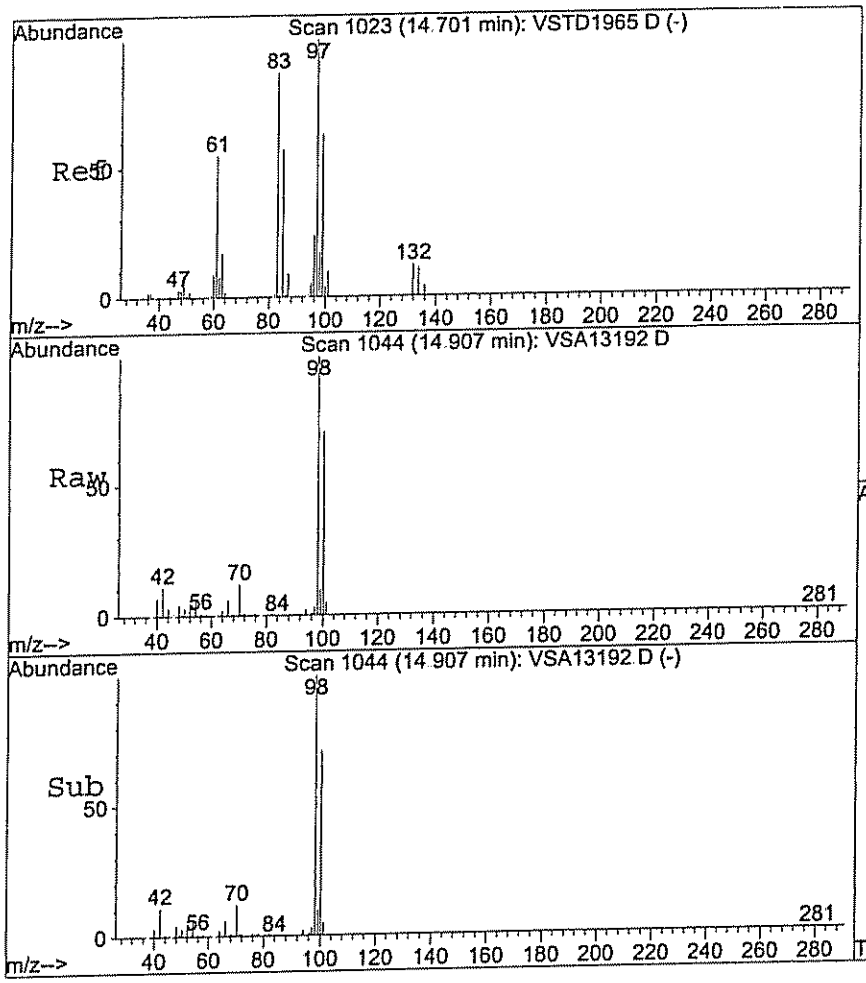


#24
Bromodichloromethane
Concen: 0.27 ug/L
RT: 13.18 min Scan# 868
Delta R.T. -0.01 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 83 Resp: 1408

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	52.7	33.9	93.9
47	562.8	0.0	46.1#

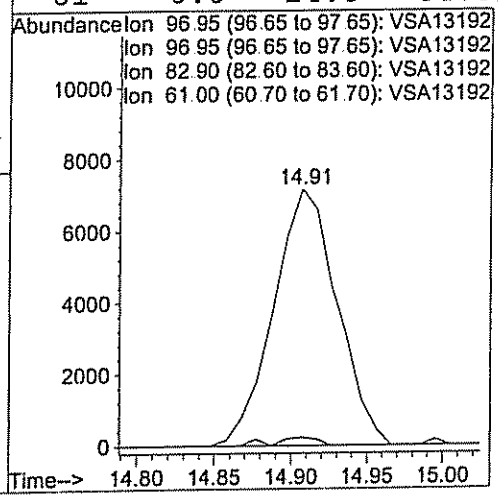


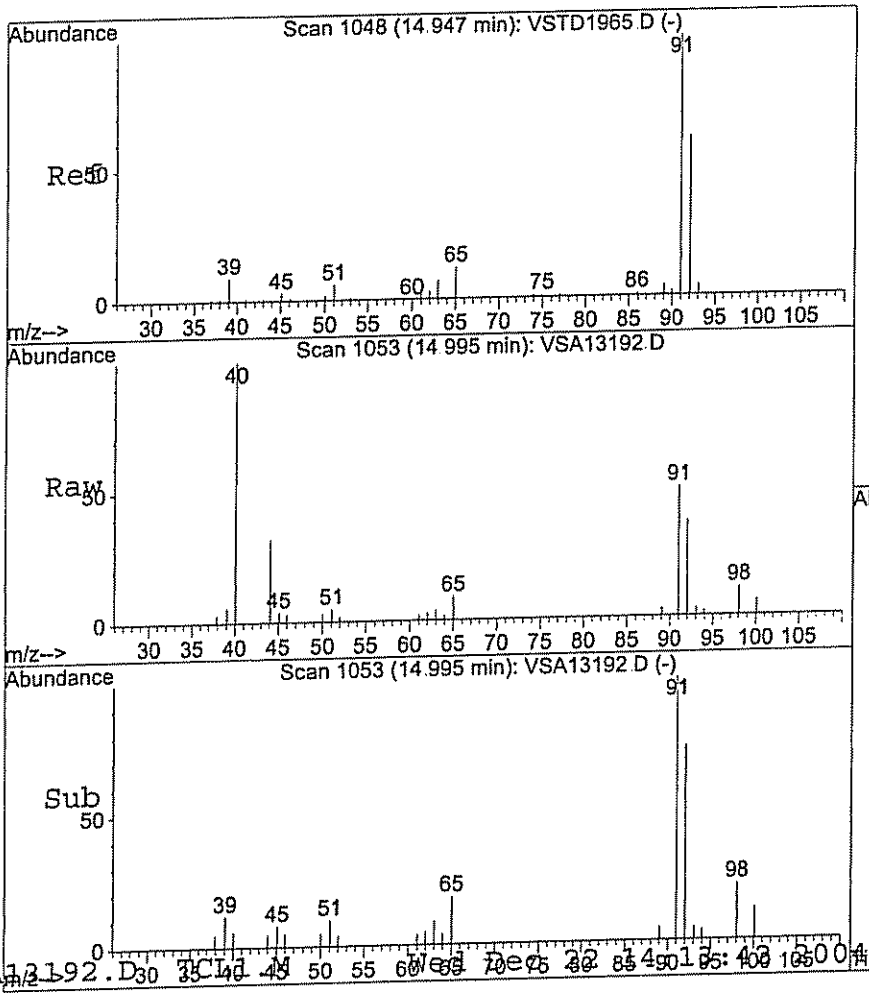


#27
1,1,2-Trichloroethane
Concen: 5.65 ug/L
RT: 14.91 min Scan# 1044
Delta R.T. 0.21 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 97 Resp: 20709

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	3.2	56.9	116.9#
61	0.0	24.6	84.6#

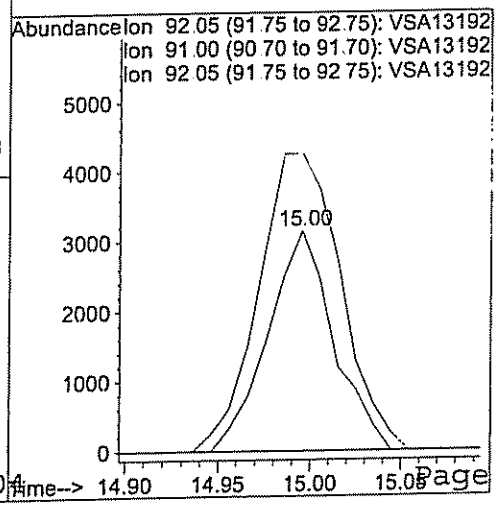


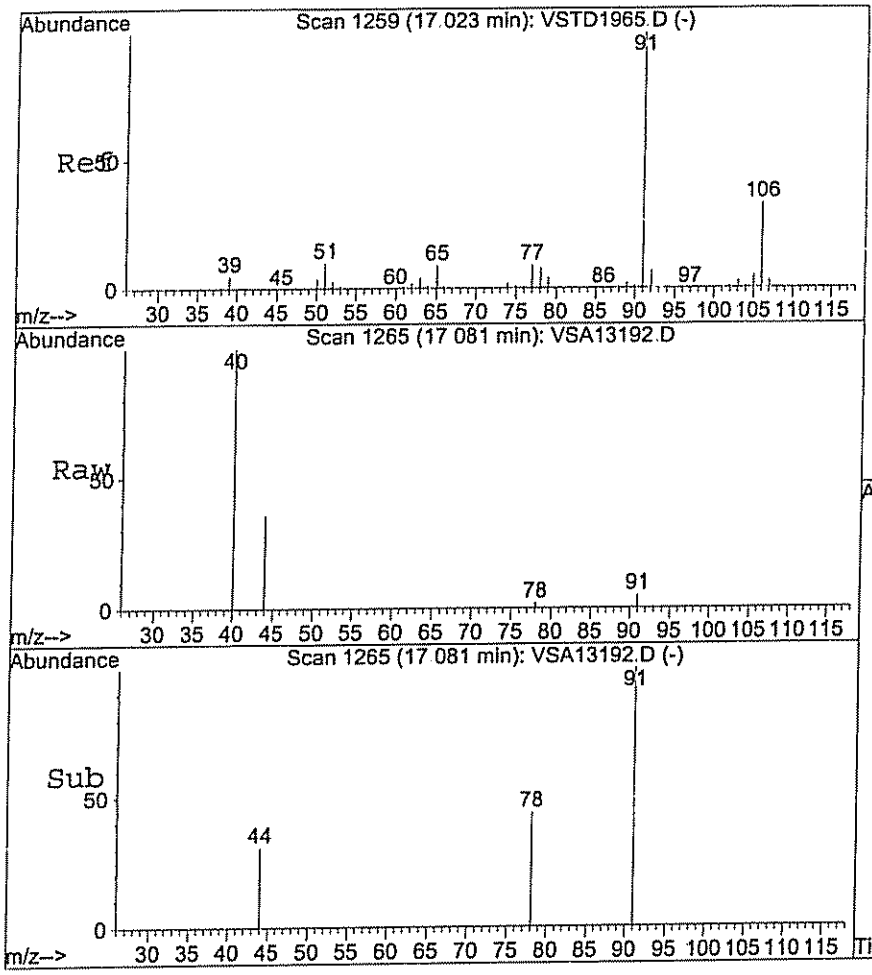


#33
Toluene
Concen: 0.80 ug/L
RT: 15.00 min Scan# 1053
Delta R.T. 0.05 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 92 Resp: 7777

Ion	Ratio	Lower	Upper
92	100		
91	127.2	132.6	192.6#
92	100.0	70.0	130.0

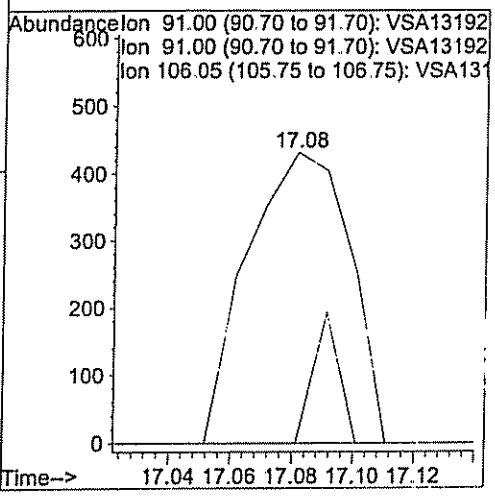


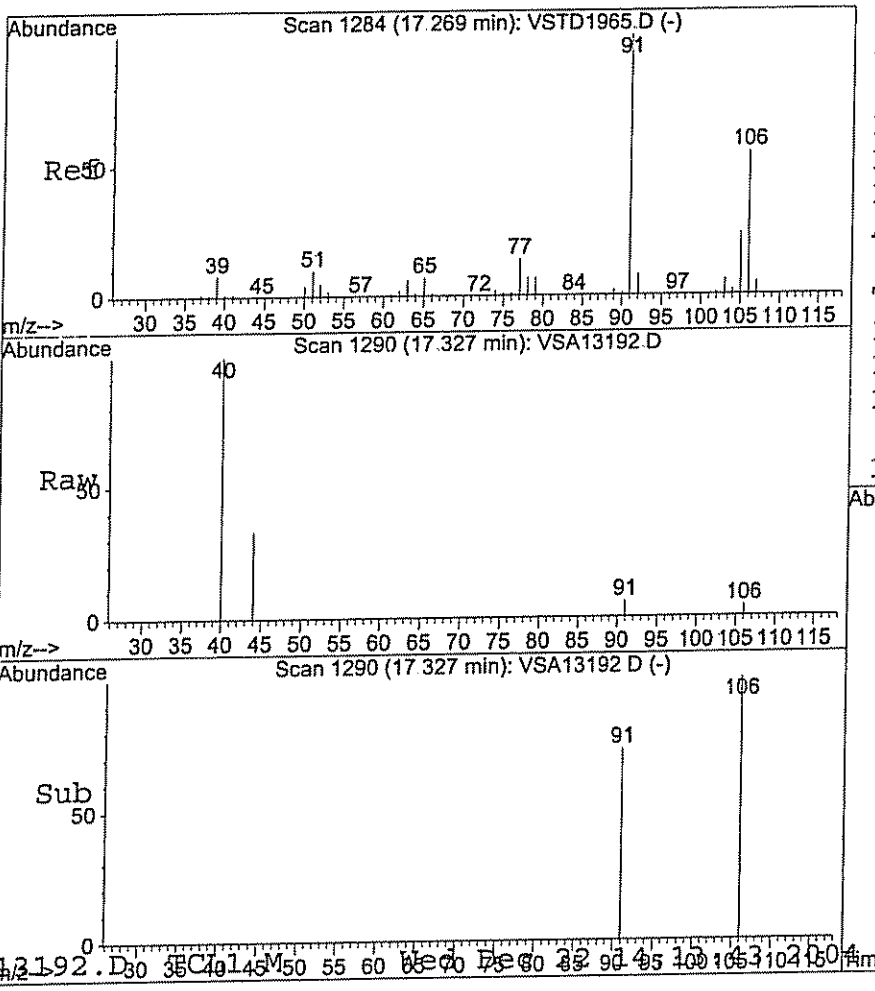


#37
Ethyl benzene
Concen: 0.06 ug/L
RT: 17.08 min Scan# 1265
Delta R.T. 0.05 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion: 91 Resp: 997

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	0.0	2.9	62.9#

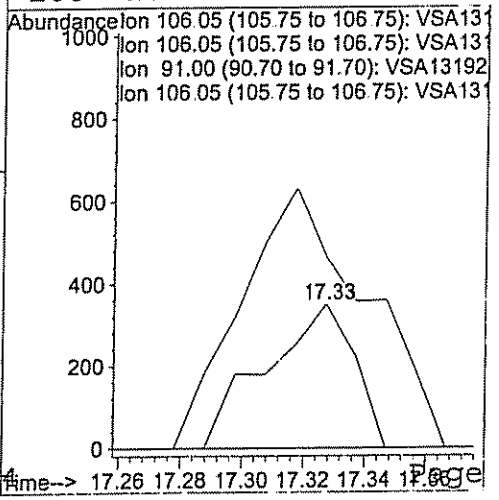


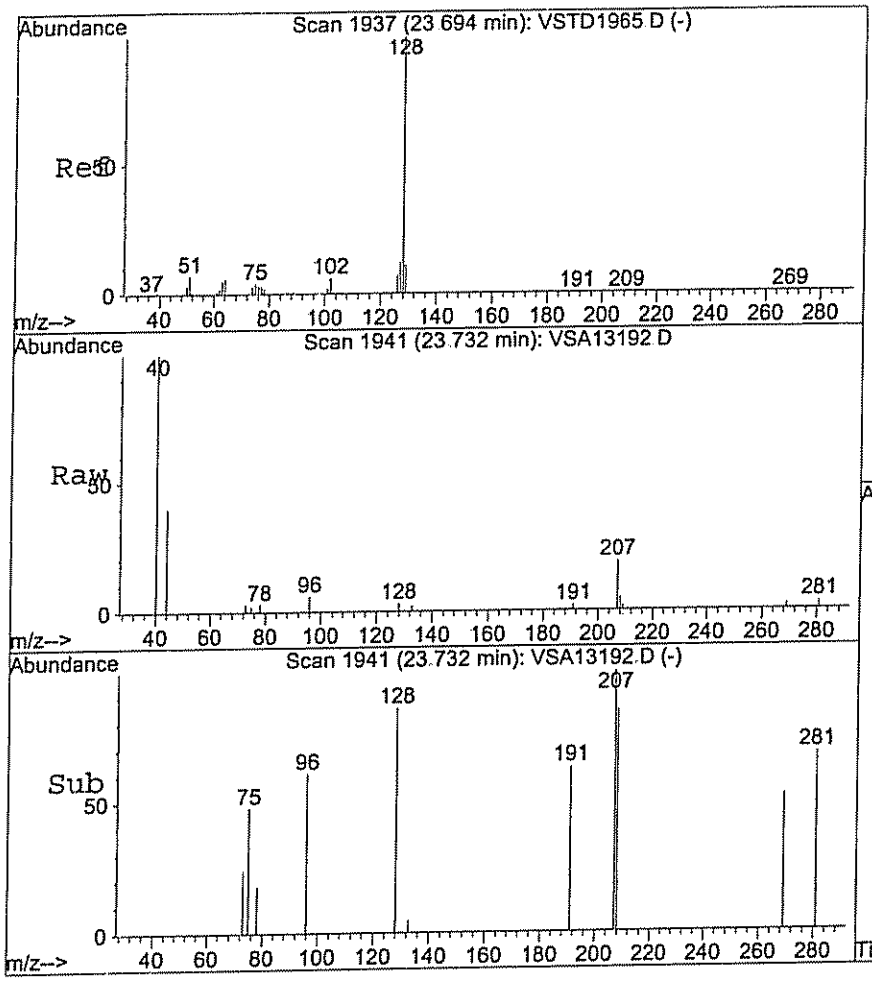


#39
m&p-Xylenes
Concen: 0.10 ug/L
RT: 17.33 min Scan# 1290
Delta R.T. 0.05 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion:106 Resp: 698

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	54.6	150.2	210.2#
106	100.0	70.0	130.0

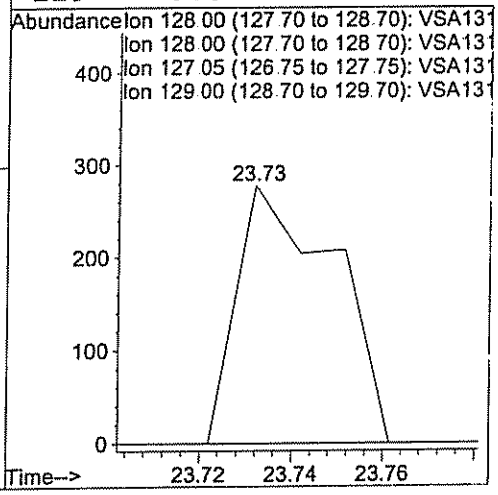




#45
Naphthalene
Concen: 0.03 ug/L
RT: 23.73 min Scan# 1941
Delta R.T. 0.04 min
Lab File: VSA13192.D
Acq: 21 Dec 2004 19:30

Tgt Ion:128 Resp: 407

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	0.0	0.0	40.8



Quantitation Report (QT Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSA13193.D
Acq On : 21 Dec 2004 20:02
Sample : P0412024-03A DF500 RE
Misc : WATER

Vial: 18
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:14 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.97	128	155031	50.00	ug/L	0.05
18) 1,4-Difluorobenzene	12.63	114	872620	50.00	ug/L	0.05
31) Chlorobenzene-d5	16.80	117	804831	50.00	ug/L	0.04
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.70	65	222765	58.63	ug/L	0.04
Spiked Amount 50.000	Range 70 - 130		Recovery = 117.26%			
32) Toluene-d8	14.90	98	704097	53.64	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.28%			
43) 4-Bromofluorobenzene	18.44	95	250665	50.36	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.72%			
Target Compounds						Qvalue
3) Vinyl chloride	6.61	62	5112	1.13	ug/L	96
4) Bromomethane	6.96	94	256	0.09	ug/L	94
6) 1,1-Dichloroethene	8.82	96	7935	2.29	ug/L	92
7) Carbon disulfide	9.33	76	298	0.02	ug/L	100
8) Methylene chloride	8.98	84	6124	1.39	ug/L	96
9) Acetone	8.31	43	5189	4.35	ug/L	97
10) trans-1,2-Dichloroethene	9.81	96	9790	2.35	ug/L	99
12) 1,1-Dichloroethane	10.09	63	8939	1.29	ug/L	97
13) cis-1,2-Dichloroethene	10.76	96	1131965	234.63	ug/L	94
15) 2-Butanone	10.62	43	2264	1.22	ug/L	88
17) 1,2-Dichloroethane	11.79	62	2631	0.60	ug/L	99
20) 1,1,1-Trichloroethane	11.92	97	11624	2.33	ug/L	93
21) Benzene	12.41	78	3348	0.19	ug/L	94
22) Trichloroethene	13.16	130	322428	56.77	ug/L	98
24) Bromodichloromethane	13.17	83	3159	0.62	ug/L #	1
27) 1,1,2-Trichloroethane	14.90	97	21366	5.90	ug/L #	50
33) Toluene	14.99	92	89819	9.30	ug/L	100
36) 2-Hexanone	14.99	43	1611	0.69	ug/L #	68
37) Ethyl benzene	17.08	91	6733	0.38	ug/L	97
39) m&p-Xylenes	17.09	106	1944	0.27	ug/L	95
40) o-Xylene	17.87	106	1082	0.16	ug/L	97
45) Naphthalene	23.74	128	469	0.03	ug/L #	97

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

DF 500

Quantitation Report

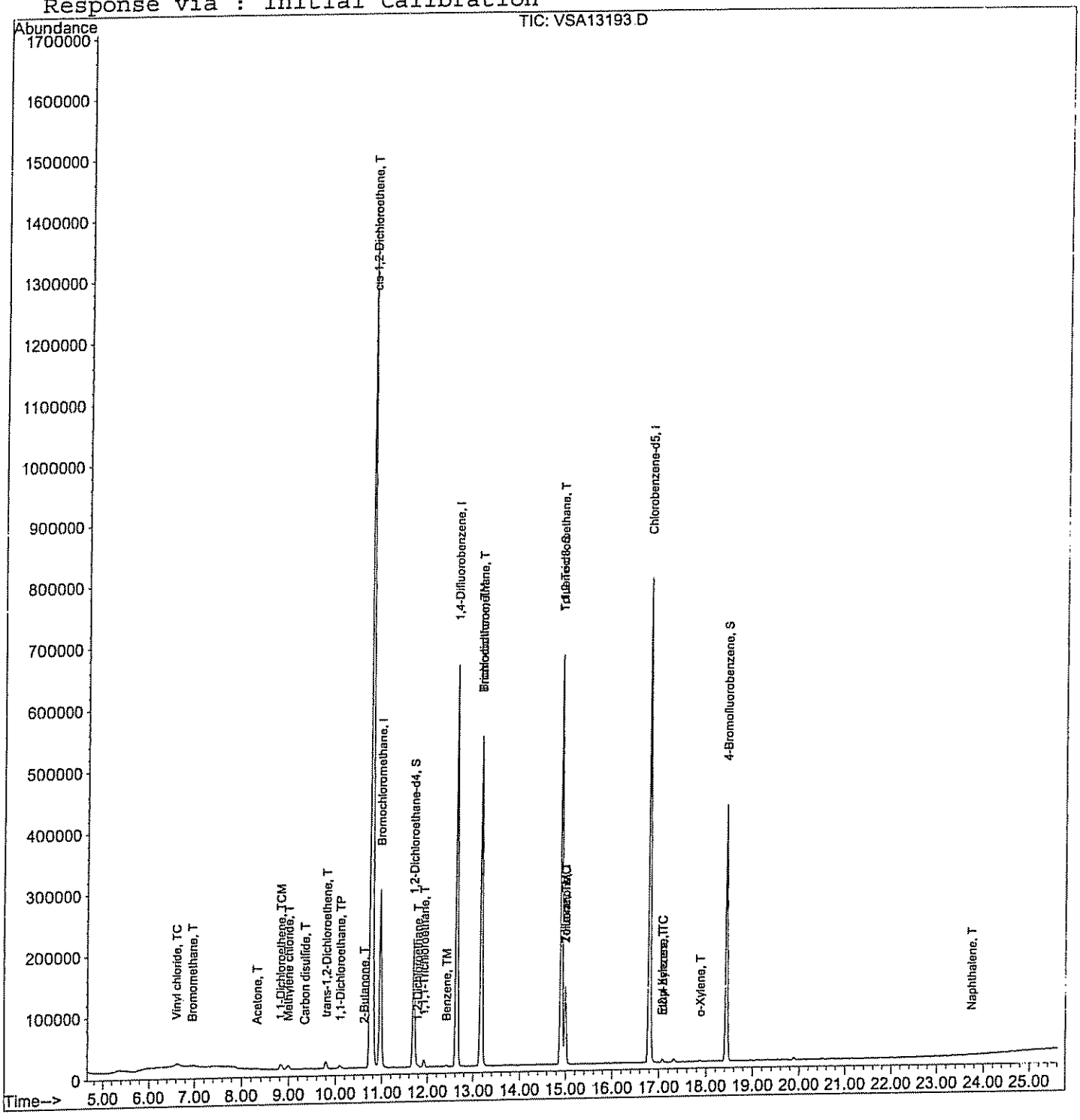
Data File : C:\HPCHEM\1\DATA\VSA13193.D
Acq On : 21 Dec 2004 20:02
Sample : P0412024-03A DF500 RE
Misc : WATER

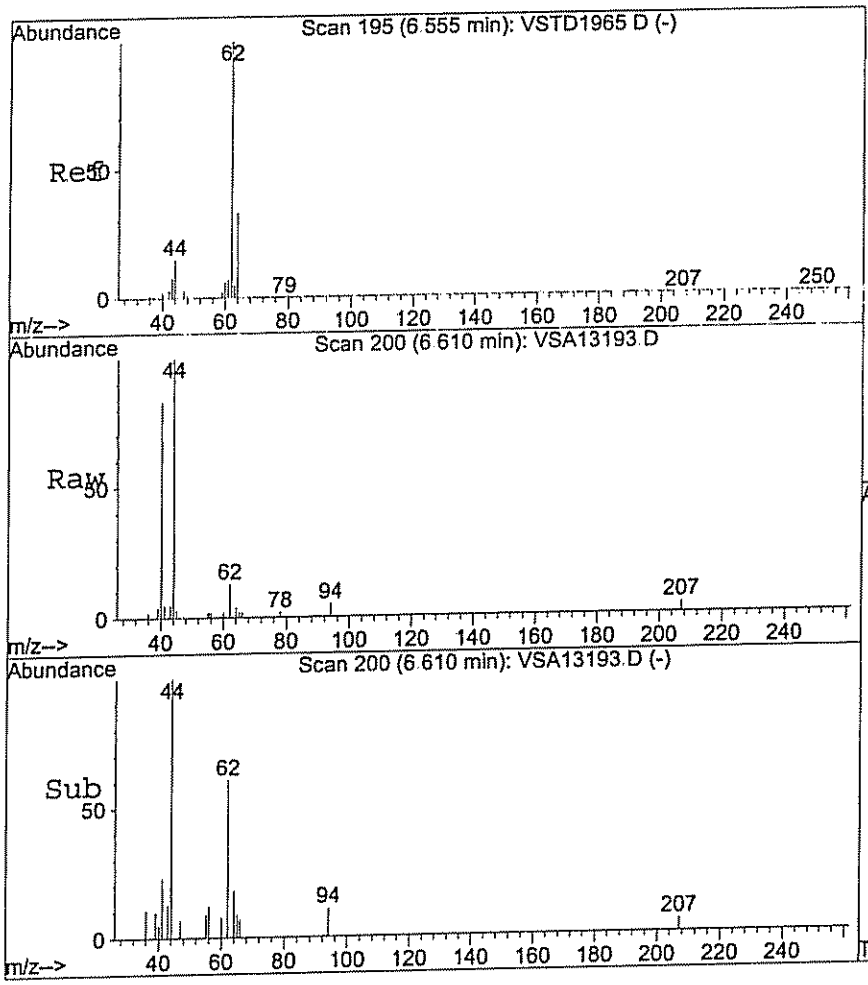
Vial: 18
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:14 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration

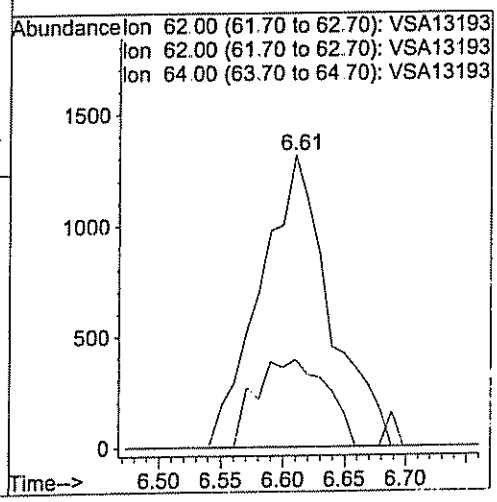


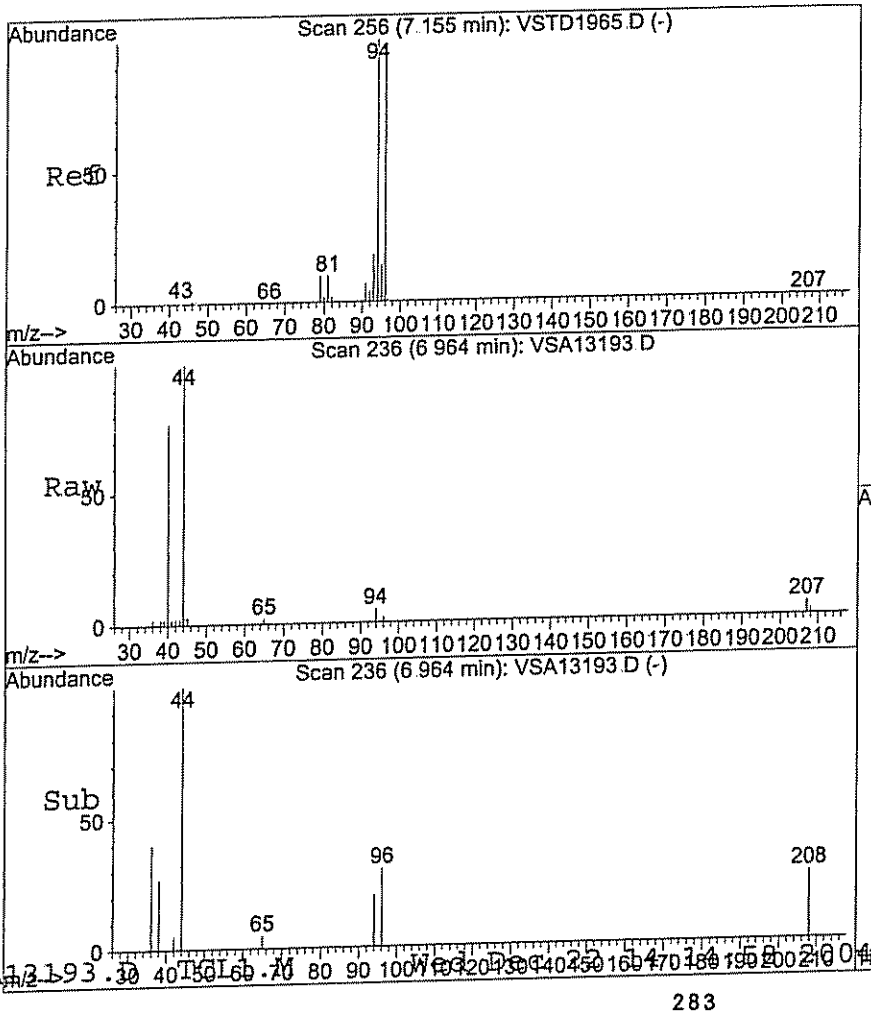


#3
Vinyl chloride
Concen: 1.13 ug/L
RT: 6.61 min Scan# 200
Delta R.T. 0.05 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 62 Resp: 5112

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	24.1	2.4	62.4

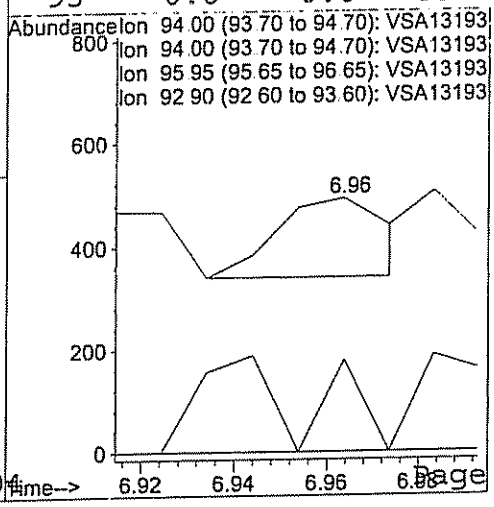


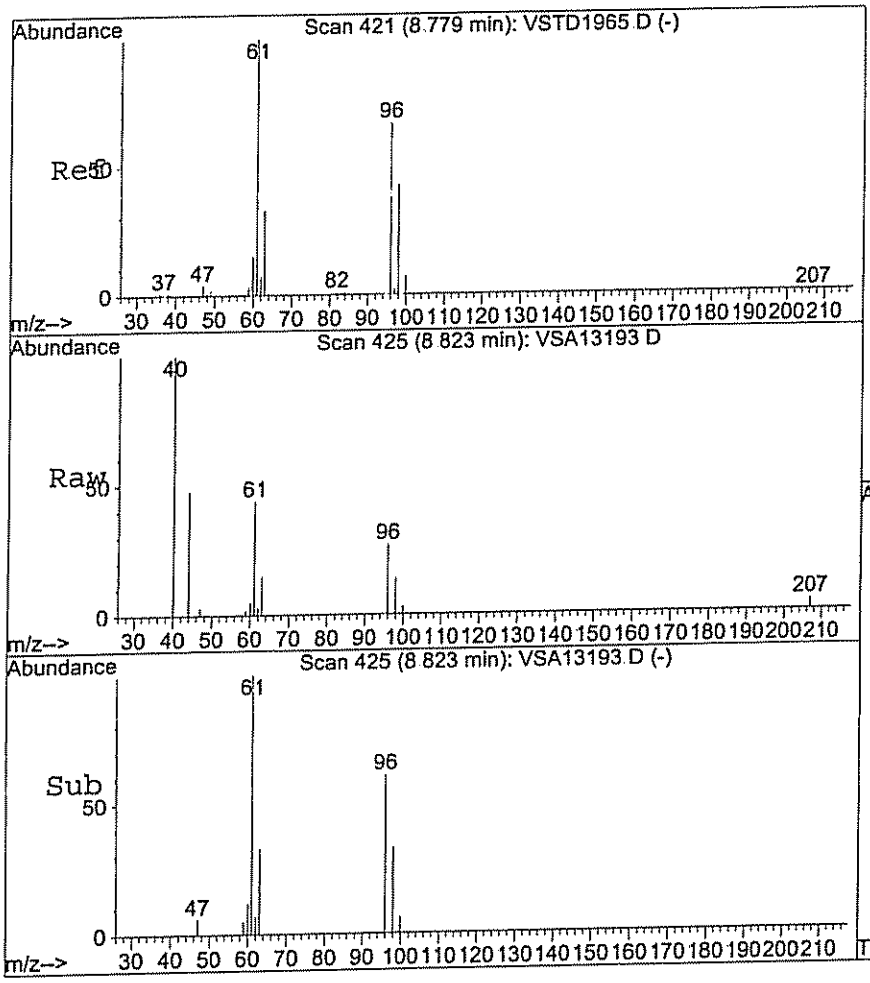


#4
Bromomethane
Concen: 0.09 ug/L
RT: 6.96 min Scan# 236
Delta R.T. -0.20 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 94 Resp: 256

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	98.5	63.6	123.6
93	0.0	0.0	48.5

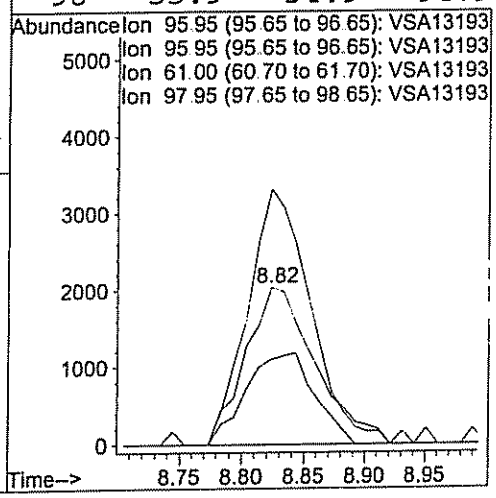


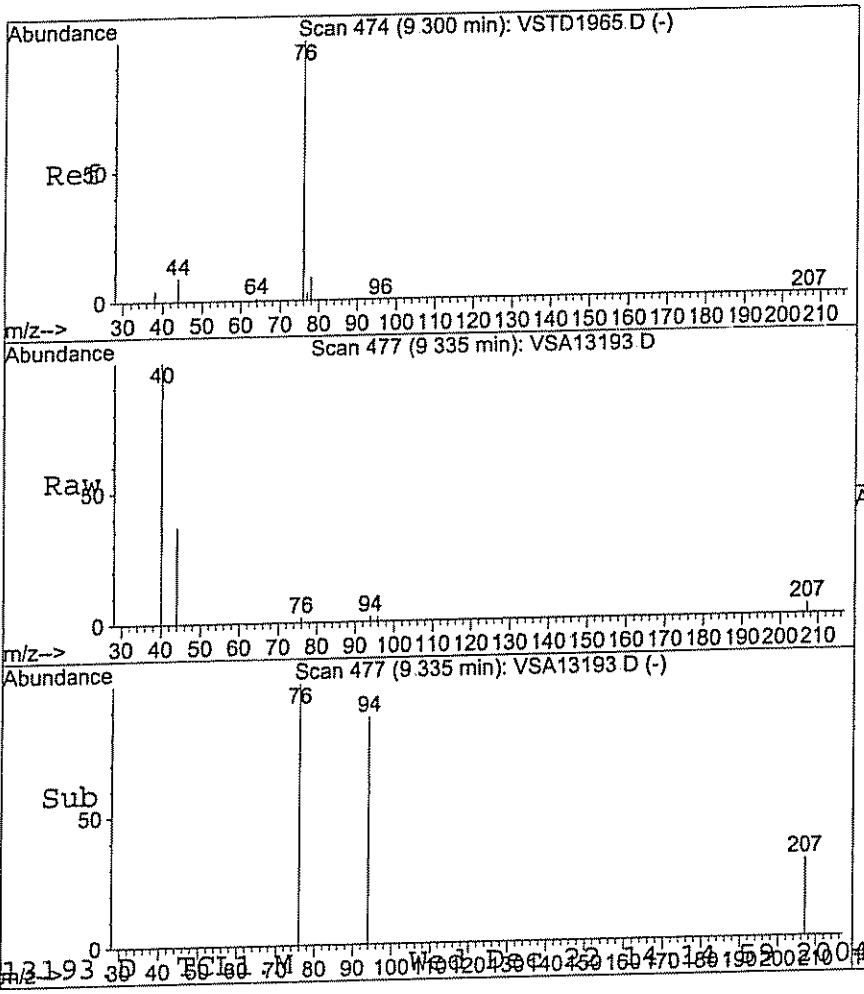


#6
1,1-Dichloroethene
Concen: 2.29 ug/L
RT: 8.82 min Scan# 425
Delta R.T. 0.05 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 96 Resp: 7935

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	162.9	118.9	178.9
98	53.9	34.9	94.9

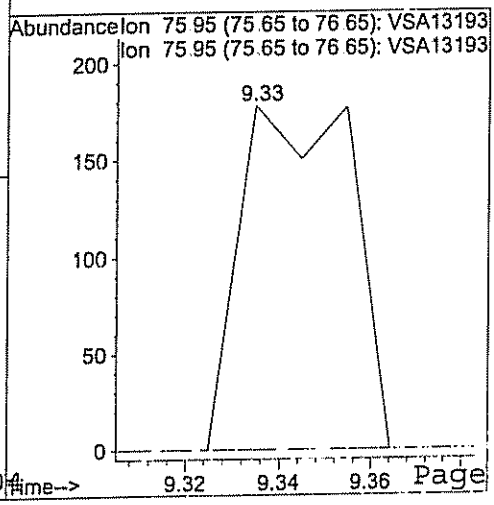


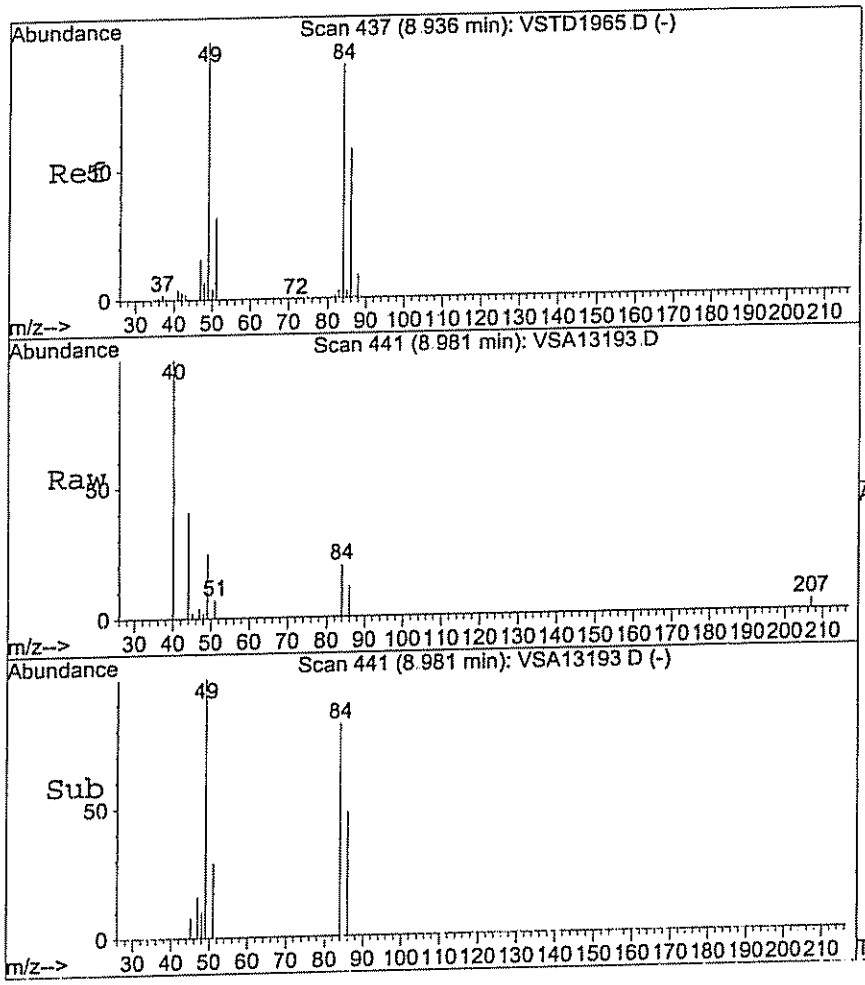


#7
Carbon disulfide
Concen: 0.02 ug/L
RT: 9.33 min Scan# 477
Delta R.T. 0.03 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 76 Resp: 298

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

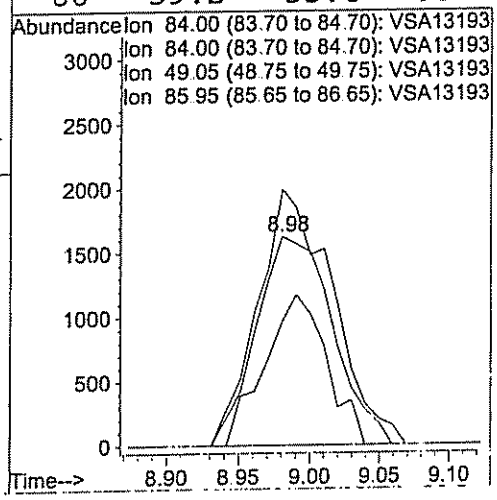


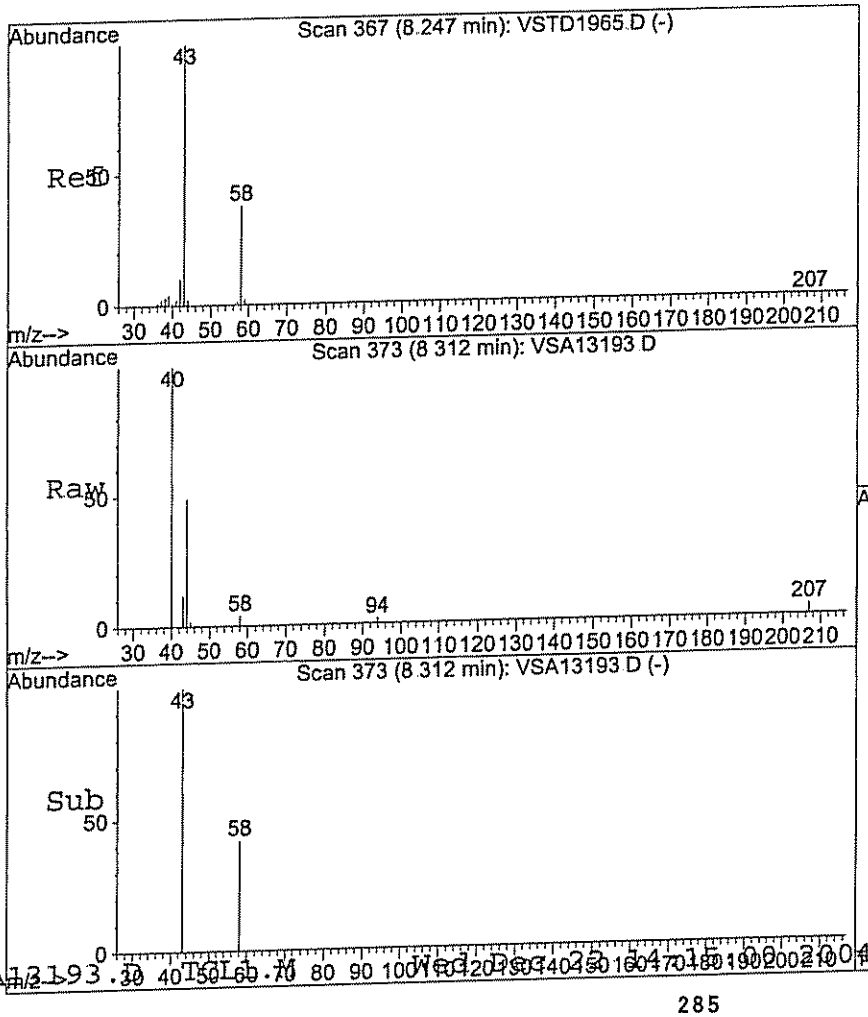


#8
Methylene chloride
Concen: 1.39 ug/L
RT: 8.98 min Scan# 441
Delta R.T. 0.04 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 84 Resp: 6124

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	117.7	80.0	140.0
86	59.2	33.4	93.4

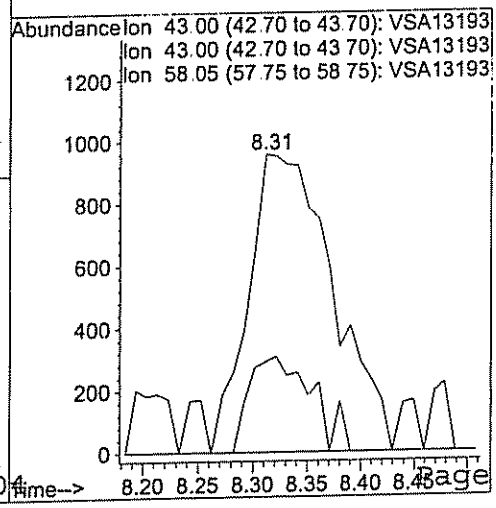


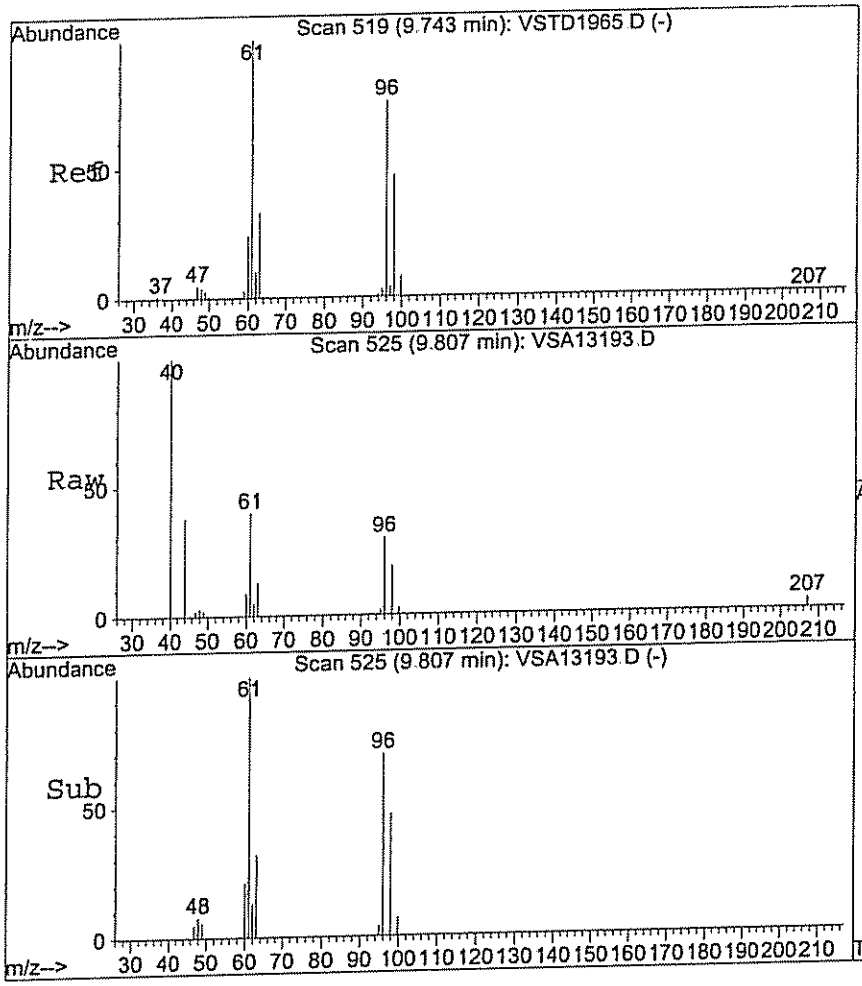


#9
Acetone
Concen: 4.35 ug/L
RT: 8.31 min Scan# 373
Delta R.T. 0.04 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 43 Resp: 5189

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	30.3	7.8	67.8

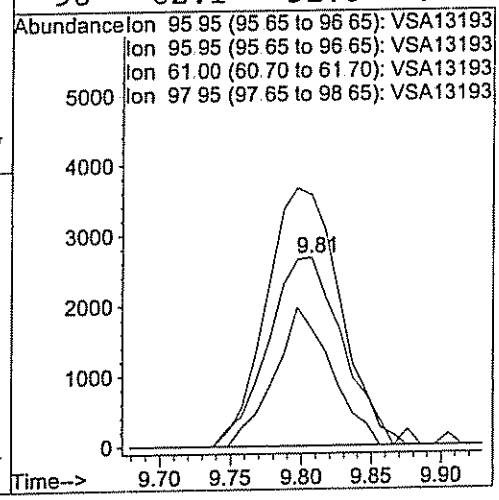


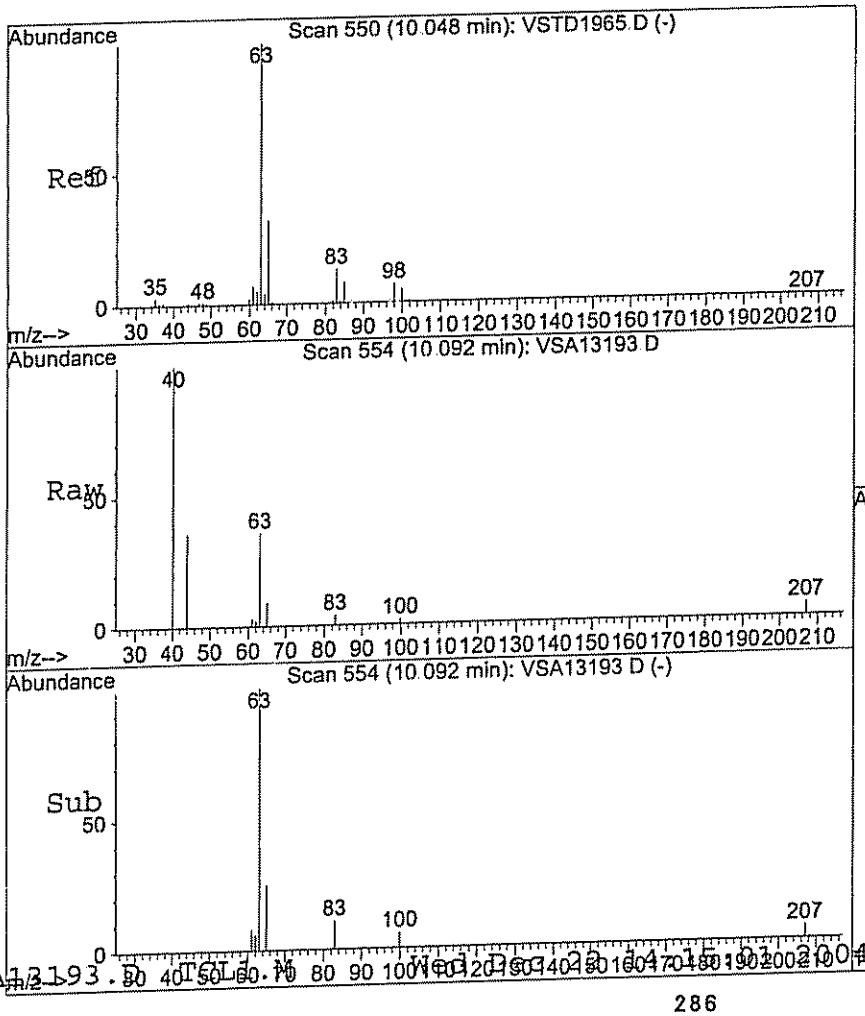


#10
trans-1,2-Dichloroethene
Concen: 2.35 ug/L
RT: 9.81 min Scan# 525
Delta R.T. 0.06 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 96 Resp: 9790

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	130.4	102.4	162.4
98	62.1	31.6	91.6

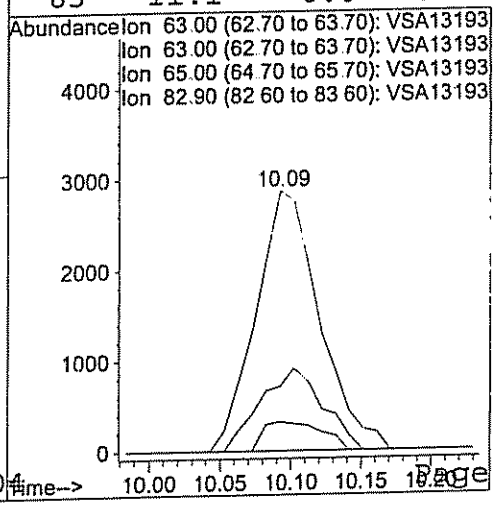


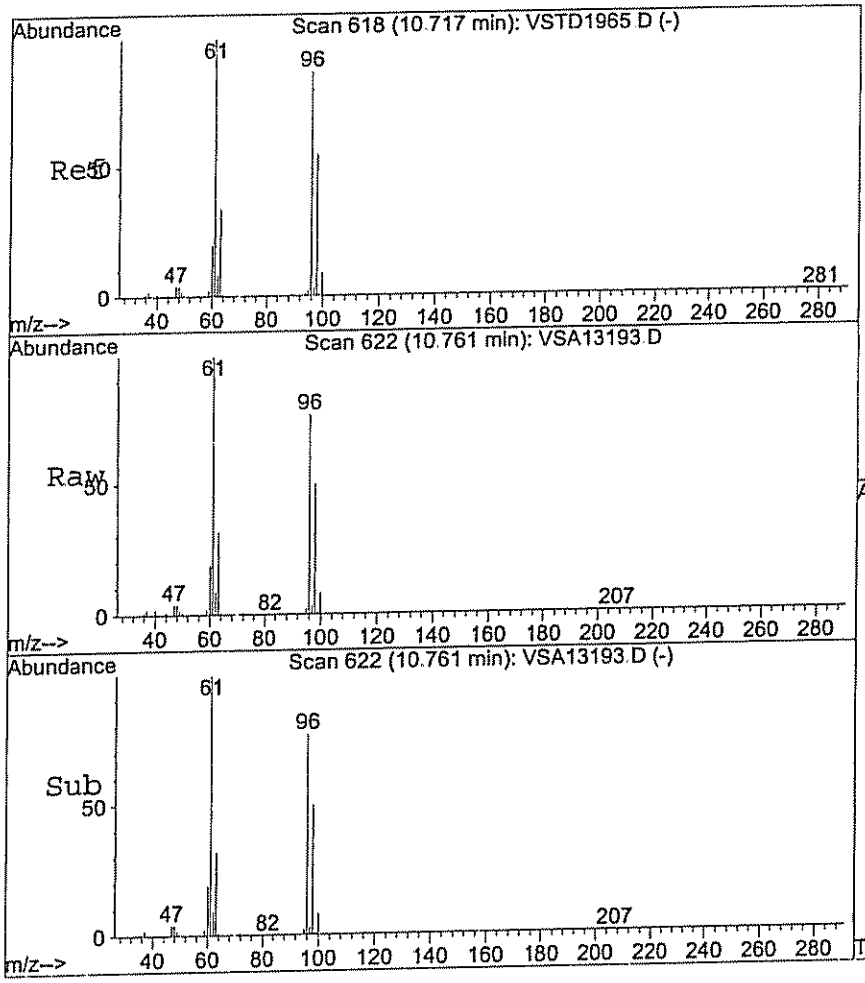


#12
1,1-Dichloroethane
Concen: 1.29 ug/L
RT: 10.09 min Scan# 554
Delta R.T. 0.04 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 63 Resp: 8939

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	24.7	2.1	62.1
83	11.1	0.0	42.6

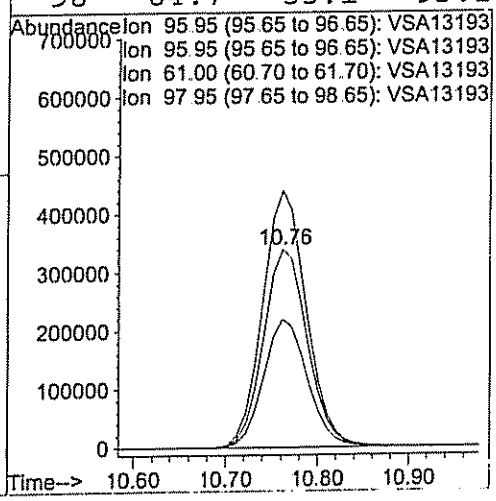


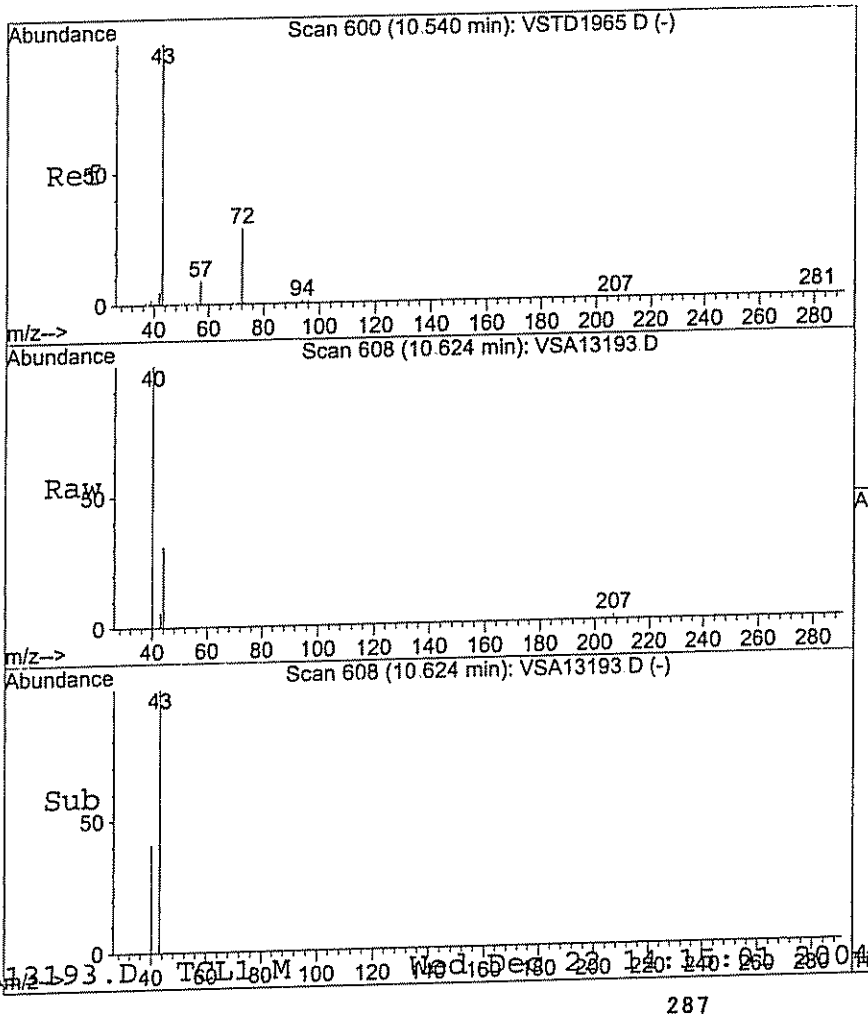


#13
cis-1,2-Dichloroethene
Concen: 234.63 ug/L
RT: 10.76 min Scan# 622
Delta R.T. 0.04 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 96 Resp: 1131965

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	129.7	85.2	145.2
98	64.7	33.1	93.1

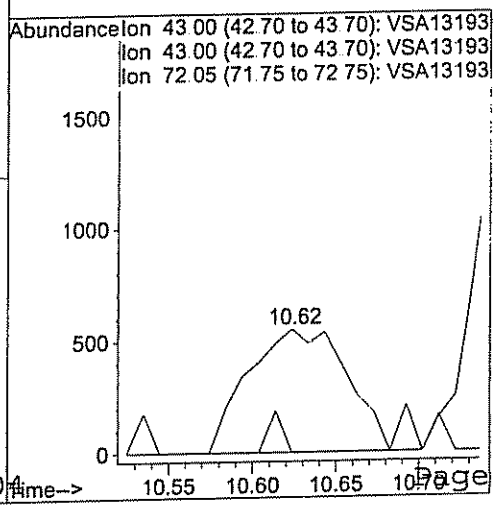


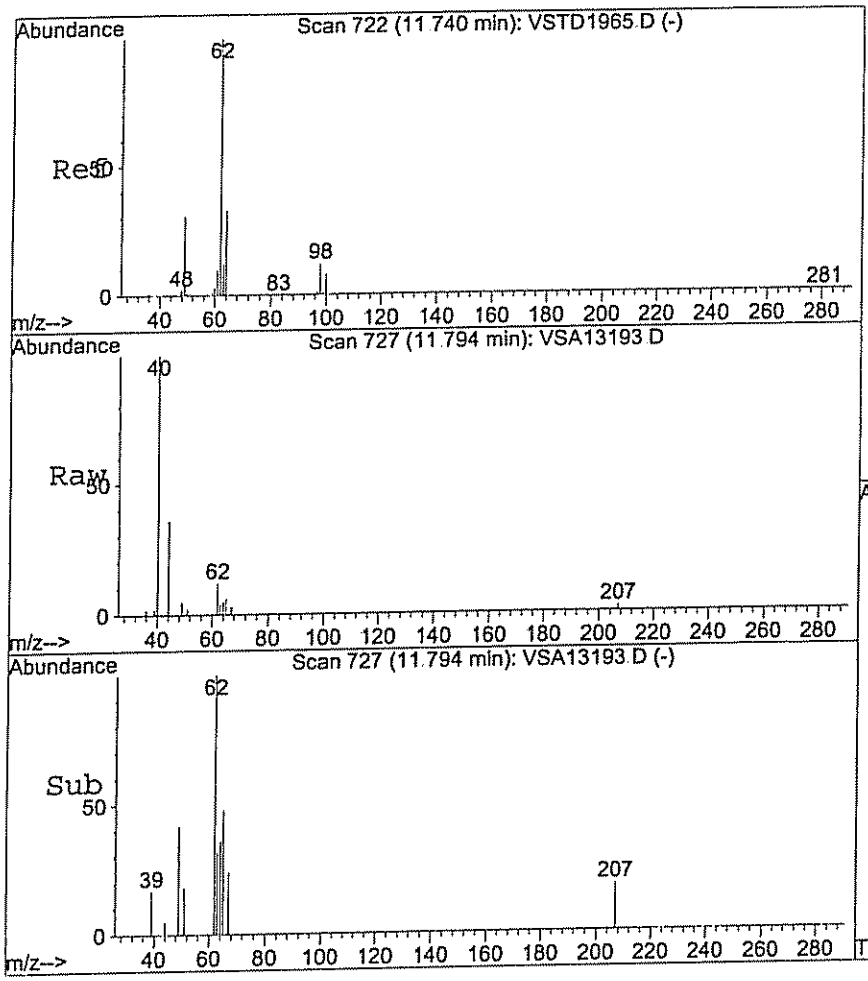


#15
2-Butanone
Concen: 1.22 ug/L
RT: 10.62 min Scan# 608
Delta R.T. 0.06 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 43 Resp: 2264

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	59.3

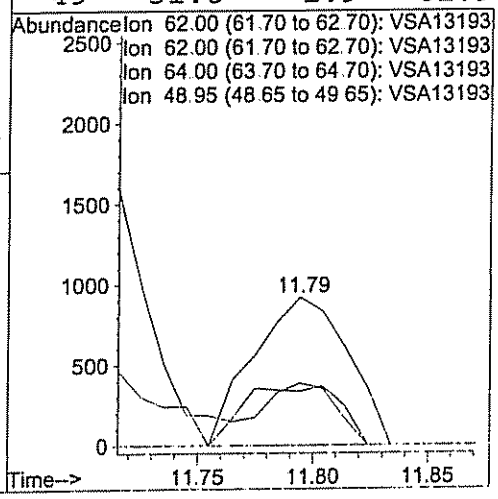


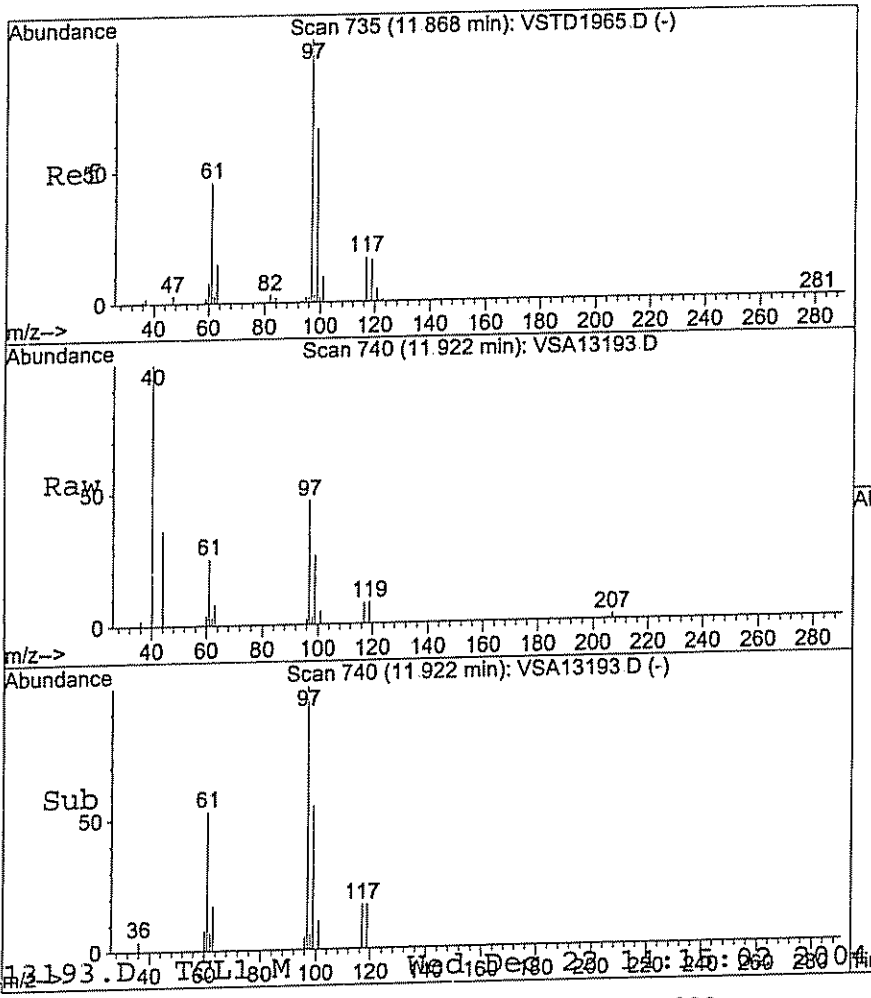


#17
1,2-Dichloroethane
Concen: 0.60 ug/L
RT: 11.79 min Scan# 727
Delta R.T. 0.05 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 62 Resp: 2631

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	36.4	2.9	62.9
49	31.8	1.9	61.9

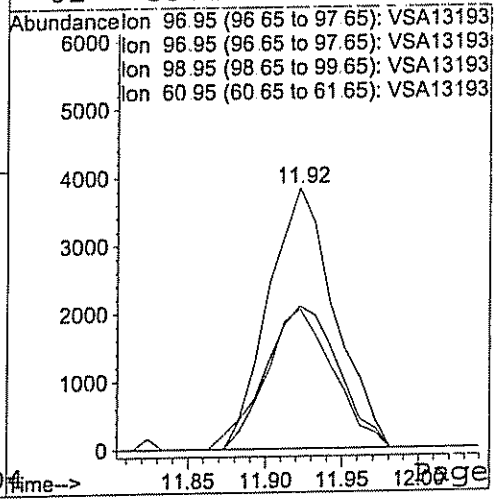


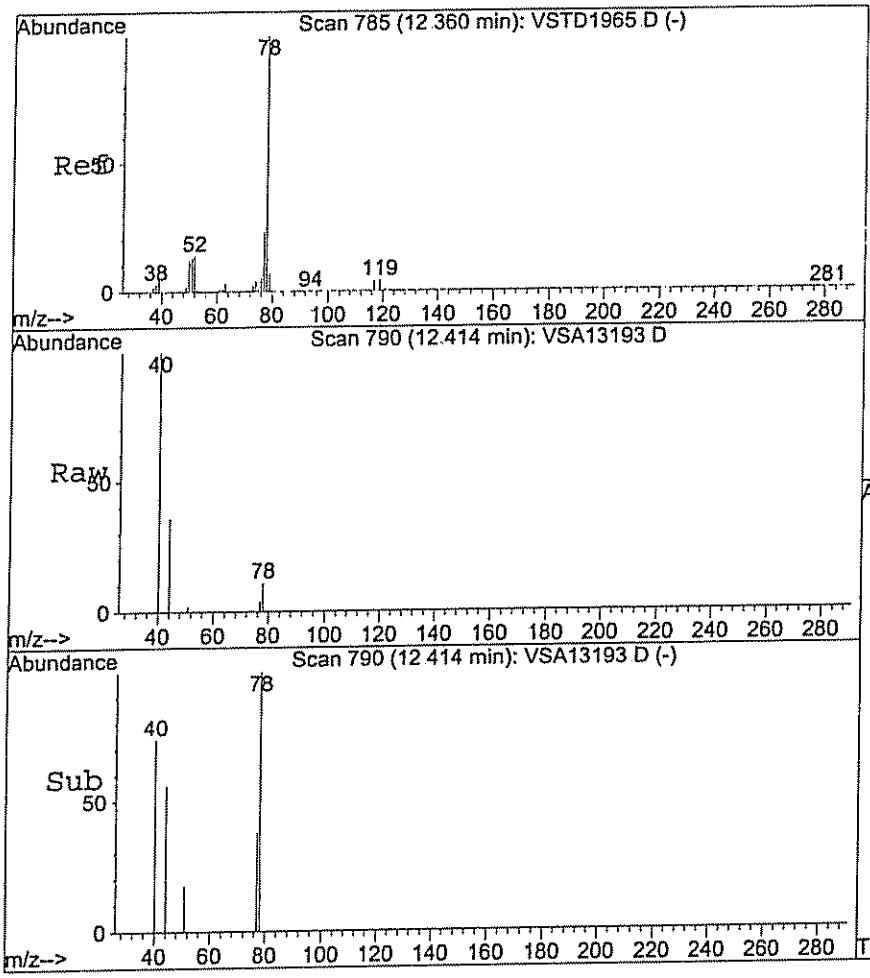


#20
1,1,1-Trichloroethane
Concen: 2.33 ug/L
RT: 11.92 min Scan# 740
Delta R.T. 0.05 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 97 Resp: 11624

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	54.6	35.6	95.6
61	53.4	16.5	76.5

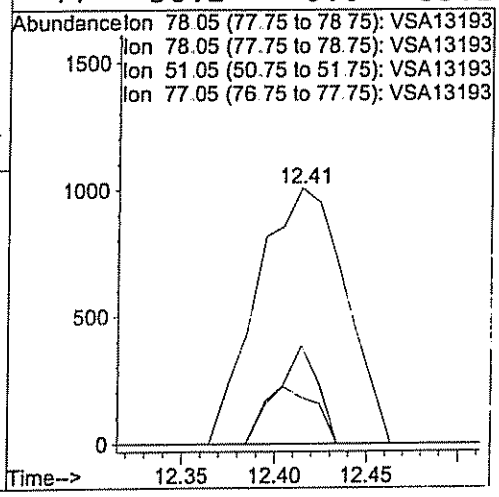


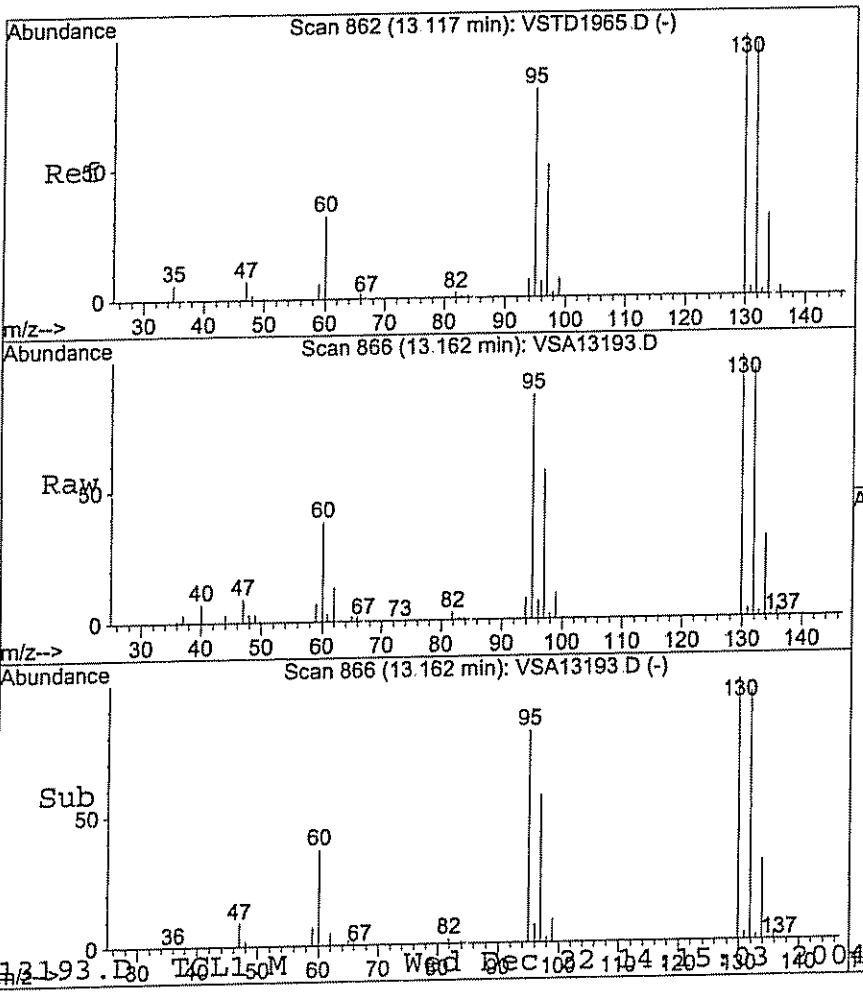


#21
Benzene
Concen: 0.19 ug/L
RT: 12.41 min Scan# 790
Delta R.T. 0.05 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 78 Resp: 3348

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	18.0	0.0	43.2
77	38.2	0.0	53.2

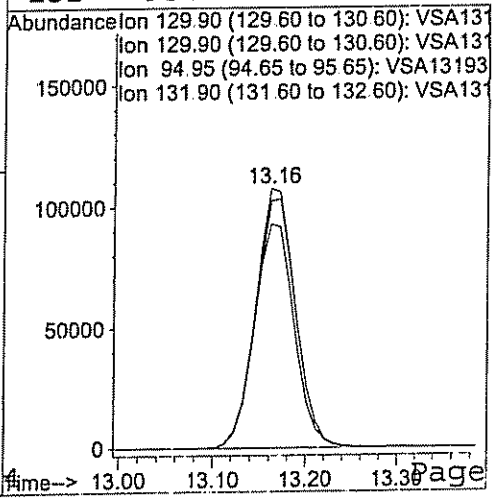


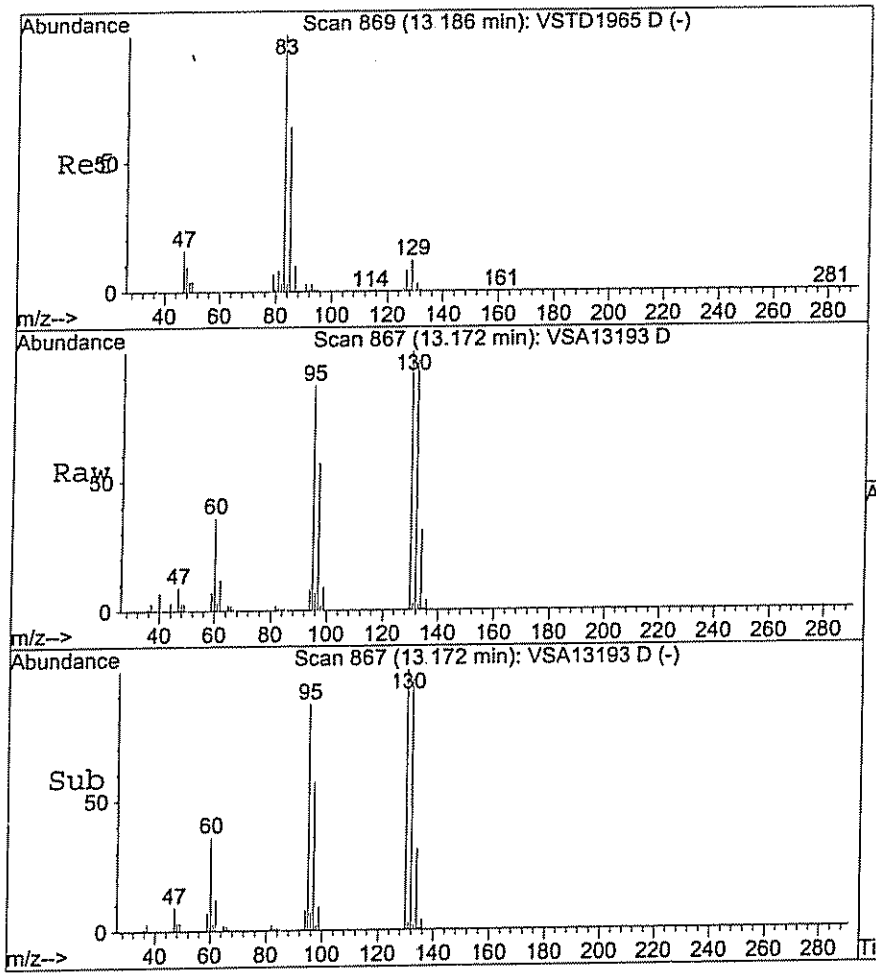


#22
Trichloroethene
Concen: 56.77 ug/L
RT: 13.16 min Scan# 866
Delta R.T. 0.04 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion:130 Resp: 322428

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	86.3	50.4	110.4
132	95.1	66.6	126.6

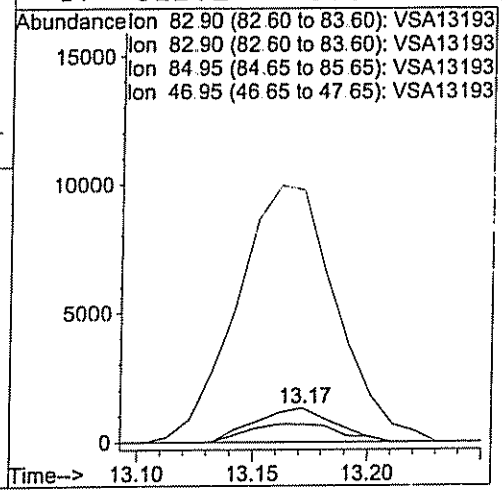


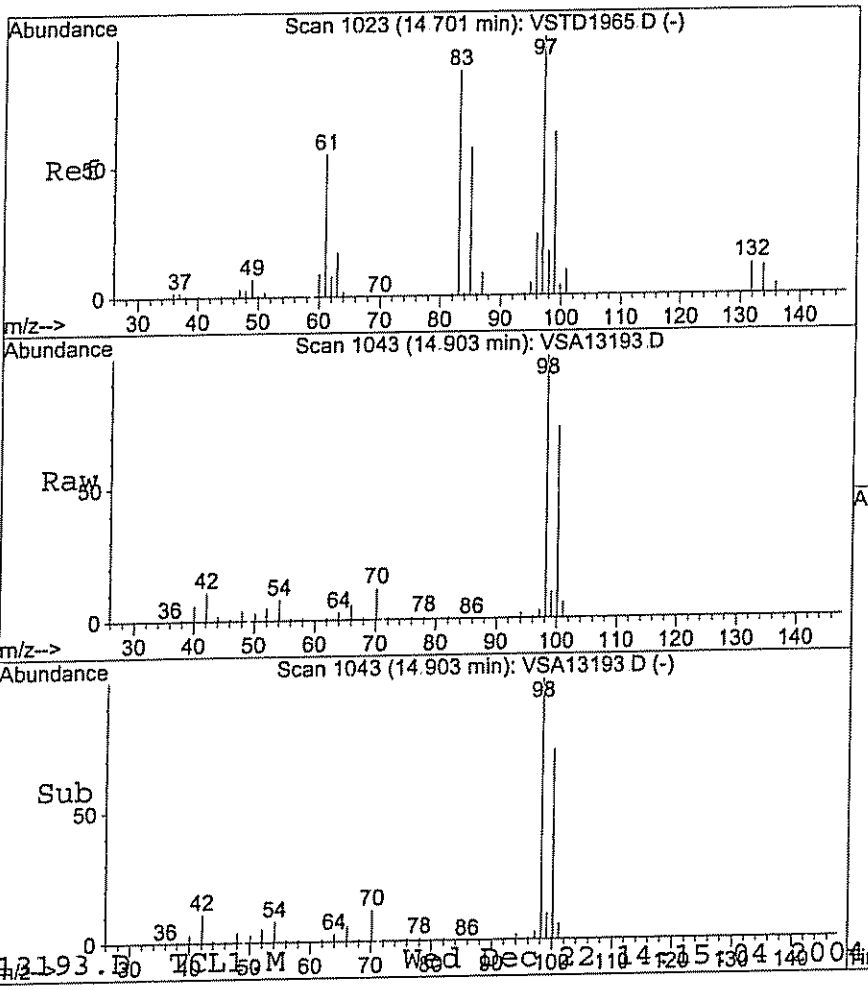


#24
Bromodichloromethane
Concen: 0.62 ug/L
RT: 13.17 min Scan# 867
Delta R.T. -0.01 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 83 Resp: 3159

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	52.1	33.9	93.9
47	612.1	0.0	46.1#

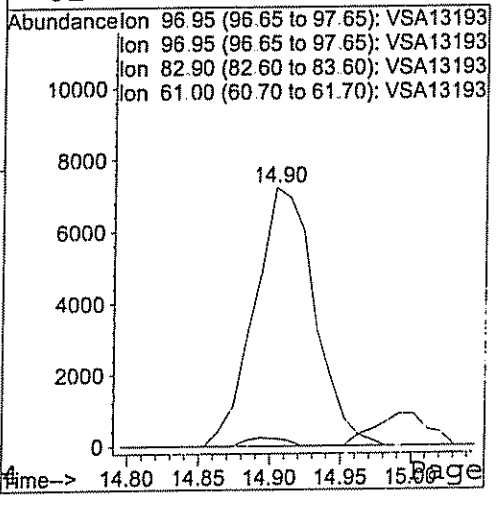


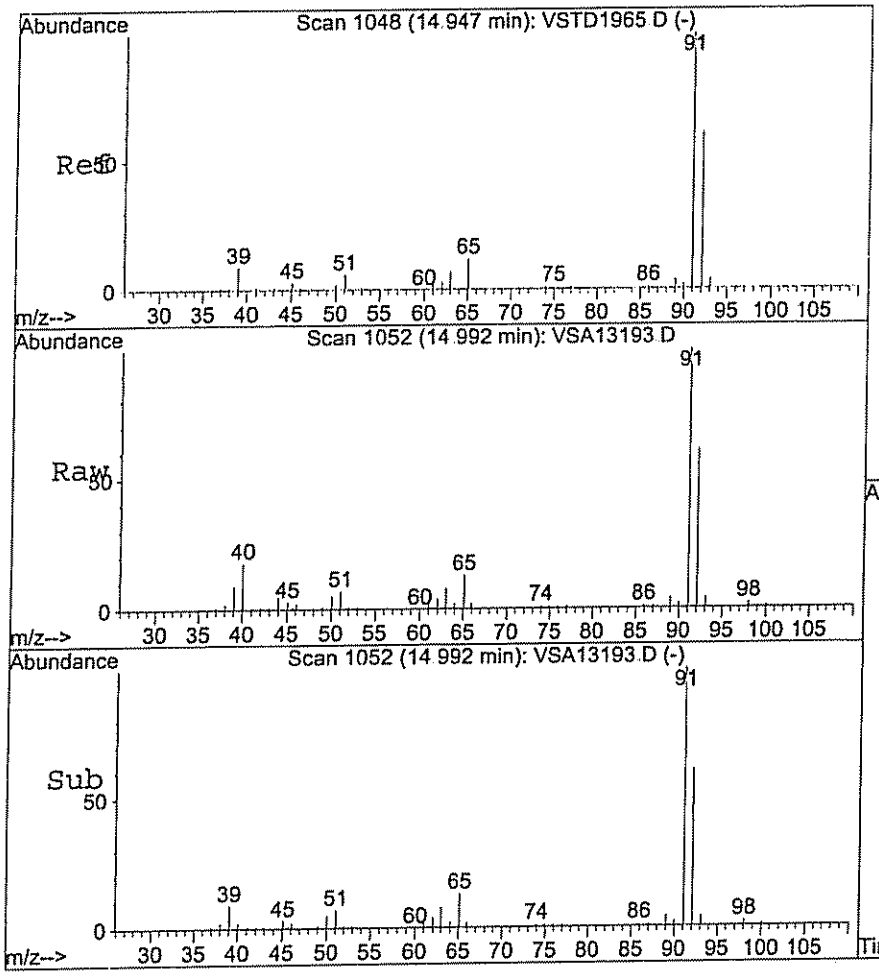


#27
1,1,2-Trichloroethane
Concen: 5.90 ug/L
RT: 14.90 min Scan# 1043
Delta R.T. 0.20 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 97 Resp: 21366

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	3.0	56.9	116.9#
61	0.0	24.6	84.6#

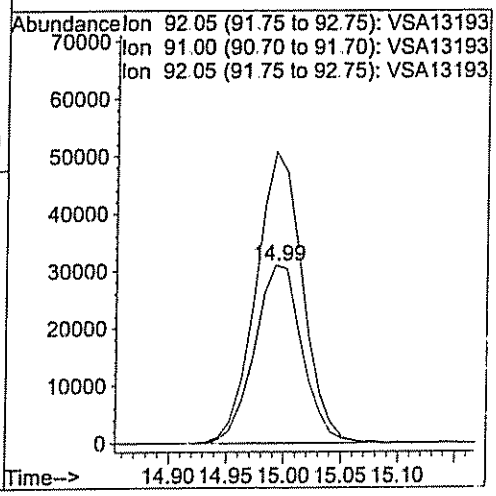


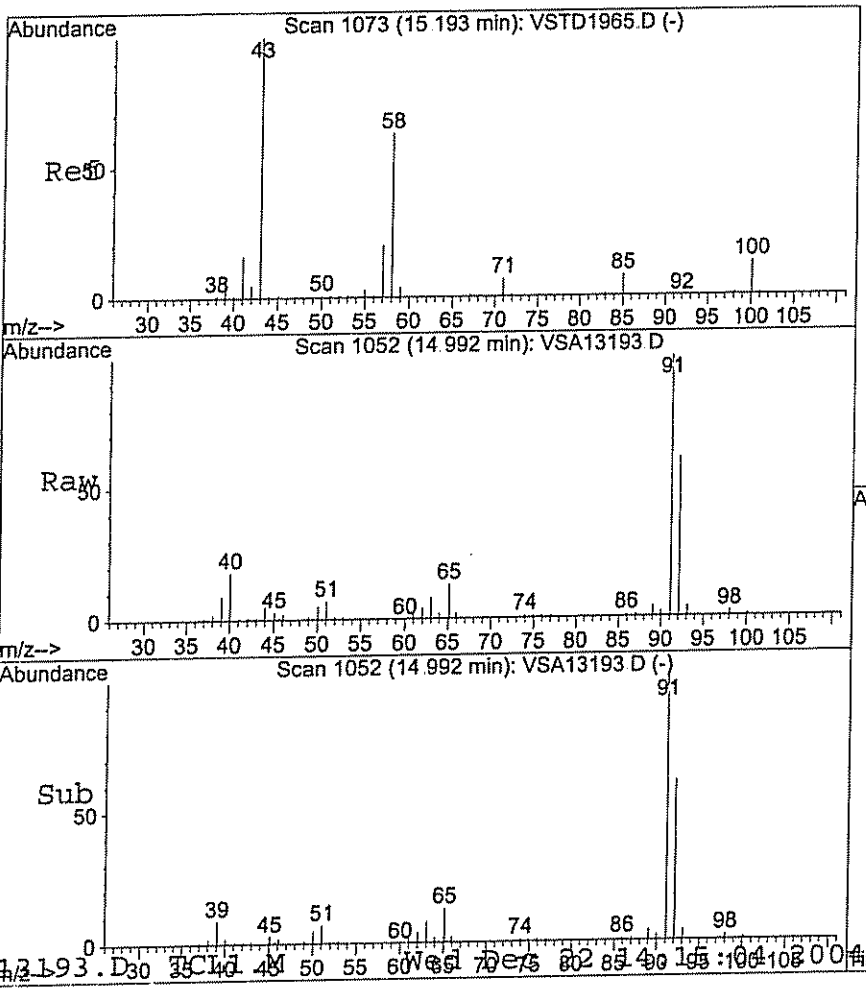


#33
Toluene
Concen: 9.30 ug/L
RT: 14.99 min Scan# 1052
Delta R.T. 0.04 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 92 Resp: 89819

Ion	Ratio	Lower	Upper
92	100		
91	163.5	132.6	192.6
92	100.0	70.0	130.0

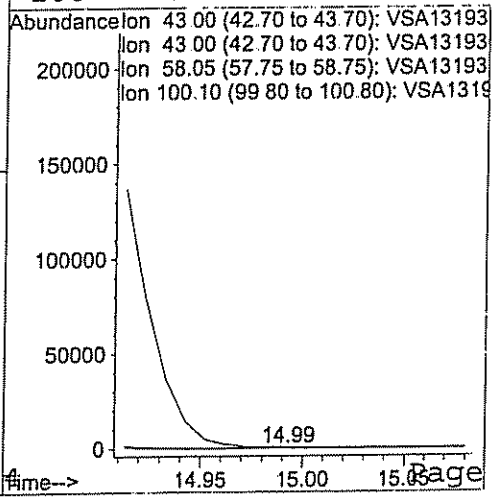


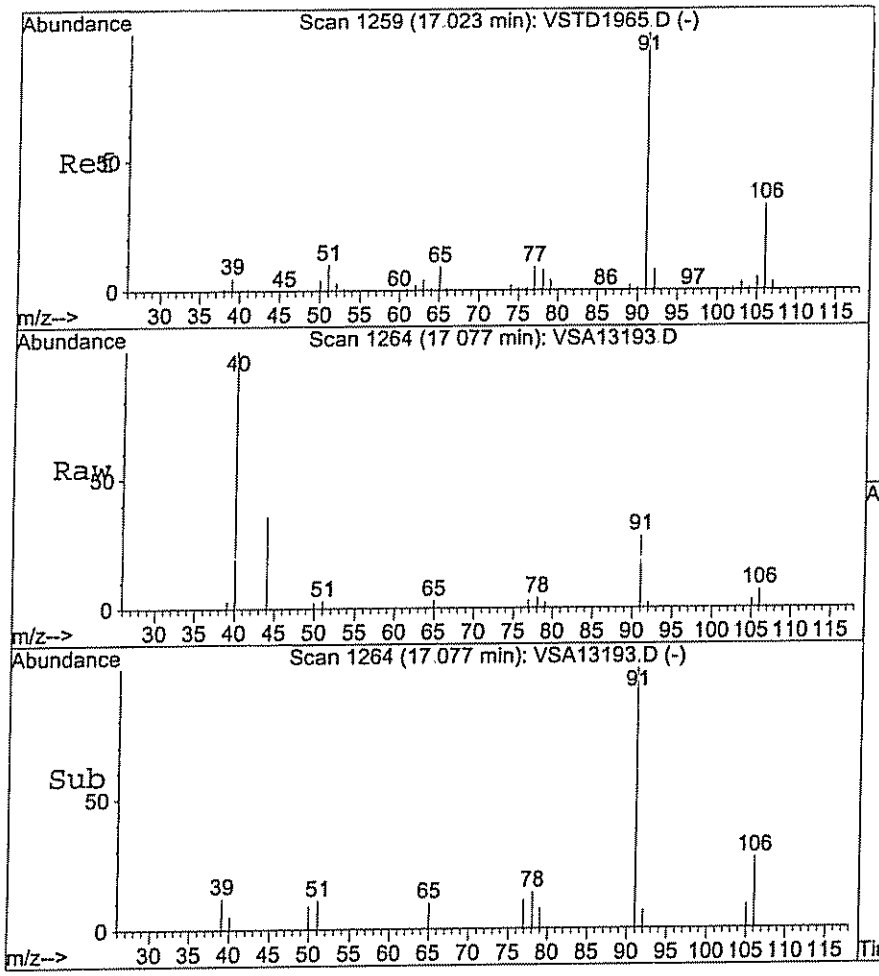


#36
2-Hexanone
Concen: 0.69 ug/L
RT: 14.99 min Scan# 1052
Delta R.T. -0.22 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 43 Resp: 1611

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	33.5	93.5#
100	0.0	0.0	43.5

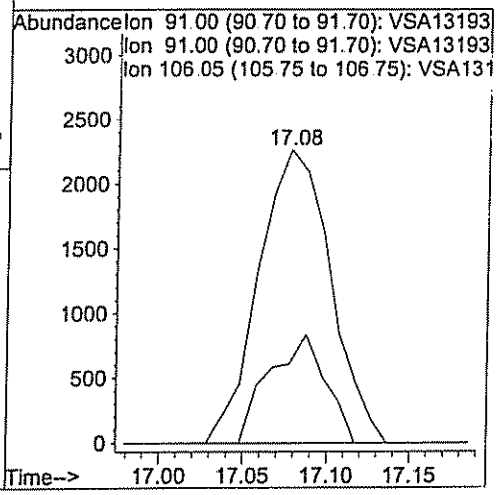


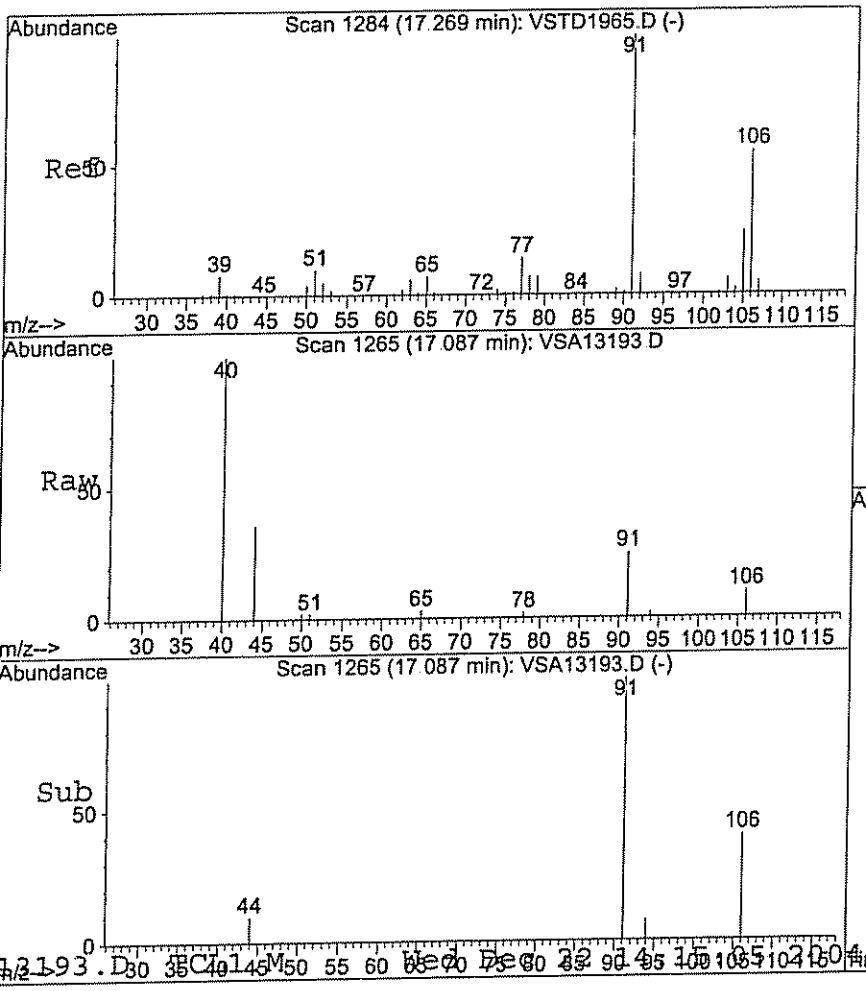


#37
Ethyl benzene
Concen: 0.38 ug/L
RT: 17.08 min Scan# 1264
Delta R.T. 0.05 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion: 91 Resp: 6733

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	26.8	2.9	62.9

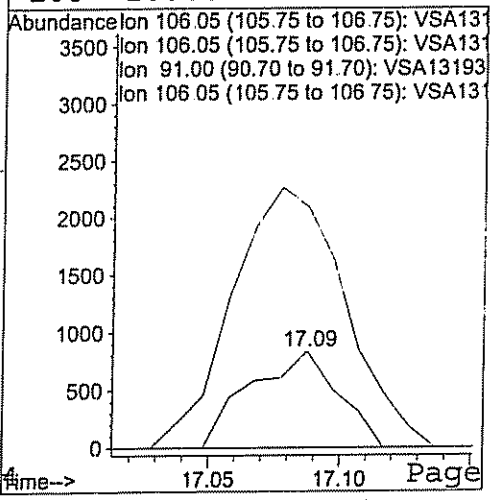


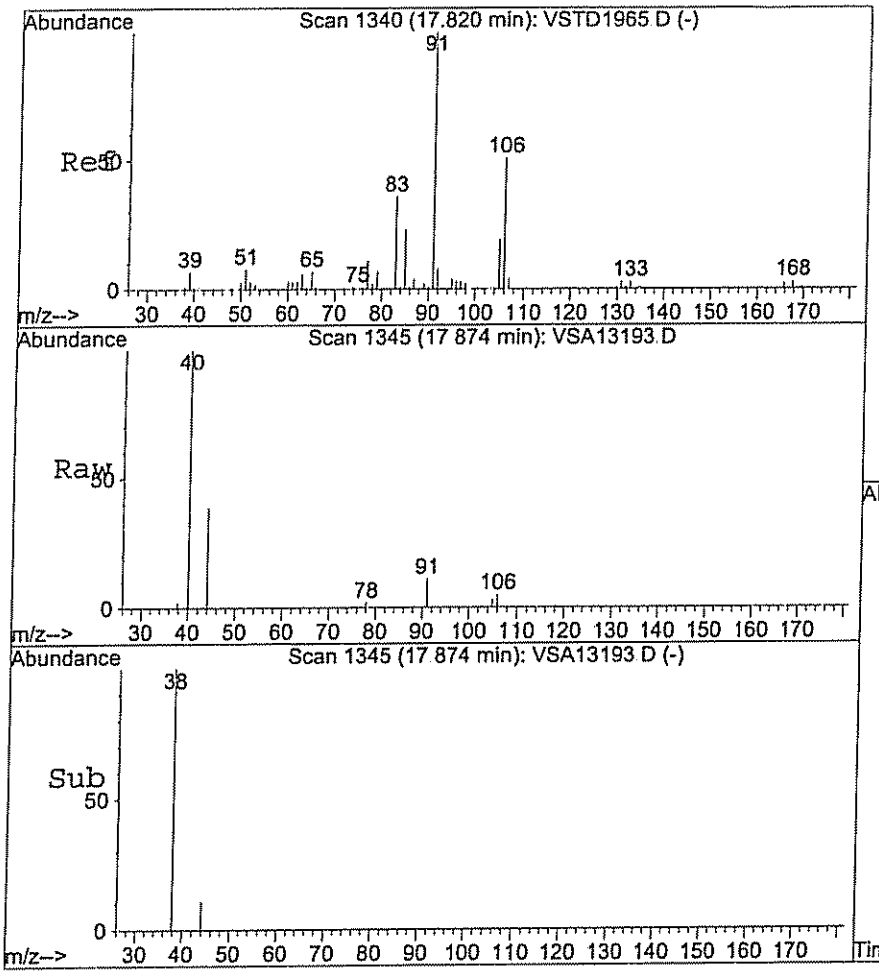


#39
m&p-Xylenes
Concen: 0.27 ug/L
RT: 17.09 min Scan# 1265
Delta R.T. -0.19 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion:106 Resp: 1944

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	194.6	150.2	210.2
106	100.0	70.0	130.0

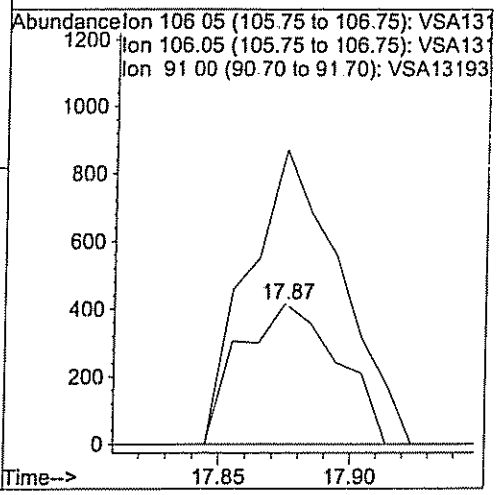


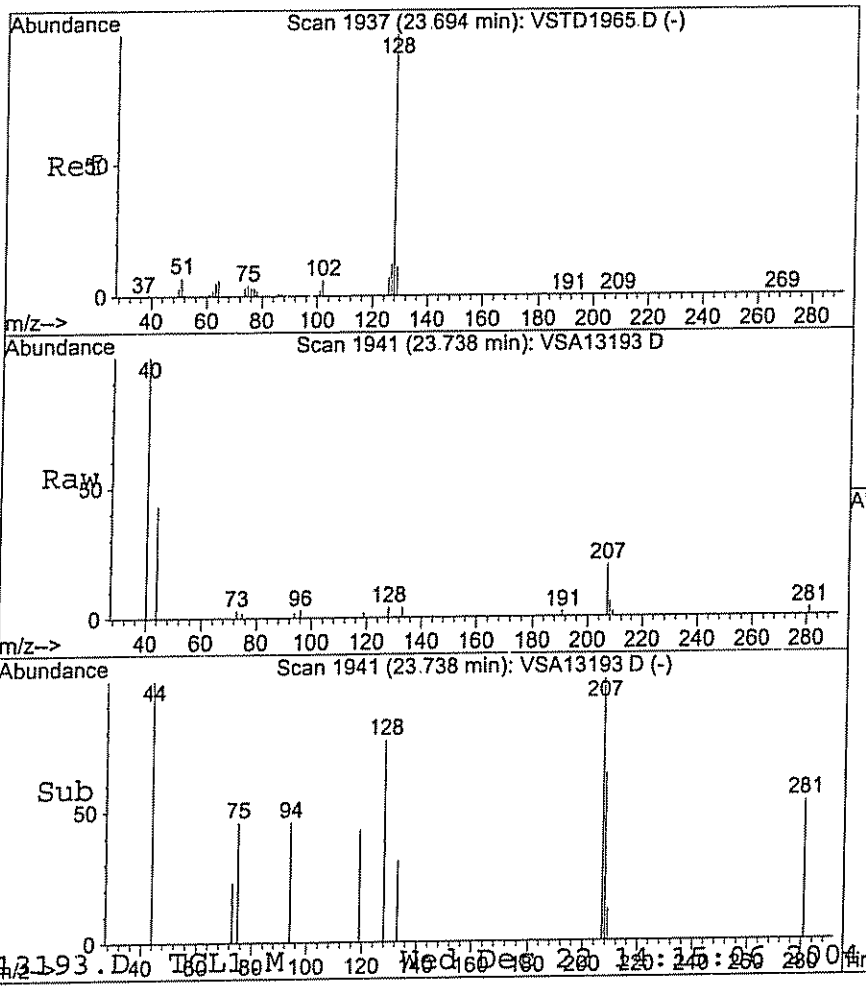


#40
o-Xylene
Concen: 0.16 ug/L
RT: 17.87 min Scan# 1345
Delta R.T. 0.05 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion:106 Resp: 1082

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	188.0	164.9	224.9

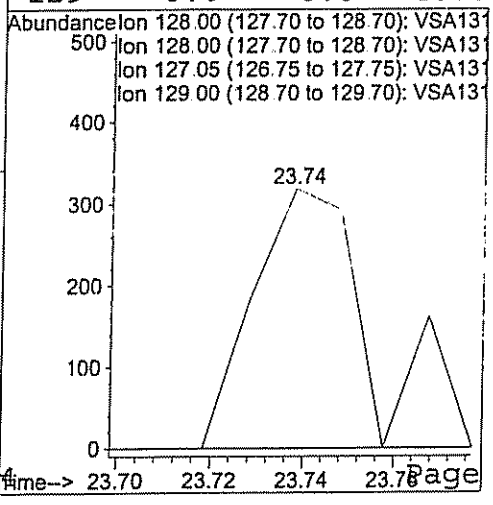




#45
Naphthalene
Concen: 0.03 ug/L
RT: 23.74 min Scan# 1941
Delta R.T. 0.04 min
Lab File: VSA13193.D
Acq: 21 Dec 2004 20:02

Tgt Ion:128 Resp: 469

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	0.0	0.0	40.8



Tune File : C:\HPCHEM\1\DATA\BB122204.D
Tune Time : 22 Dec 2004 22:00

Daily Calibration File : C:\HPCHEM\1\DATA\VSTD1965.D

					193087	988291	929660
File	Sample	Surrogate Recovery %			Internal Standard Responses		
LCSW1434.D	50UG/L TCL LCS	104	102	98	168932	888103	798997
LCSW1435.D	50UG/L TCL LCS DUP	104	102	98	169656	888940	794557
VBLK1454.D	WATER METHOD BLK	103	101	98	166356	879115	803149
VCAL1458.D	50UG/L TCL/PAUST/DCB CCAL	215*	197*	198*	157372	868209	790546
VSA13220.D	P0412041-01A DF200 RE	107	101	99	158521	858963	787170
VSA13221.D	P0412041-02A DF200 RE	105	104	100	162958	865283	759394
VSA13222.D	P0412024-01A DF500 RE	108	101	99	155105	856976	781167
VSA13223.D	P0412024-02A DF100 RE	109	103	98	154389	848452	764538
VSA13224.D	P0412024-03A DF100 RE	112	102	99	150794	849995	769531
SA13225.D	P0412077-02A DF100 RE	110	101	96	154951	846910	777427
SA13226.D	P0412077-03A DF50 RE	111	102	99	152456	838258	760349
SA13227.D	P0412077-04A DF100 RE	109	103	99	155299	846346	764512
SA13228.D	P0412077-05A DF100 RE	110	102	99	158444	851170	773208
SA13229.D	P0412093-01A DF500	109	102	100	152635	835354	756368
SA13230.D	P0412093-02A DF500	109	104	101	151195	819052	734515
SA13231.D	P0412093-03A DF500	111	103	100	151220	826581	734091

t - fails 12hr time check * - fails criteria

Created: Tue Dec 28 12:31:14 2004 GC
Ins

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 28 11:55:58 2004
Response via : Initial Calibration

Continuing Calibration File: VCAL1458.D

Min. RRF : 0.100 Min. Rel. Area : 50%
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%
1	I	Bromochloromethane	1.000	1.000	0.0	82
2	TP	Chloromethane	1.459	1.009	30.8#	53
3	TC	Vinyl chloride	1.456	1.197	17.8	63
4	T	Bromomethane	0.908	0.618	31.9#	54
5	T	Chloroethane	0.993	0.940	5.3	74
6	TCM	1,1-Dichloroethene	1.117	1.003	10.2	73
7	T	Carbon disulfide	4.078	3.450	15.4	69
8	T	Methylene chloride	1.416	1.356	4.2	80
9	T	Acetone	0.384	0.362	5.7	87
10	T	trans-1,2-Dichloroethene	1.342	1.243	7.3	77
11	T	methyl-tert-butyl-Ether	3.139	3.053	2.8	80
12	TP	1,1-Dichloroethane	2.238	2.333	-4.2	87
13	T	cis-1,2-Dichloroethene	1.556	1.364	12.3	78
14	TC	Chloroform	1.997	1.970	1.4	84
15	T	2-Butanone	0.600	0.555	7.5	81
16	S	1,2-Dichloroethane-d4	1.225	2.637	-115.2#	180#
17	T	1,2-Dichloroethane	1.409	1.530	-8.6	91
18	I	1,4-Difluorobenzene	1.000	1.000	0.0	88
19	T	Carbon tetrachloride	0.243	0.223	8.0	81
20	T	1,1,1-Trichloroethane	0.286	0.263	8.1	82
21	TM	Benzene	0.998	0.900	9.8	80
22	TM	Trichloroethene	0.325	0.235	27.8#	70
23	TC	1,2-Dichloropropane	0.257	0.253	1.5	88
24	T	Bromodichloromethane	0.292	0.271	7.2	83
25	T	cis-1,3-Dichloropropene	0.417	0.377	9.4	79
26	T	trans-1,3-Dichloropropene	0.349	0.322	7.6	81
27	T	1,1,2-Trichloroethane	0.207	0.194	6.3	84
28	T	Dibromochloromethane	0.265	0.230	13.0	77
29		1,2-Dibromoethane	0.237	0.221	6.5	82
30	TP	Bromoform	0.181	0.144	20.5#	71
31	I	Chlorobenzene-d5	1.000	1.000	0.0	85
32	S	Toluene-d8	0.816	1.603	-96.5#	166#
33	TMC	Toluene	0.600	0.543	9.5	80
34	T	4-methyl-2-Pentanone	0.212	0.212	0.1	87
35	T	Tetrachloroethene	0.226	0.182	19.5	69
36	T	2-Hexanone	0.145	0.144	0.7	85
37	TC	Ethyl benzene	1.093	1.023	6.4	80

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 28 11:55:58 2004
Response via : Initial Calibration

Continuing Calibration File: VCAL1458.D

Min. RRF : 0.100 Min. Rel. Area : 50%
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%
38	TMP	Chlorobenzene	0.727	0.674	7.3	82
39	T	m&p-Xylenes	0.442	0.418	5.6	81
40	T	o-Xylene	0.430	0.415	3.6	85
41	T	Styrene	0.718	0.693	3.4	82
42	T	Isopropylbenzene	1.072	1.058	1.3	84
43	S	4-Bromofluorobenzene	0.309	0.613	-98.3#	171#
44	TP	1,1,2,2-Tetrachloroethane	0.308	0.301	2.1	87
45	T	Naphthalene	0.893	0.743	16.8	70

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

Quantitation Report (QT Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VCAL1458.D
Acq On : 22 Dec 2004 22:32
Sample : 50UG/L TCL/PAUST/DCB CCAL
Misc : WATER

Vial: 15
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:55 2004 Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.97	128	157372m	50.00	ug/L	0.05
18) 1,4-Difluorobenzene	12.63	114	868209	50.00	ug/L	0.05
31) Chlorobenzene-d5	16.80	117	790546	50.00	ug/L	0.04
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.69	65	414981	107.60	ug/L	0.04
Spiked Amount 50.000	Range 70 - 130		Recovery = 215.20%#			
32) Toluene-d8	14.90	98	1266895	98.25	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 196.50%#			
43) 4-Bromofluorobenzene	18.43	95	484719	99.14	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 198.28%#			
Target Compounds						Qvalue
2) Chloromethane	6.31	50	158799m	34.59	ug/L	99
3) Vinyl chloride	6.60	62	188358	41.09	ug/L	100
4) Bromomethane	7.21	94	97268	34.04	ug/L	99
5) Chloroethane	7.39	64	147964	47.33	ug/L	99
6) 1,1-Dichloroethene	8.83	96	157861	44.90	ug/L	95
7) Carbon disulfide	9.35	76	542908	42.29	ug/L	100
8) Methylene chloride	8.99	84	213453	47.90	ug/L	95
9) Acetone	8.29	43	57020	47.14	ug/L	98
10) trans-1,2-Dichloroethene	9.80	96	195672	46.33	ug/L	96
11) methyl-tert-butyl-Ether	9.89	73	480427	48.62	ug/L	99
12) 1,1-Dichloroethane	10.09	63	367204	52.12	ug/L	100
13) cis-1,2-Dichloroethene	10.77	96	214670	43.83	ug/L	96
14) Chloroform	11.01	83	309965	49.31	ug/L	99
15) 2-Butanone	10.58	43	87334	46.23	ug/L	99
17) 1,2-Dichloroethane	11.79	62	240846	54.32	ug/L	98
19) Carbon tetrachloride	12.37	117	193878	45.98	ug/L	99
20) 1,1,1-Trichloroethane	11.92	97	228507	45.94	ug/L	98
21) Benzene	12.41	78	781563	45.11	ug/L	100
22) Trichloroethene	13.17	130	204107	36.12	ug/L	98
23) 1,2-Dichloropropane	13.13	63	219732	49.27	ug/L	99
24) Bromodichloromethane	13.23	83	235567	46.38	ug/L	99
25) cis-1,3-Dichloropropene	14.00	75	327690	45.28	ug/L	99
26) trans-1,3-Dichloropropene	14.52	75	279806	46.21	ug/L	98

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

Data File : C:\HPCHEM\1\DATA\VCAL1458.D
Acq On : 22 Dec 2004 22:32
Sample : 50UG/L TCL/PAUST/DCB CCAL
Misc : WATER

Vial: 15
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:55 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.74	97	168681	46.85	ug/L		96
28) Dibromochloromethane	15.44	129	199971	43.48	ug/L		99
29) 1,2-Dibromoethane	15.77	107	192282	46.73	ug/L		100
30) Bromoform	17.55	173	125302	39.77	ug/L		99
33) Toluene	14.99	92	428924	45.23	ug/L		100
34) 4-methyl-2-Pentanone	14.13	43	167401	49.95	ug/L		100
35) Tetrachloroethene	15.95	164	143548	40.26	ug/L		95
36) 2-Hexanone	15.24	43	113943	49.63	ug/L		99
37) Ethyl benzene	17.08	91	809099	46.81	ug/L		100
38) Chlorobenzene	16.85	112	532479	46.35	ug/L		100
39) m&p-Xylenes	17.32	106	660215	94.37	ug/L		99
40) o-Xylene	17.87	106	327732	48.22	ug/L		99
41) Styrene	17.77	104	547795	48.28	ug/L		99
42) Isopropylbenzene	18.35	105	836729	49.36	ug/L	#	99
44) 1,1,2,2-Tetrachloroethane	17.86	83	238262	48.94	ug/L		100
45) Naphthalene	23.74	128	587386	41.59	ug/L	#	100

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

Quantitation Report

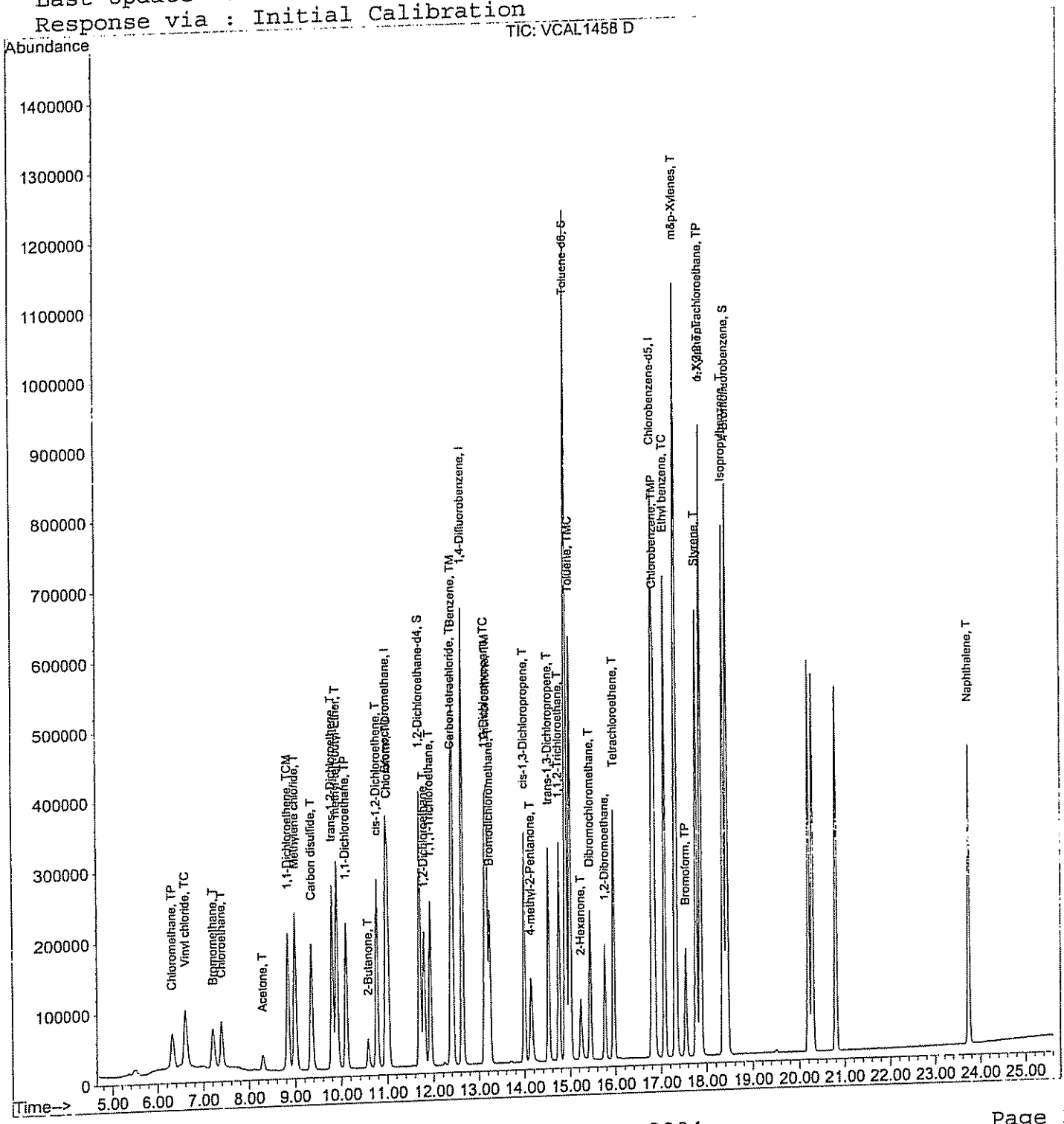
Data File : C:\HPCHEM\1\DATA\VCAL1458.D
Acq On : 22 Dec 2004 22:32
Sample : 50UG/L TCL/PAUST/DCB CCAL
Misc : WATER

Vial: 15
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:55 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration

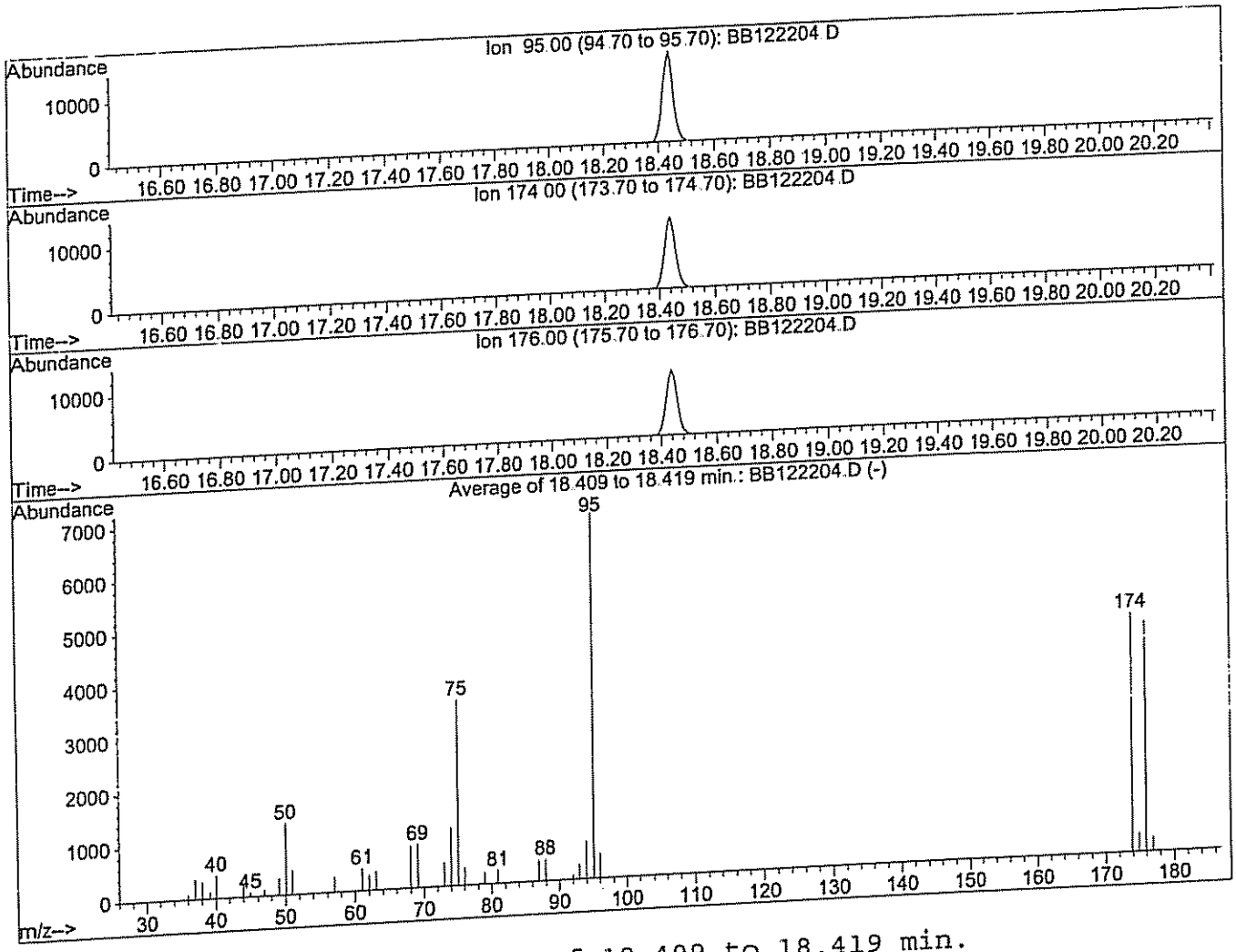


BFB

Data File : C:\HPCHEM\1\DATA\BB122204.D
Acq On : 22 Dec 2004 22:00
Sample : 50NG BFB TUNING STD
Misc : WATER

Vial: 14
Operator: hfg system
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

Method : C:\HPCHEM\1\METHODS\BFB.M (Chemstation Integrator)
Title :



Spectrum Information: Average of 18.409 to 18.419 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	1336	PASS
75	95	30	60	50.7	3494	PASS
95	95	100	100	100.0	6894	PASS
96	95	5	9	6.7	461	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	65.8	4538	PASS
175	174	5	9	7.8	355	PASS
176	174	95	101	96.3	4371	PASS
177	176	5	9	6.2	270	PASS

Average of 18.409 to 18.419 min.: BB122204.D
50NG BFB TUNING STD

Modified:subtracted

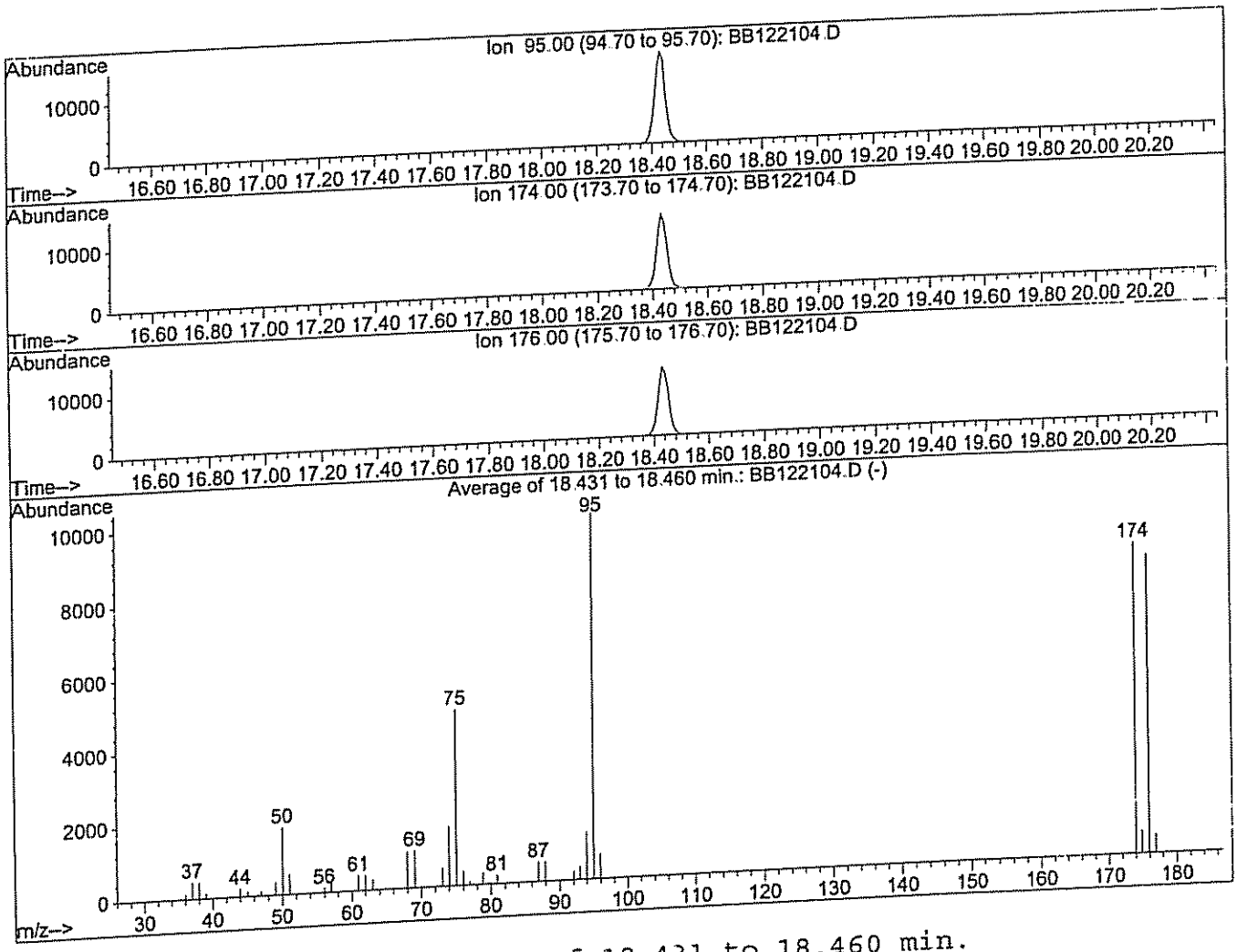
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	90	57.05	279	80.90	247	176.95	270
37.00	374	61.00	416	86.90	389		
38.05	317	62.00	288	87.95	408		
39.15	134	63.00	347	92.00	83		
40.05	430	68.00	784	92.95	286		
44.00	279	69.05	812	93.95	715		
45.00	82	73.00	457	95.05	6894		
46.95	109	74.00	1087	96.00	461		
49.05	320	75.05	3494	173.90	4538		
50.05	1336	76.05	326	174.90	355		
51.00	448	78.95	215	175.90	4371		

BFB

Data File : C:\HPCHEM\1\DATA\BB122104.D
Acq On : 21 Dec 2004 22:12
Sample : 50NG BFB TUNING STD
Misc : WATER

Vial: 22
Operator: hfg system
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

Method : C:\HPCHEM\1\METHODS\BFB.M (Chemstation Integrator)
Title :



Spectrum Information: Average of 18.431 to 18.460 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	1831	PASS
75	95	30	60	48.2	4821	PASS
95	95	100	100	100.0	9998	PASS
96	95	5	9	6.8	679	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	85.5	8551	PASS
175	174	5	9	7.4	633	PASS
176	174	95	101	96.1	8215	PASS
177	176	5	9	6.5	532	PASS

verage of 18.431 to 18.460 min.: BB122104.D
50NG BFB TUNING STD

odified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	122	57.00	251	76.95	104	173.95	8551
37.00	466	60.95	420	78.90	327	174.90	633
38.00	435	62.00	418	79.90	50	175.90	8215
39.05	160	63.00	292	80.90	240	176.90	532
44.00	224	67.95	992	86.95	542		
45.05	138	69.05	1020	87.95	531		
47.00	119	69.95	41	92.00	239		
49.05	345	73.00	496	92.95	348		
50.05	1831	74.00	1628	93.95	1295		
51.05	551	75.00	4821	95.00	9998		
56.00	133	76.00	387	95.95	679		

Quantitation Report (NOT Reviewed) MWB-2

Data File : C:\HPCHEM\1\DATA\VBLK1454.D
Acq On : 23 Dec 2004 00:09
Sample : WATER METHOD BLK
Misc : WATER

Vial: 18
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 9:38 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.98	128	166356	50.00	ug/L	0.07
18) 1,4-Difluorobenzene	12.64	114	879115	50.00	ug/L	0.06
31) Chlorobenzene-d5	16.82	117	803149	50.00	ug/L	0.06
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.71	65	210375	51.60	ug/L	0.06
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.20%			
32) Toluene-d8	14.91	98	661537	50.50	ug/L	0.06
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.00%			
43) 4-Bromofluorobenzene	18.44	95	242974	48.92	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.84%			
Target Compounds						Qvalue
2) Chloromethane	6.29	50	221	0.05	ug/L #	85
4) Bromomethane	7.10	94	273	0.09	ug/L	92
6) 1,1-Dichloroethene	8.83	96	412	0.11	ug/L #	38
7) Carbon disulfide	9.34	76	360	0.03	ug/L	100
8) Methylene chloride	9.00	84	551	0.12	ug/L #	78
9) Acetone	8.35	43	2830	2.21	ug/L	95
13) cis-1,2-Dichloroethene	10.77	96	426	0.08	ug/L #	56
15) 2-Butanone	10.66	43	2963	1.48	ug/L	88
21) Benzene	12.43	78	1023	0.06	ug/L	88
22) Trichloroethene	13.18	130	2812	0.49	ug/L	98
27) 1,1,2-Trichloroethane	14.92	97	19810	5.43	ug/L #	50
33) Toluene	15.01	92	1316	0.14	ug/L #	78
37) Ethyl benzene	16.81	91	1255	0.07	ug/L #	86
38) Chlorobenzene	16.86	112	1534	0.13	ug/L #	74
45) Naphthalene	23.75	128	878	0.06	ug/L #	97

(#) = qualifier out of range (m) = manual integration
VBLK1454.D TCL1.M Thu Dec 23 09:39:02 2004

Quantitation Report

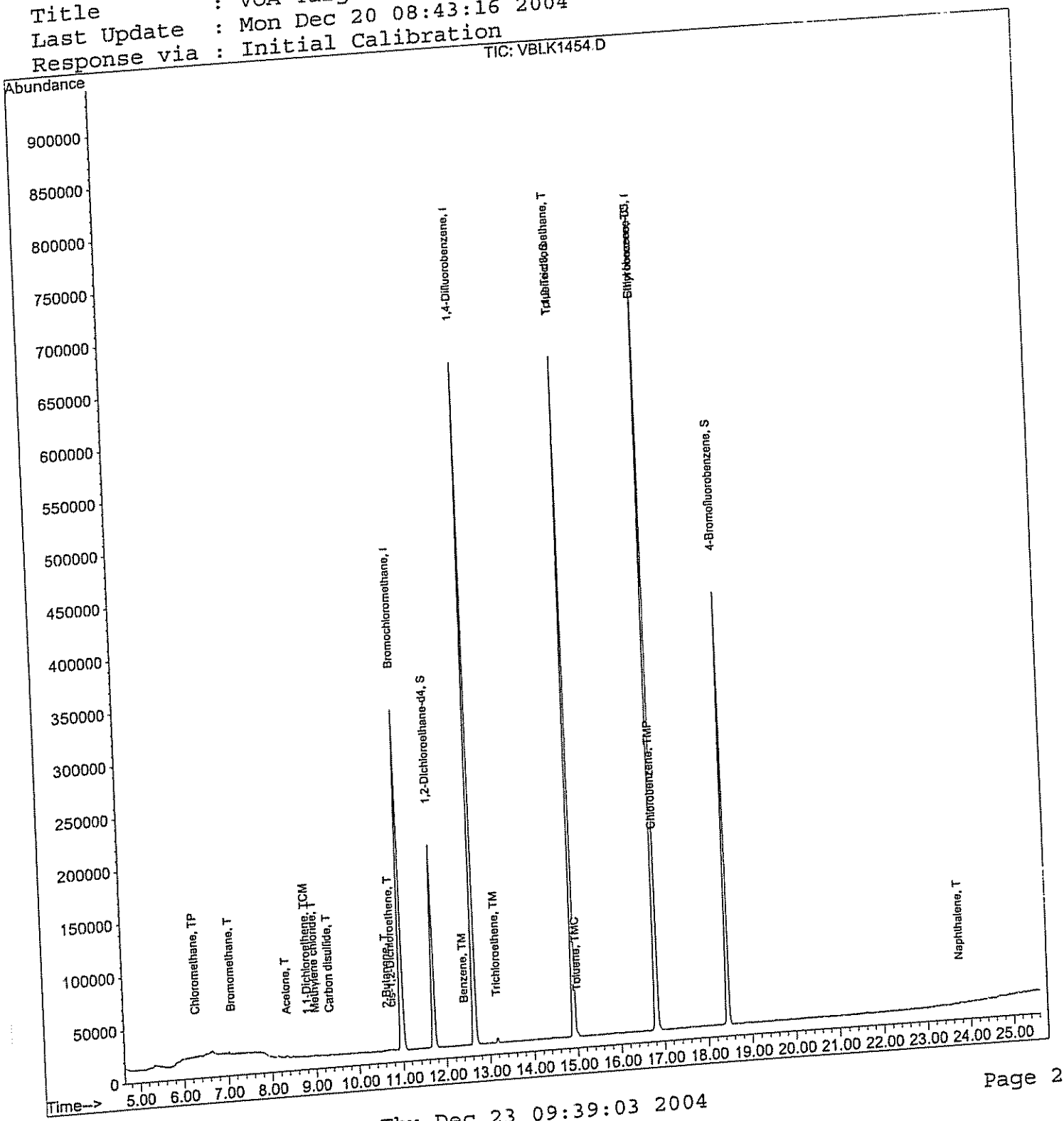
Data File : C:\HPCHEM\1\DATA\VBLK1454.D
Acq On : 23 Dec 2004 00:09
Sample : WATER METHOD BLK
Misc : WATER

Vial: 18
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 9:38 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



LCS Blank Summary Report

Data File : C:\HPCHEM\1\DATA\LCSW1434.D
Acq On : 22 Dec 2004 23:05
Sample : 50UG/L TCL LCS
Misc : WATER
Matrix : WATER
Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Multiple Level Calibration

		Compound Name	Conc	Added	Recv(%)	QC Range	Q
6)	T	1,1-Dichloroethene	29.84	50.00	59.68	54 to 121%	[ ]
21)	T	Benzene	43.20	50.00	86.40	80 to 118%	[ ]
22)	T	Trichloroethene	32.70	50.00	65.40	67 to 118%	[*]
33)	T	Toluene	44.44	50.00	88.88	73 to 124%	[ ]
38)	T	Chlorobenzene	44.92	50.00	89.84	80 to 117%	[ ]

* = out of control limits
Thu Dec 23 08:59:30 2004

Quantitation Report (Not Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\LCSW1434.D
Acq On : 22 Dec 2004 23:05
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:56 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1
IS QA File : File name for IS QA unknown

	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
Internal Standards						
1) Bromochloromethane	10.97	128	168932	50.00	ug/L	0.05 NA%
18) 1,4-Difluorobenzene	12.63	114	888103	50.00	ug/L	0.05 NA%
31) Chlorobenzene-d5	16.80	117	798997	50.00	ug/L	0.05 NA%
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.70	65	214888	51.91	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.82%			
32) Toluene-d8	14.90	98	665511	51.07	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.14%			
43) 4-Bromofluorobenzene	18.44	95	243214	49.22	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.44%			
Target Compounds						Qvalue
2) Chloromethane	6.31	50	707	0.14	ug/L	97
3) Vinyl chloride	6.58	62	328	0.07	ug/L #	86
4) Bromomethane	7.20	94	4034	1.32	ug/L	96
5) Chloroethane	7.38	64	194	0.06	ug/L #	82
6) 1,1-Dichloroethene	8.82	96	112637	29.84	ug/L	94
7) Carbon disulfide	9.36	76	3763	0.27	ug/L	100
8) Methylene chloride	9.00	84	1325	0.28	ug/L #	82
9) Acetone	8.29	43	2055	1.58	ug/L	88
10) trans-1,2-Dichloroethene	9.81	96	896	0.20	ug/L #	55
13) cis-1,2-Dichloroethene	10.77	96	1288	0.25	ug/L	88
15) 2-Butanone	10.59	43	3951	1.95	ug/L	100
21) Benzene	12.42	78	765571	43.20	ug/L	99
22) Trichloroethene	13.17	130	188995	32.70	ug/L	98
24) Bromodichloromethane	13.17	83	1822	0.35	ug/L #	1
26) trans-1,3-Dichloropropene	14.52	75	112	0.02	ug/L #	77
27) 1,1,2-Trichloroethane	14.91	97	20791	5.64	ug/L #	50
33) Toluene	14.99	92	425955	44.44	ug/L	99
36) 2-Hexanone	14.99	43	7274	3.14	ug/L #	68

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

Data File : C:\HPCHEM\1\DATA\LCSW1434.D
Acq On : 22 Dec 2004 23:05
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:56 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) Ethyl benzene	17.08	91	1473	0.08 ug/L #	86
38) Chlorobenzene	16.85	112	521614	44.92 ug/L	99
39) m&p-Xylenes	17.32	106	1169	0.17 ug/L #	67
41) Styrene	17.81	104	699	0.06 ug/L	86
42) Isopropylbenzene	18.35	105	991	0.06 ug/L #	88
44) 1,1,2,2-Tetrachloroethane	17.87	83	408	0.08 ug/L #	67
45) Naphthalene	23.75	128	12464	0.87 ug/L	98

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

Quantitation Report

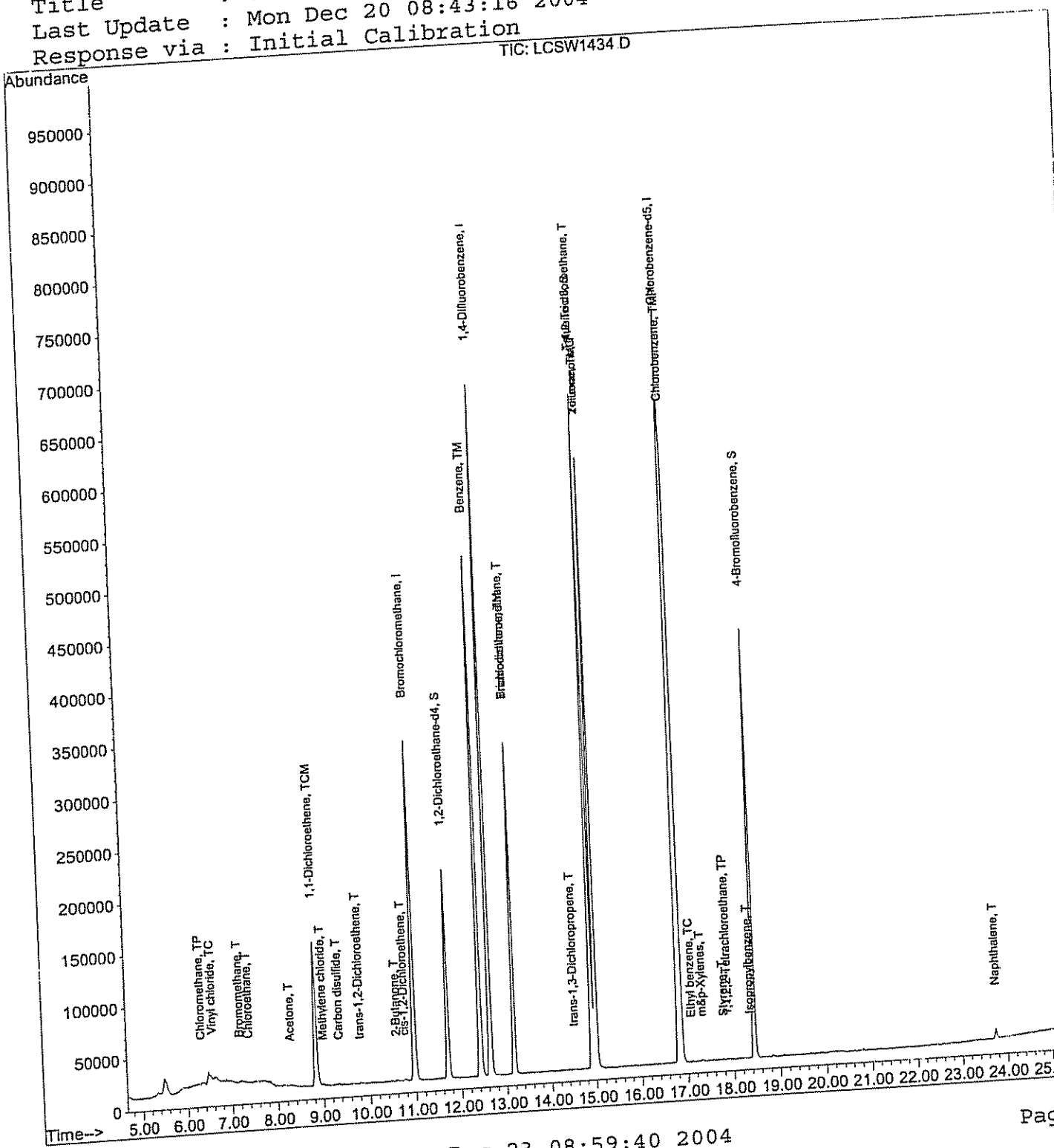
Data File : C:\HPCHEM\1\DATA\LCSW1434.D
Acq On : 22 Dec 2004 23:05
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:56 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



LCSW1434.D TCL1.M Thu Dec 23 08:59:40 2004

LCS Blank Summary Report

Data File : C:\HPCHEM\1\DATA\LCSW1435.D
Acq On : 22 Dec 2004 23:37
Sample : 50UG/L TCL LCS DUP
Misc : WATER
Matrix : WATER
Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Multiple Level Calibration

		Compound Name	Conc	Added	Recv(%)	QC Range	Q
6)	T	1,1-Dichloroethene	29.84	50.00	59.68	54 to 121%	[ ]
21)	T	Benzene	42.60	50.00	85.19	80 to 118%	[ ]
22)	T	Trichloroethene	32.16	50.00	64.33	67 to 118%	[*]
33)	T	Toluene	44.08	50.00	88.16	73 to 124%	[ ]
38)	T	Chlorobenzene	44.34	50.00	88.69	80 to 117%	[ ]

* = out of control limits
Thu Dec 23 08:59:03 2004

Quantitation Report (Not Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\LCSW1435.D
Acq On : 22 Dec 2004 23:37
Sample : 50UG/L TCL LCS DUP
Misc : WATER

Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:58 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1
IS QA File : C:\HPCHEM\1\DATA\VSTD1965.D (15 Dec 2004 14:57)

	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
Internal Standards						
1) Bromochloromethane	10.97	128	169656	50.00	ug/L	0.06 87.87%
18) 1,4-Difluorobenzene	12.64	114	888940	50.00	ug/L	0.06 89.95%
31) Chlorobenzene-d5	16.81	117	794557	50.00	ug/L	0.05 85.47%
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.70	65	216251	52.01	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.02%			
32) Toluene-d8	14.91	98	663986	51.23	ug/L	0.06
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.46%			
43) 4-Bromofluorobenzene	18.44	95	240388	48.92	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.84%			
Target Compounds						Qvalue
2) Chloromethane	6.36	50	143	0.03	ug/L	87
4) Bromomethane	7.19	94	1108	0.36	ug/L #	83
6) 1,1-Dichloroethene	8.83	96	113105	29.84	ug/L	93
7) Carbon disulfide	9.32	76	261	0.02	ug/L	100
8) Methylene chloride	8.98	84	1033	0.22	ug/L #	64
9) Acetone	8.29	43	2009	1.54	ug/L	95
10) trans-1,2-Dichloroethene	9.82	96	310	0.07	ug/L #	33
13) cis-1,2-Dichloroethene	10.76	96	999	0.19	ug/L #	69
15) 2-Butanone	10.58	43	3446	1.69	ug/L	98
21) Benzene	12.41	78	755622	42.60	ug/L	99
22) Trichloroethene	13.17	130	186080	32.16	ug/L	96
24) Bromodichloromethane	13.17	83	2111	0.41	ug/L #	1
27) 1,1,2-Trichloroethane	14.92	97	21113	5.73	ug/L #	50
33) Toluene	15.00	92	420180	44.08	ug/L	100
36) 2-Hexanone	15.00	43	6806	2.95	ug/L #	68
37) Ethyl benzene	17.08	91	552	0.03	ug/L #	86
38) Chlorobenzene	16.86	112	512062	44.34	ug/L	100
39) m&p-Xylenes	17.34	106	299	0.04	ug/L #	54

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

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\LCSW1435.D
Acq On : 22 Dec 2004 23:37
Sample : 50UG/L TCL LCS DUP
Misc : WATER

Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:58 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45) Naphthalene	23.75	128	1870	0.13 ug/L #	97

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

Quantitation Report

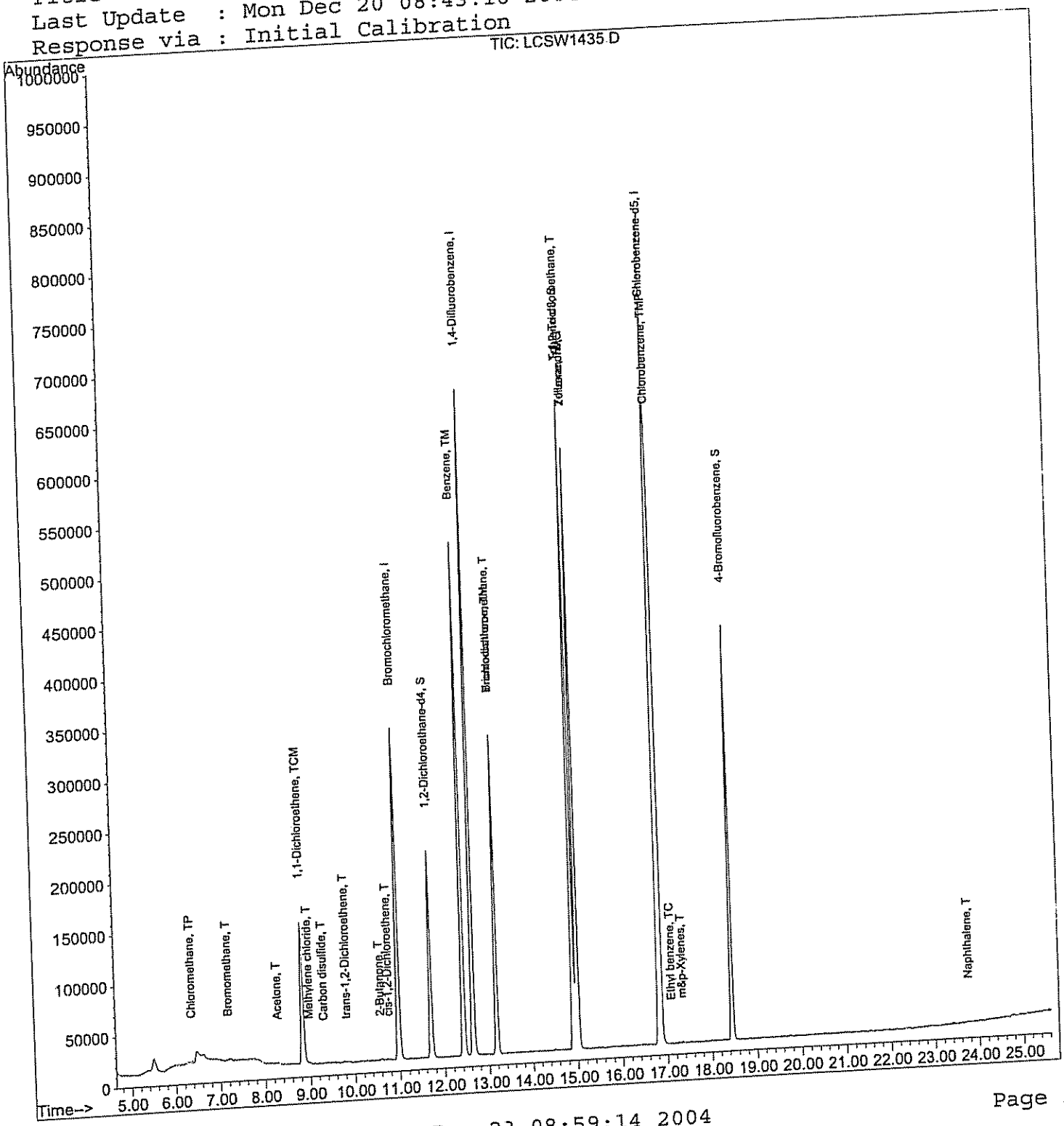
Data File : C:\HPCHEM\1\DATA\LCSW1435.D
Acq On : 22 Dec 2004 23:37
Sample : 50UG/L TCL LCS DUP
Misc : WATER

Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:58 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSA13222.D
Acq On : 23 Dec 2004 3:56
Sample : P0412024-01A DF500 RE
Misc : WATER

Vial: 25
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:33 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	11.00	128	155105	50.00	ug/L	0.09
18) 1,4-Difluorobenzene	12.67	114	856976	50.00	ug/L	0.09
31) Chlorobenzene-d5	16.84	117	781167	50.00	ug/L	0.08
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.73	65	204587	53.82	ug/L	0.08
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.64%			
32) Toluene-d8	14.94	98	645589	50.67	ug/L	0.09
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.34%			
43) 4-Bromofluorobenzene	18.46	95	238119	49.29	ug/L	0.07
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.58%			
Target Compounds						Qvalue
3) Vinyl chloride	6.63	62	2493	0.55	ug/L	96
4) Bromomethane	7.32	94	431	0.15	ug/L	86
6) 1,1-Dichloroethene	8.86	96	8202	2.37	ug/L	97
7) Carbon disulfide	9.39	76	99	0.01	ug/L	100
8) Methylene chloride	9.02	84	6742	1.54	ug/L	91
9) Acetone	8.35	43	3150	2.64	ug/L	92
10) trans-1,2-Dichloroethene	9.84	96	5080	1.22	ug/L	90
12) 1,1-Dichloroethane	10.13	63	12914	1.86	ug/L	99
13) cis-1,2-Dichloroethene	10.80	96	645019	133.63	ug/L ✓	91
15) 2-Butanone	10.66	43	2849	1.53	ug/L	97
17) 1,2-Dichloroethane	11.82	62	2280	0.52	ug/L	89
20) 1,1,1-Trichloroethane	11.96	97	22996	4.68	ug/L	98
21) Benzene	12.44	78	2353	0.14	ug/L	94
22) Trichloroethene	13.20	130	364929	65.43	ug/L ✓	96
24) Bromodichloromethane	13.20	83	4042	0.81	ug/L #	1
27) 1,1,2-Trichloroethane	14.95	97	19978	5.62	ug/L #	50
33) Toluene	15.03	92	70064	7.48	ug/L	100
34) 4-methyl-2-Pentanone	14.22	43	510	0.15	ug/L #	77
36) 2-Hexanone	15.04	43	1469	0.65	ug/L #	68
37) Ethyl benzene	17.11	91	5688	0.33	ug/L	99
39) m&p-Xylenes	17.35	106	4067	0.59	ug/L	90
40) o-Xylene	17.91	106	1439	0.21	ug/L #	71
45) Naphthalene	23.77	128	1021	0.07	ug/L #	97

(#) = qualifier out of range (m) = manual integration DF 500

Quantitation Report

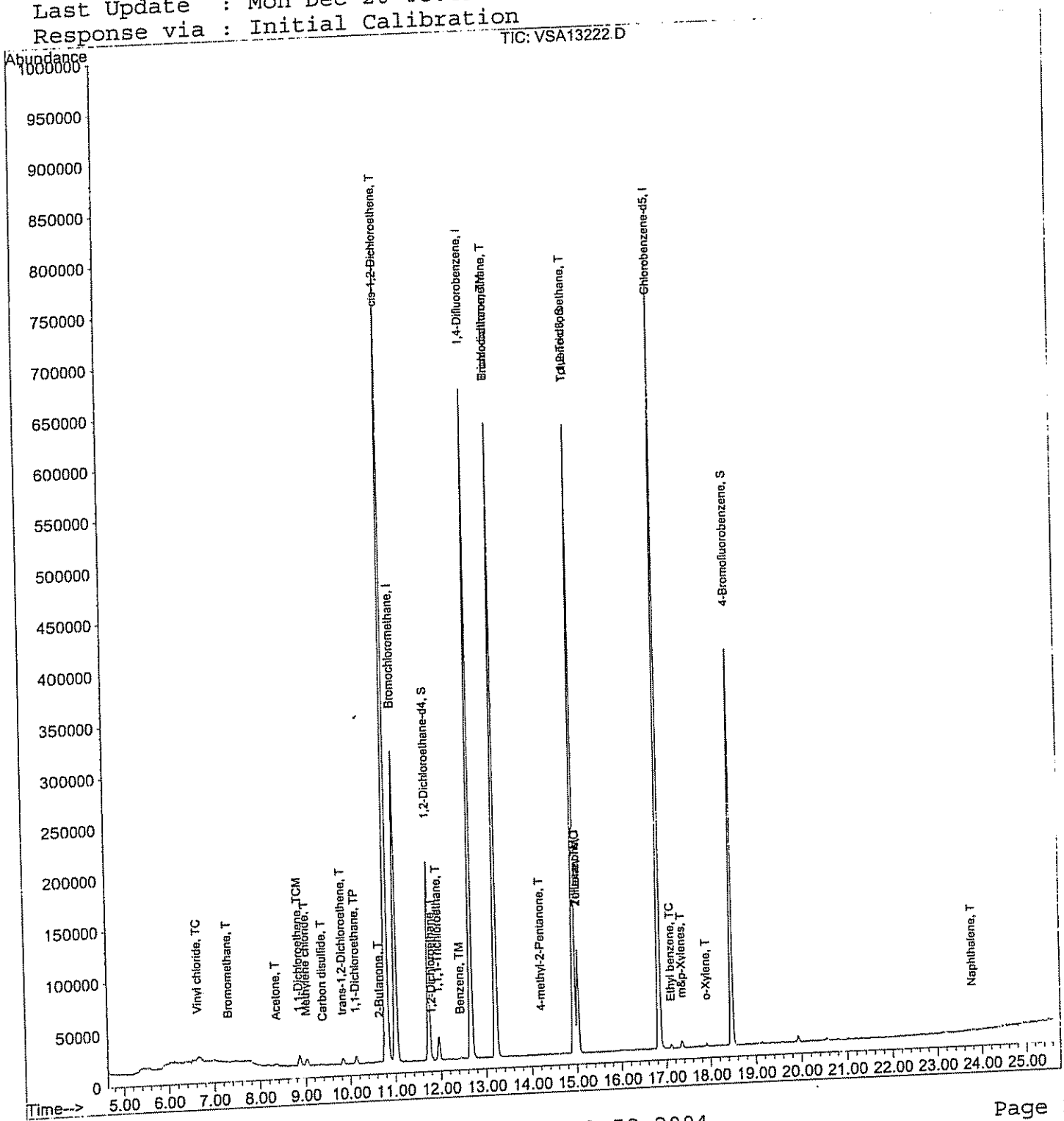
Data File : C:\HPCHEM\1\DATA\VSA13222.D
Acq On : 23 Dec 2004 3:56
Sample : P0412024-01A DF500 RE
Misc : WATER

Vial: 25
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

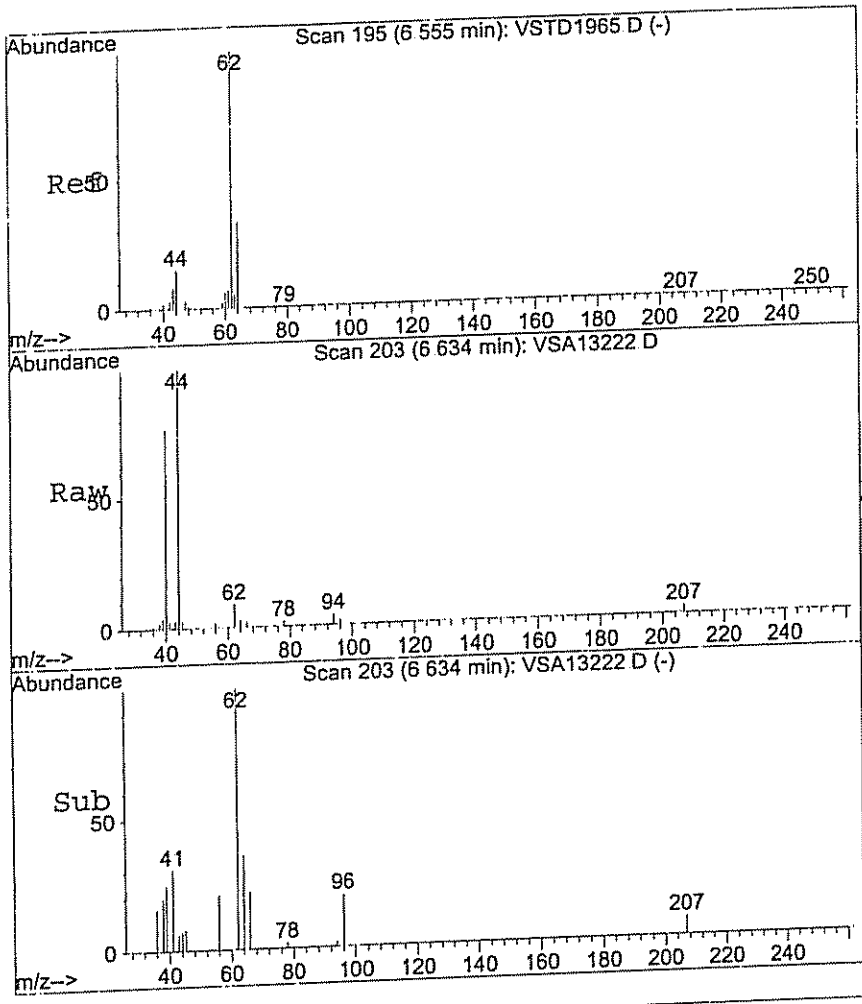
MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:33 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



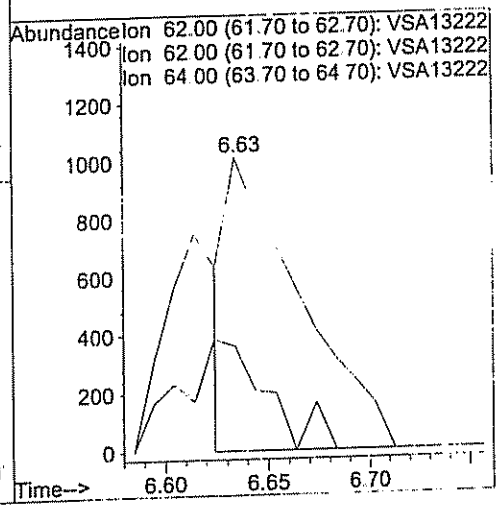
VSA13222.D TCL1.M Tue Dec 28 11:33:59 2004

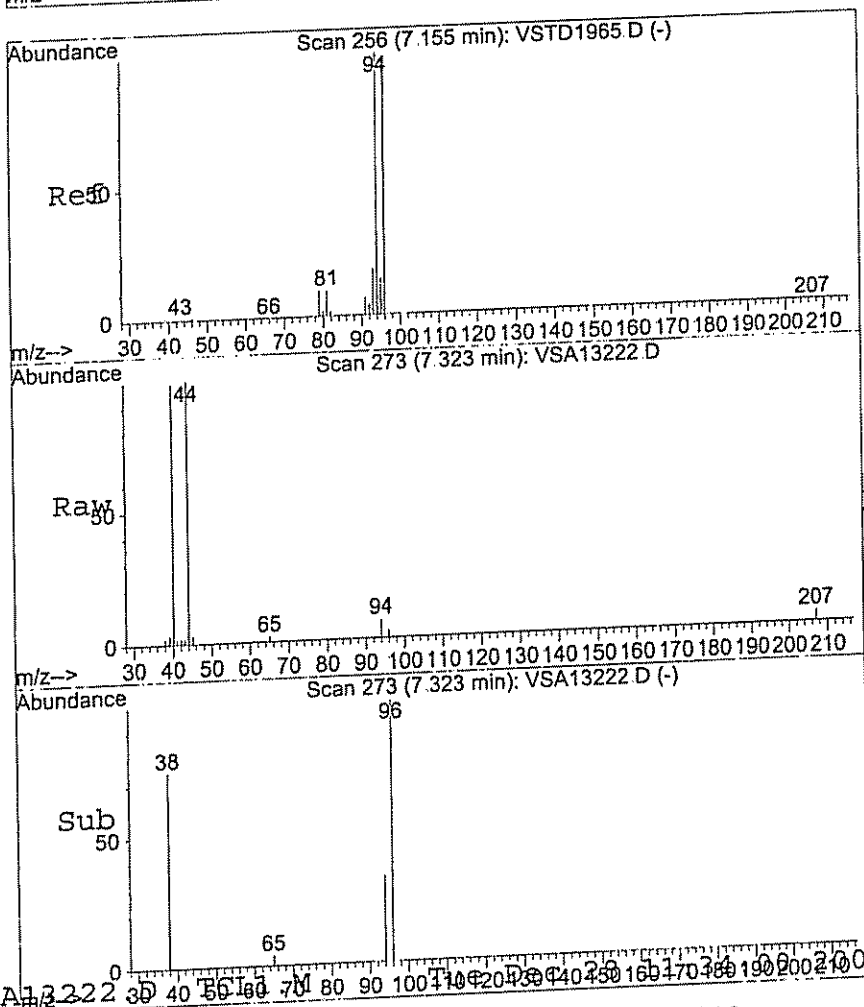


#3
Vinyl chloride
Concen: 0.55 ug/L
RT: 6.63 min Scan# 203
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 62 Resp: 2493

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	24.1	2.4	62.4

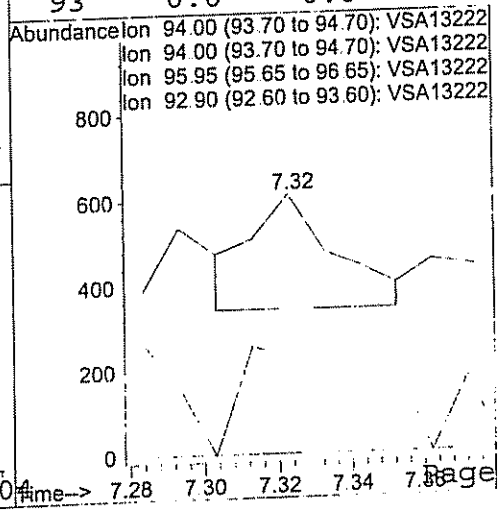


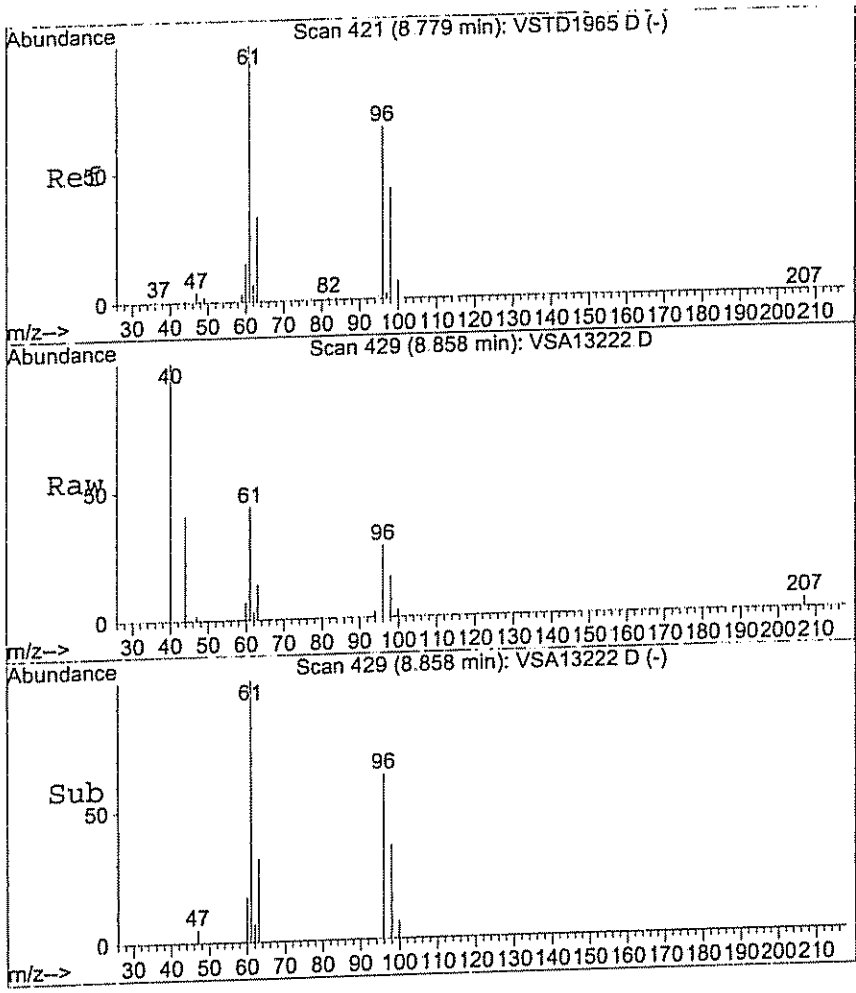


#4
Bromomethane
Concen: 0.15 ug/L
RT: 7.32 min Scan# 273
Delta R.T. 0.16 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 94 Resp: 431

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	70.4	63.6	123.6
93	0.0	0.0	48.5

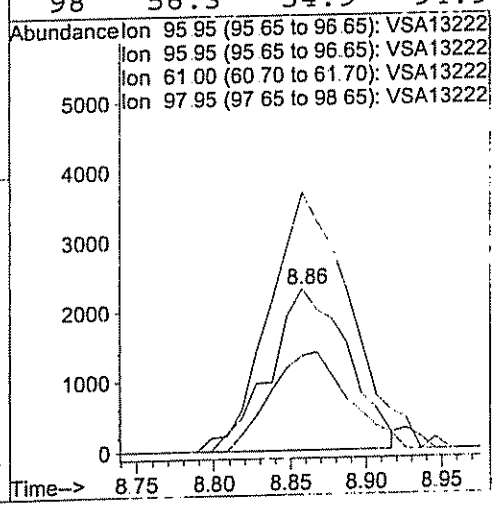


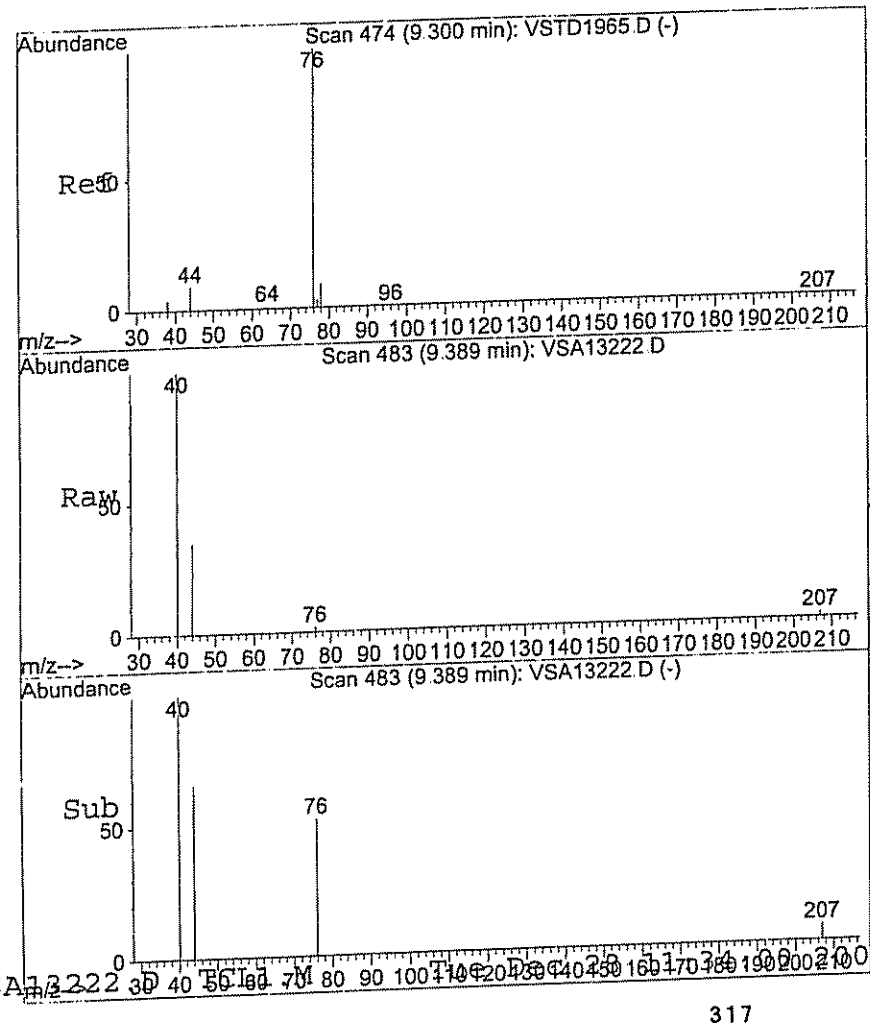


#6
1,1-Dichloroethene
Concen: 2.37 ug/L
RT: 8.86 min Scan# 429
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 96 Resp: 8202

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	151.9	118.9	178.9
98	56.3	34.9	94.9

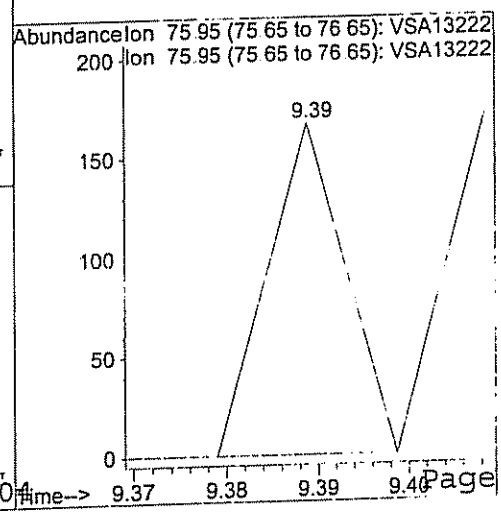


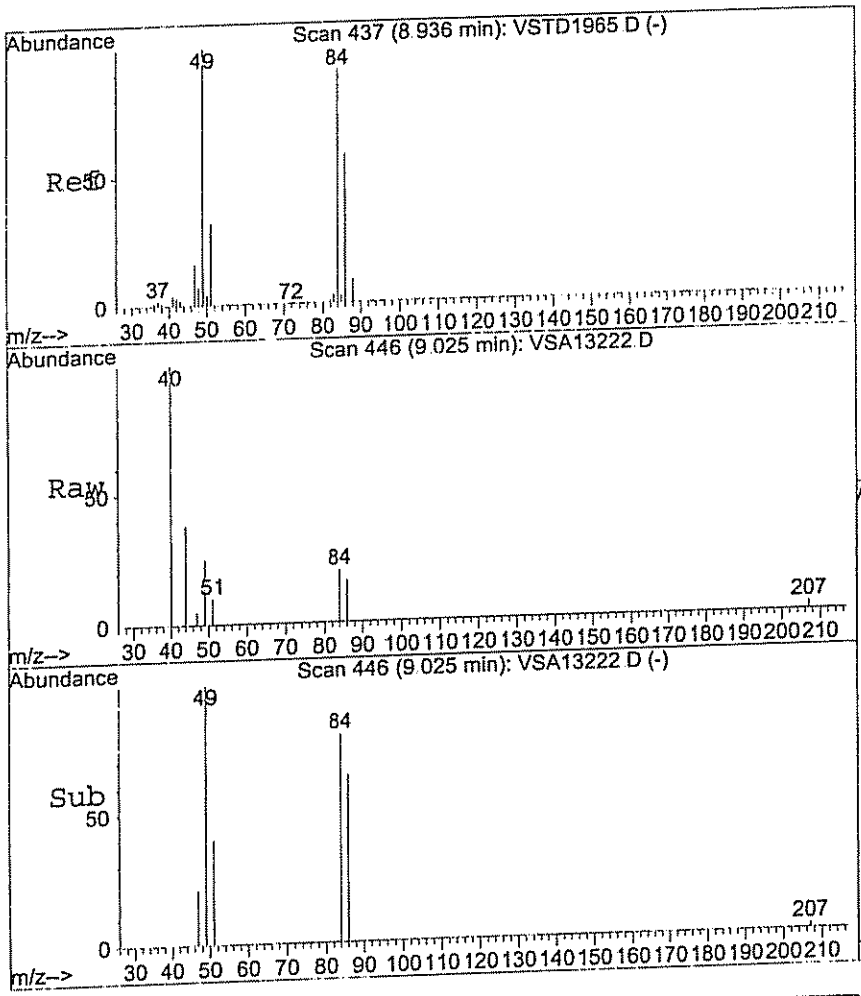


#7
Carbon disulfide
Concen: 0.01 ug/L
RT: 9.39 min Scan# 483
Delta R.T. 0.09 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 76 Resp: 99

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

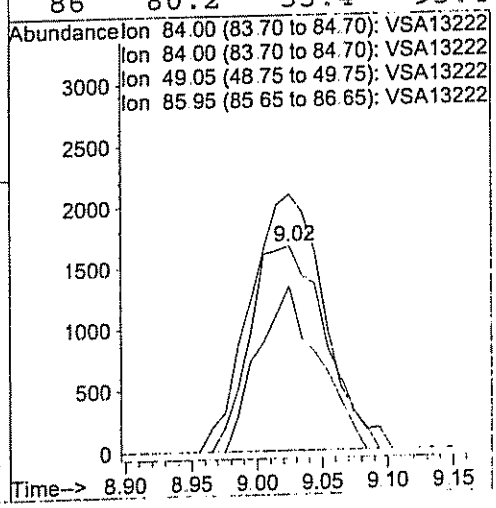


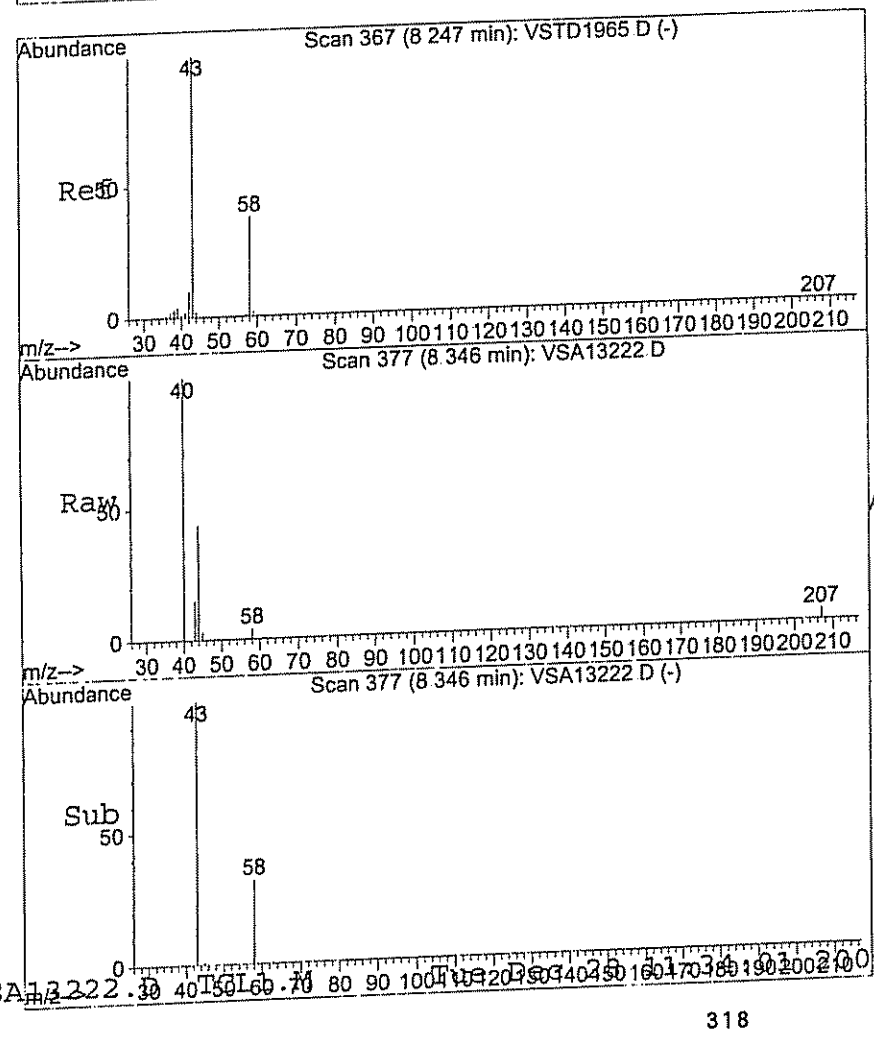


#8
Methylene chloride
Concen: 1.54 ug/L
RT: 9.02 min Scan# 446
Delta R.T. 0.09 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 84 Resp: 6742

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	120.0	80.0	140.0
86	80.2	33.4	93.4

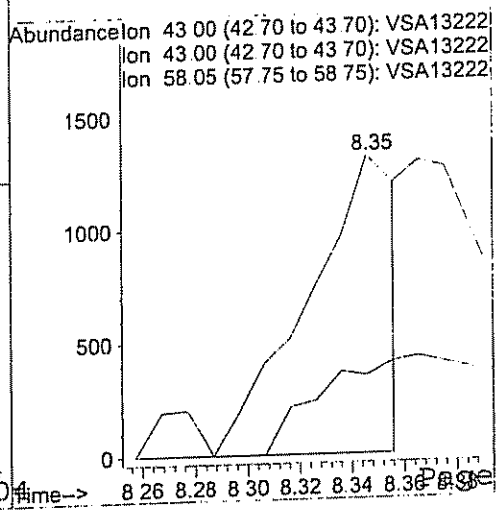


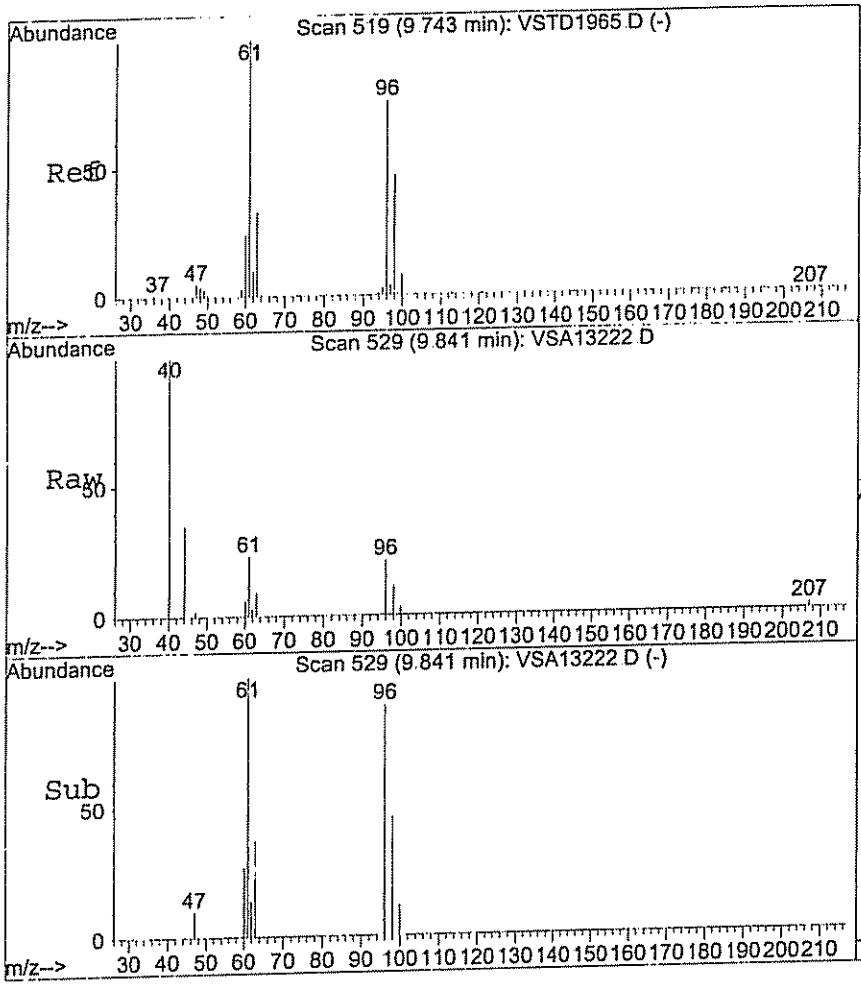


#9
Acetone
Concen: 2.64 ug/L
RT: 8.35 min Scan# 377
Delta R.T. 0.07 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 43 Resp: 3150

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	19.8	7.8	67.8

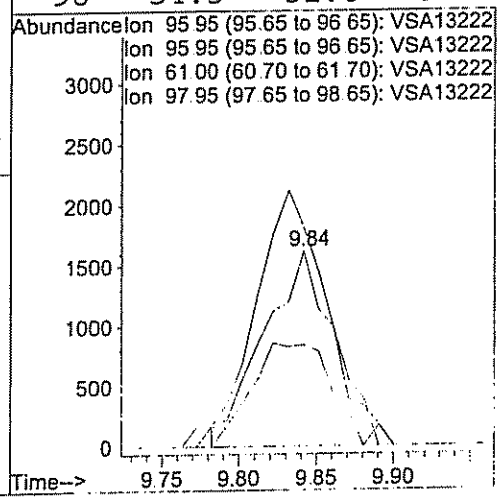


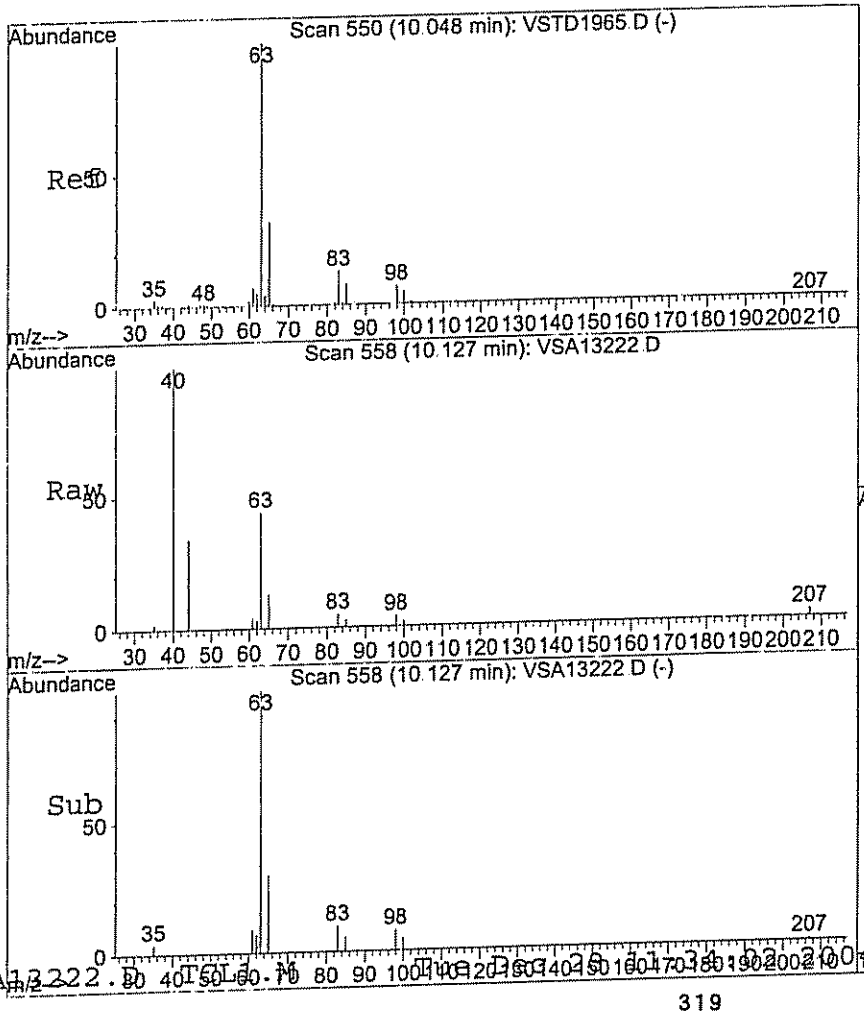


#10
trans-1,2-Dichloroethene
Concen: 1.22 ug/L
RT: 9.84 min Scan# 529
Delta R.T. 0.09 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 96 Resp: 5080

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	111.9	102.4	162.4
98	54.5	31.6	91.6

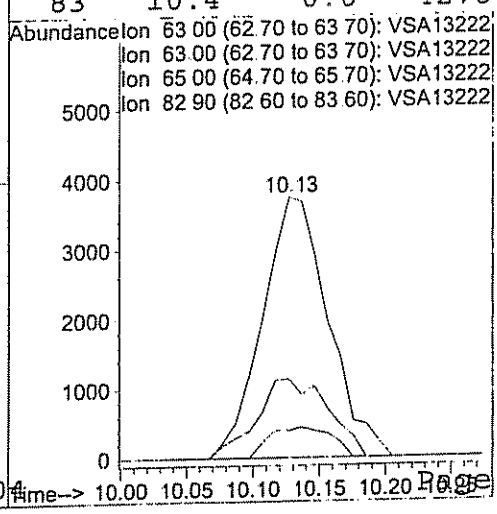


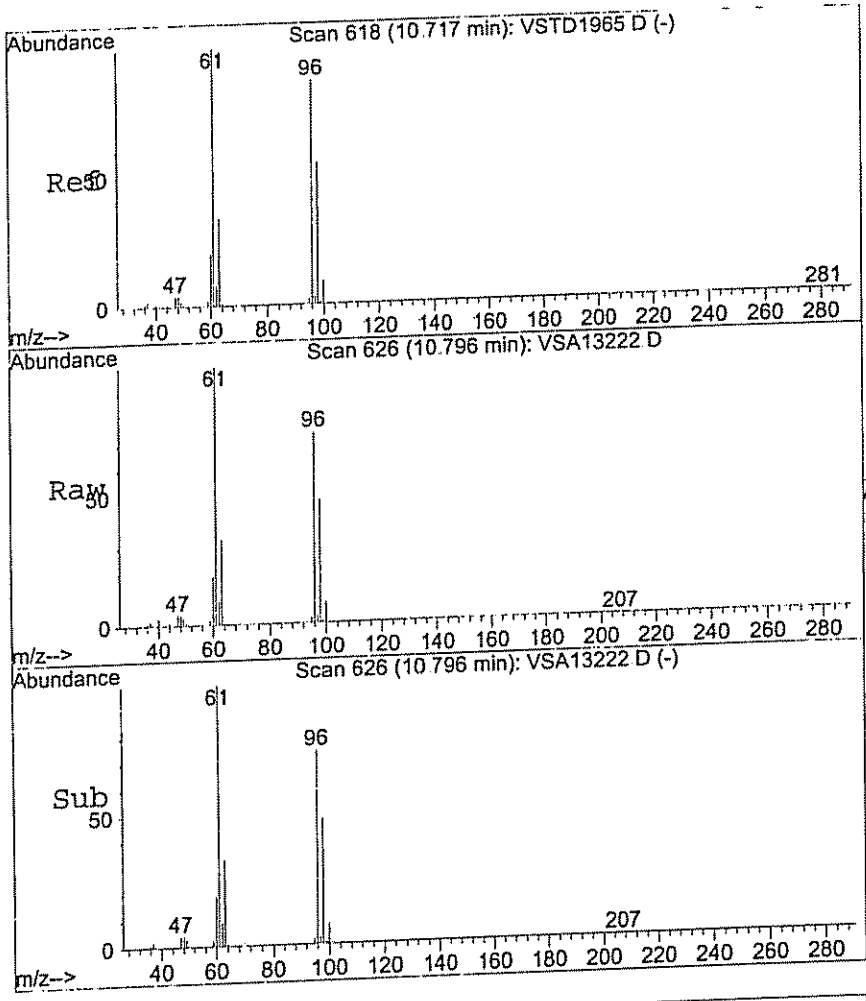


#12
1,1-Dichloroethane
Concen: 1.86 ug/L
RT: 10.13 min Scan# 558
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 63 Resp: 12914

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	30.2	2.1	62.1
83	10.4	0.0	42.6

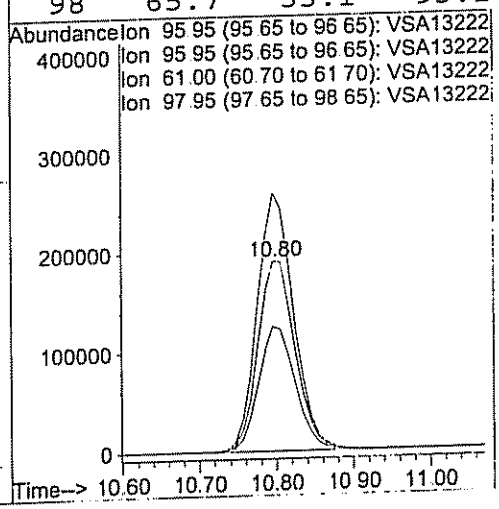


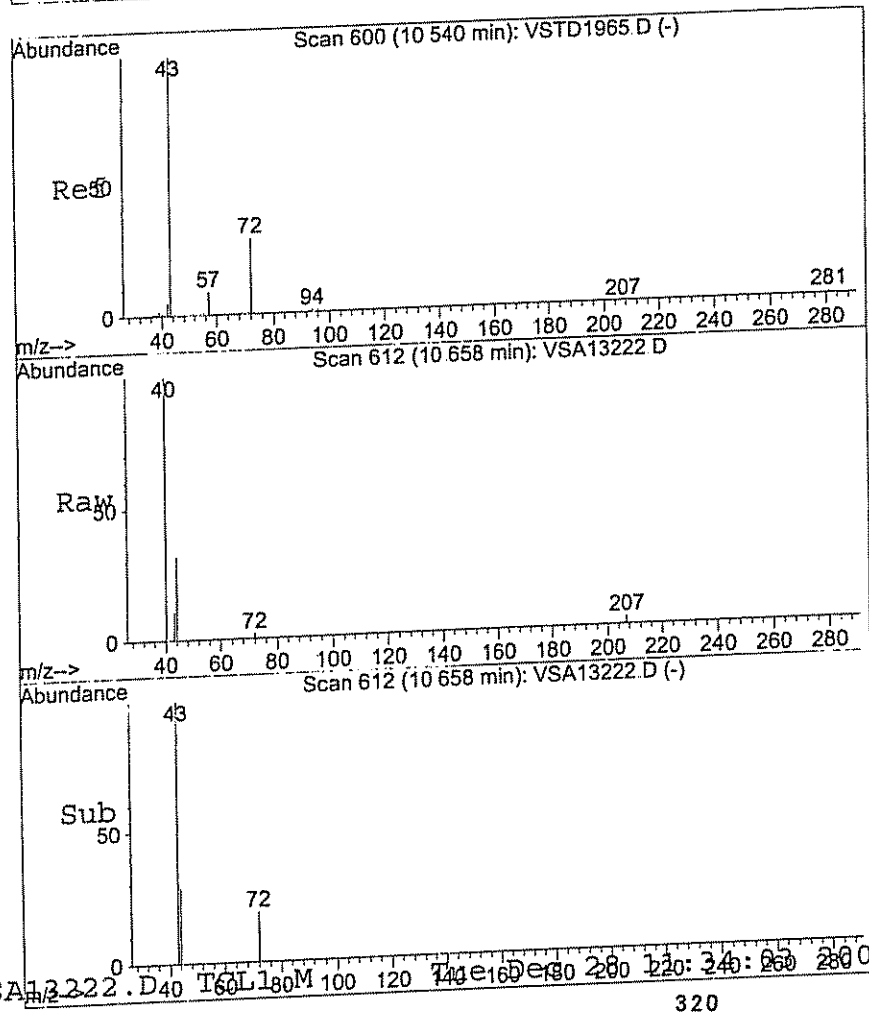


#13
cis-1,2-Dichloroethene
Concen: 133.63 ug/L
RT: 10.80 min Scan# 626
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 96 Resp: 645019

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	136.0	85.2	145.2
98	65.7	33.1	93.1

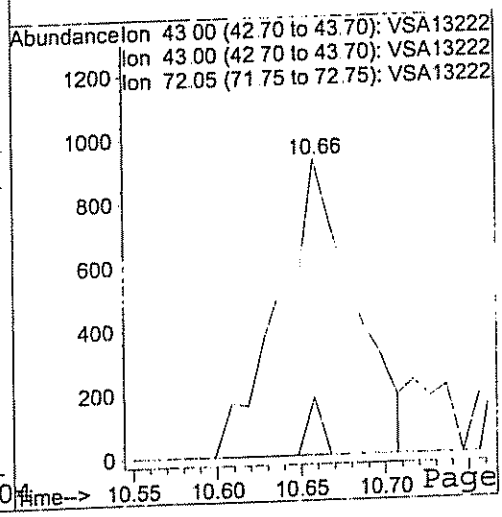


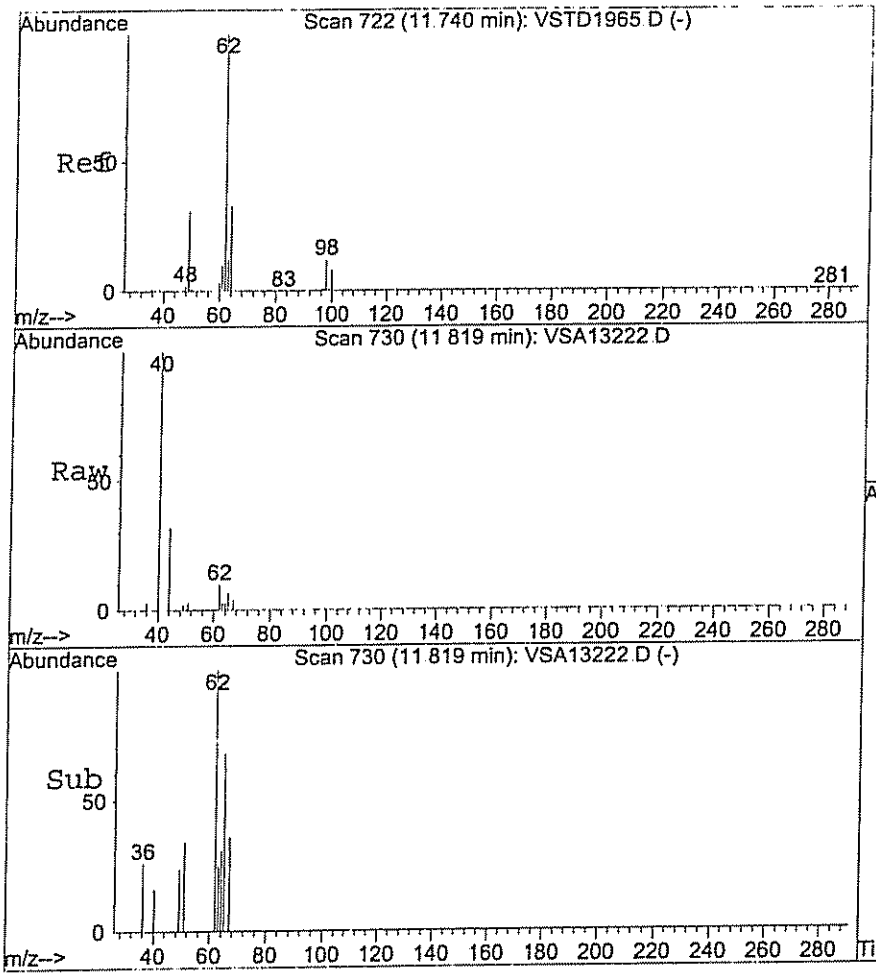


#15
2-Butanone
Concen: 1.53 ug/L
RT: 10.66 min Scan# 612
Delta R.T. 0.10 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 43 Resp: 2849

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	21.4	0.0	59.3

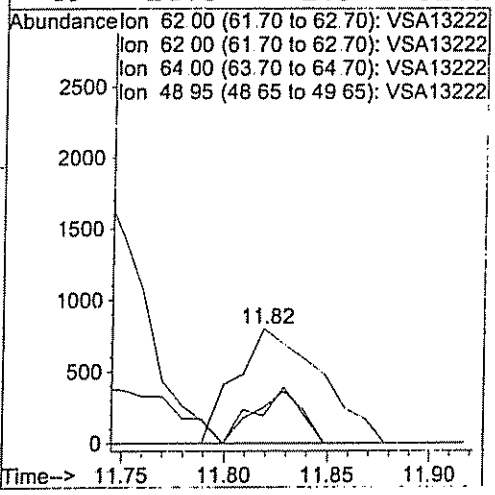


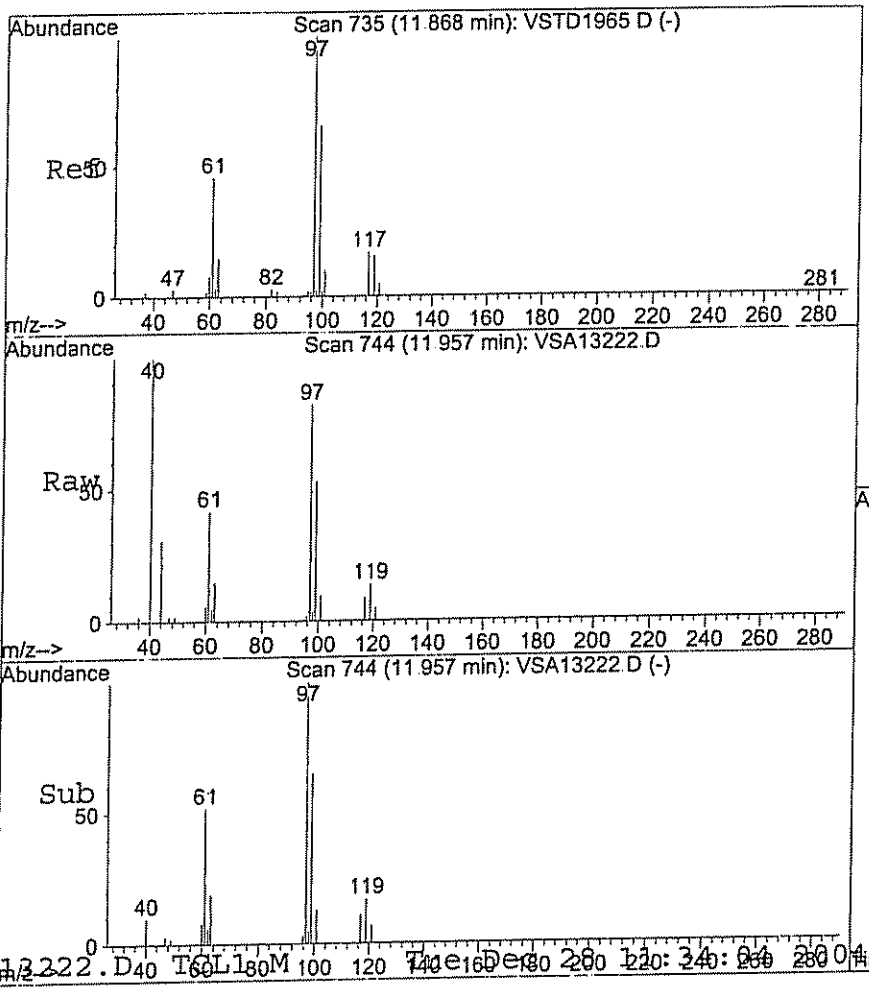


#17
1,2-Dichloroethane
Concen: 0.52 ug/L
RT: 11.82 min Scan# 730
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 62 Resp: 2280

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	20.3	2.9	62.9
49	14.3	1.9	61.9

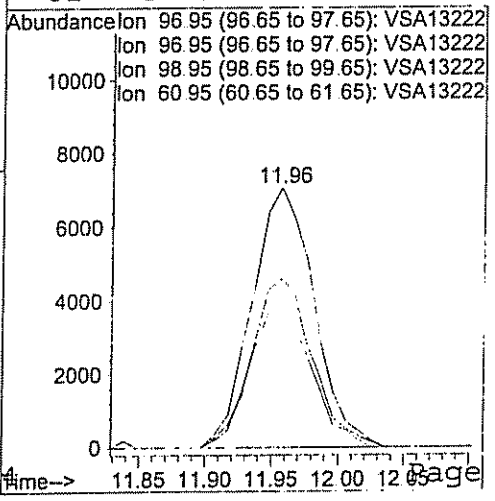


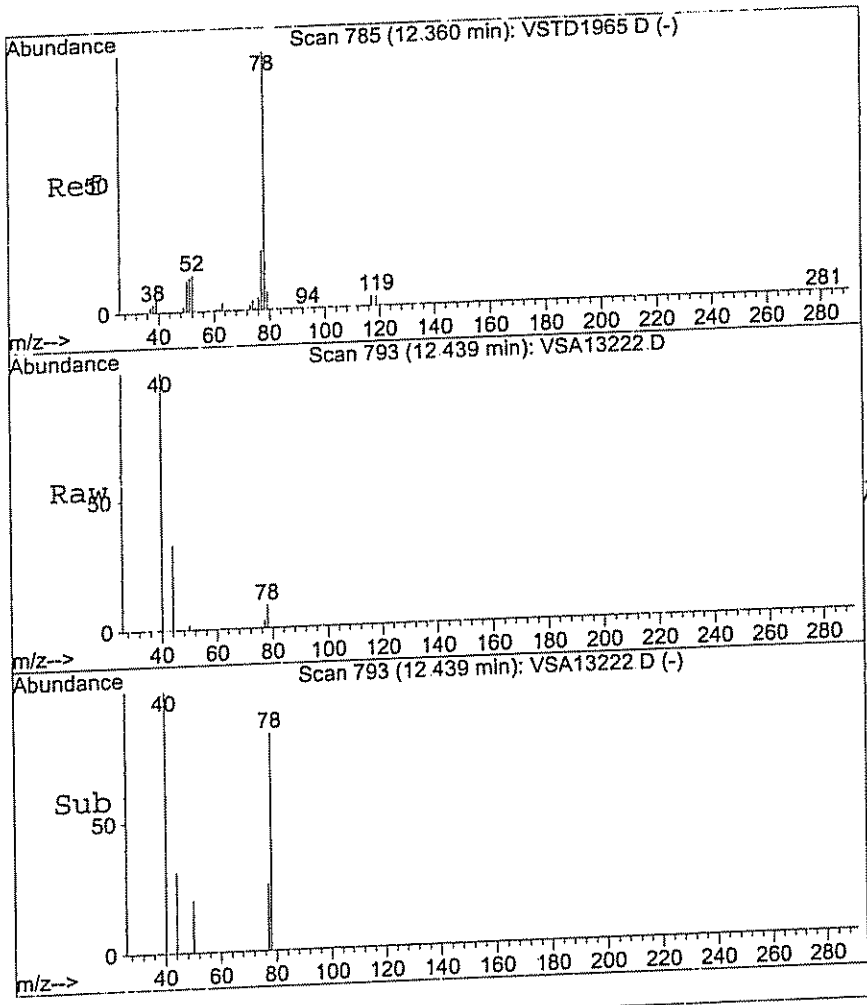


#20
1,1,1-Trichloroethane
Concen: 4.68 ug/L
RT: 11.96 min Scan# 744
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 97 Resp: 22996

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	65.1	35.6	95.6
61	51.9	16.5	76.5

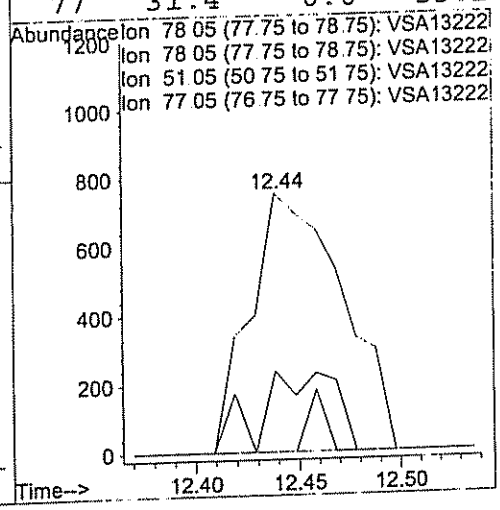


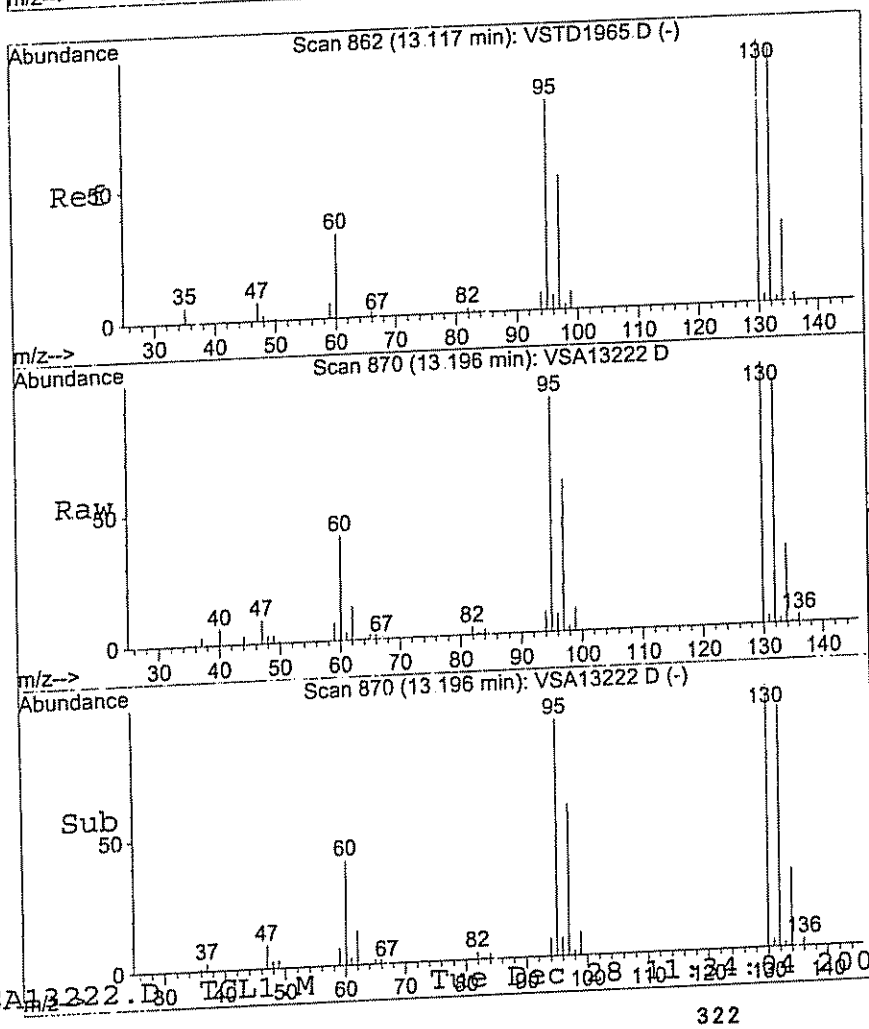


#21
Benzene
Concen: 0.14 ug/L
RT: 12.44 min Scan# 793
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 78 Resp: 2353

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	0.0	0.0	43.2
77	31.4	0.0	53.2

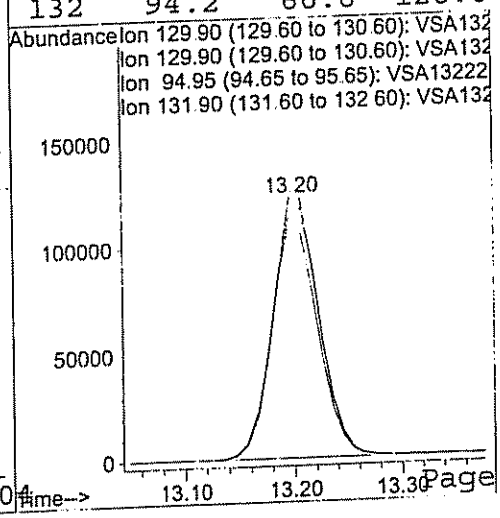


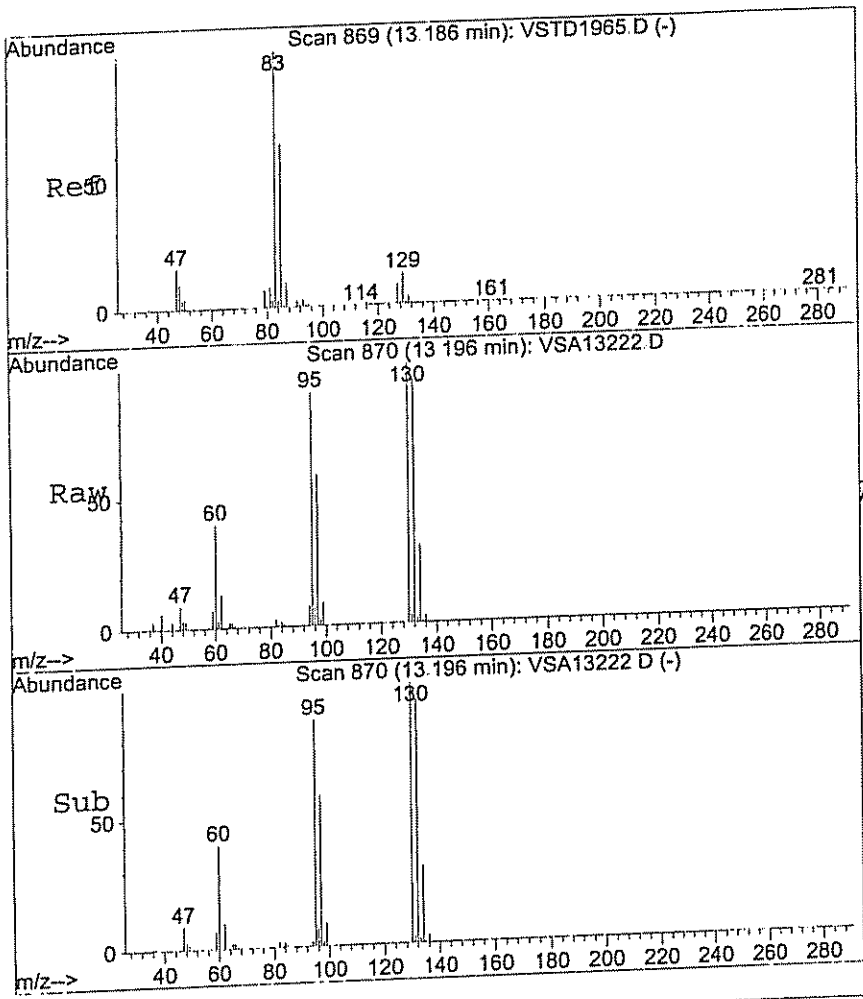


#22
Trichloroethene
Concen: 65.43 ug/L
RT: 13.20 min Scan# 870
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion:130 Resp: 364929

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	89.8	50.4	110.4
132	94.2	66.6	126.6

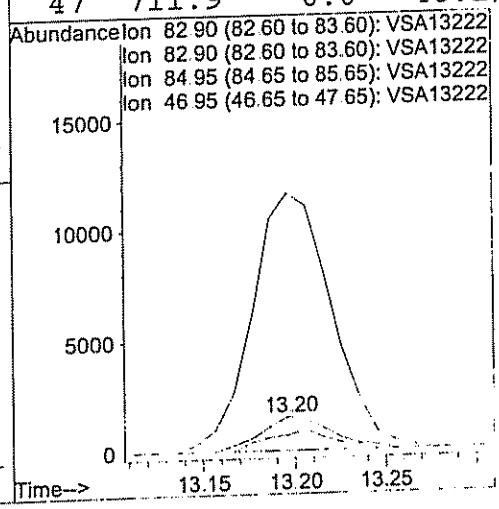


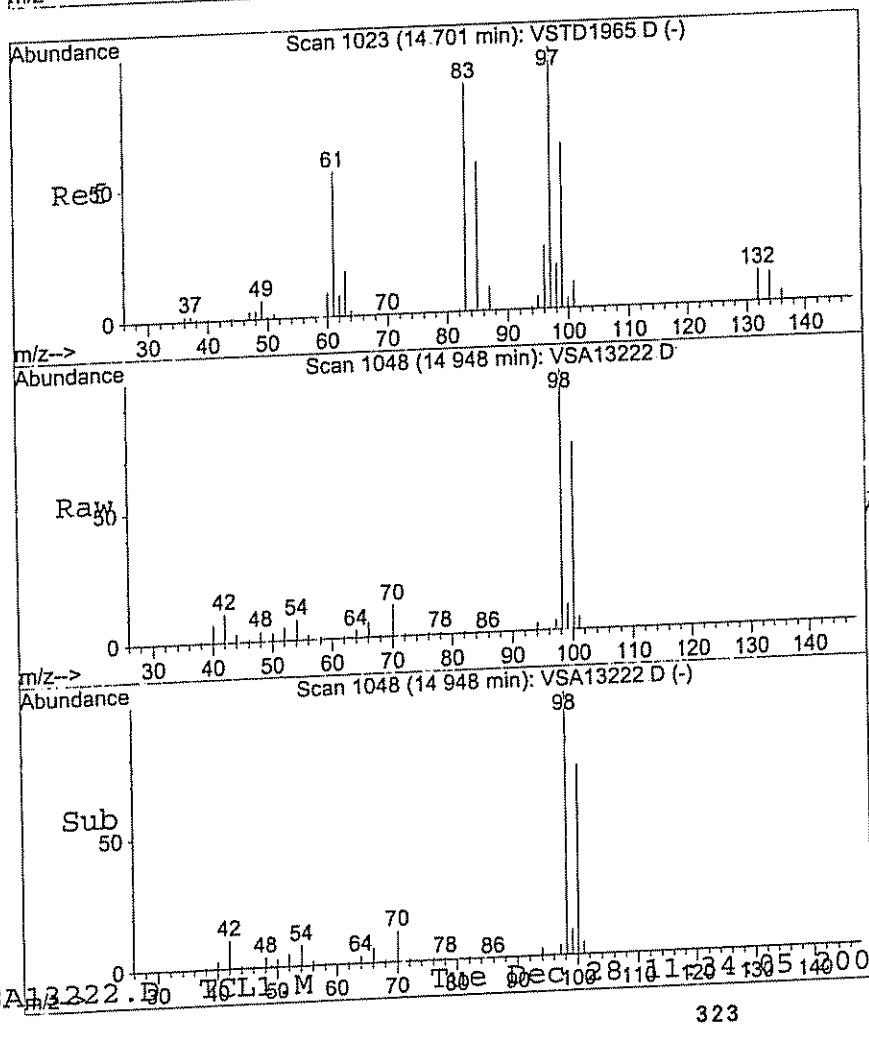


#24
Bromodichloromethane
Concen: 0.81 ug/L
RT: 13.20 min Scan# 870
Delta R.T. 0.01 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 83 Resp: 4042

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	45.4	33.9	93.9
47	711.9	0.0	46.1#

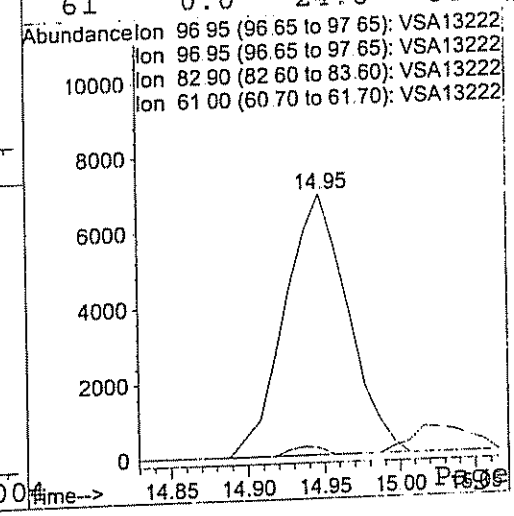


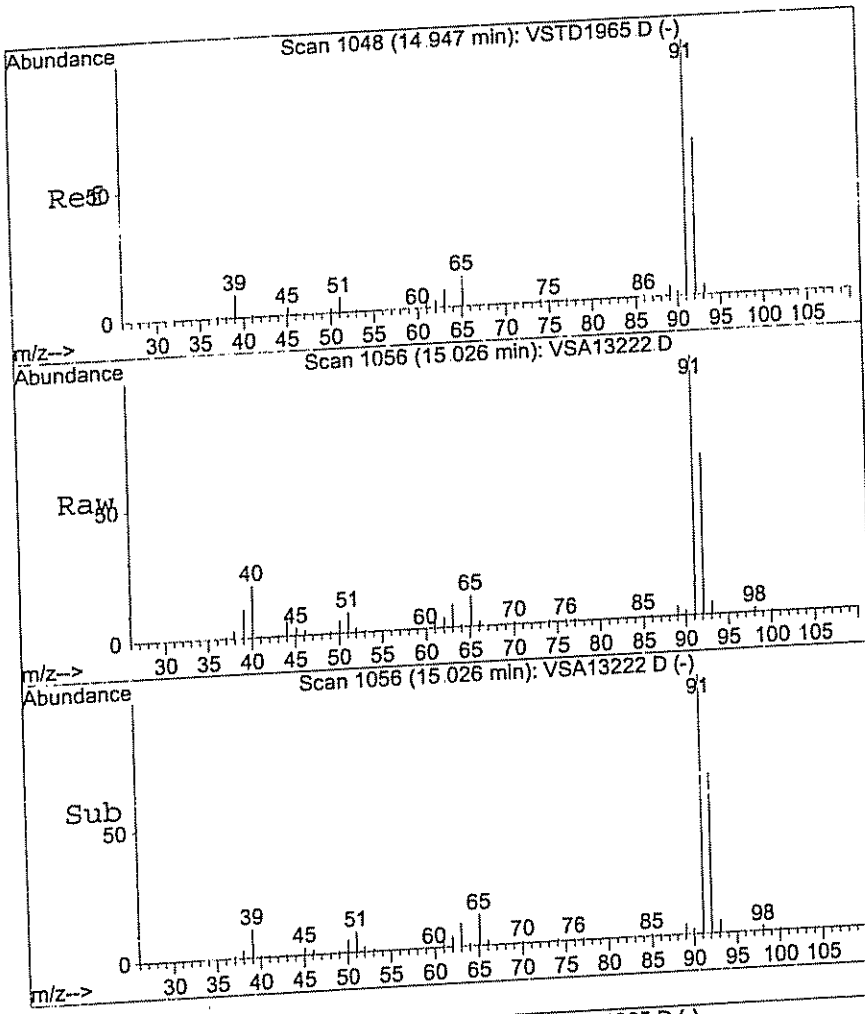


#27
1,1,2-Trichloroethane
Concen: 5.62 ug/L
RT: 14.95 min Scan# 1048
Delta R.T. 0.25 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 97 Resp: 19978

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	2.7	56.9	116.9#
61	0.0	24.6	84.6#

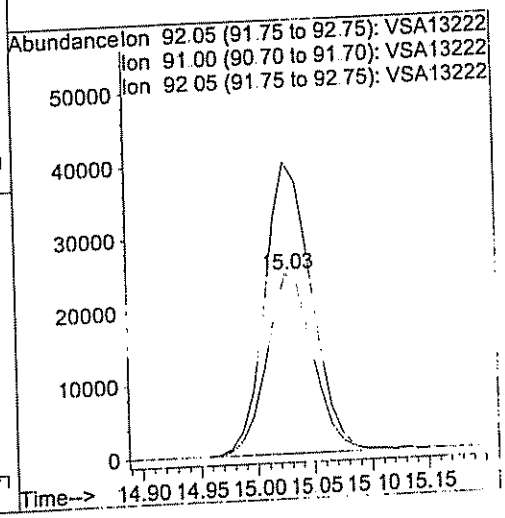


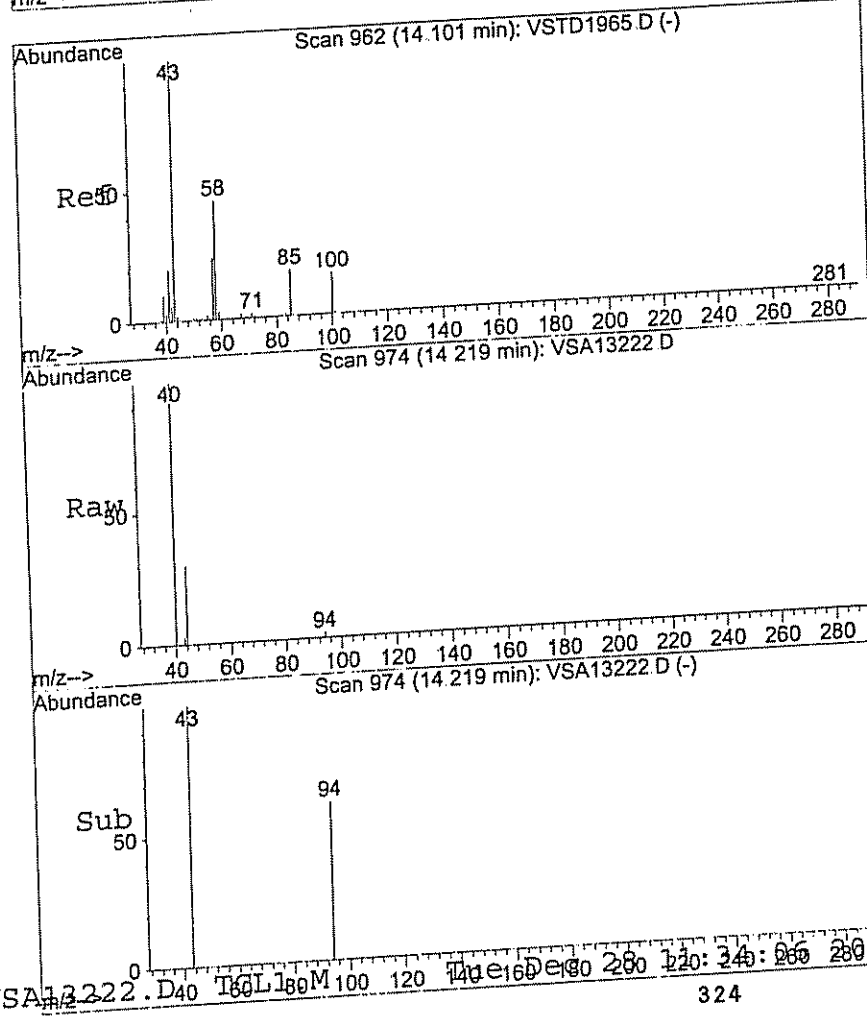


#33
Toluene
Concen: 7.48 ug/L
RT: 15.03 min Scan# 1056
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 92 Resp: 70064

Ion	Ratio	Lower	Upper
92	100		
91	161.7	132.6	192.6
92	100.0	70.0	130.0

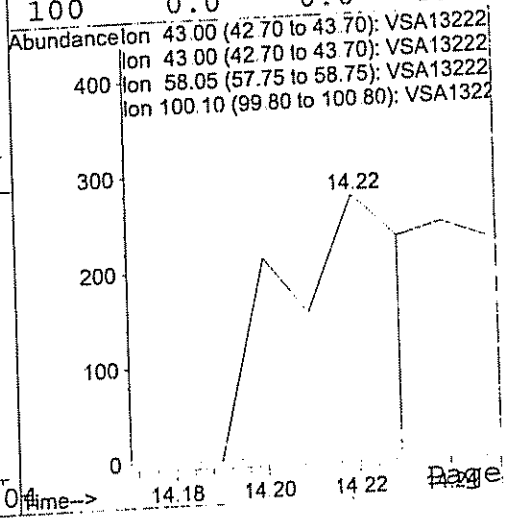


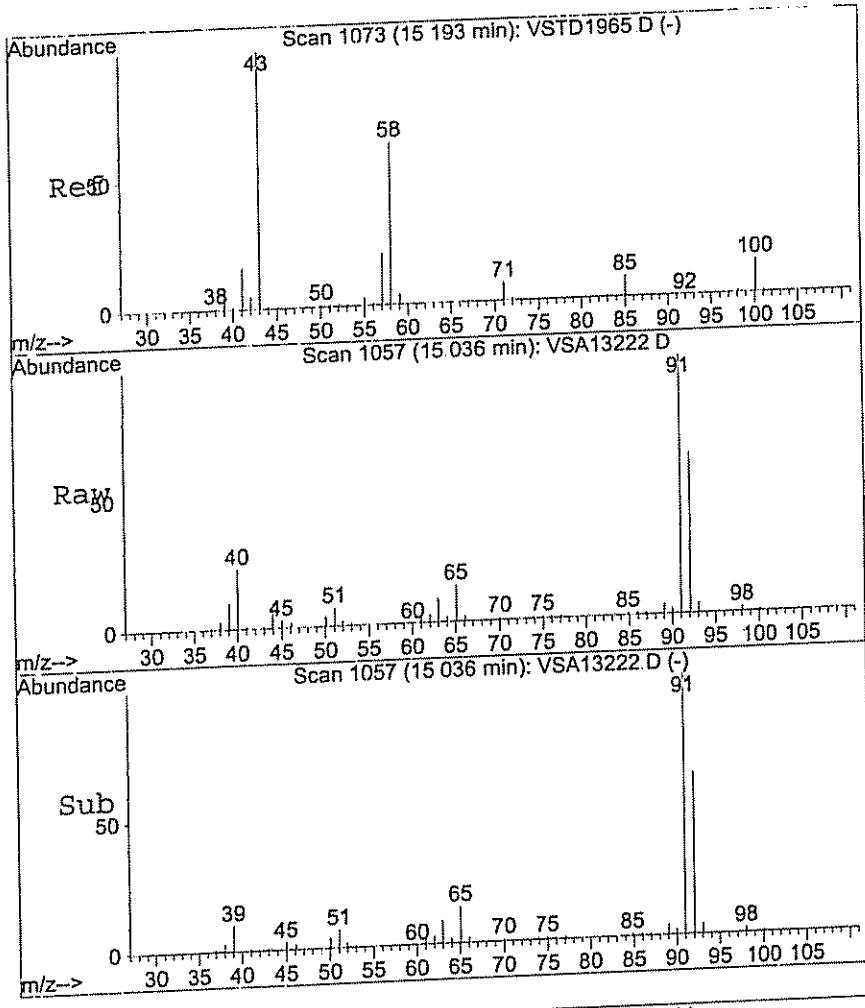


#34
4-methyl-2-Pentanone
Concen: 0.15 ug/L
RT: 14.22 min Scan# 974
Delta R.T. 0.10 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 43 Resp: 510

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	15.8	75.8#
100	0.0	0.0	46.4

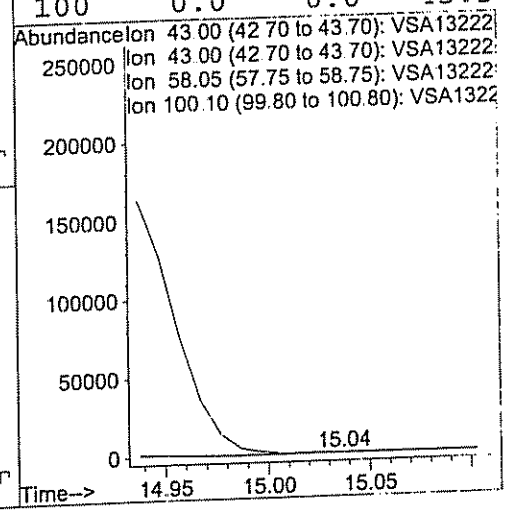


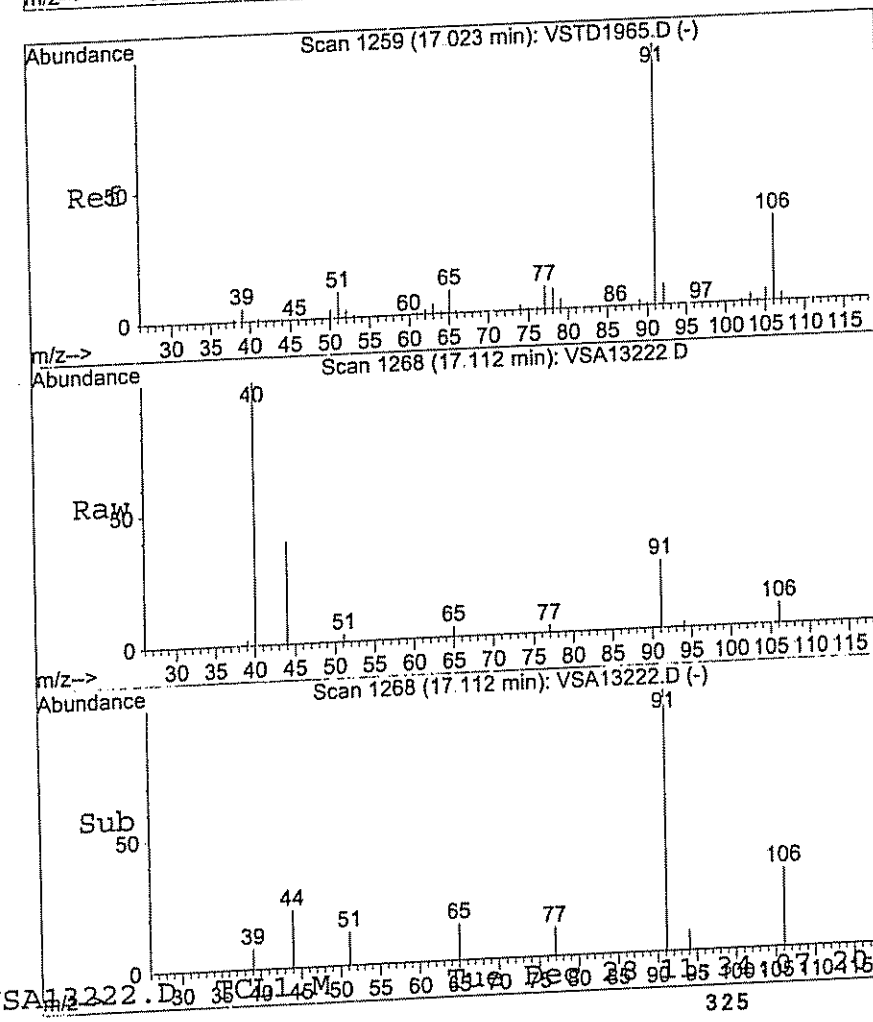


#36
2-Hexanone
Concen: 0.65 ug/L
RT: 15.04 min Scan# 1057
Delta R.T. -0.18 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 43 Resp: 1469

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	33.5	93.5#
100	0.0	0.0	43.5

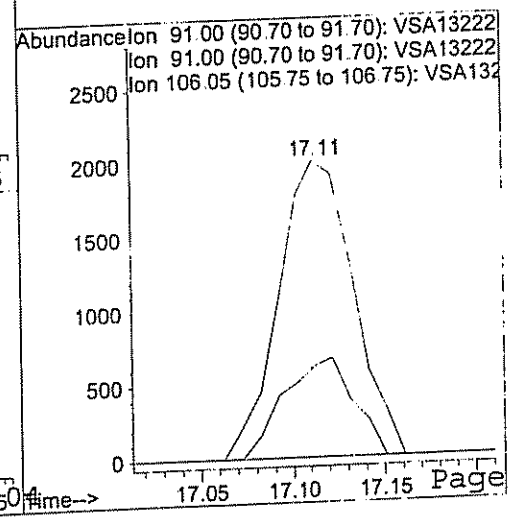


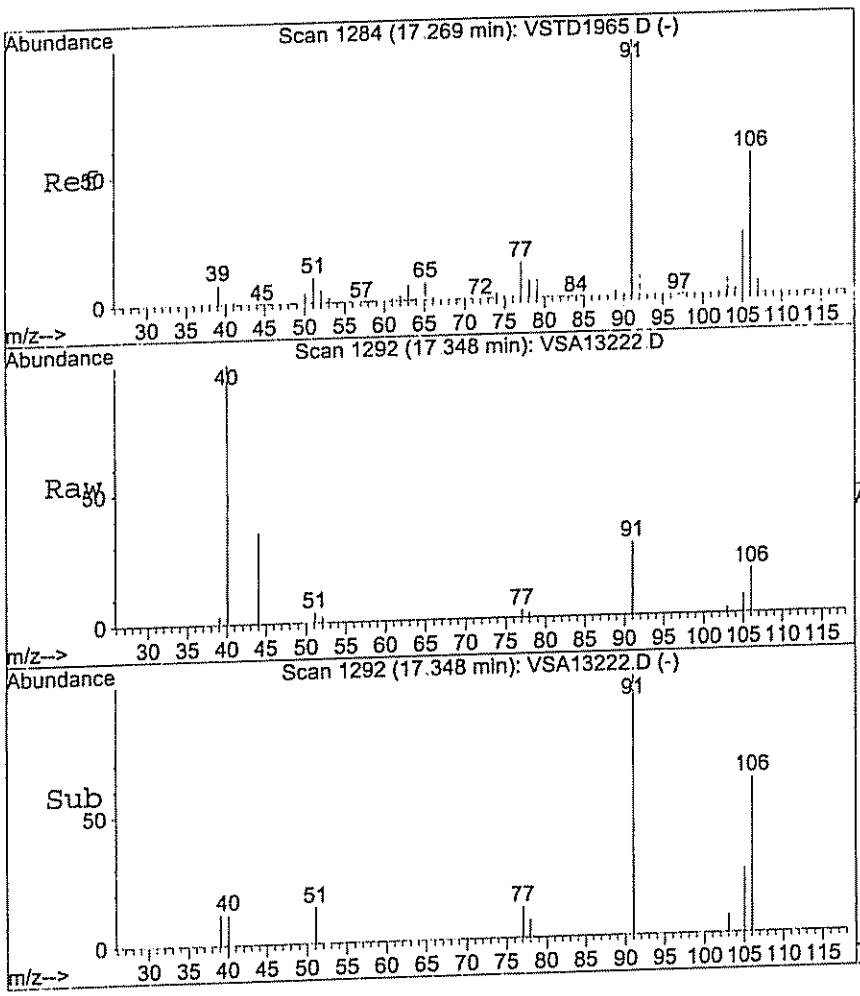


#37
Ethyl benzene
Concen: 0.33 ug/L
RT: 17.11 min Scan# 1268
Delta R.T. 0.09 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion: 91 Resp: 5688

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	30.4	2.9	62.9

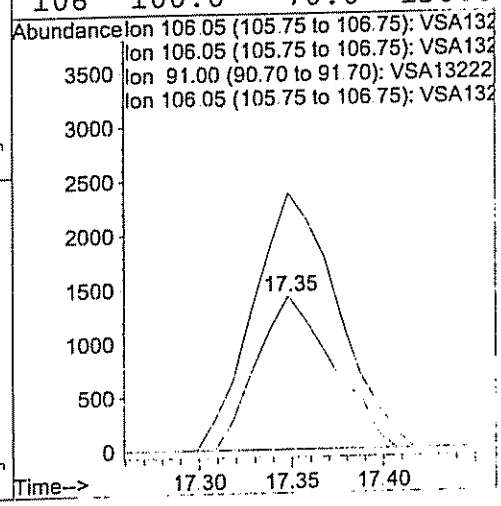


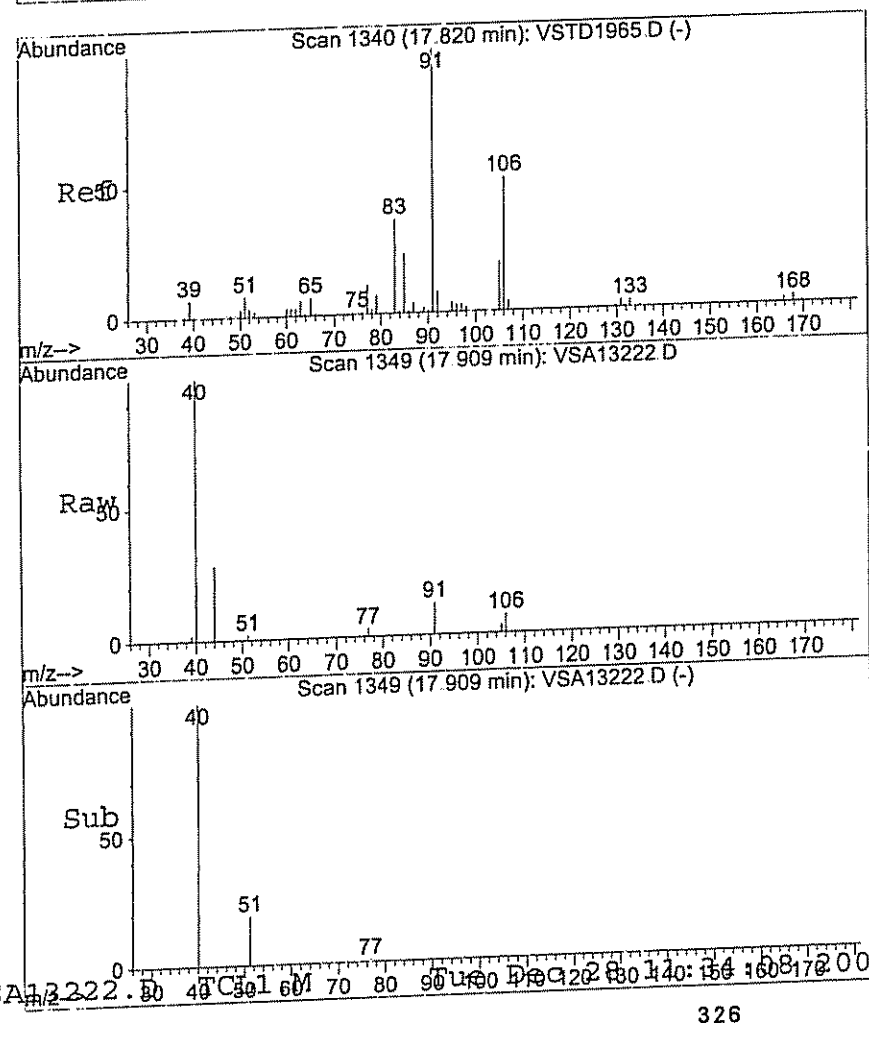


#39
m&p-Xylenes
Concen: 0.59 ug/L
RT: 17.35 min Scan# 1292
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion:106 Resp: 4067

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	151.6	150.2	210.2
106	100.0	70.0	130.0

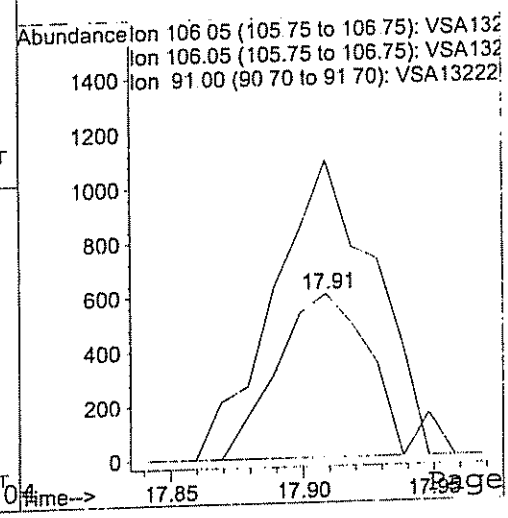


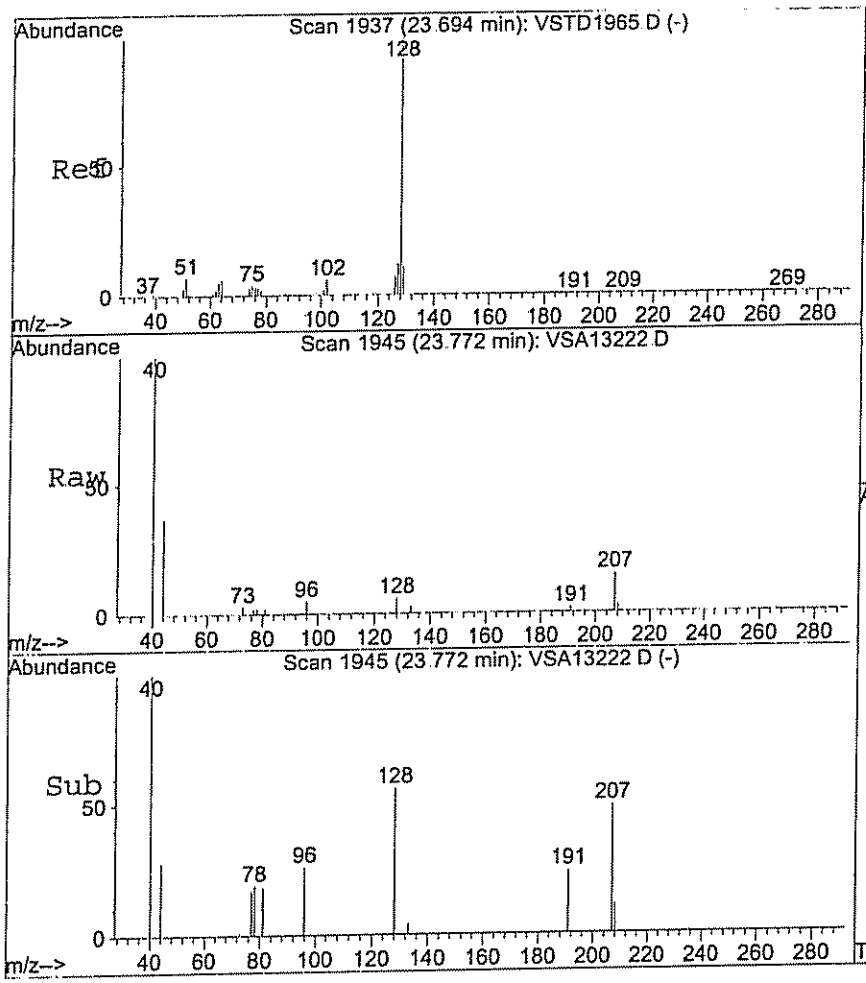


#40
o-Xylene
Concen: 0.21 ug/L
RT: 17.91 min Scan# 1349
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion:106 Resp: 1439

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	130.0	164.9	224.9#

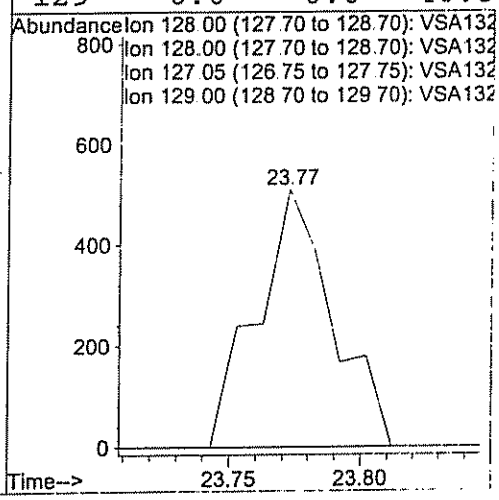




#45
Naphthalene
Concen: 0.07 ug/L
RT: 23.77 min Scan# 1945
Delta R.T. 0.08 min
Lab File: VSA13222.D
Acq: 23 Dec 2004 3:56

Tgt Ion:128 Resp: 1021

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	0.0	0.0	40.8



Quantitation Report (QT Reviewed) **MWB-2**

Data File : C:\HPCHEM\1\DATA\VSA13223.D
Acq On : 23 Dec 2004 4:29
Sample : P0412024-02A DF100 RE
Misc : WATER

Vial: 26
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:34 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	11.00	128	154389	50.00	ug/L	0.09
18) 1,4-Difluorobenzene	12.67	114	848452	50.00	ug/L	0.09
31) Chlorobenzene-d5	16.84	117	764538	50.00	ug/L	0.08
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.73	65	206940	54.69	ug/L	0.08
Spiked Amount 50.000	Range 70 - 130		Recovery = 109.38%			
32) Toluene-d8	14.94	98	644604	51.69	ug/L	0.09
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.38%			
43) 4-Bromofluorobenzene	18.47	95	231312	48.92	ug/L	0.08
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.84%			
Target Compounds						Qvalue
2) Chloromethane	6.33	50	89	0.02	ug/L #	85
3) Vinyl chloride	6.64	62	20928	4.65	ug/L	97
4) Bromomethane	6.91	94	244	0.09	ug/L	90
6) 1,1-Dichloroethene	8.87	96	16973	4.92	ug/L	94
7) Carbon disulfide	9.39	76	816	0.06	ug/L	100
8) Methylene chloride	9.03	84	6671	1.53	ug/L	94
9) Acetone	8.35	43	1420	1.20	ug/L	89
10) trans-1,2-Dichloroethene	9.84	96	12904	3.11	ug/L	99
12) 1,1-Dichloroethane	10.14	63	22187	3.21	ug/L	99
13) cis-1,2-Dichloroethene	10.80	96	1396279	290.62	ug/L	92
14) Chloroform	11.04	83	1101	0.18	ug/L	85
15) 2-Butanone	10.66	43	3301	1.78	ug/L	99
17) 1,2-Dichloroethane	11.83	62	12596	2.90	ug/L	98
20) 1,1,1-Trichloroethane	11.96	97	42617	8.77	ug/L	97
21) Benzene	12.44	78	4907	0.29	ug/L	99
22) Trichloroethene	13.21	130	1016221	184.03	ug/L	97
24) Bromodichloromethane	13.20	83	10706	2.16	ug/L #	1
27) 1,1,2-Trichloroethane	14.95	97	19612	5.57	ug/L #	50
33) Toluene	15.03	92	52400	5.71	ug/L	99
35) Tetrachloroethene	15.99	164	1371	0.40	ug/L #	81
36) 2-Hexanone	15.21	43	445	0.20	ug/L #	68
37) Ethyl benzene	17.11	91	9852	0.59	ug/L	99
38) Chlorobenzene	16.87	112	104	0.01	ug/L #	67

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

DF100

TSP4 DF 500

Data File : C:\HPCHEM\1\DATA\VSA13223.D
Acq On : 23 Dec 2004 4:29
Sample : P0412024-02A DF100 RE
Misc : WATER

Vial: 26
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:34 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) m&p-Xylenes	17.35	106	8518	1.26 ug/L	98
40) o-Xylene	17.91	106	2148	0.33 ug/L #	82
42) Isopropylbenzene	18.39	105	709	0.04 ug/L #	88
45) Naphthalene	23.77	128	873	0.06 ug/L #	97

(#) = qualifier out of range (m) = manual integration
VSA13223.D TCL1.M Tue Dec 28 11:34:58 2004

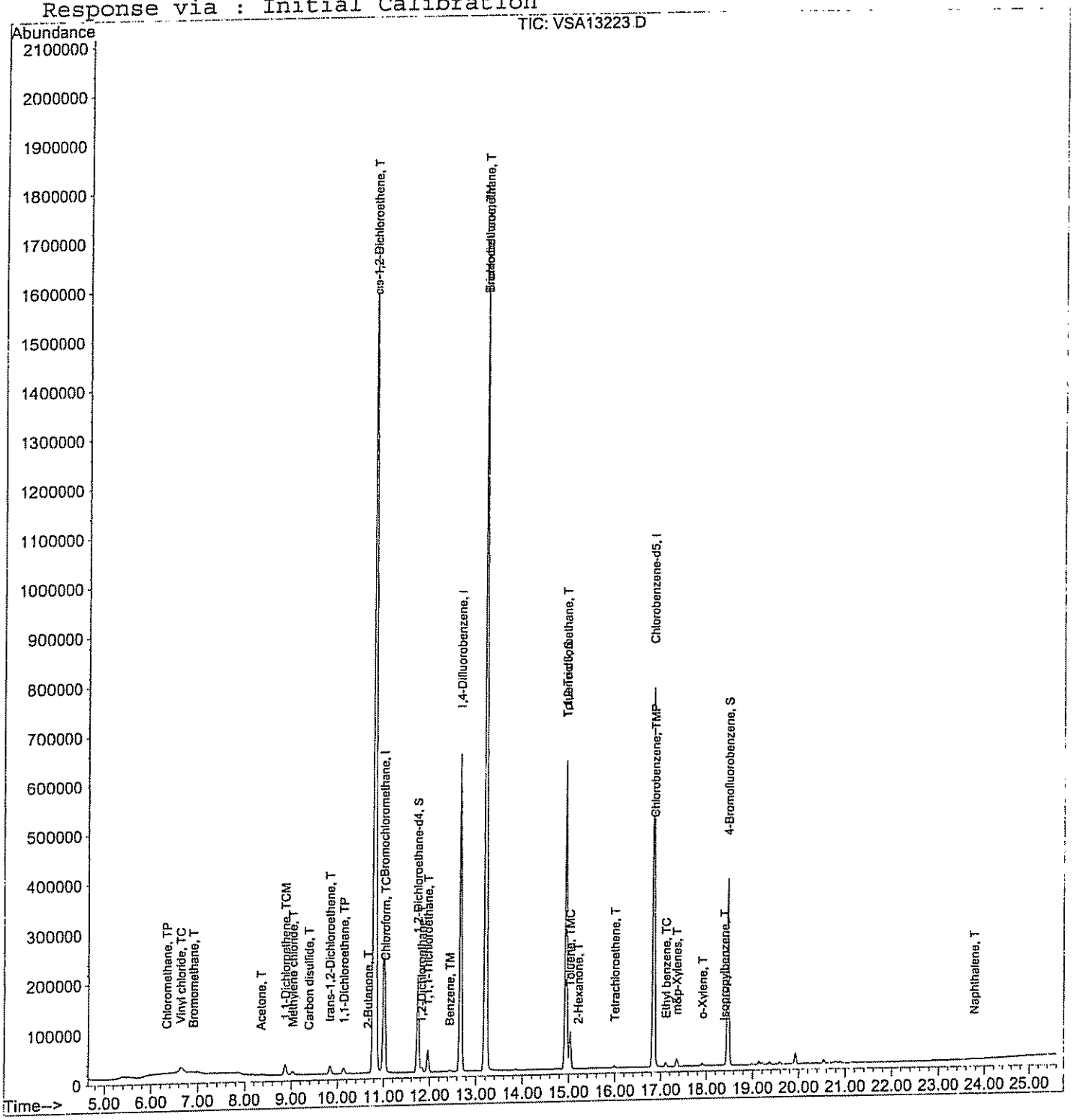
Data File : C:\HPCHEM\1\DATA\VSA13223.D
Acq On : 23 Dec 2004 4:29
Sample : P0412024-02A DF100 RE
Misc : WATER

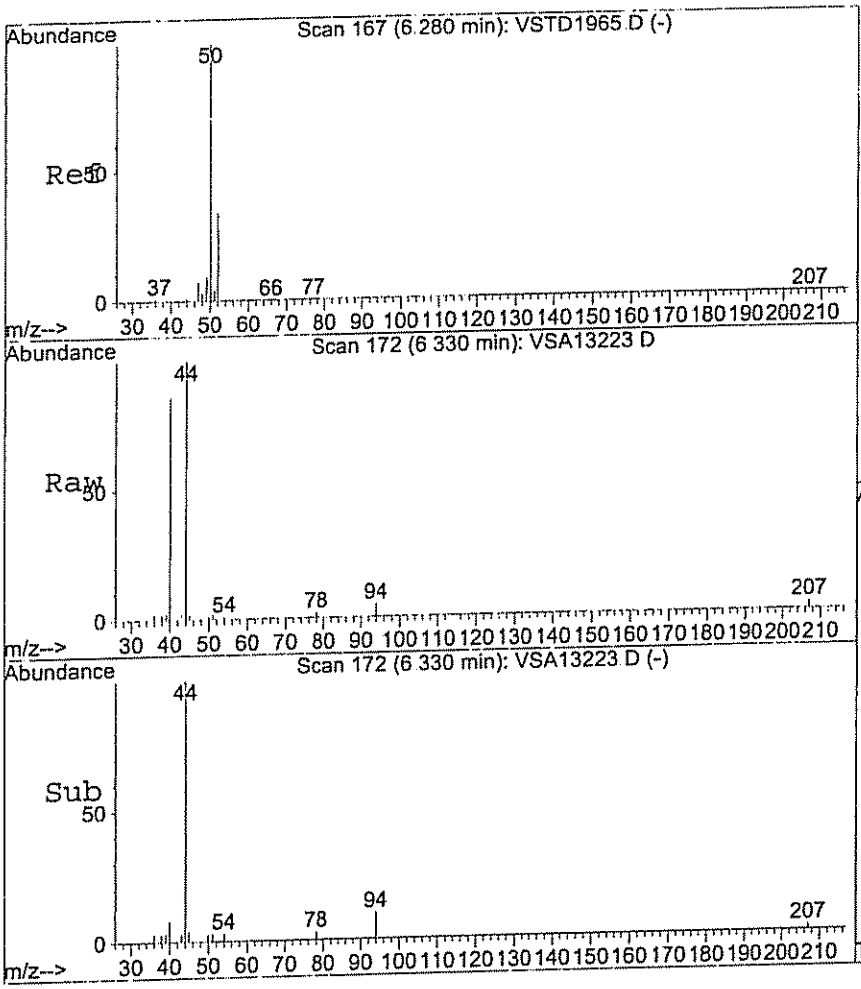
Vial: 26
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:34 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration

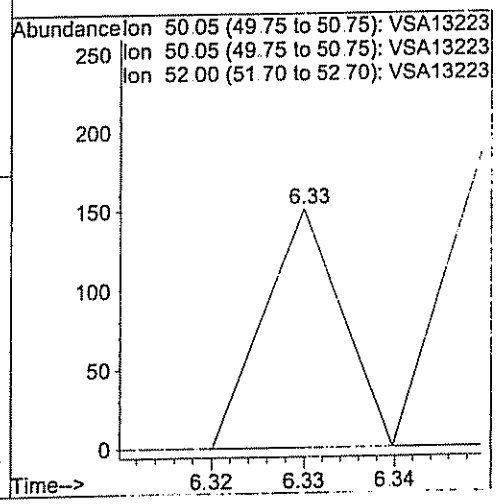


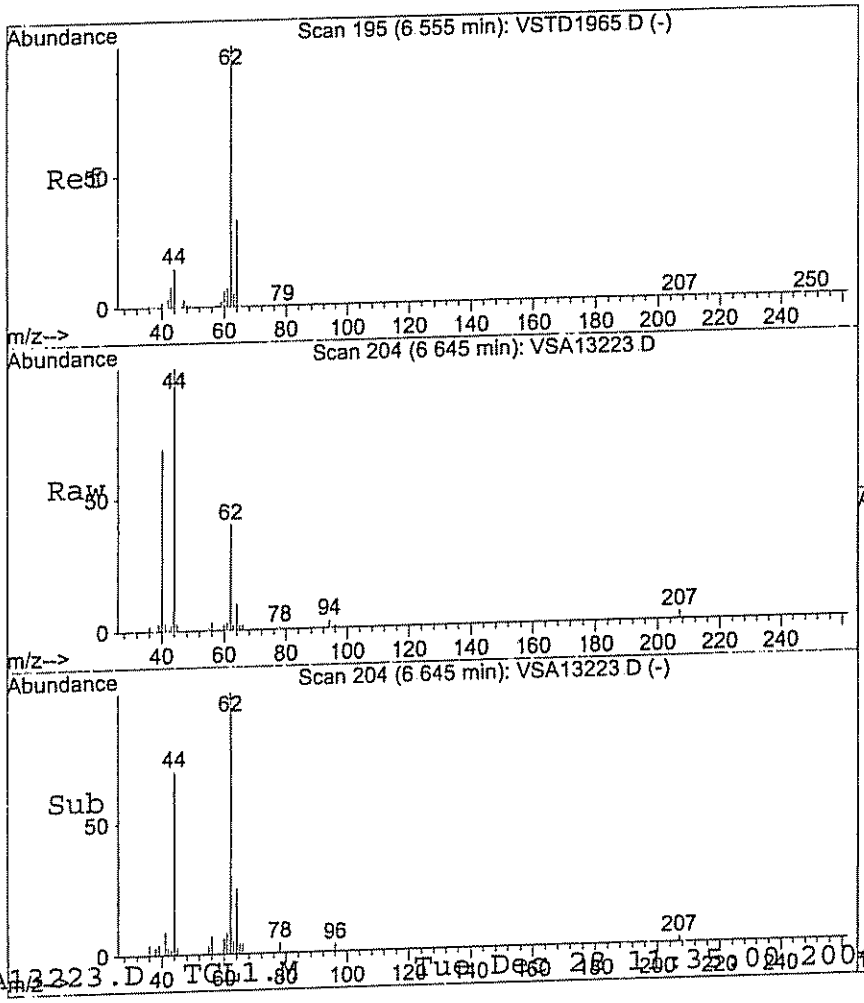


#2
Chloromethane
Concen: 0.02 ug/L
RT: 6.33 min Scan# 172
Delta R.T. 0.05 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 50 Resp: 89

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.9	63.9#

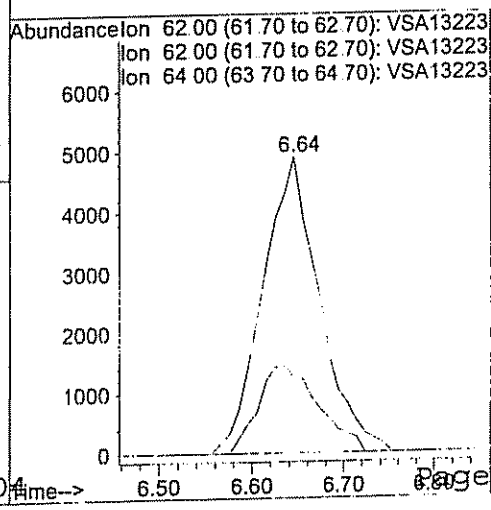


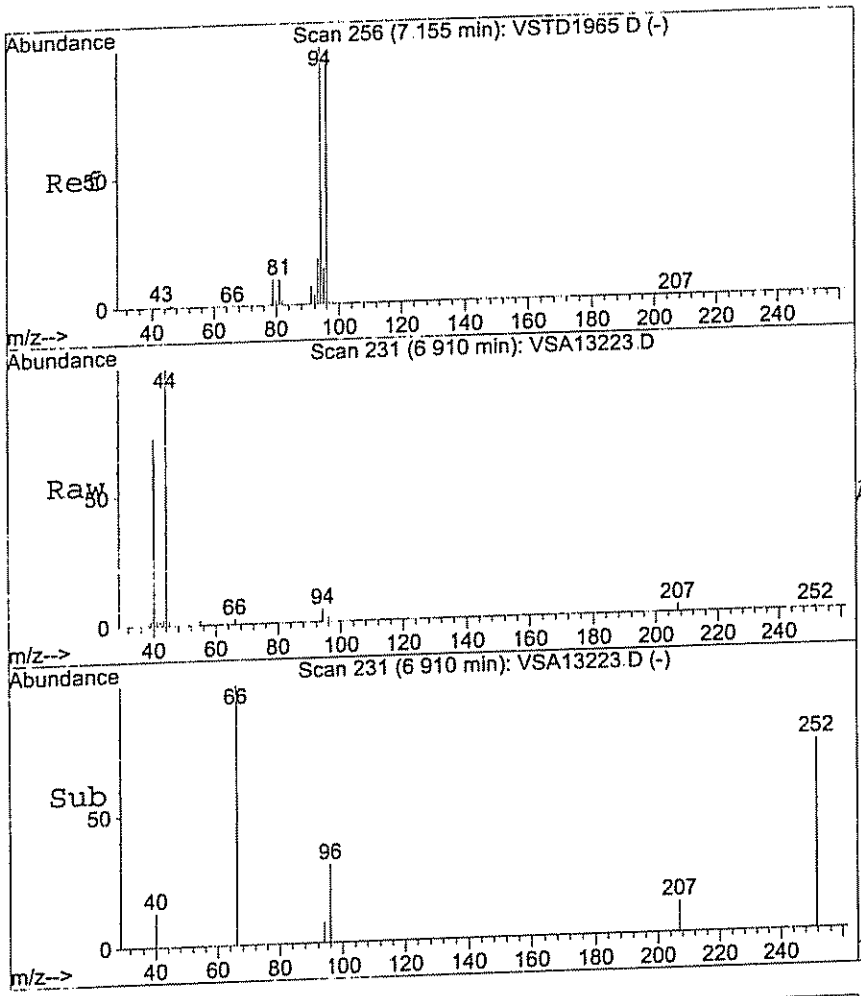


#3
Vinyl chloride
Concen: 4.65 ug/L
RT: 6.64 min Scan# 204
Delta R.T. 0.09 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 62 Resp: 20928

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	25.3	2.4	62.4

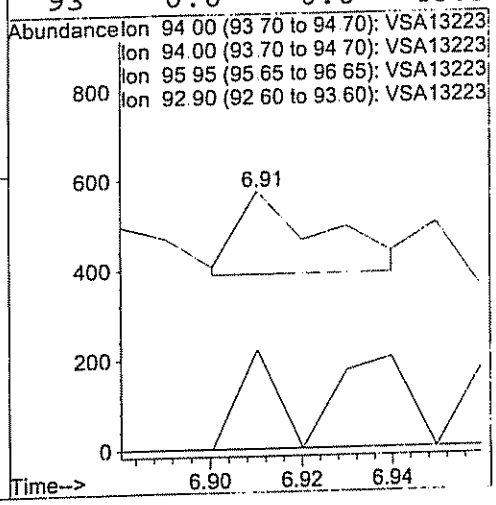


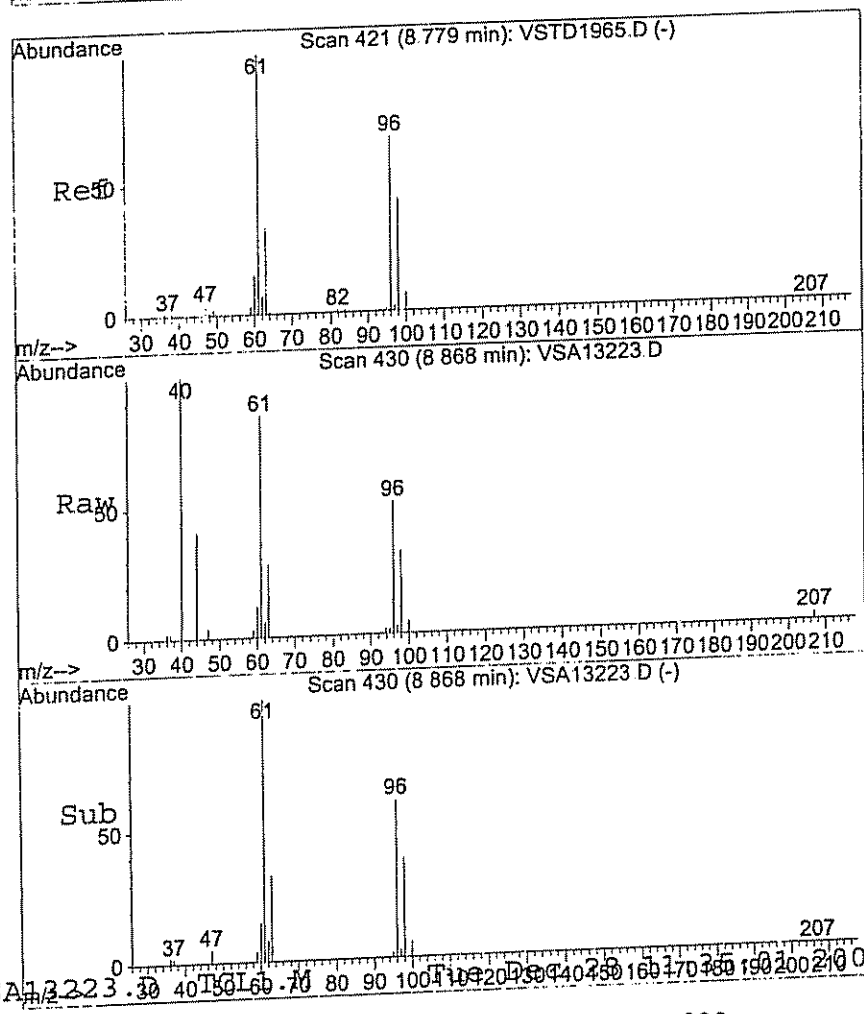


#4
Bromomethane
Concen: 0.09 ug/L
RT: 6.91 min Scan# 231
Delta R.T. -0.25 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 94 Resp: 244

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	78.6	63.6	123.6
93	0.0	0.0	48.5

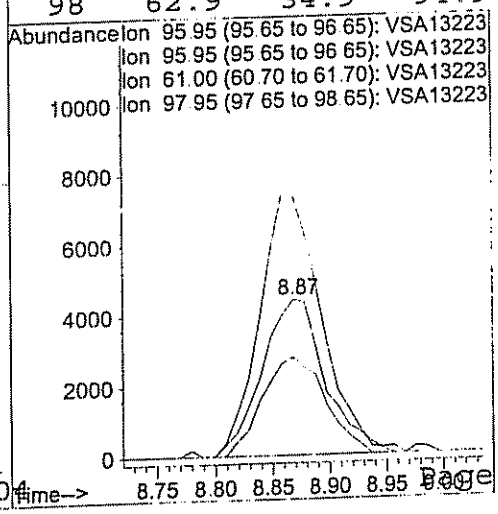


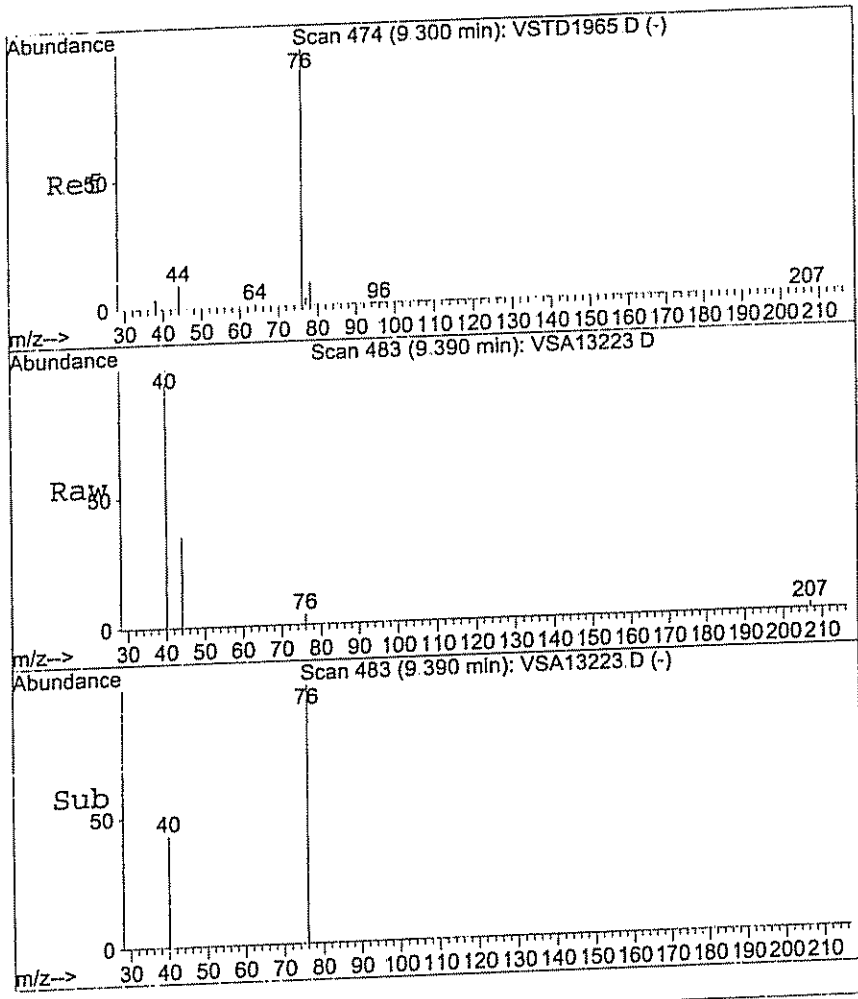


#6
1,1-Dichloroethene
Concen: 4.92 ug/L
RT: 8.87 min Scan# 430
Delta R.T. 0.09 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 96 Resp: 16973

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	164.4	118.9	178.9
98	62.9	34.9	94.9

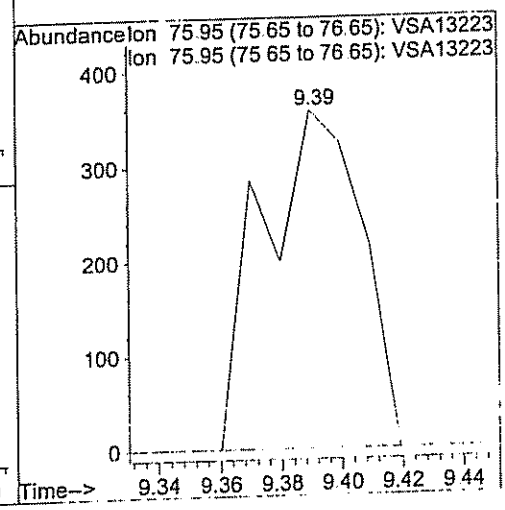


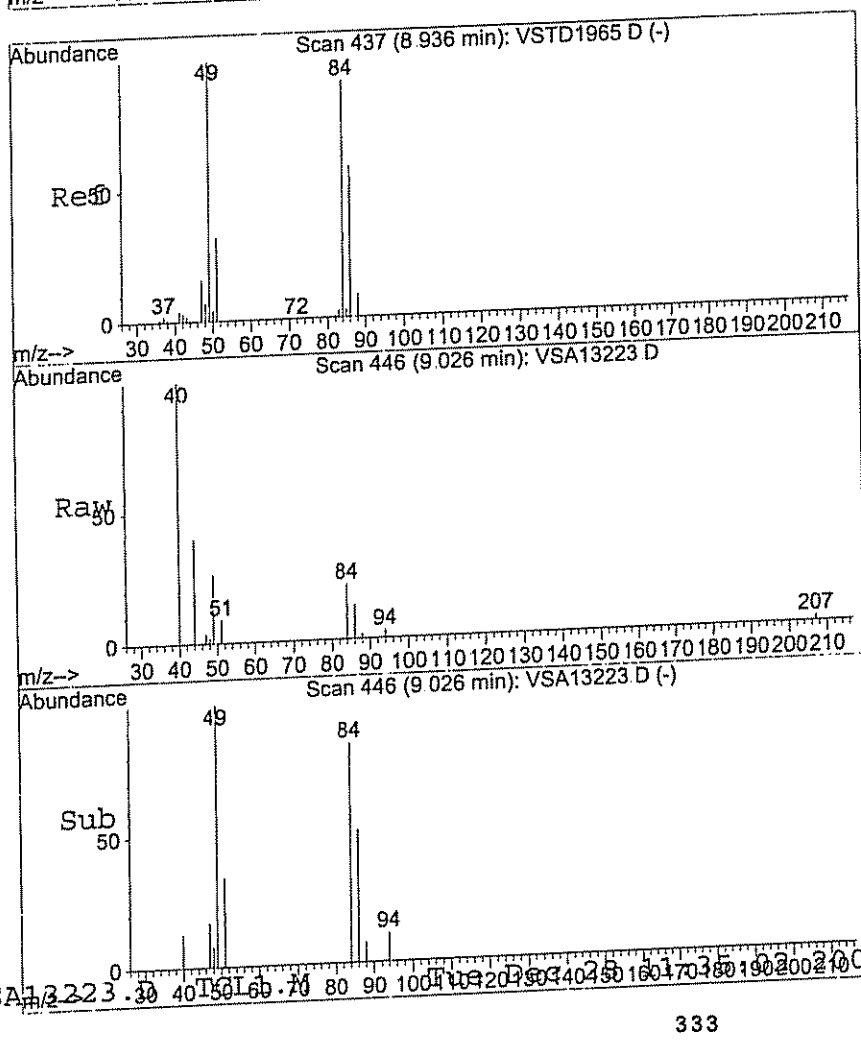


#7
Carbon disulfide
Concen: 0.06 ug/L
RT: 9.39 min Scan# 483
Delta R.T. 0.09 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 76 Resp: 816

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

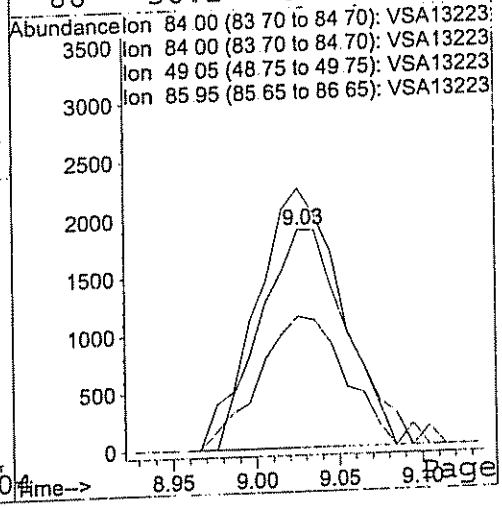


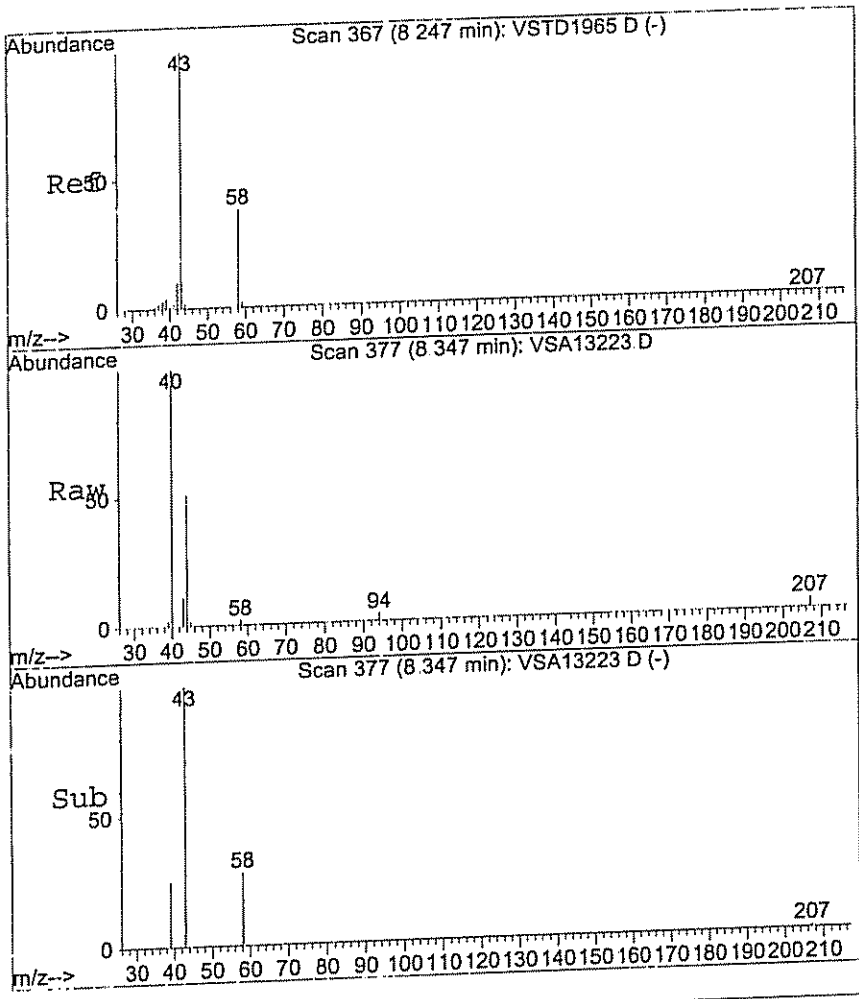


#8
Methylene chloride
Concen: 1.53 ug/L
RT: 9.03 min Scan# 446
Delta R.T. 0.09 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 84 Resp: 6671

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	100.9	80.0	140.0
86	56.2	33.4	93.4

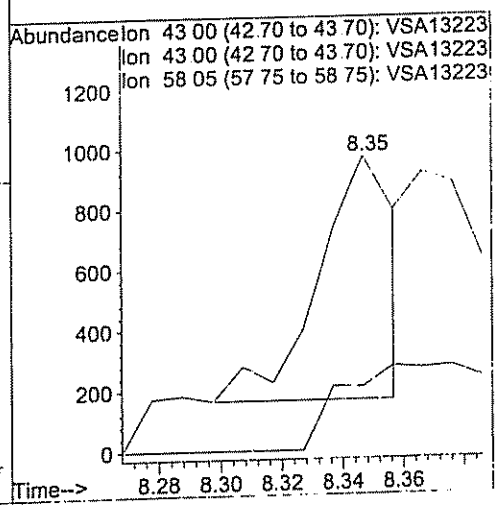


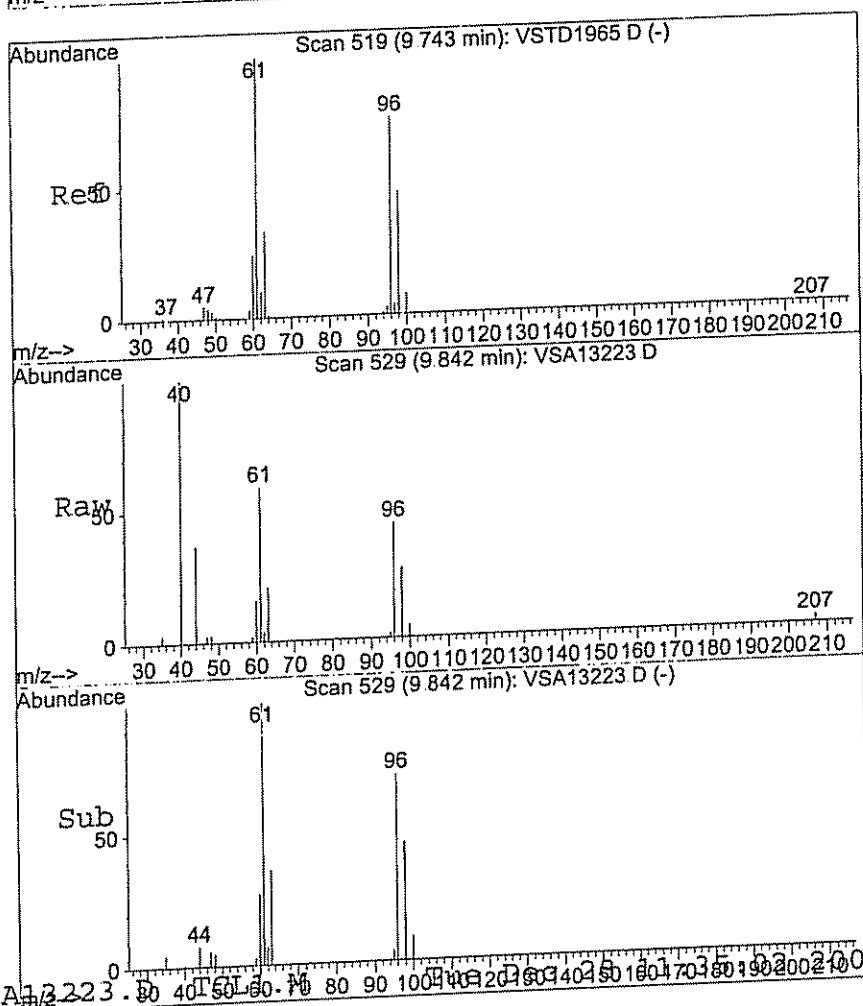


#9
Acetone
Concen: 1.20 ug/L
RT: 8.35 min Scan# 377
Delta R.T. 0.07 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 43 Resp: 1420

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	14.3	7.8	67.8

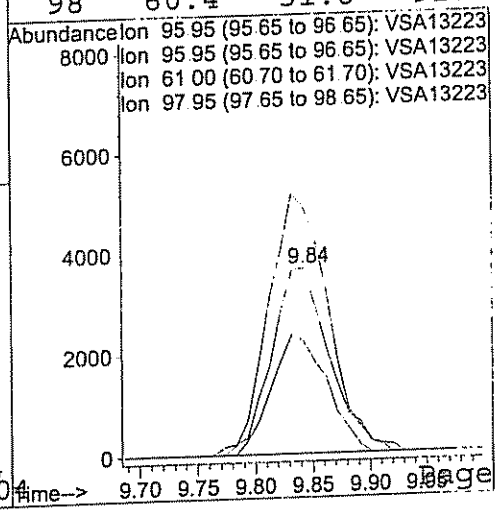


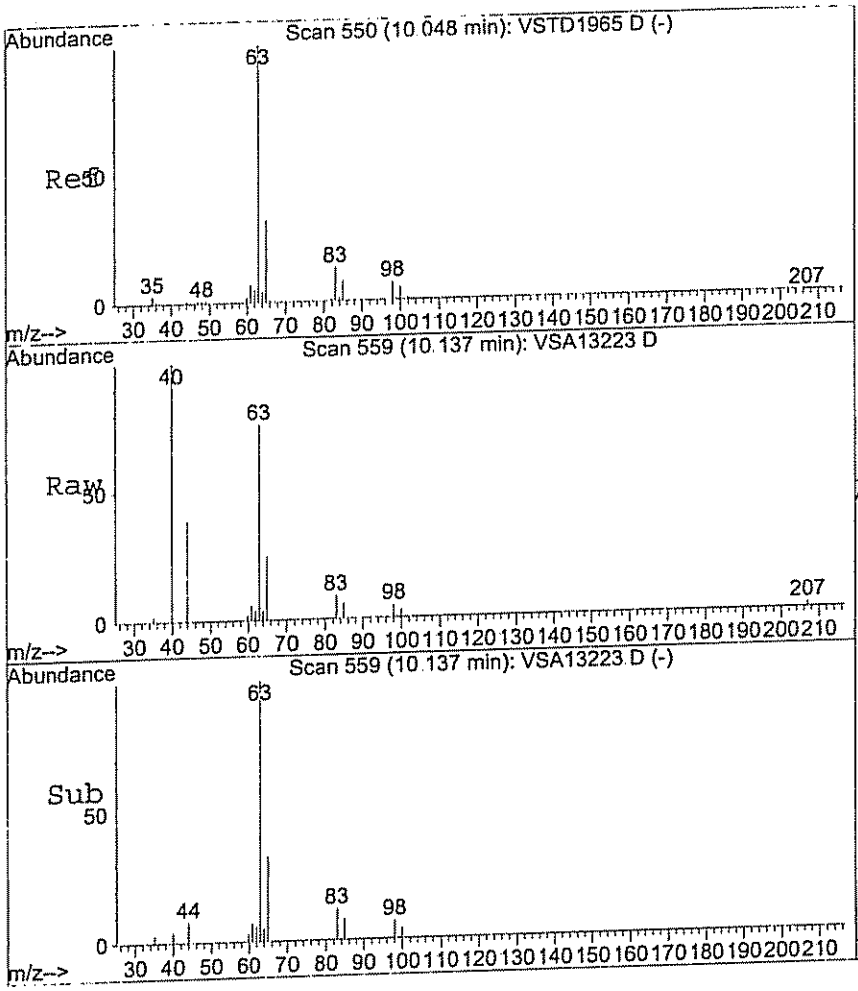


#10
trans-1,2-Dichloroethene
Concen: 3.11 ug/L
RT: 9.84 min Scan# 529
Delta R.T. 0.10 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 96 Resp: 12904

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	131.4	102.4	162.4
98	60.4	31.6	91.6

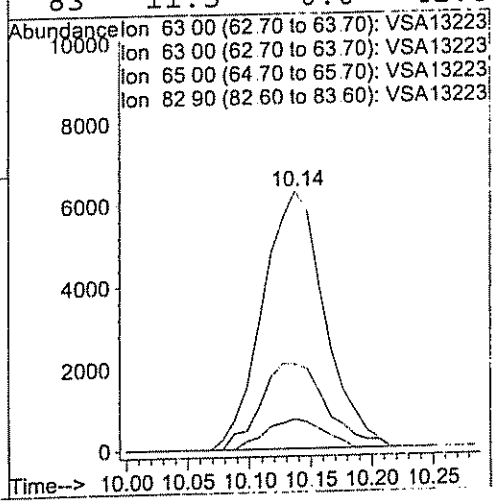


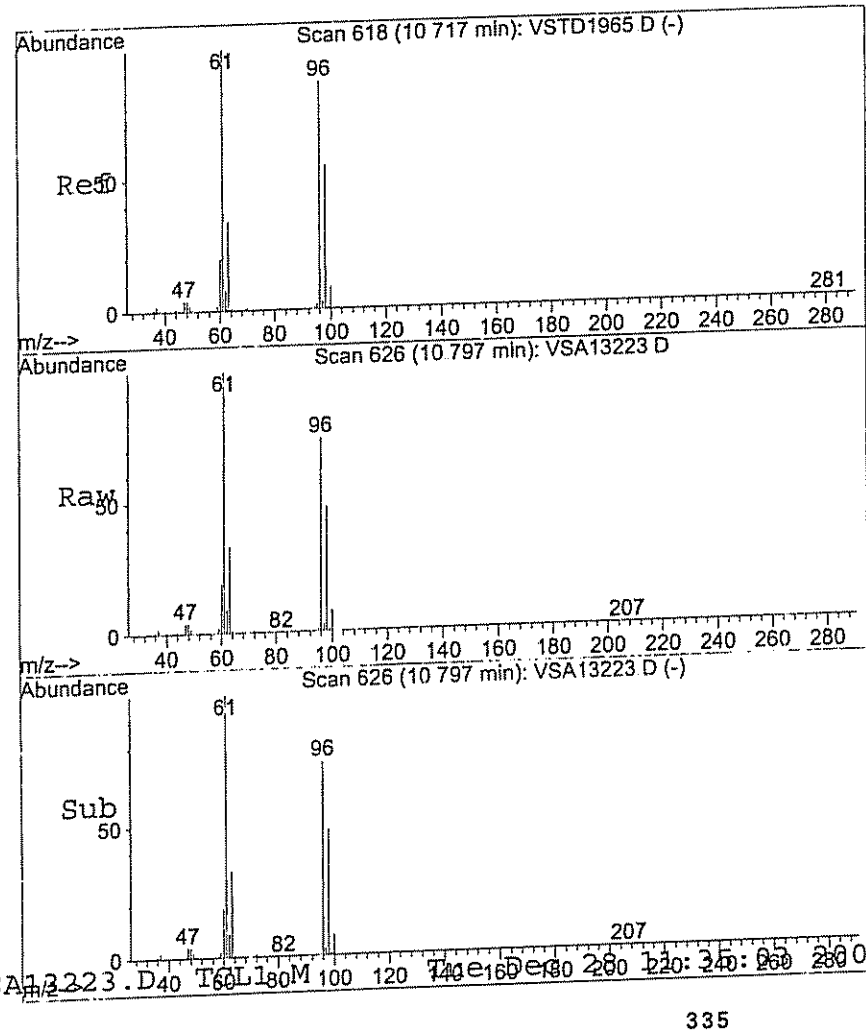


#12
1,1-Dichloroethane
Concen: 3.21 ug/L
RT: 10.14 min Scan# 559
Delta R.T. 0.09 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 63 Resp: 22187

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	32.8	2.1	62.1
83	11.5	0.0	42.6

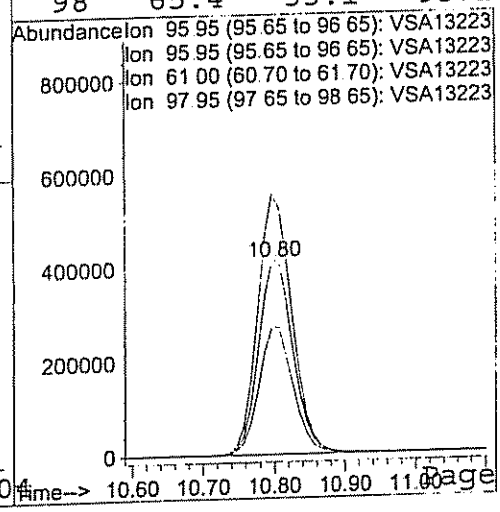


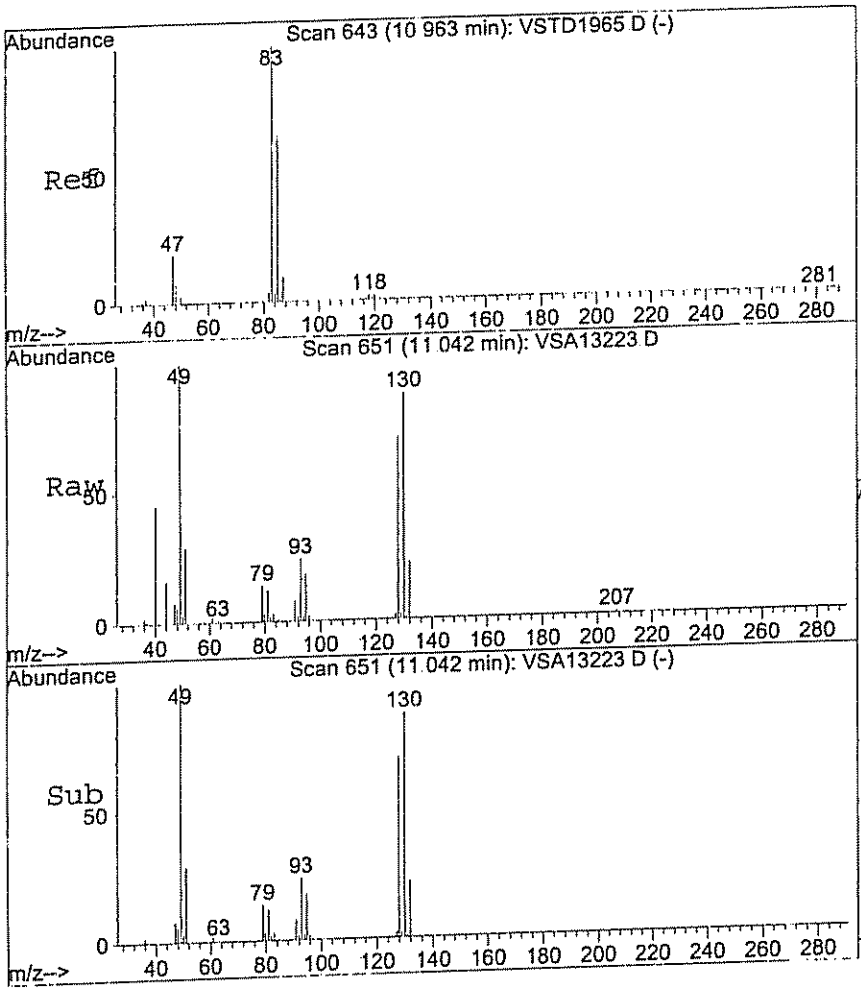


#13
cis-1,2-Dichloroethene
Concen: 290.62 ug/L
RT: 10.80 min Scan# 626
Delta R.T. 0.08 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 96 Resp: 1396279

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	135.2	85.2	145.2
98	65.4	33.1	93.1

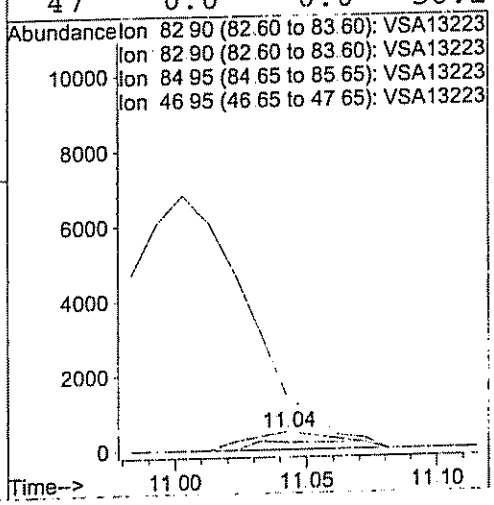


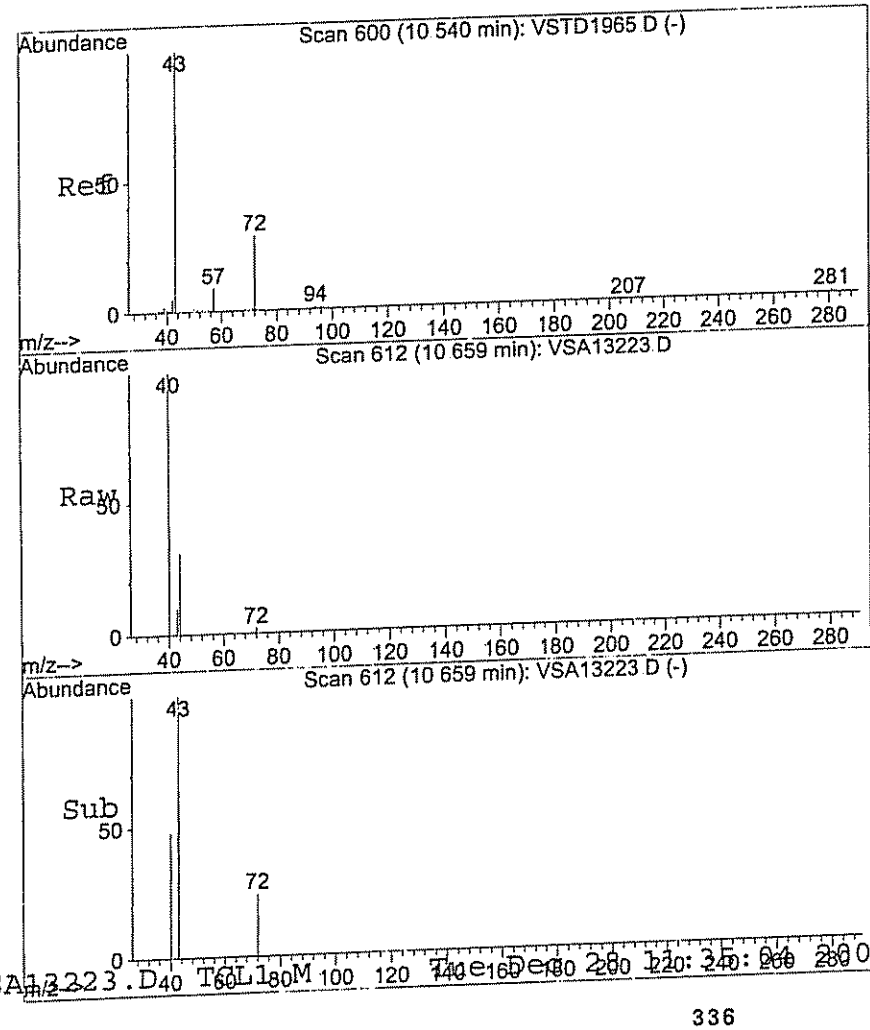


#14
Chloroform
Concen: 0.18 ug/L
RT: 11.04 min Scan# 651
Delta R.T. 0.08 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 83 Resp: 1101

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	41.1	34.7	94.7
47	0.0	0.0	50.1

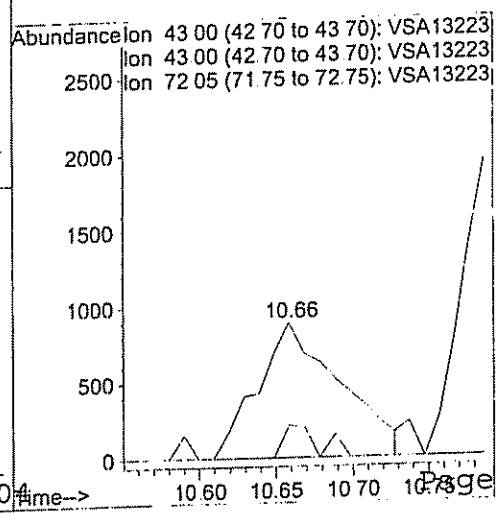


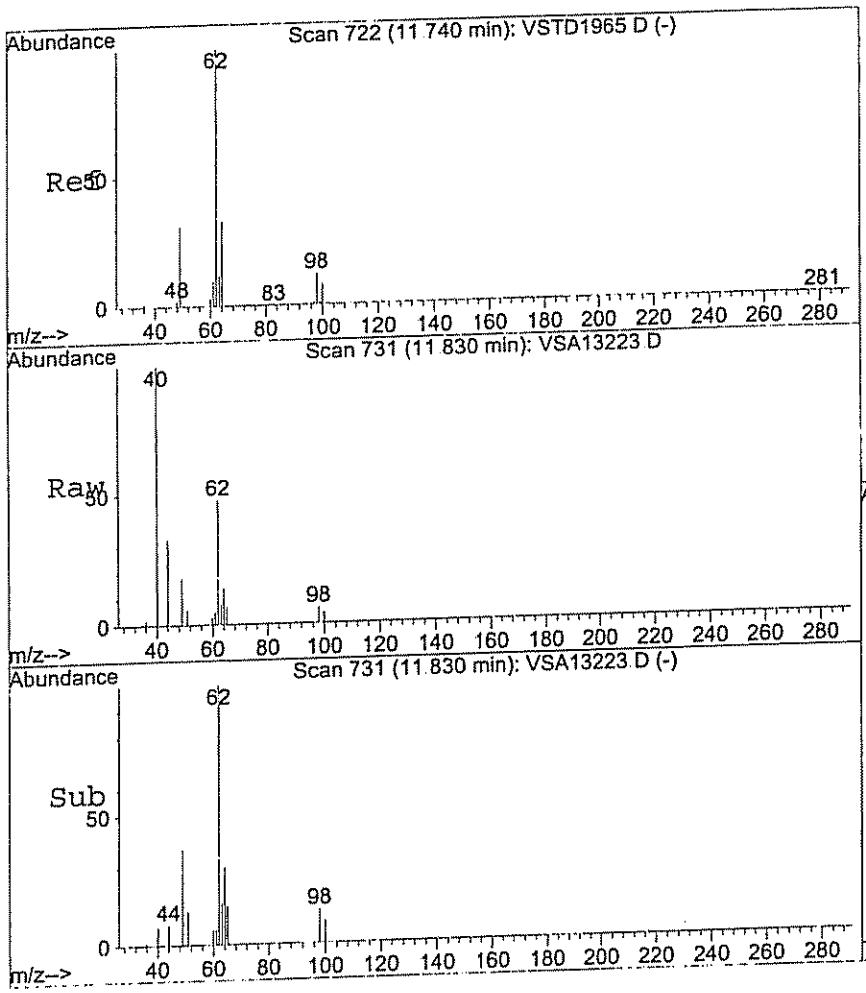


#15
2-Butanone
Concen: 1.78 ug/L
RT: 10.66 min Scan# 612
Delta R.T. 0.10 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 43 Resp: 3301

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	26.2	0.0	59.3

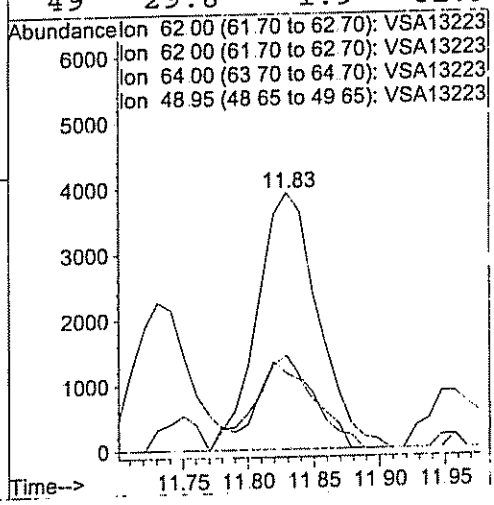


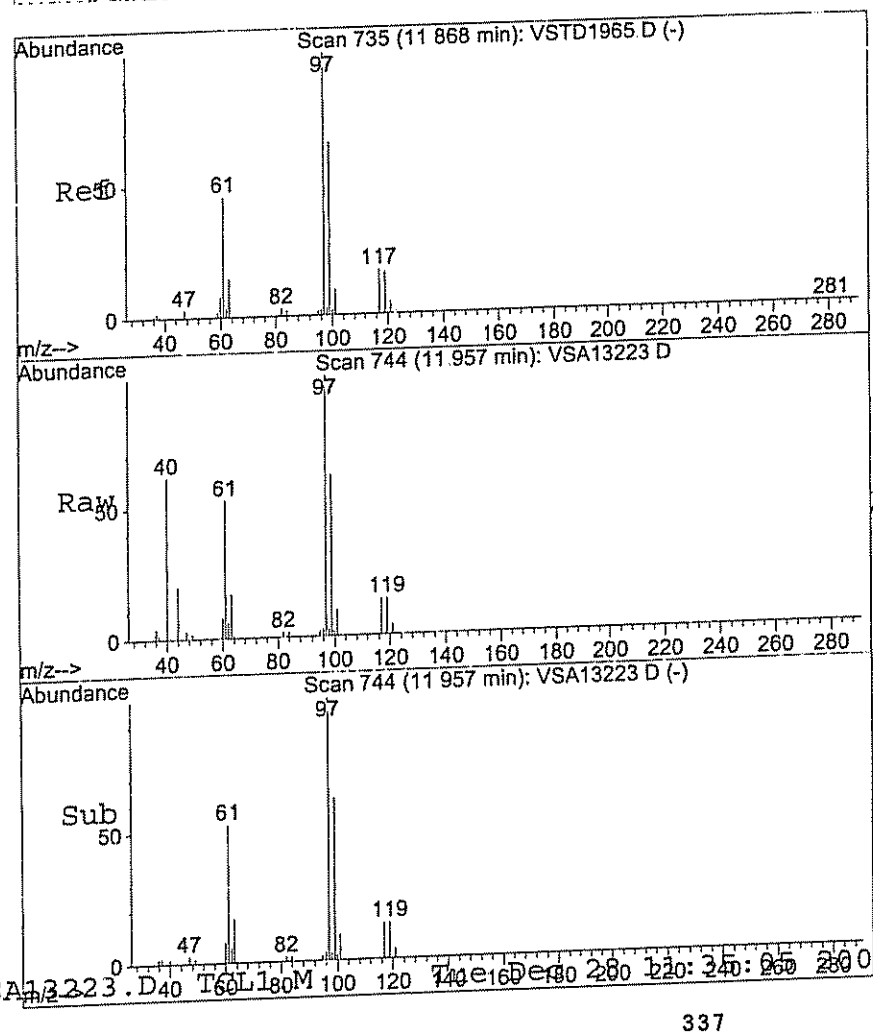


#17
1,2-Dichloroethane
Concen: 2.90 ug/L
RT: 11.83 min Scan# 731
Delta R.T. 0.09 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 62 Resp: 12596

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	29.7	2.9	62.9
49	29.8	1.9	61.9

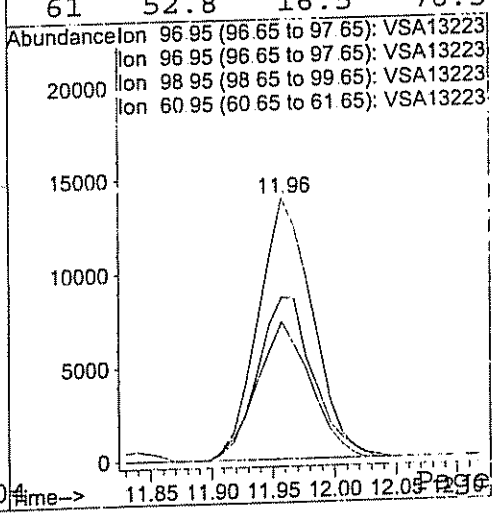


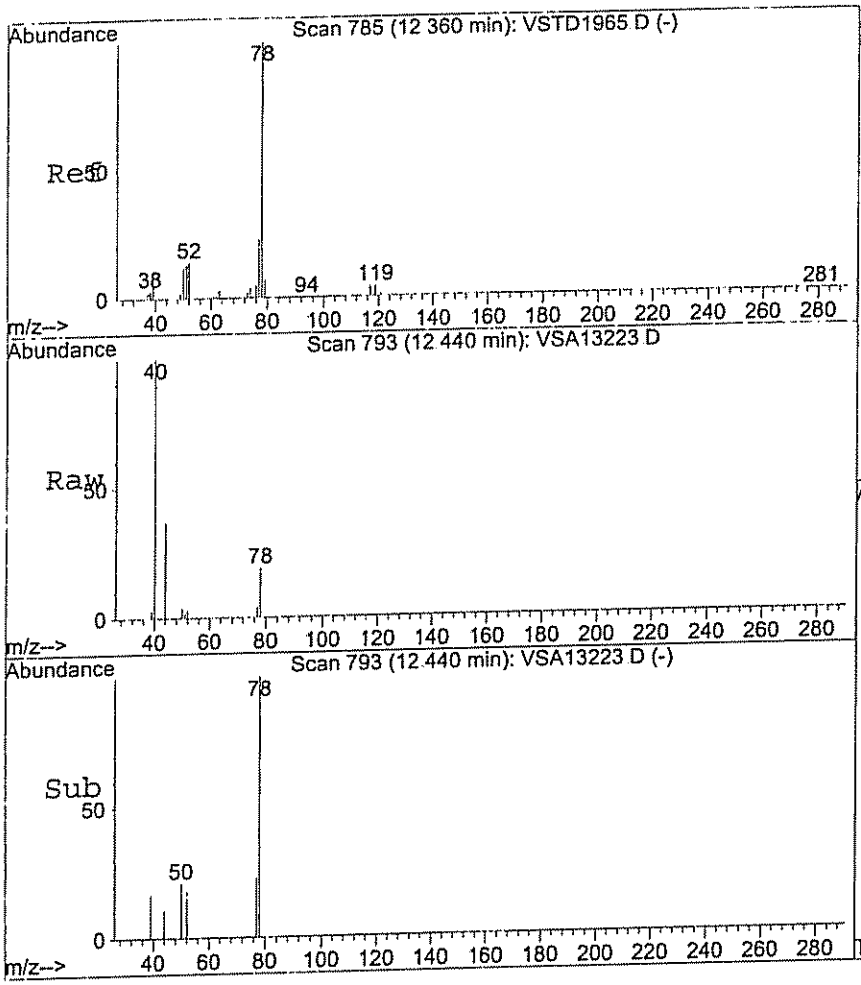


#20
1,1,1-Trichloroethane
Concen: 8.77 ug/L
RT: 11.96 min Scan# 744
Delta R.T. 0.09 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 97 Resp: 42617

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	62.1	35.6	95.6
61	52.8	16.5	76.5

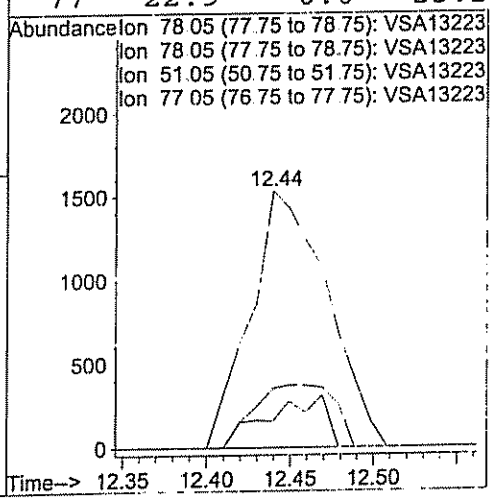


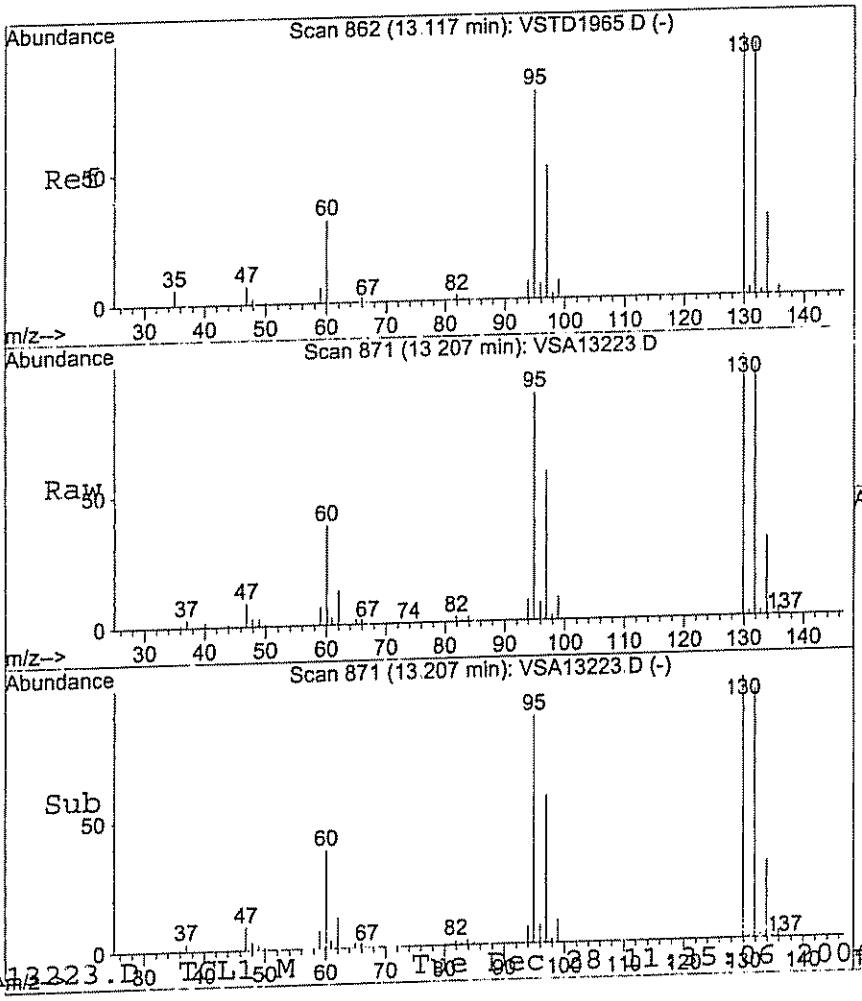


#21
Benzene
Concen: 0.29 ug/L
RT: 12.44 min Scan# 793
Delta R.T. 0.08 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 78 Resp: 4907

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	10.1	0.0	43.2
77	22.9	0.0	53.2

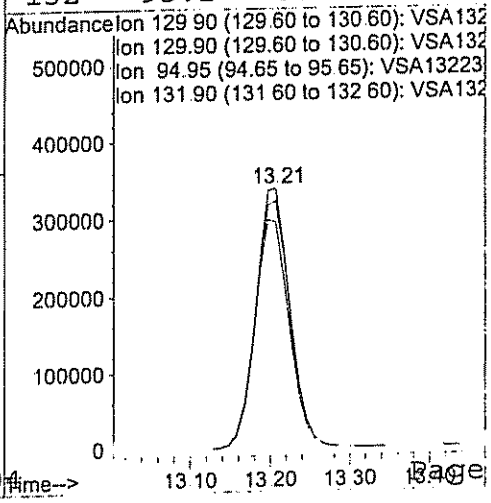


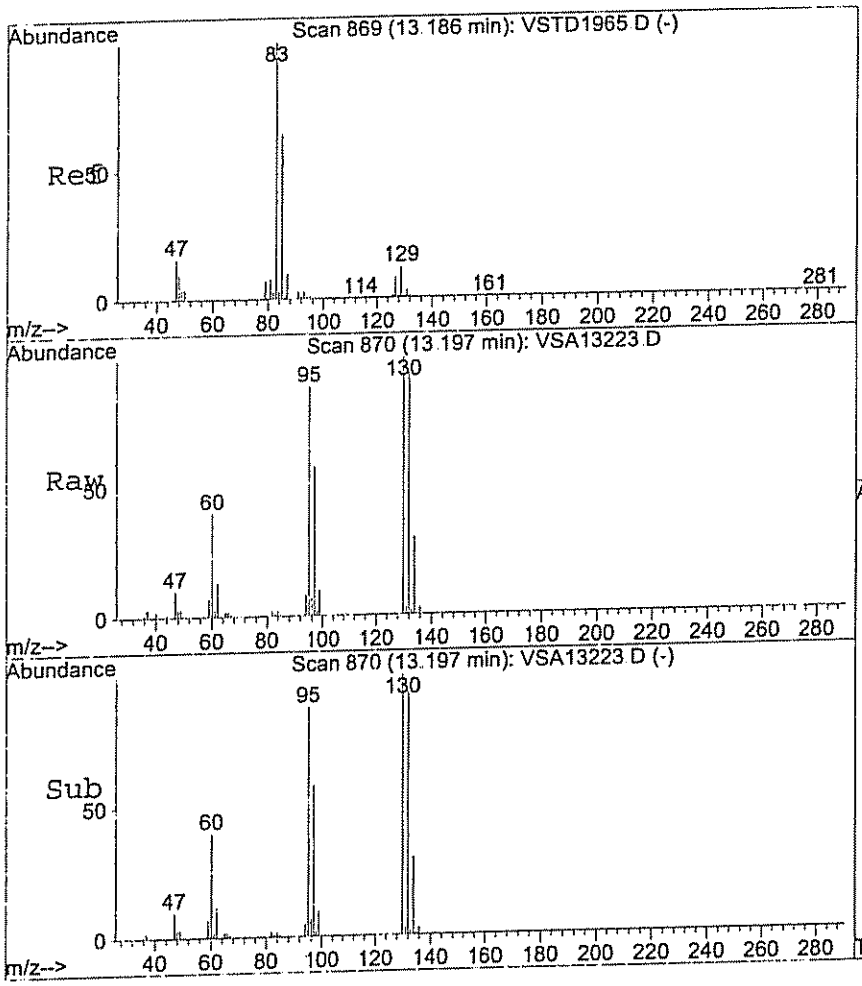


#22
Trichloroethene
Concen: 184.03 ug/L
RT: 13.21 min Scan# 871
Delta R.T. 0.09 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion:130 Resp: 1016221

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	87.1	50.4	110.4
132	95.2	66.6	126.6

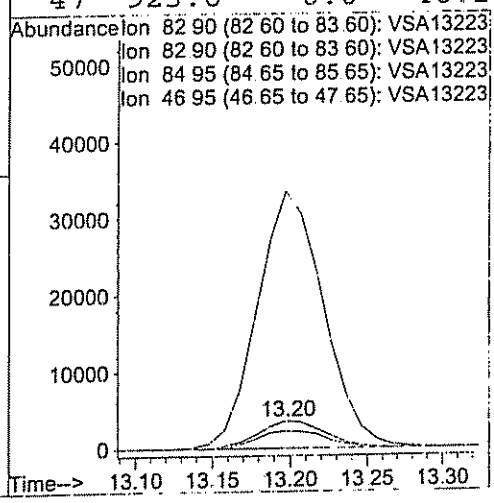


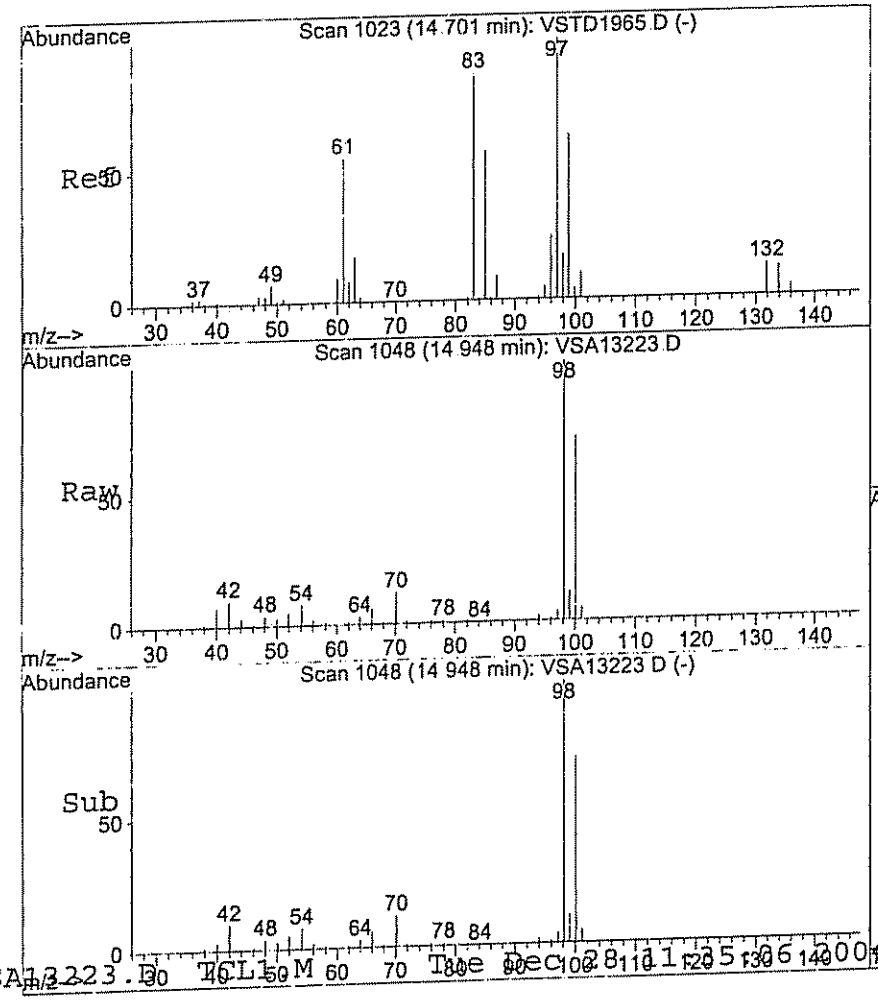


#24
Bromodichloromethane
Concen: 2.16 ug/L
RT: 13.20 min Scan# 870
Delta R.T. 0.01 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 83 Resp: 10706

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	63.4	33.9	93.9
47	923.6	0.0	46.1#

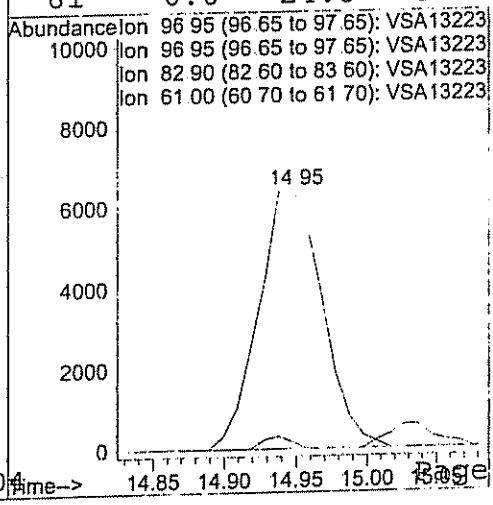


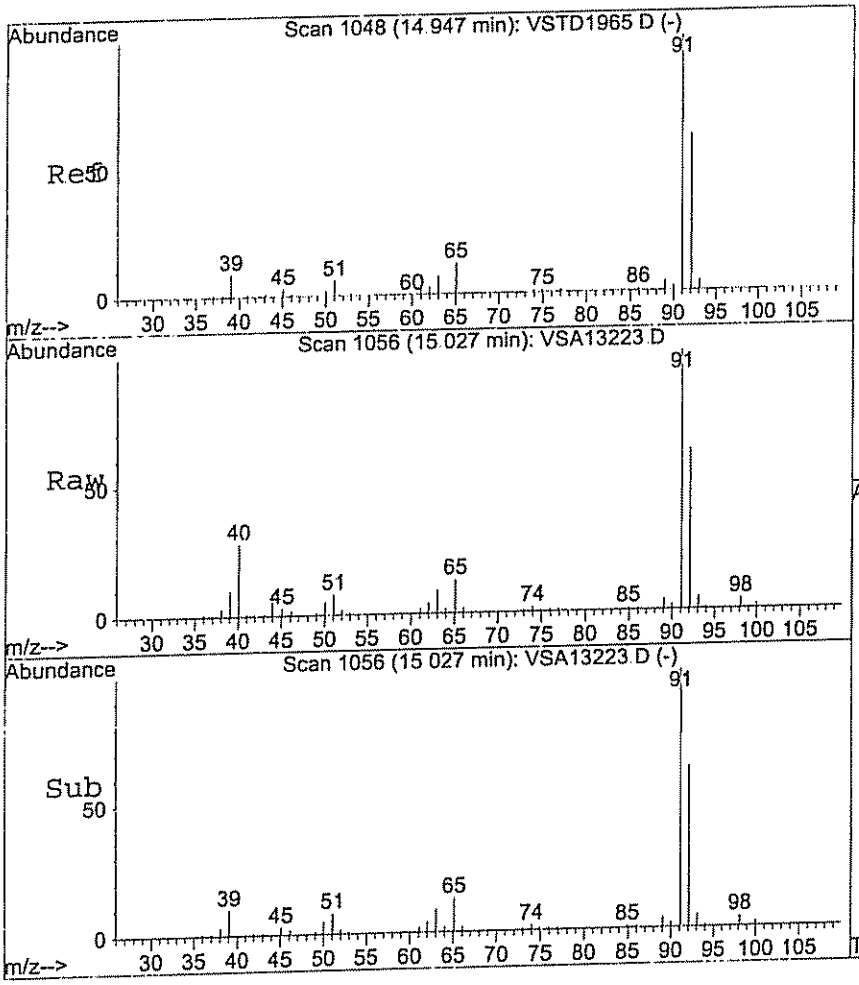


#27
1,1,2-Trichloroethane
Concen: 5.57 ug/L
RT: 14.95 min Scan# 1048
Delta R.T. 0.25 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 97 Resp: 19612

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	2.5	56.9	116.9#
61	0.0	24.6	84.6#

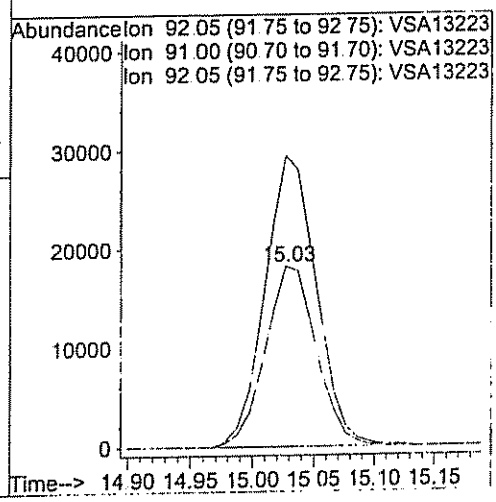


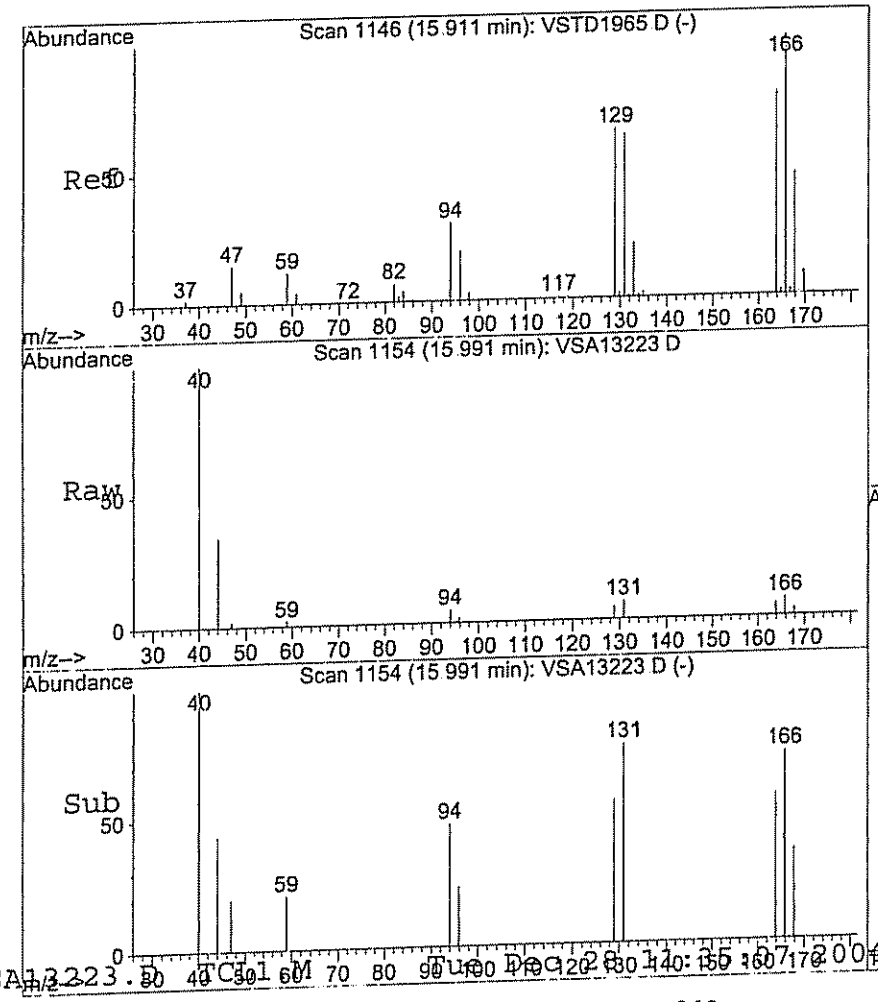


#33
Toluene
Concen: 5.71 ug/L
RT: 15.03 min Scan# 1056
Delta R.T. 0.08 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 92 Resp: 52400

Ion	Ratio	Lower	Upper
92	100		
91	161.3	132.6	192.6
92	100.0	70.0	130.0

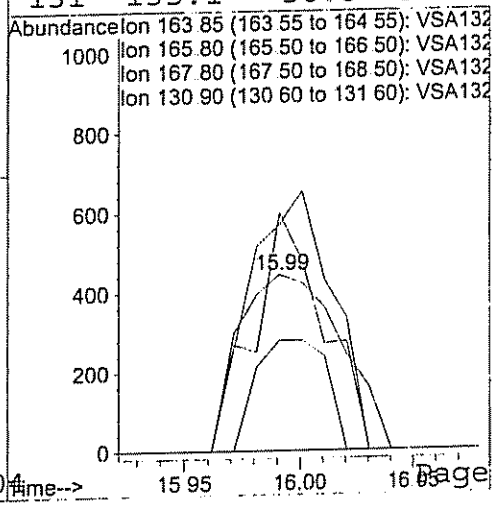


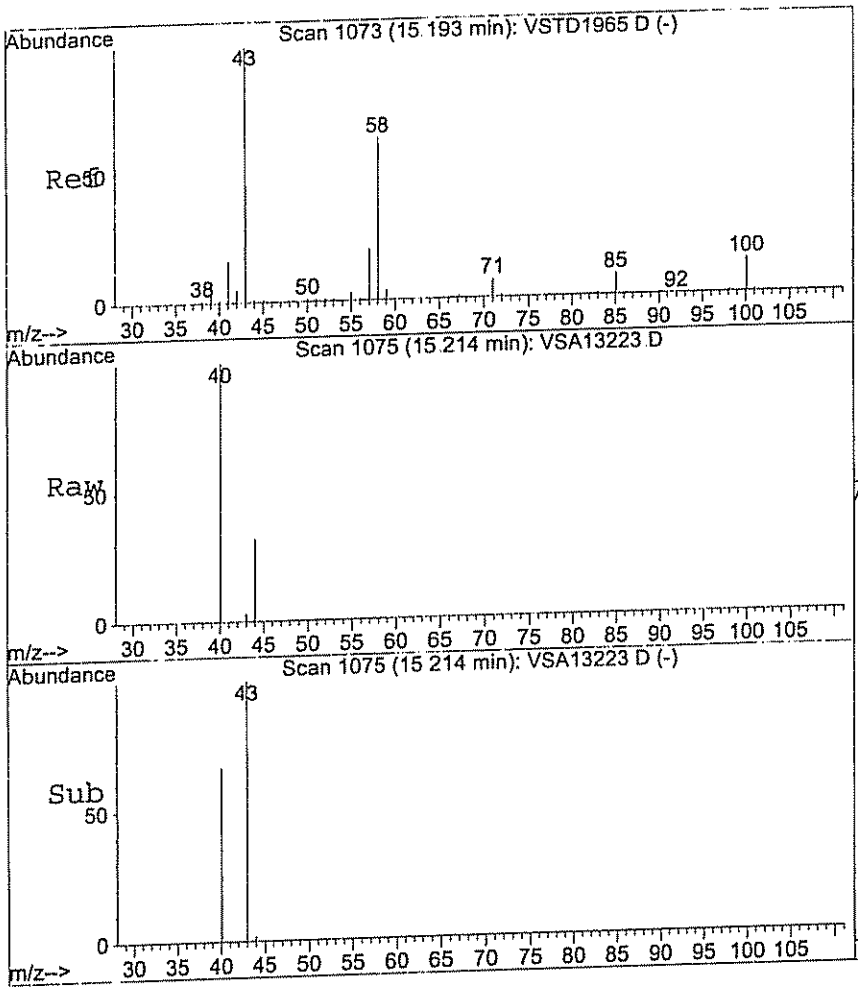


#35
Tetrachloroethene
Concen: 0.40 ug/L
RT: 15.99 min Scan# 1154
Delta R.T. 0.08 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion:164 Resp: 1371

Ion	Ratio	Lower	Upper
164	100		
166	128.2	98.3	158.3
168	62.8	30.5	90.5
131	135.1	50.6	110.6#

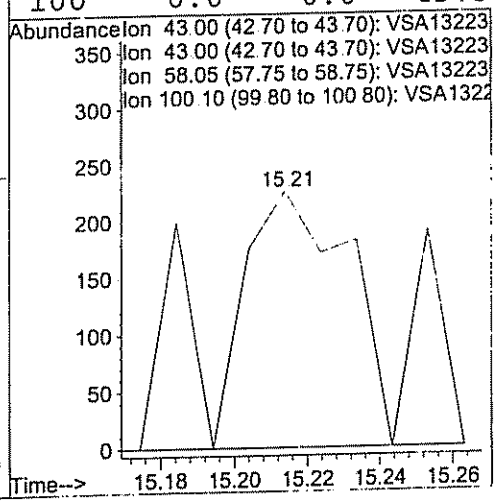


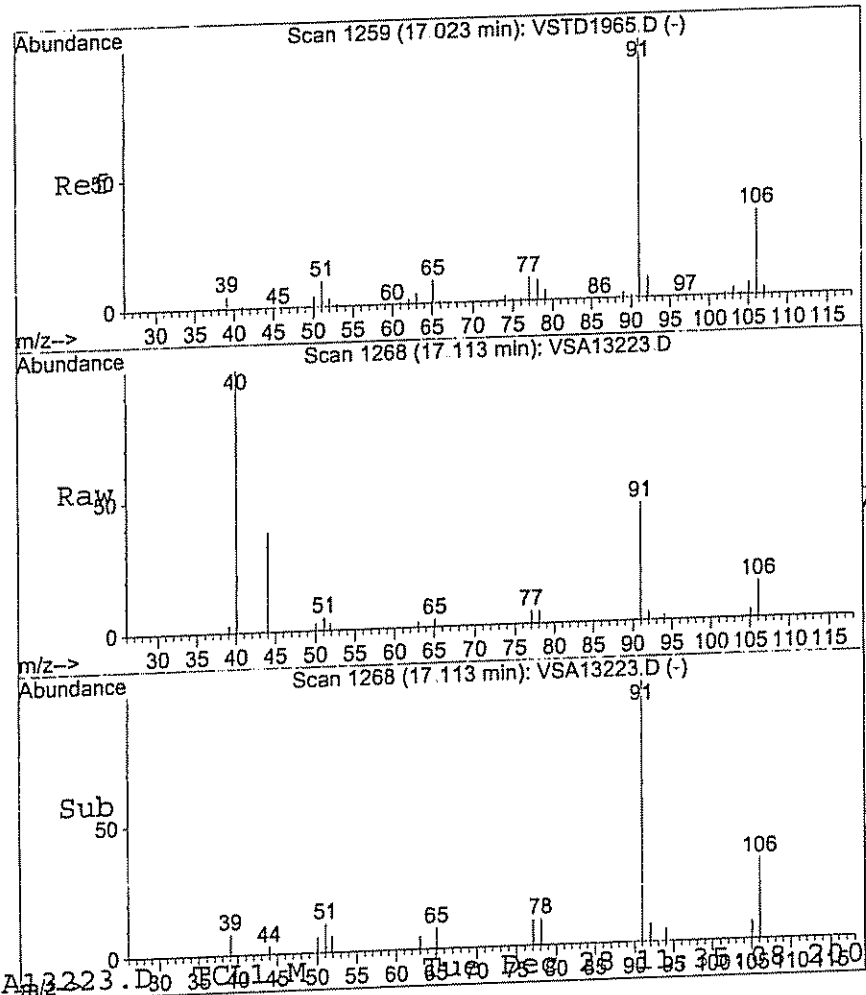


#36
2-Hexanone
Concen: 0.20 ug/L
RT: 15.21 min Scan# 1075
Delta R.T. 0.00 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 43 Resp: 445

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	33.5	93.5#
100	0.0	0.0	43.5

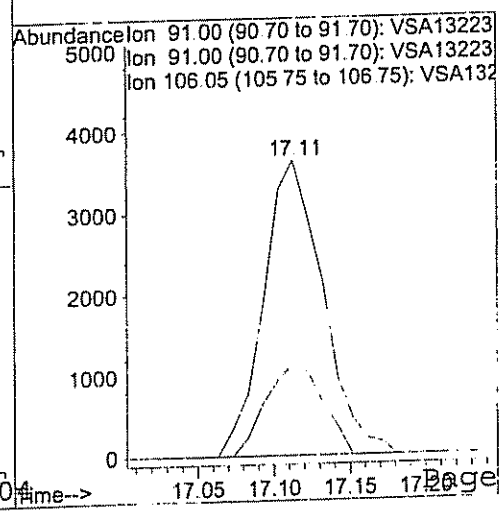


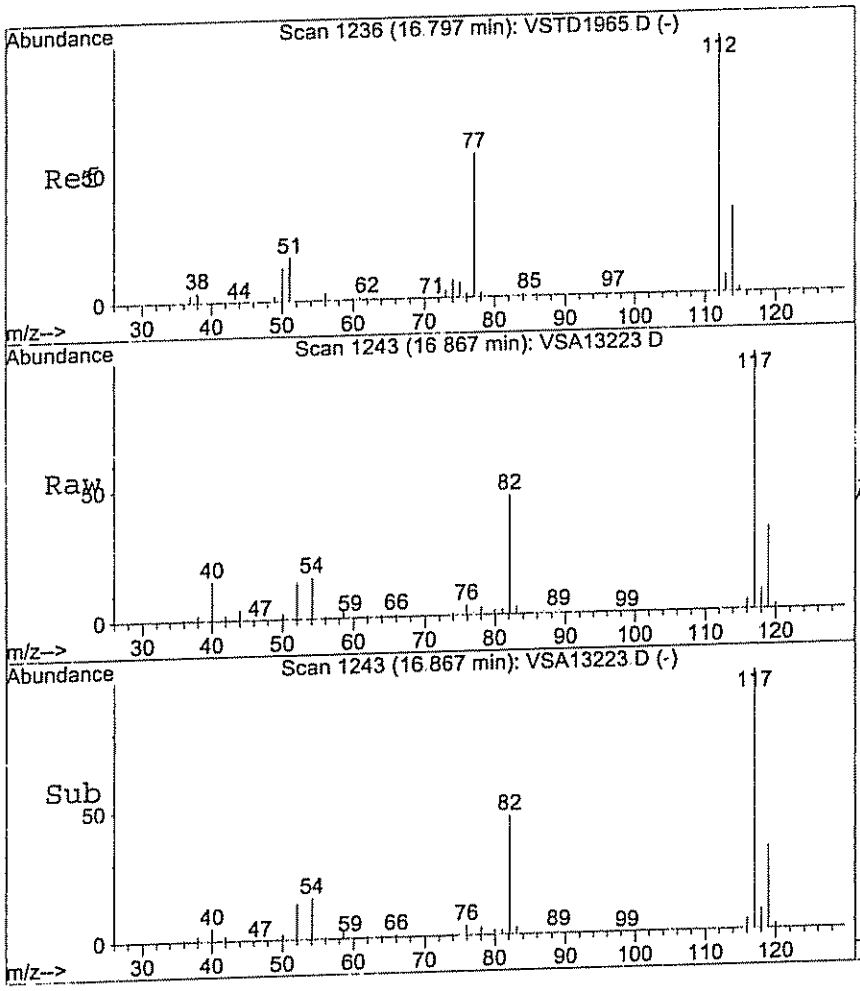


#37
Ethyl benzene
Concen: 0.59 ug/L
RT: 17.11 min Scan# 1268
Delta R.T. 0.09 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion: 91 Resp: 9852

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	31.0	2.9	62.9

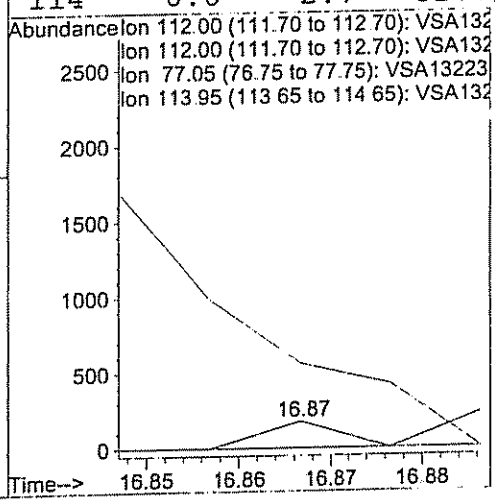


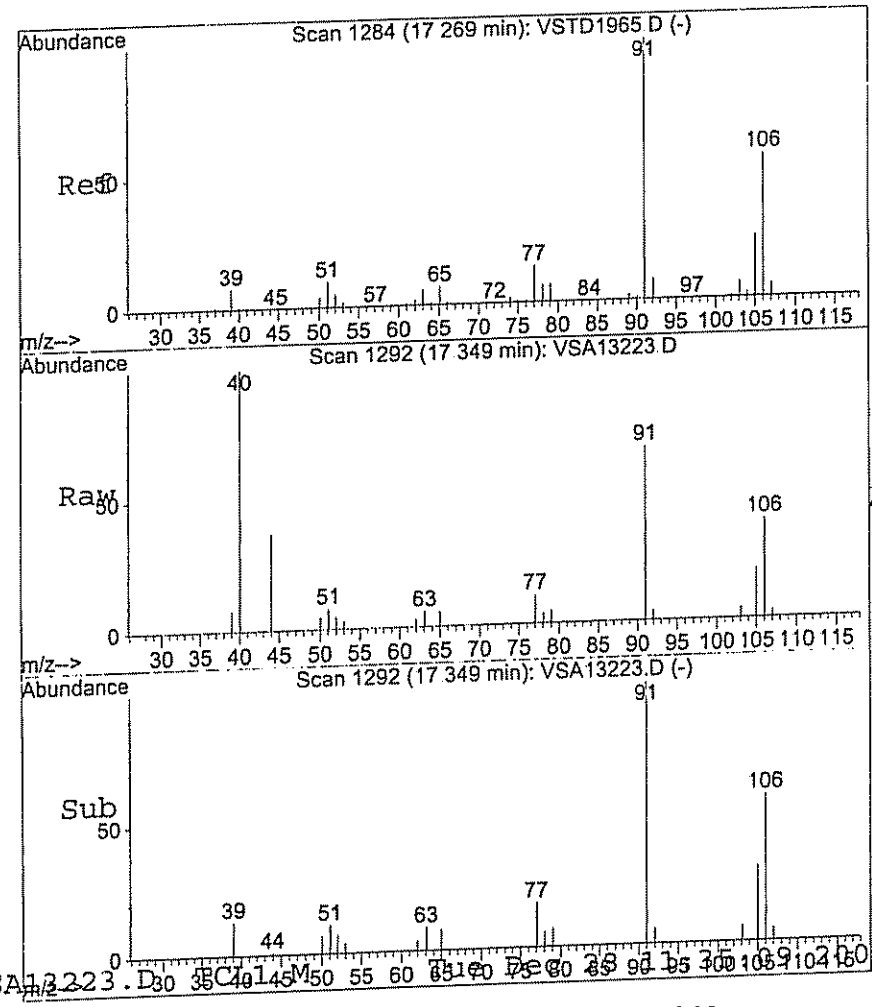


#38
Chlorobenzene
Concen: 0.01 ug/L
RT: 16.87 min Scan# 1243
Delta R.T. 0.07 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion:112 Resp: 104

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	0.0	26.0	86.0#
114	0.0	2.7	62.7#

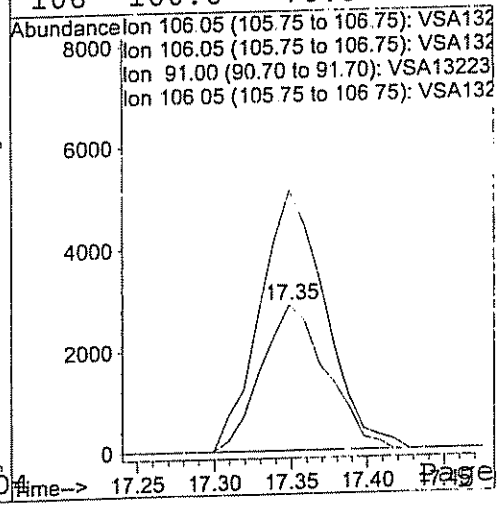


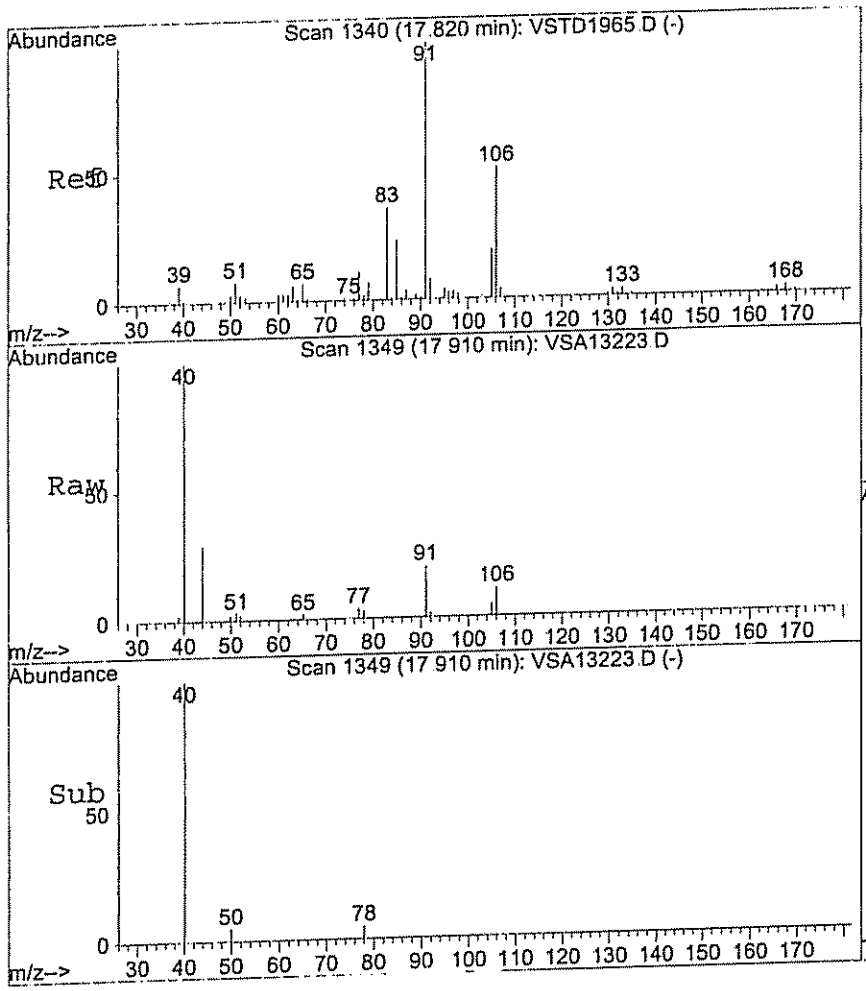


#39
m&p-Xylenes
Concen: 1.26 ug/L
RT: 17.35 min Scan# 1292
Delta R.T. 0.08 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion:106 Resp: 8518

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	174.3	150.2	210.2
106	100.0	70.0	130.0

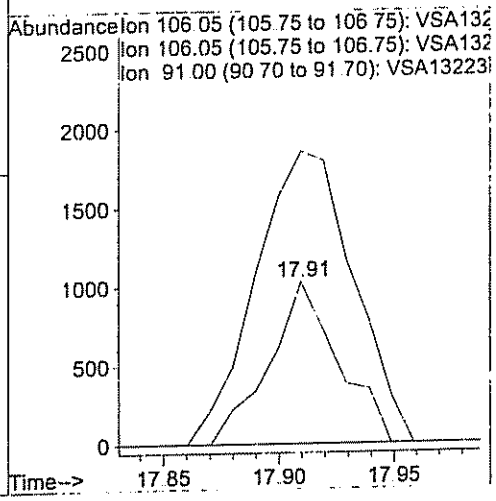


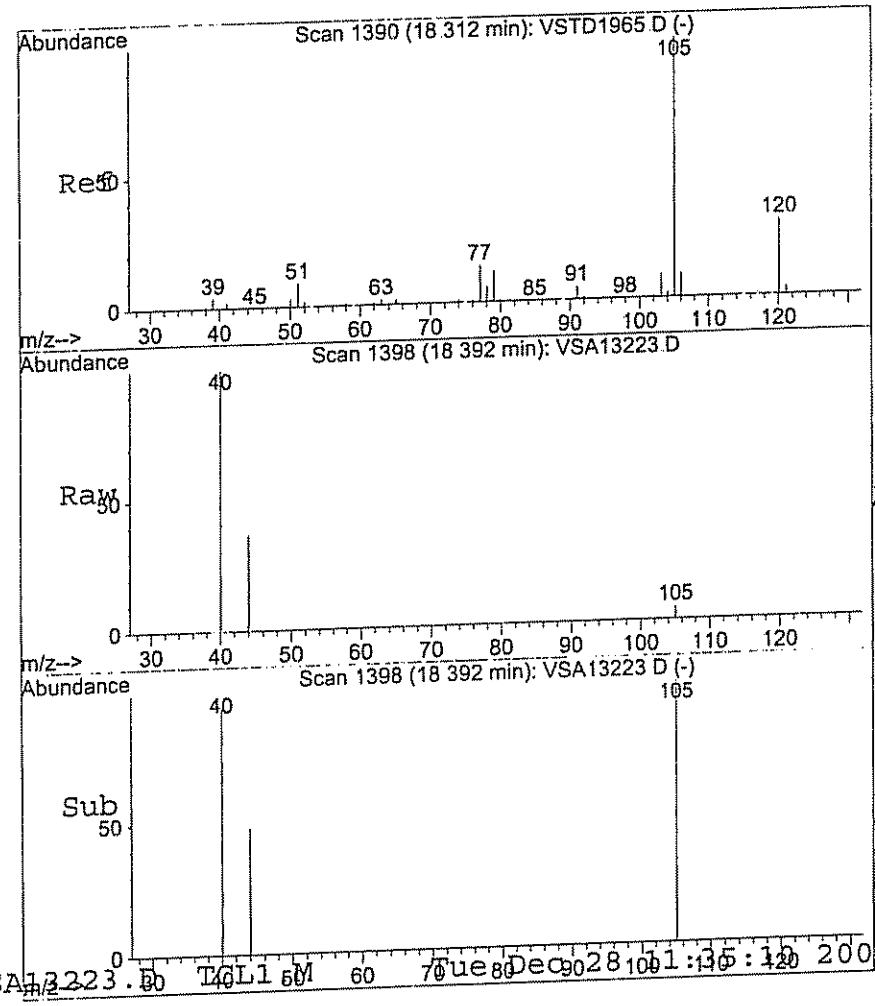


#40
o-Xylene
Concen: 0.33 ug/L
RT: 17.91 min Scan# 1349
Delta R.T. 0.08 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion:106 Resp: 2148

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	155.2	164.9	224.9#

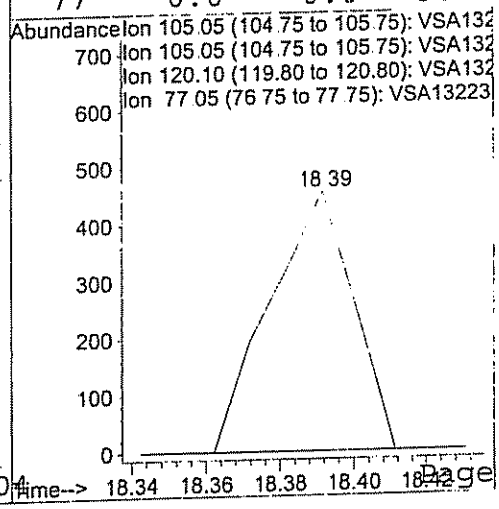


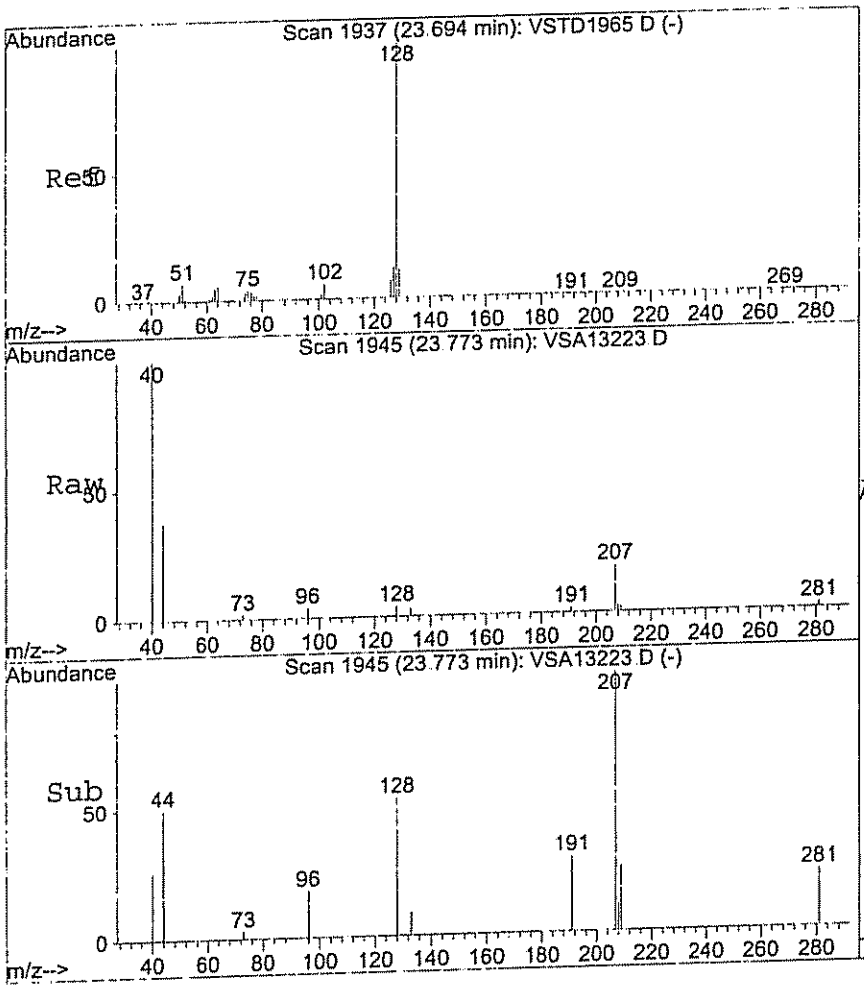


#42
Isopropylbenzene
Concen: 0.04 ug/L
RT: 18.39 min Scan# 1398
Delta R.T. 0.08 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion:105 Resp: 709

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	0.0	0.0	59.3
77	0.0	0.0	30.0

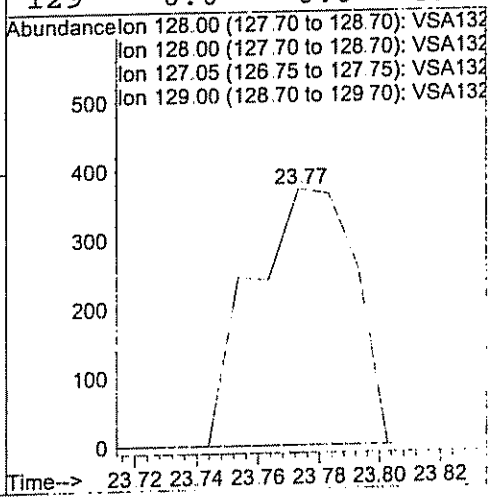




#45
Naphthalene
Concen: 0.06 ug/L
RT: 23.77 min Scan# 1945
Delta R.T. 0.08 min
Lab File: VSA13223.D
Acq: 23 Dec 2004 4:29

Tgt Ion:128 Resp: 873

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	0.0	0.0	40.8



Quantitation Report (QT Reviewed) MWB-2

Data File : C:\HPCHEM\1\DATA\VSA13224.D
Acq On : 23 Dec 2004 5:01
Sample : P0412024-03A DF100 RE
Misc : WATER

Vial: 27
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:35 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	11.01	128	150794	50.00 ug/L	0.09
18) 1,4-Difluorobenzene	12.67	114	849995	50.00 ug/L	0.09
31) Chlorobenzene-d5	16.84	117	769531	50.00 ug/L	0.08

System Monitoring Compounds					
16) 1,2-Dichloroethane-d4	11.74	65	207047	56.03 ug/L	0.08
Spiked Amount 50.000	Range 70 - 130		Recovery = 112.06%		
32) Toluene-d8	14.94	98	638188	50.84 ug/L	0.09
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.68%		
43) 4-Bromofluorobenzene	18.46	95	235712	49.53 ug/L	0.08
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.06%		

Target Compounds					Qvalue
2) Chloromethane	6.34	50	217	0.05 ug/L #	85
3) Vinyl chloride	6.64	62	26163	5.96 ug/L	99
4) Bromomethane	7.18	94	328	0.12 ug/L #	72
6) 1,1-Dichloroethene	8.86	96	36309	10.78 ug/L	98
7) Carbon disulfide	9.39	76	238	0.02 ug/L	100
8) Methylene chloride	9.03	84	27434	6.42 ug/L	91
9) Acetone	8.36	43	4276	3.69 ug/L	94
10) trans-1,2-Dichloroethene	9.85	96	55581	13.73 ug/L	99
12) 1,1-Dichloroethane	10.13	63	46996	6.96 ug/L	99
13) cis-1,2-Dichloroethene	10.80	96	5264254	1121.81 ug/L	94
14) Chloroform	11.04	83	842	0.14 ug/L #	66
15) 2-Butanone	10.67	43	1895	1.05 ug/L	96
17) 1,2-Dichloroethane	11.83	62	16170	3.81 ug/L	93
20) 1,1,1-Trichloroethane	11.96	97	58091	11.93 ug/L	97
21) Benzene	12.45	78	15663	0.92 ug/L	97
22) Trichloroethene	13.20	130	1513402	273.57 ug/L	97
24) Bromodichloromethane	13.20	83	15882	~~3.19 ug/L #~~	1
33) Toluene	15.03	92	460695	49.90 ug/L	100
34) 4-methyl-2-Pentanone	14.24	43	445	0.14 ug/L #	77
35) Tetrachloroethene	16.00	164	848	0.24 ug/L #	58
36) 2-Hexanone	15.03	43	7197	3.22 ug/L #	68
37) Ethyl benzene	17.12	91	39243	2.33 ug/L	99
38) Chlorobenzene	16.88	112	828	0.07 ug/L #	67

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

VSA13224.D TCL1.M Tue Dec 28 11:36:20 2004

Page 1

DF100

rsee DF 500 1/2/05

Data File : C:\HPCHEM\1\DATA\VSA13224.D
Acq On : 23 Dec 2004 5:01
Sample : P0412024-03A DF100 RE
Misc : WATER

Vial: 27
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:35 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) m&p-Xylenes	17.35	106	20109	2.95	ug/L	100
40) o-Xylene	17.91	106	6544	0.99	ug/L	94
42) Isopropylbenzene	18.39	105	1466	0.09	ug/L #	88
45) Naphthalene	23.78	128	3251	0.24	ug/L #	97

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

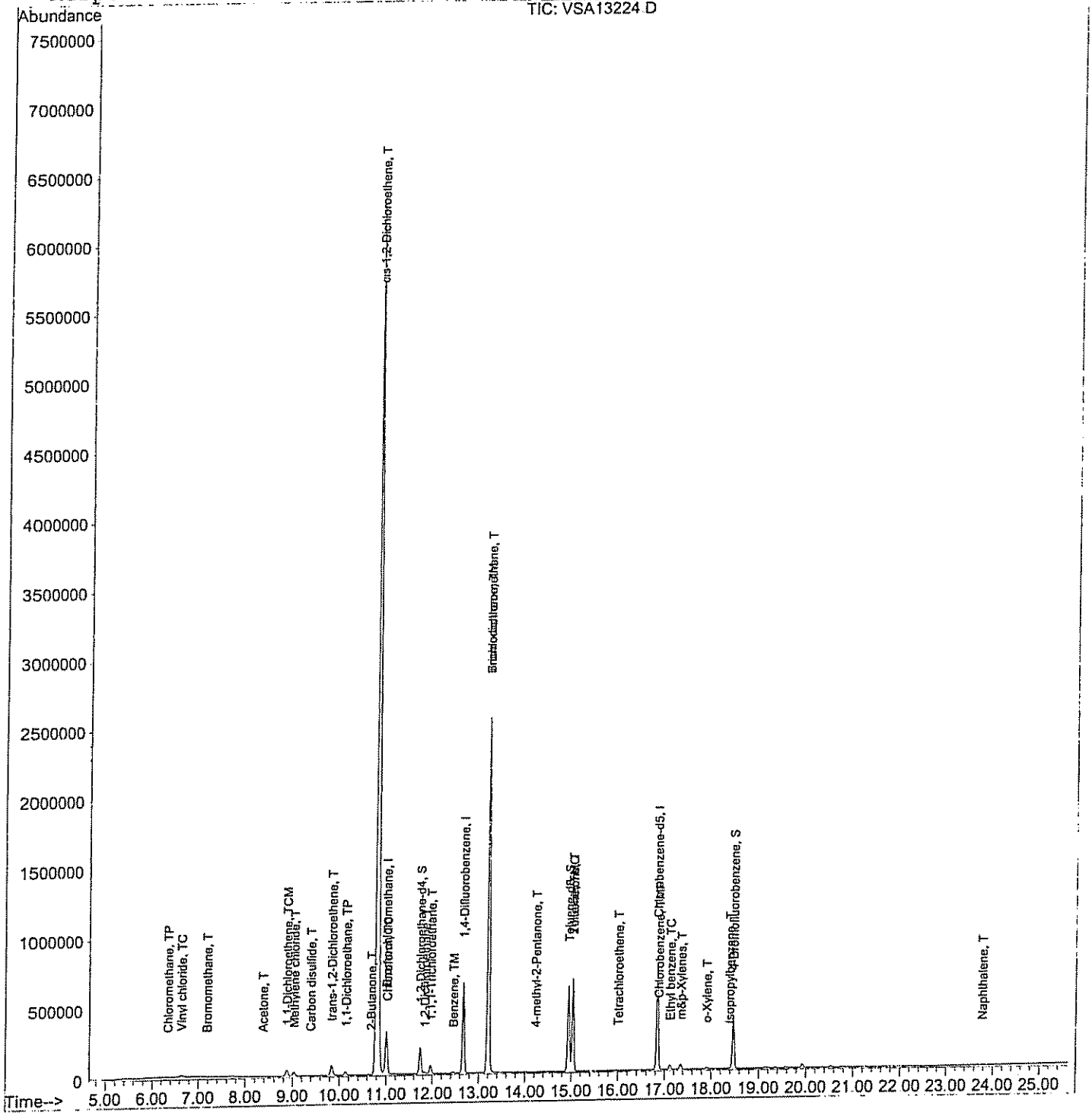
Data File : C:\HPCHEM\1\DATA\VSA13224.D
Acq On : 23 Dec 2004 5:01
Sample : P0412024-03A DF100 RE
Misc : WATER

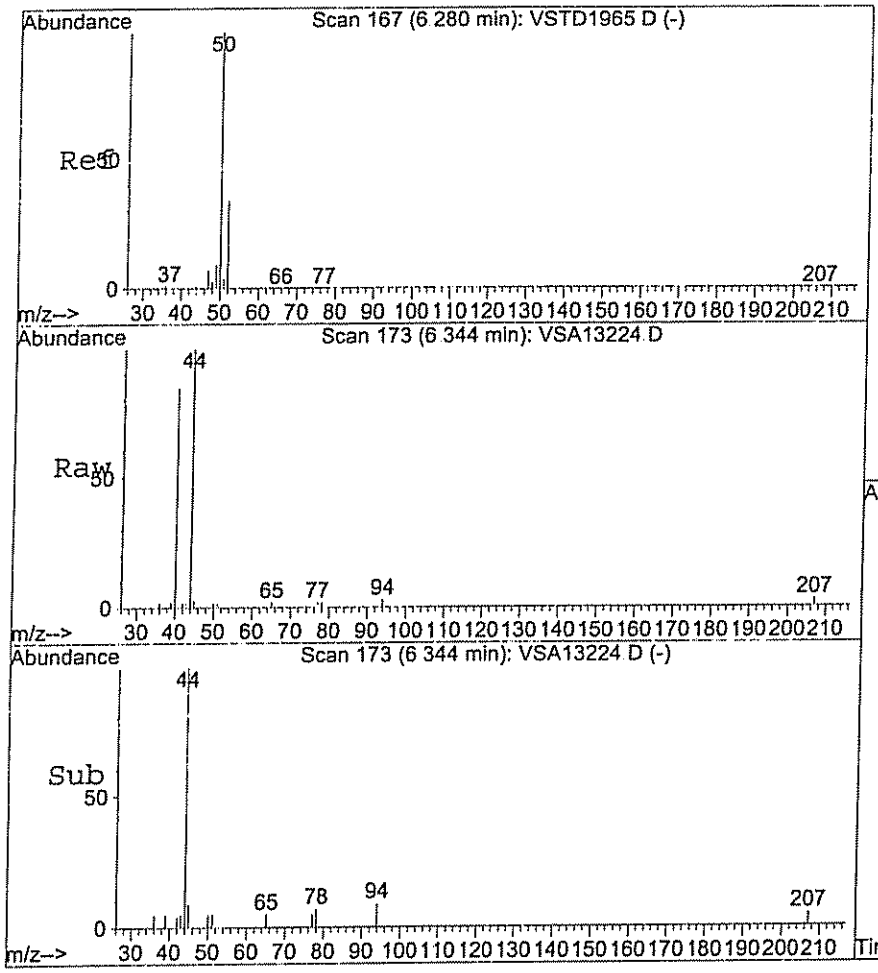
Vial: 27
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:35 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration

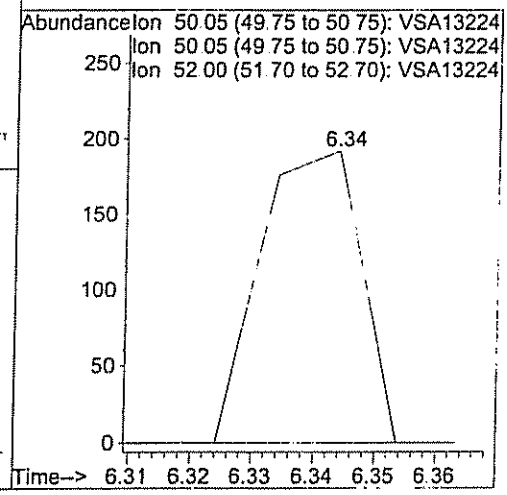


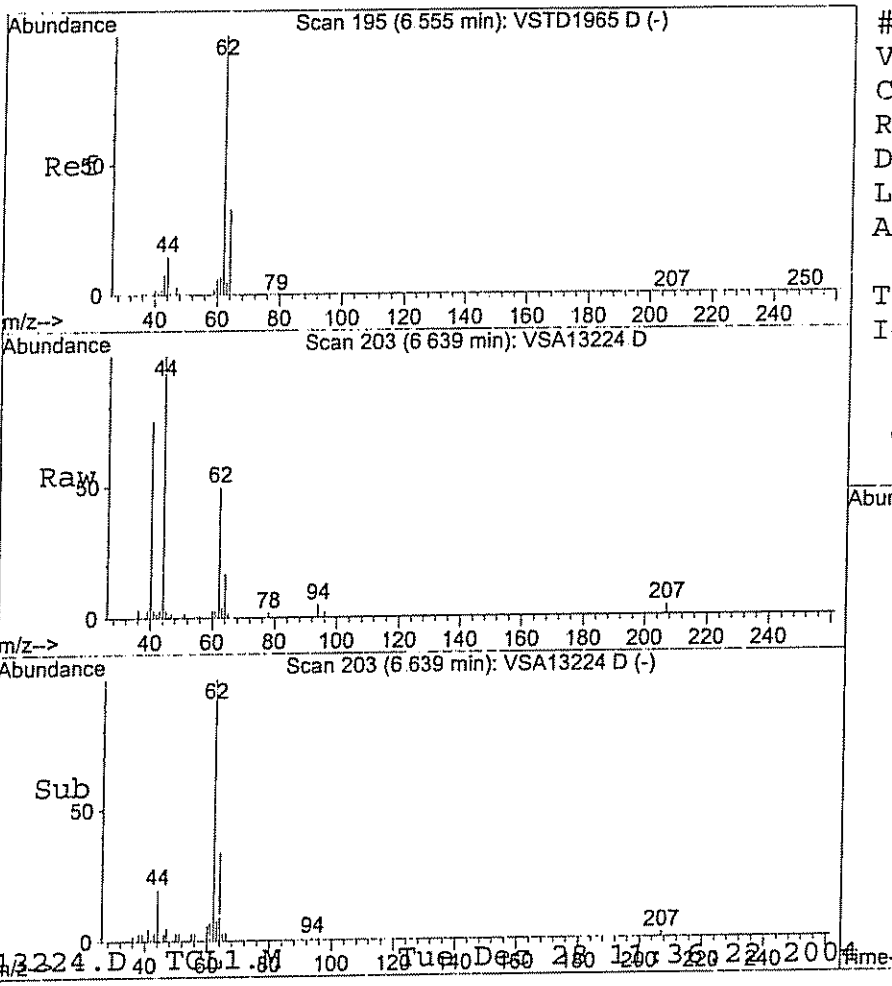


#2
Chloromethane
Concen: 0.05 ug/L
RT: 6.34 min Scan# 173
Delta R.T. 0.07 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 50 Resp: 217

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.9	63.9#

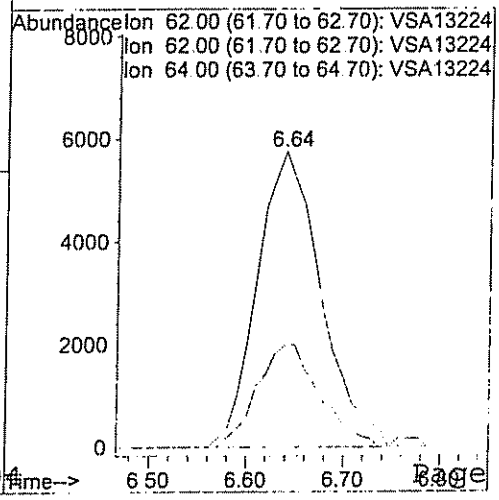


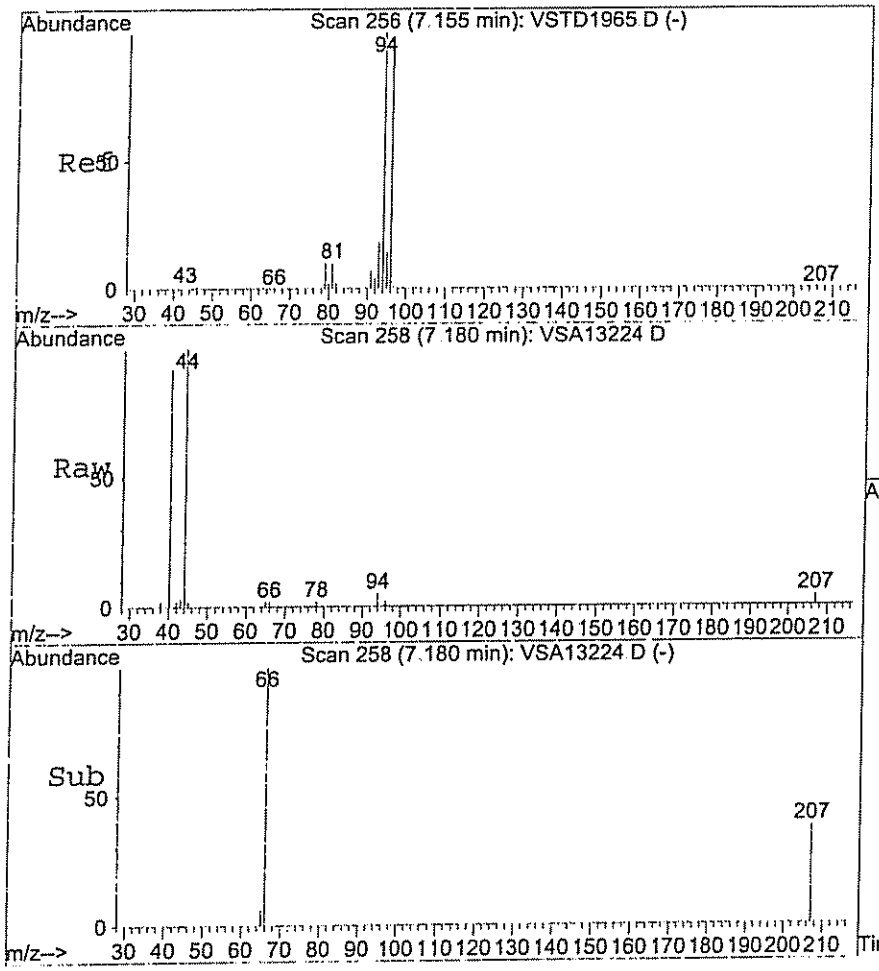


#3
Vinyl chloride
Concen: 5.96 ug/L
RT: 6.64 min Scan# 203
Delta R.T. 0.08 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 62 Resp: 26163

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	34.4	2.4	62.4

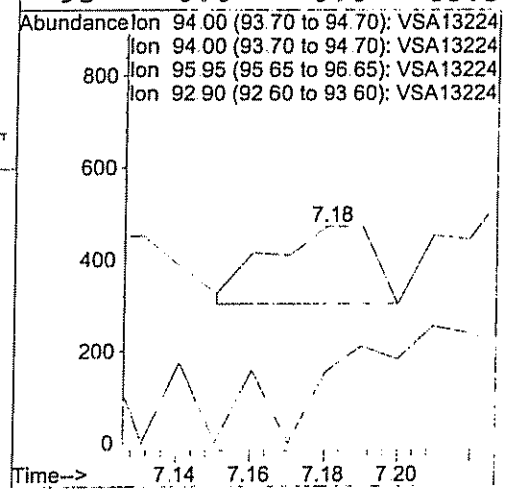


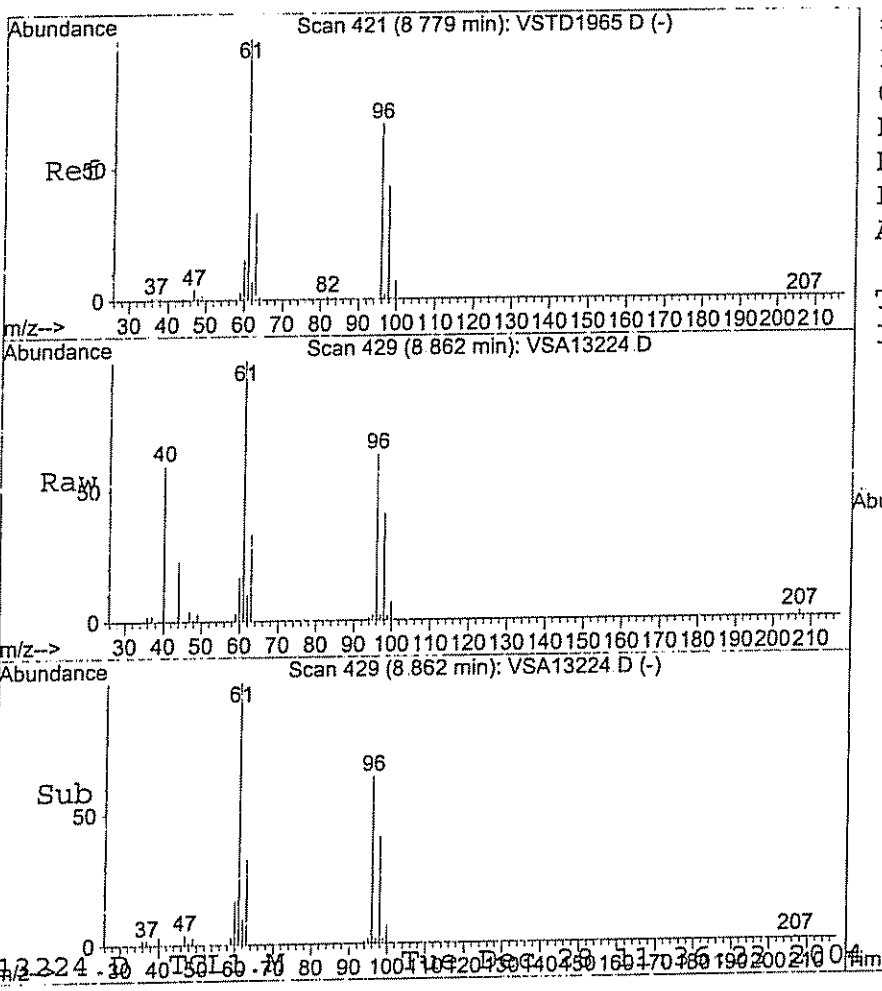


#4
Bromomethane
Concen: 0.12 ug/L
RT: 7.18 min Scan# 258
Delta R.T. 0.02 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 94 Resp: 328

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	40.0	63.6	123.6#
93	0.0	0.0	48.5

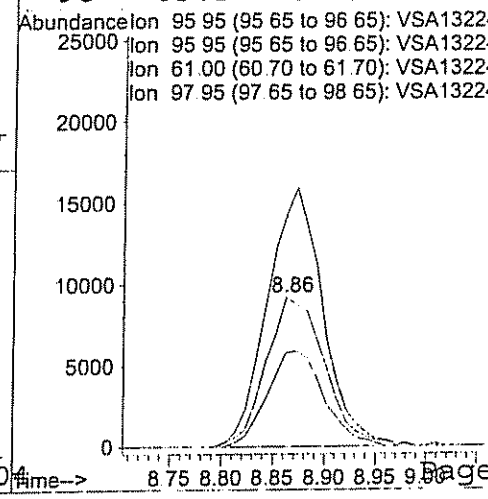


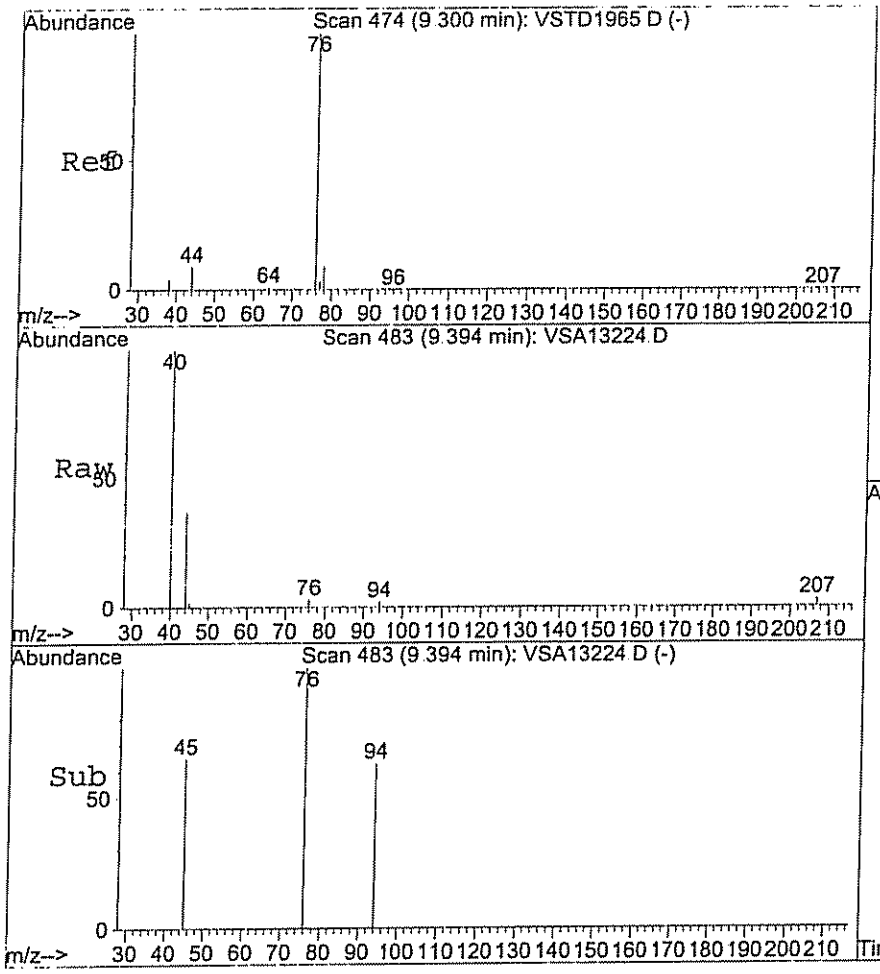


#6
1,1-Dichloroethene
Concen: 10.78 ug/L
RT: 8.86 min Scan# 429
Delta R.T. 0.09 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 96 Resp: 36309

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	154.1	118.9	178.9
98	63.1	34.9	94.9

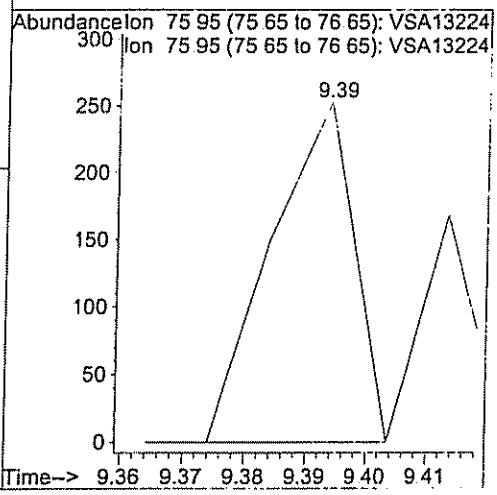


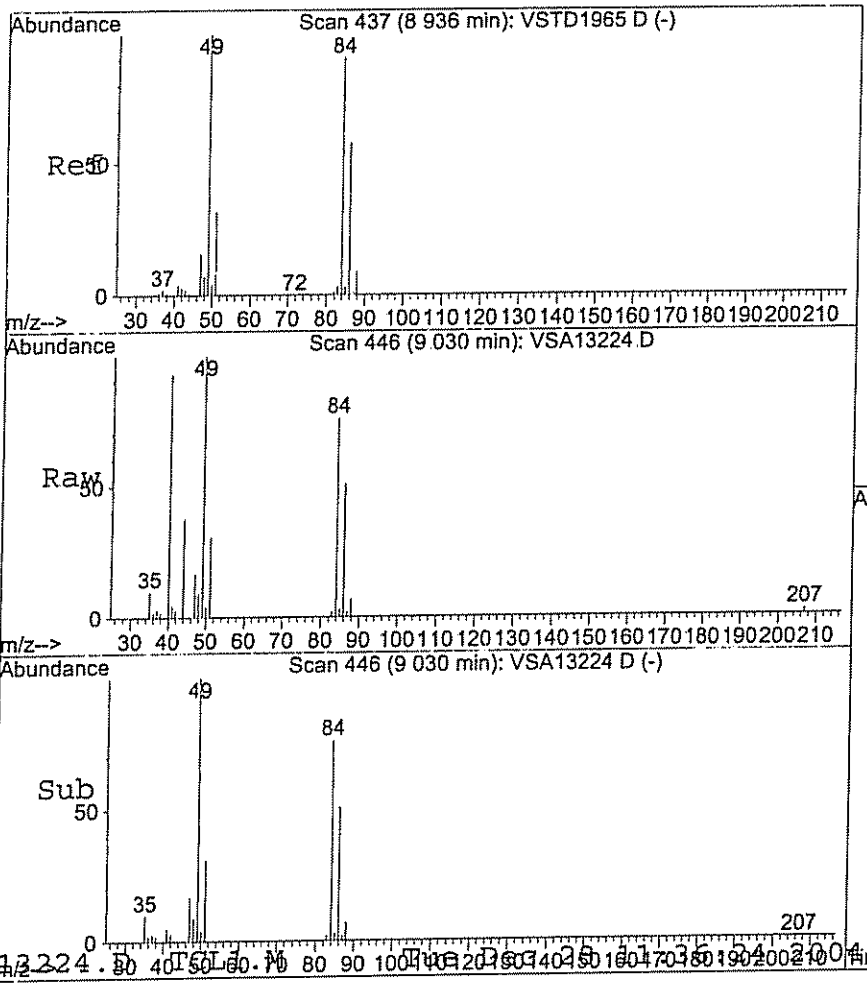


#7
Carbon disulfide
Concen: 0.02 ug/L
RT: 9.39 min Scan# 483
Delta R.T. 0.09 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 76 Resp: 238

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

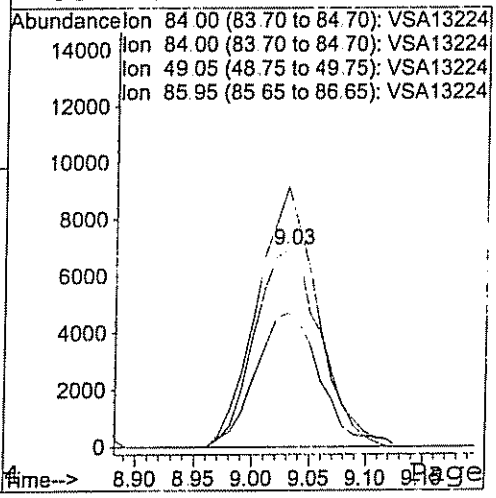


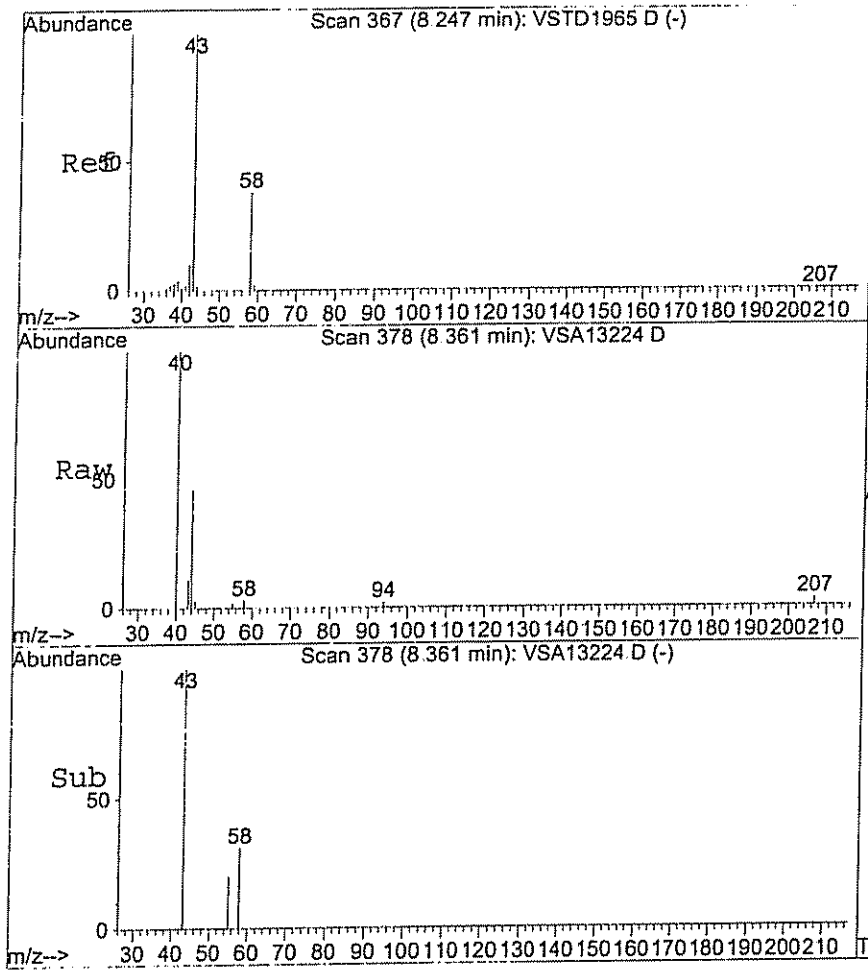


#8
Methylene chloride
Concen: 6.42 ug/L
RT: 9.03 min Scan# 446
Delta R.T. 0.09 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 84 Resp: 27434

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	129.9	80.0	140.0
86	67.6	33.4	93.4

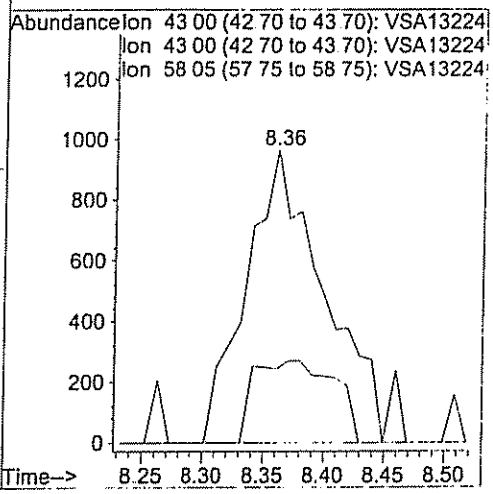


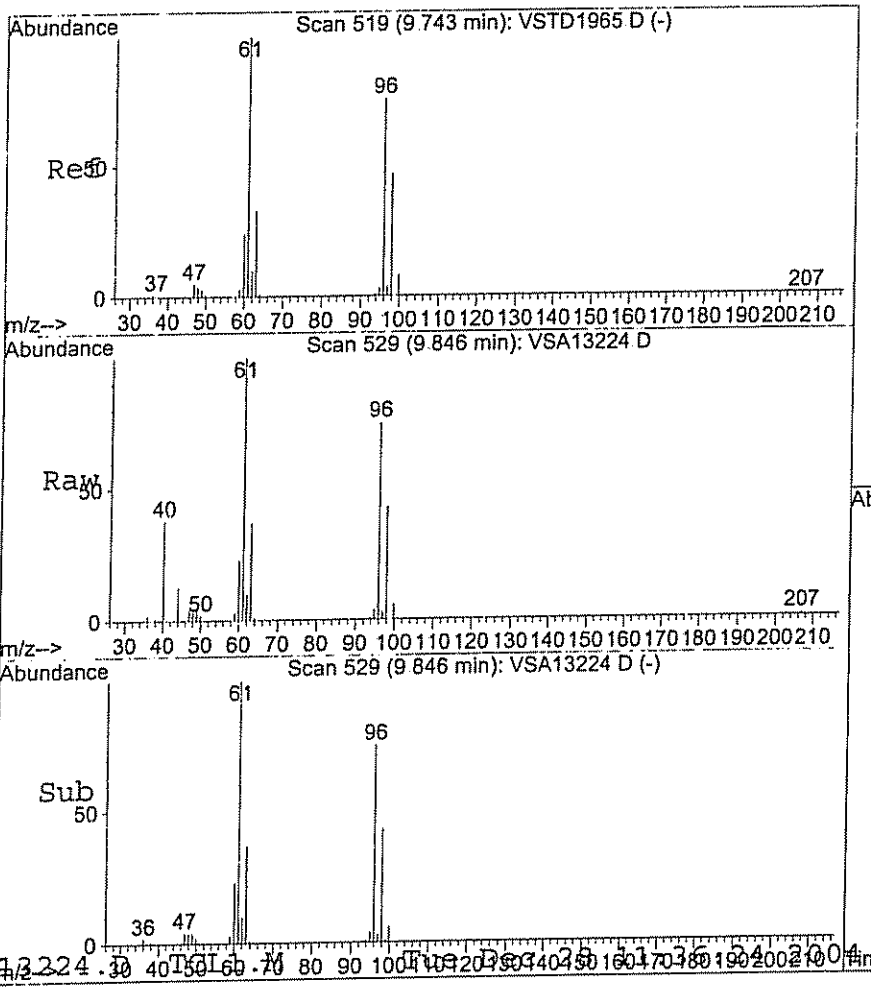


#9
Acetone
Concen: 3.69 ug/L
RT: 8.36 min Scan# 378
Delta R.T. 0.09 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 43 Resp: 4276

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	25.1	7.8	67.8

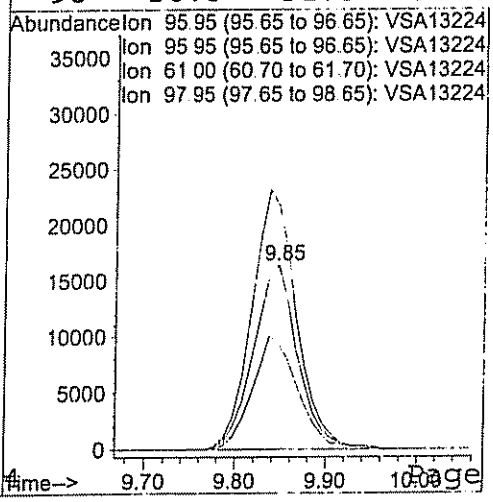


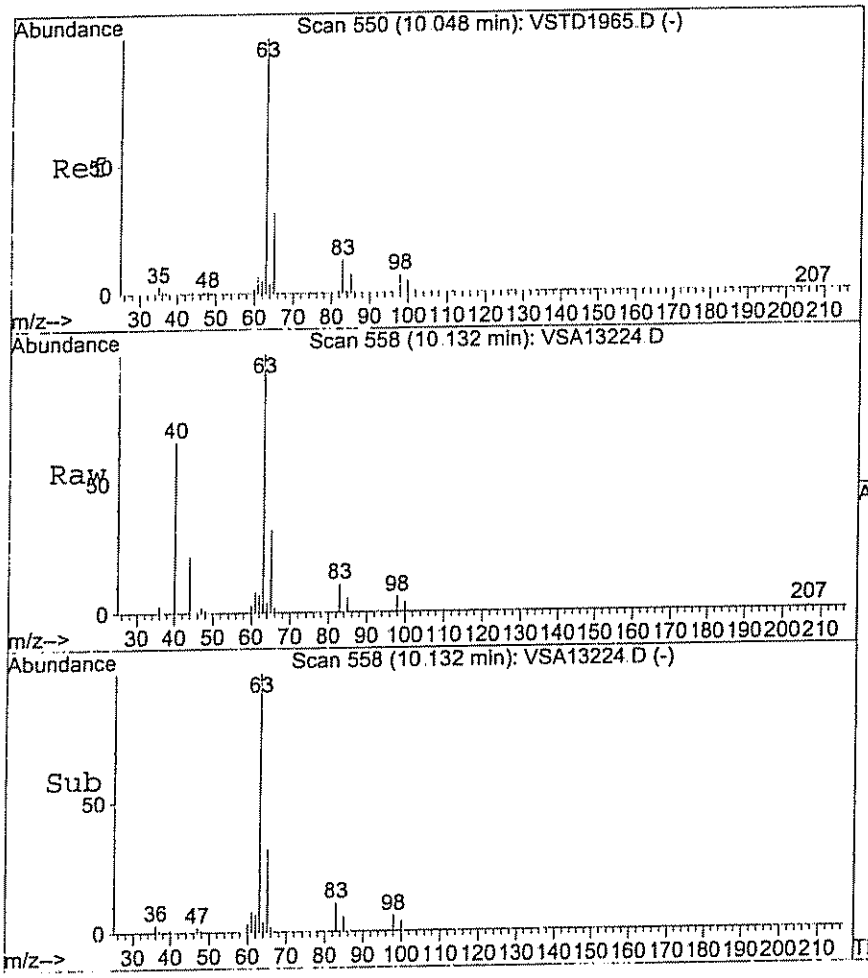


#10
trans-1,2-Dichloroethene
Concen: 13.73 ug/L
RT: 9.85 min Scan# 529
Delta R.T. 0.10 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 96 Resp: 55581

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	132.7	102.4	162.4
98	56.8	31.6	91.6

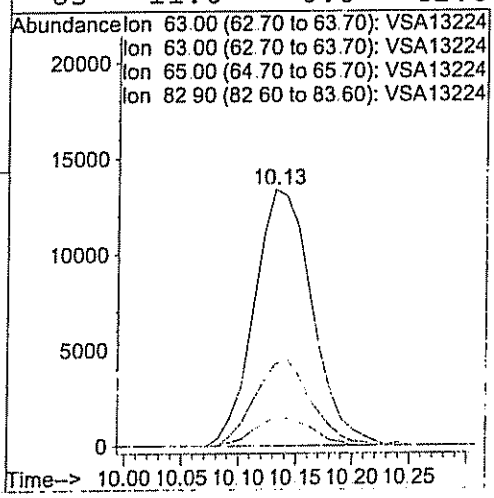


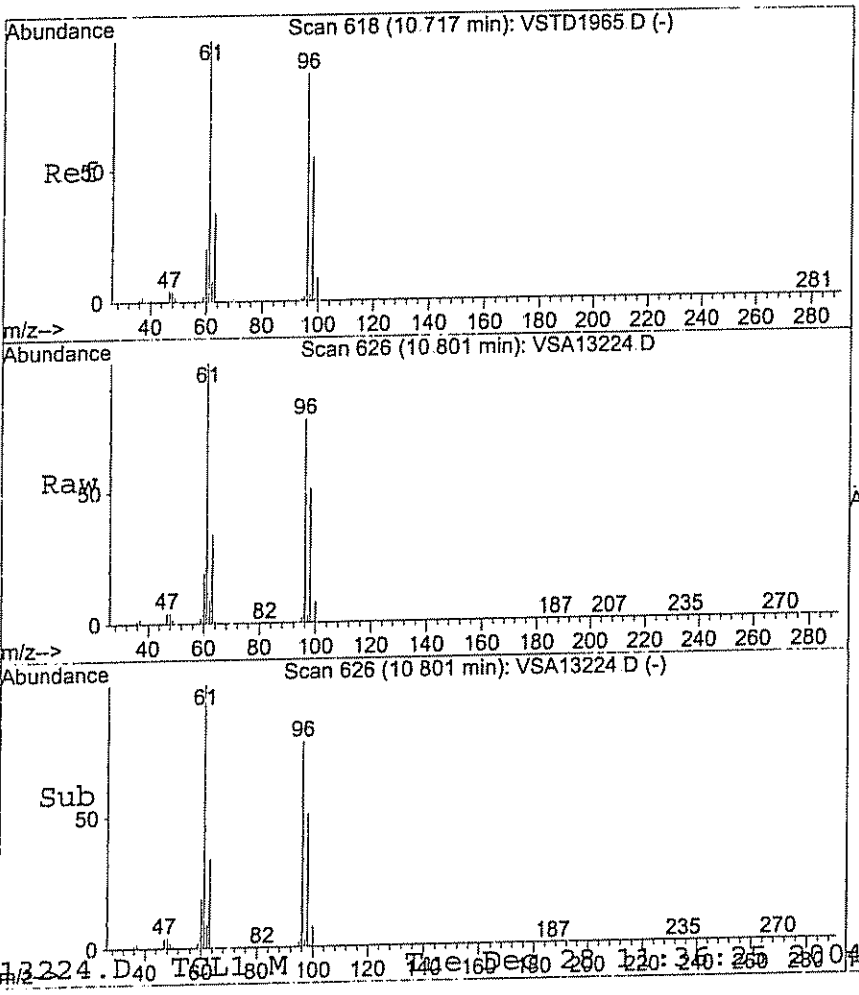


#12
1,1-Dichloroethane
Concen: 6.96 ug/L
RT: 10.13 min Scan# 558
Delta R.T. 0.08 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 63 Resp: 46996

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	31.0	2.1	62.1
83	11.0	0.0	42.6

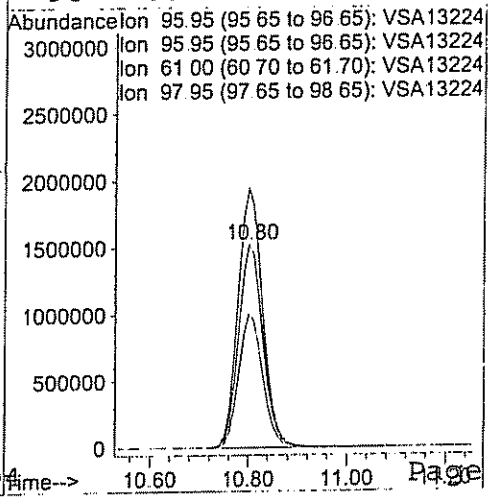


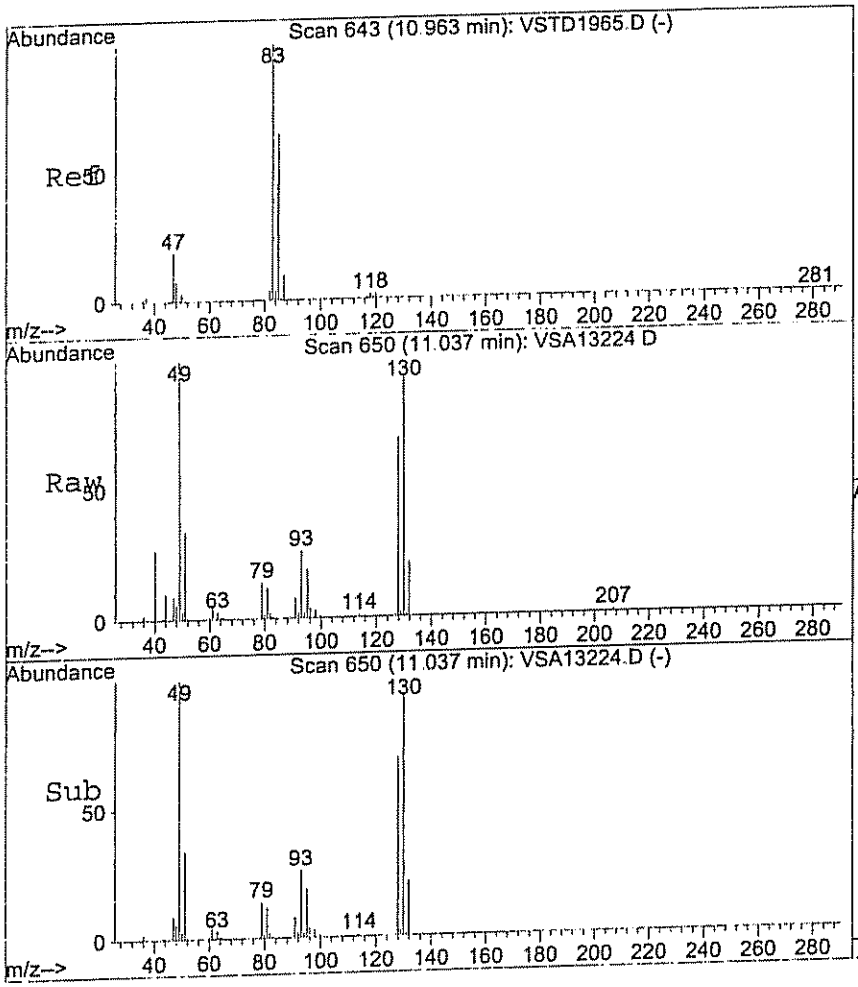


#13
cis-1,2-Dichloroethene
Concen: 1121.81 ug/L
RT: 10.80 min Scan# 626
Delta R.T. 0.08 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 96 Resp: 5264254

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	127.9	85.2	145.2
98	65.9	33.1	93.1

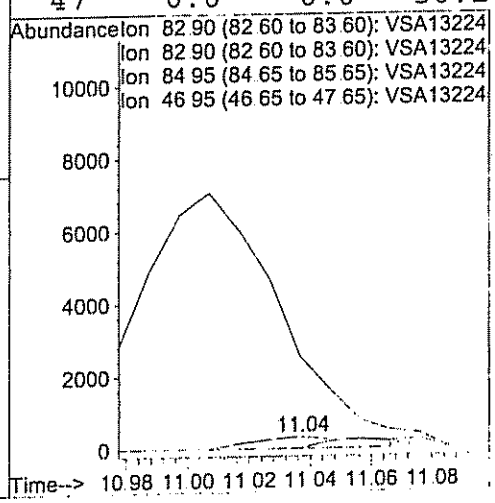


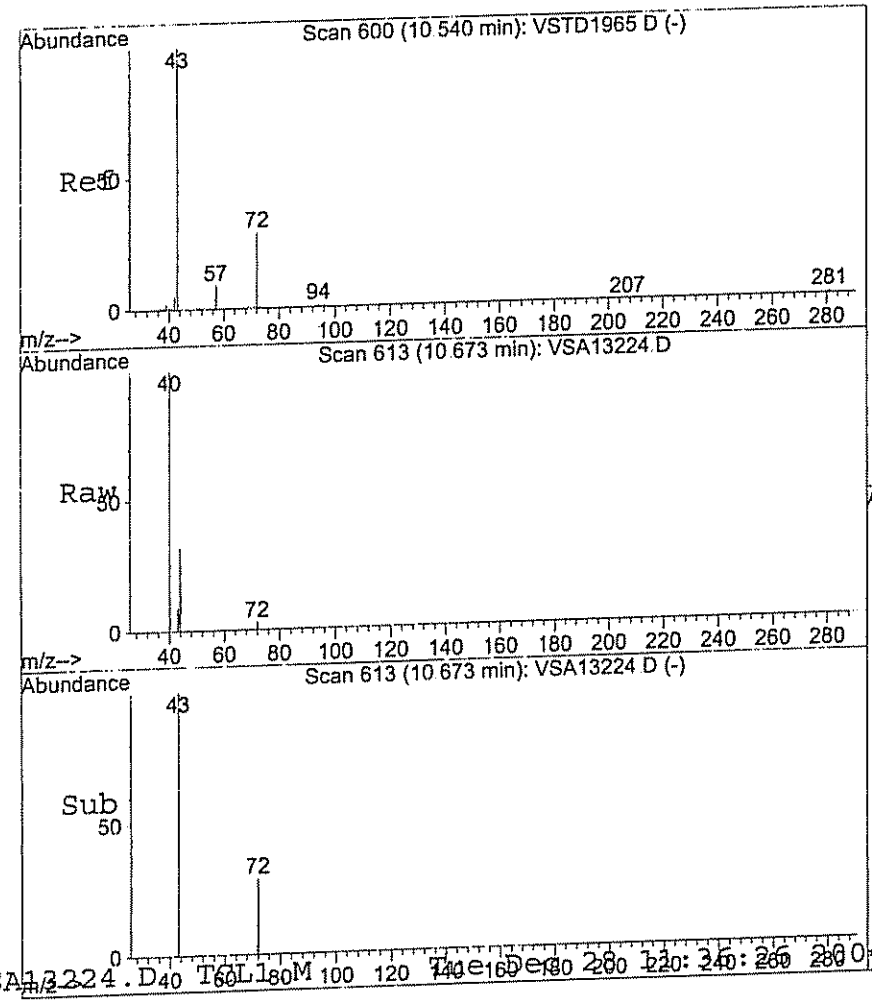


#14
Chloroform
Concen: 0.14 ug/L
RT: 11.04 min Scan# 650
Delta R.T. 0.07 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 83 Resp: 842

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	0.0	34.7	94.7#
47	0.0	0.0	50.1

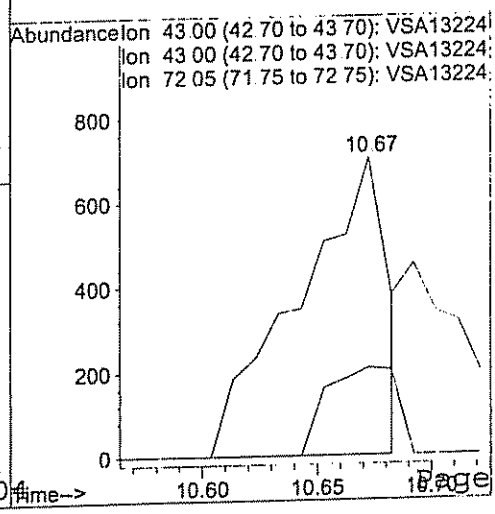


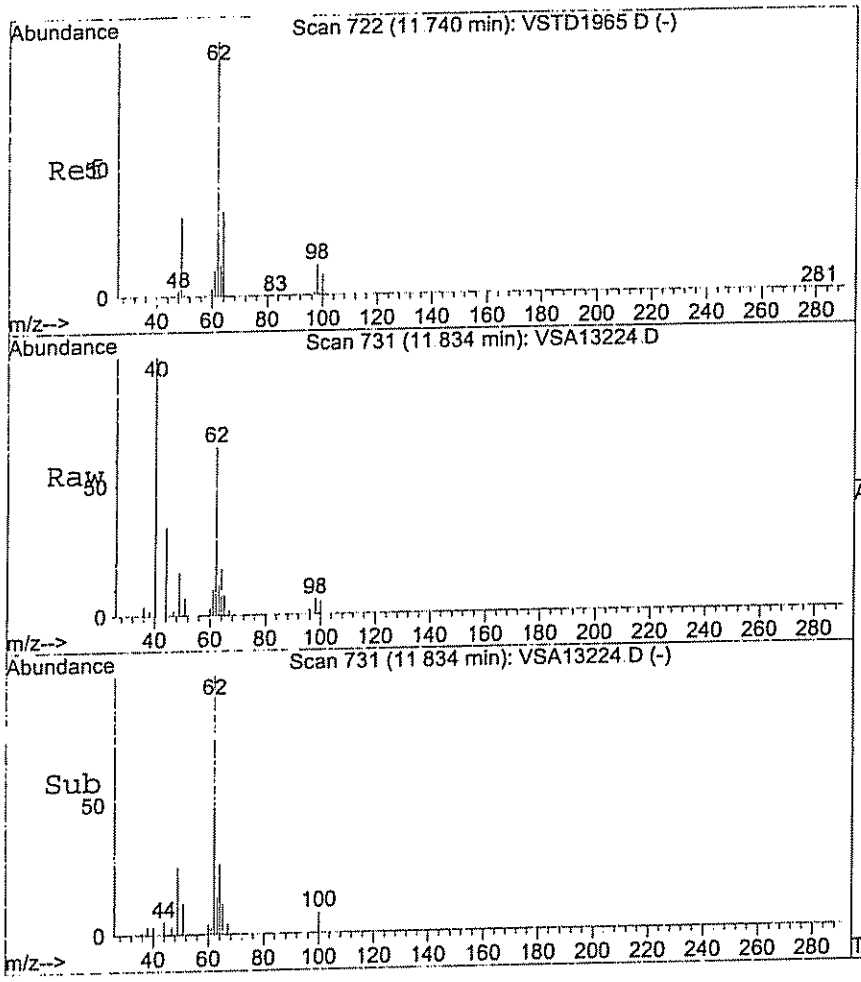


#15
2-Butanone
Concen: 1.05 ug/L
RT: 10.67 min Scan# 613
Delta R.T. 0.11 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 43 Resp: 1895

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	20.6	0.0	59.3

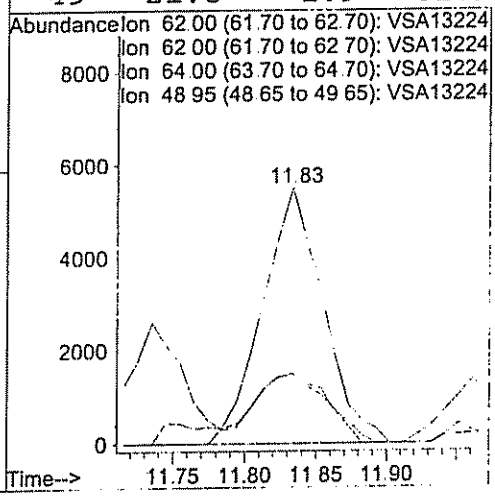


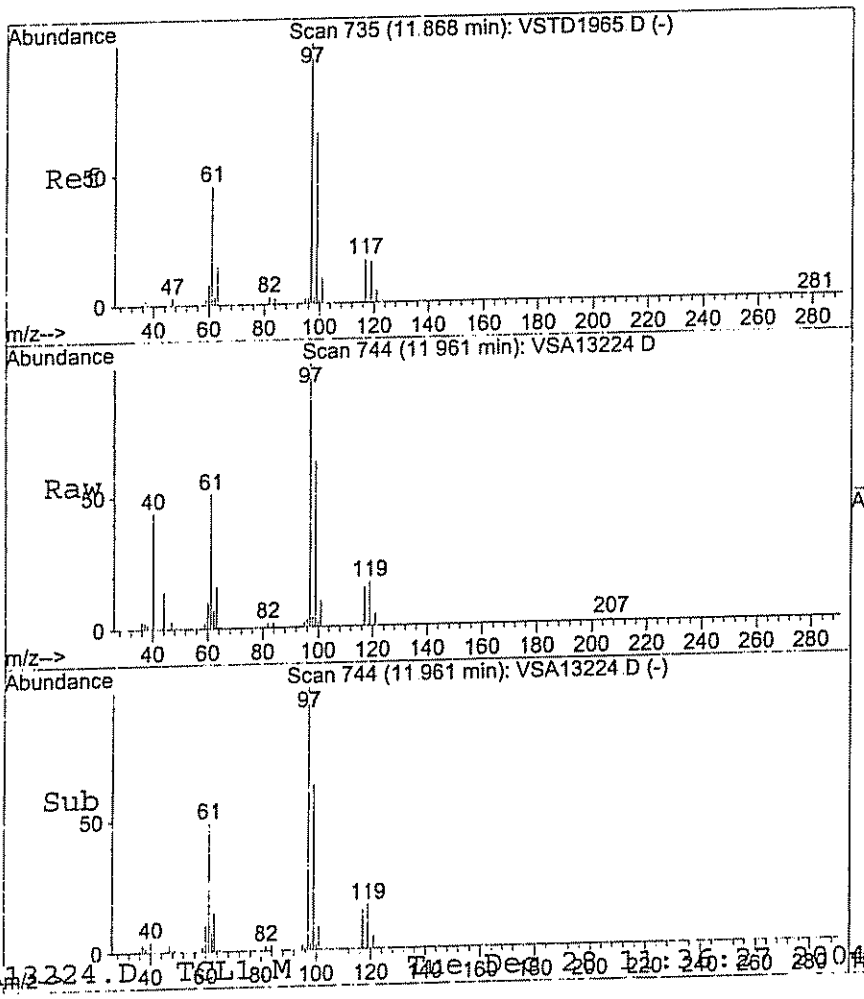


#17
1,2-Dichloroethane
Concen: 3.81 ug/L
RT: 11.83 min Scan# 731
Delta R.T. 0.09 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 62 Resp: 16170

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	23.9	2.9	62.9
49	21.8	1.9	61.9

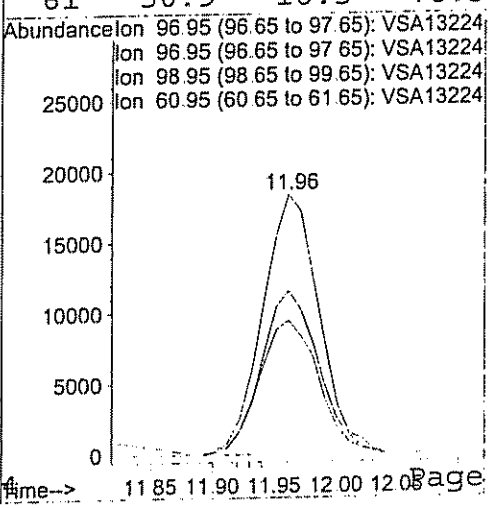


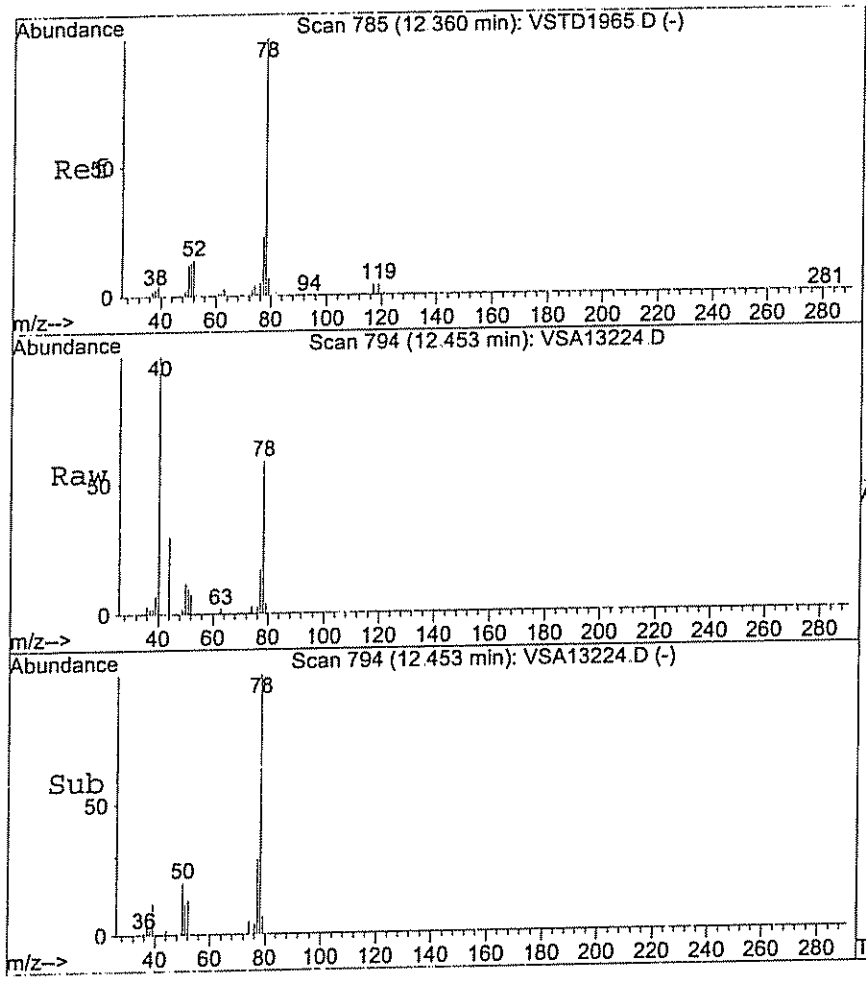


#20
1,1,1-Trichloroethane
Concen: 11.93 ug/L
RT: 11.96 min Scan# 744
Delta R.T. 0.09 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 97 Resp: 58091

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	62.8	35.6	95.6
61	50.9	16.5	76.5

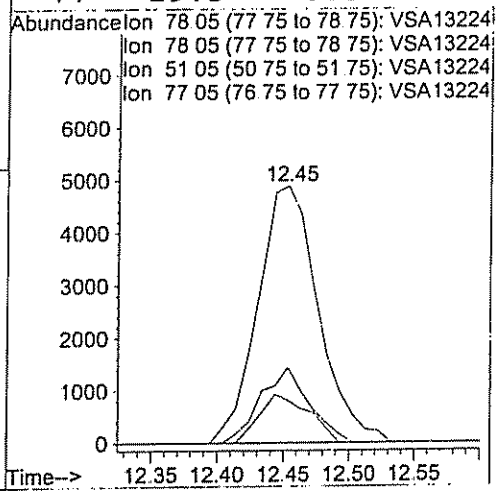


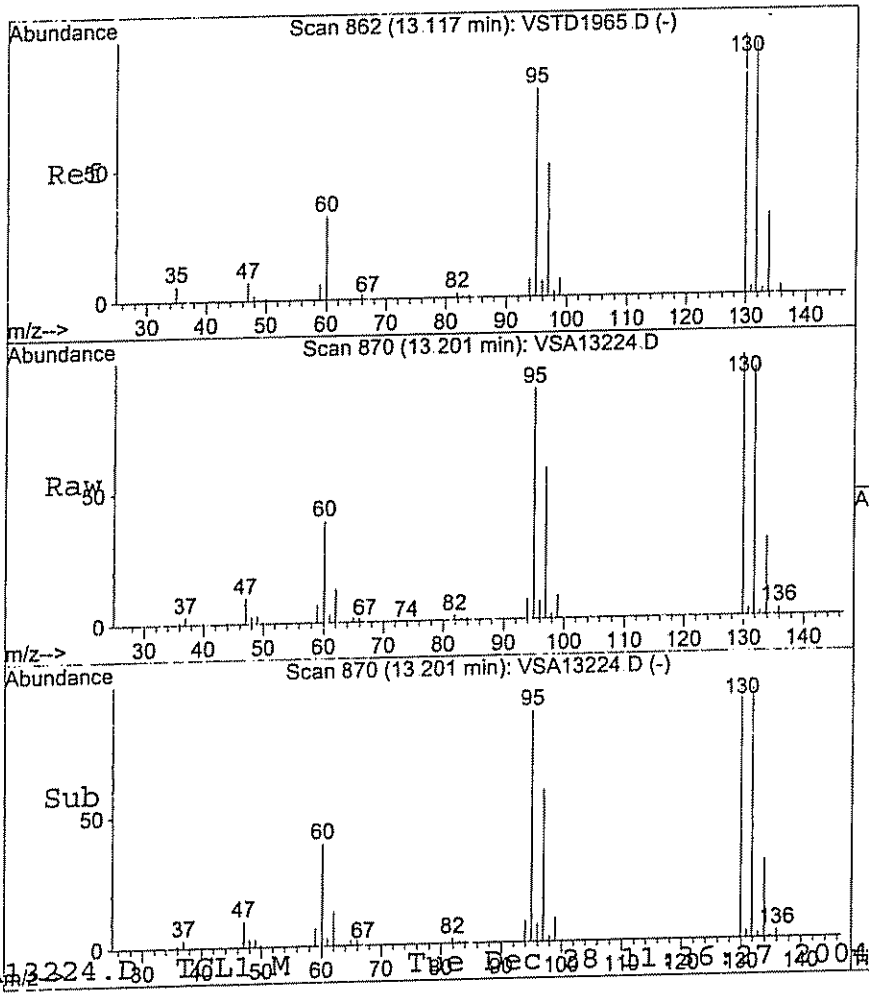


#21
Benzene
Concen: 0.92 ug/L
RT: 12.45 min Scan# 794
Delta R.T. 0.09 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 78 Resp: 15663

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	16.6	0.0	43.2
77	29.5	0.0	53.2

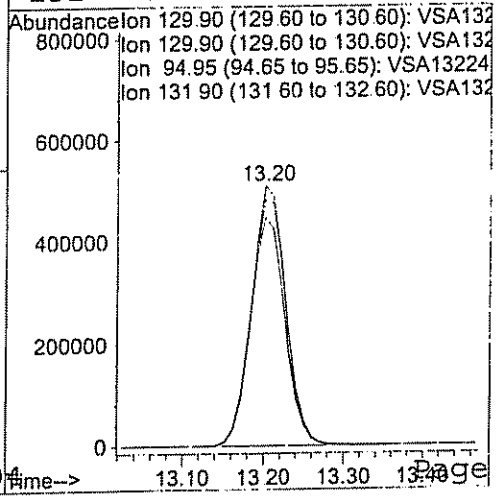


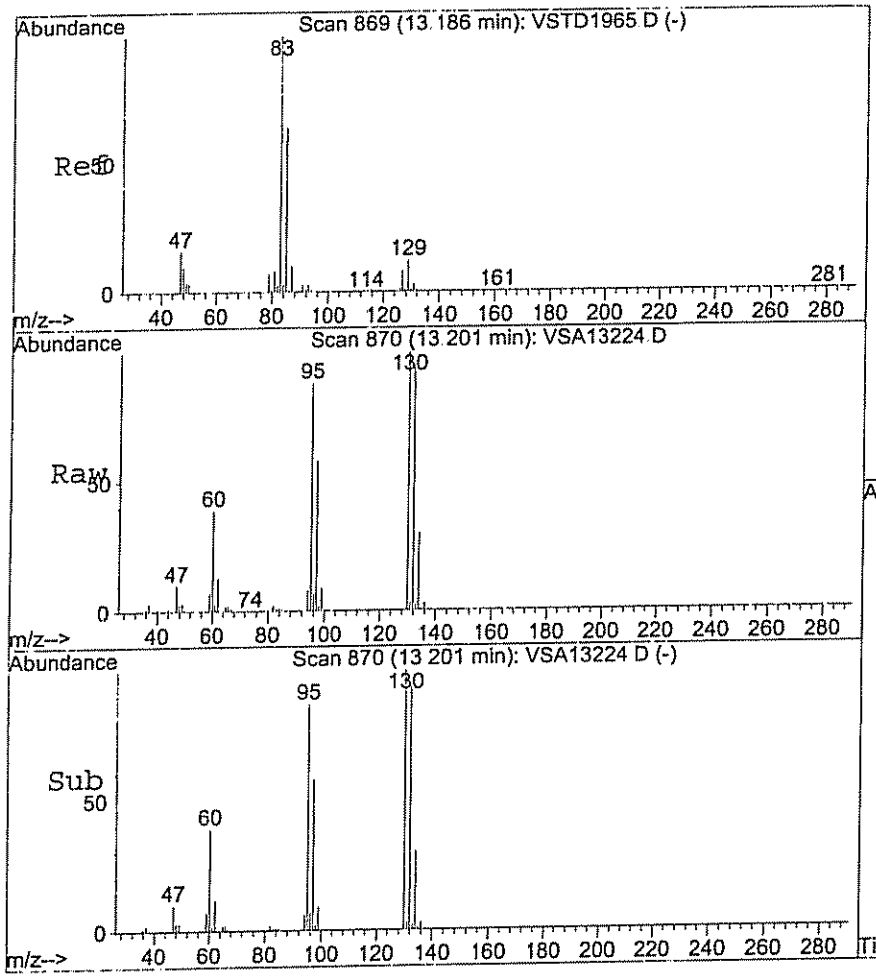


#22
Trichloroethene
Concen: 273.57 ug/L
RT: 13.20 min Scan# 870
Delta R.T. 0.08 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion:130 Resp: 1513402

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	87.8	50.4	110.4
132	94.7	66.6	126.6

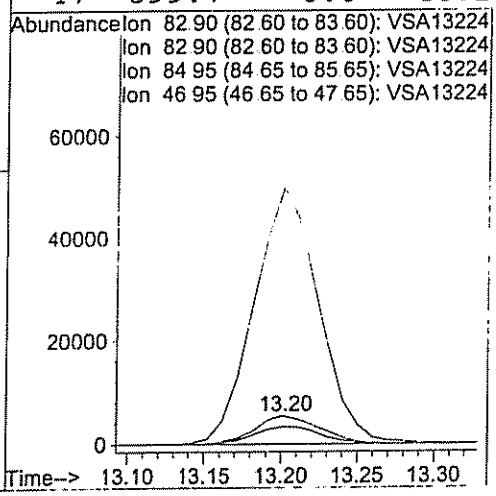


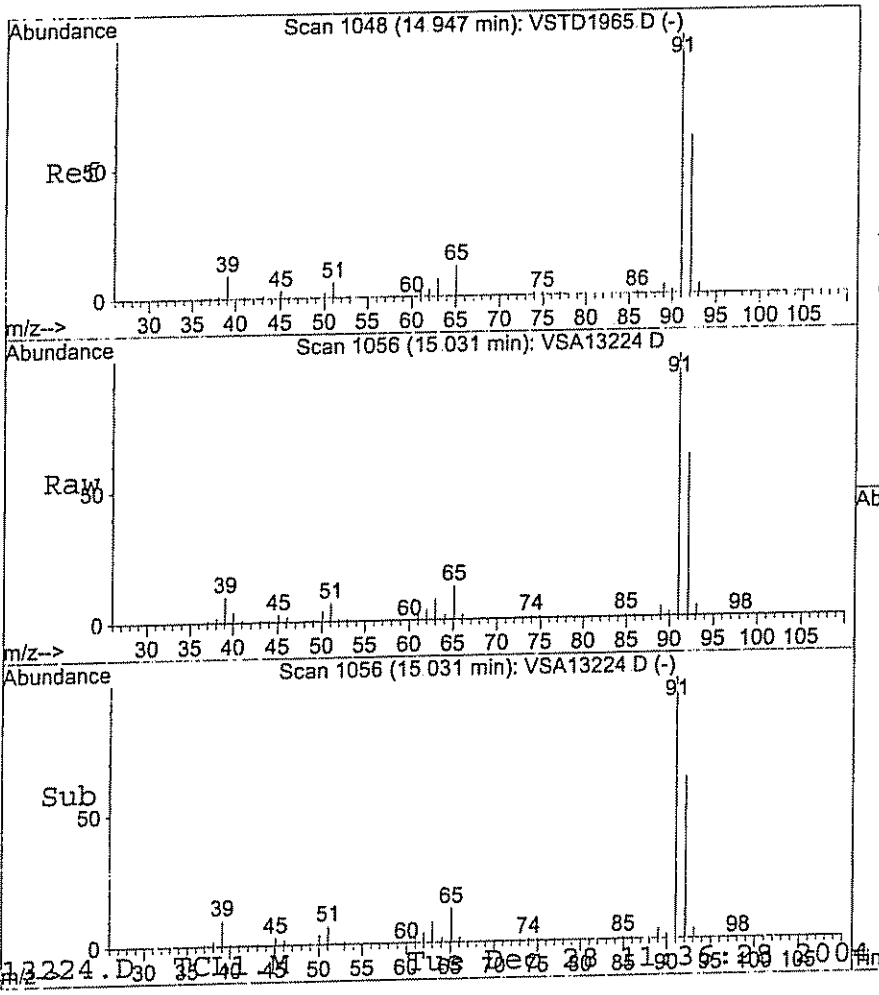


#24
Bromodichloromethane
Concen: 3.19 ug/L
RT: 13.20 min Scan# 870
Delta R.T. 0.02 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 83 Resp: 15882

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	60.9	33.9	93.9
47	899.7	0.0	46.1#

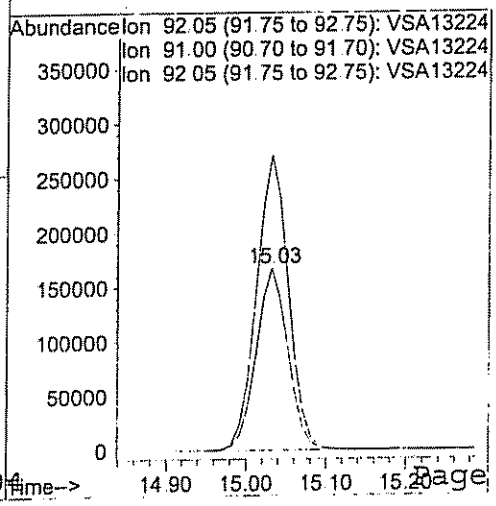


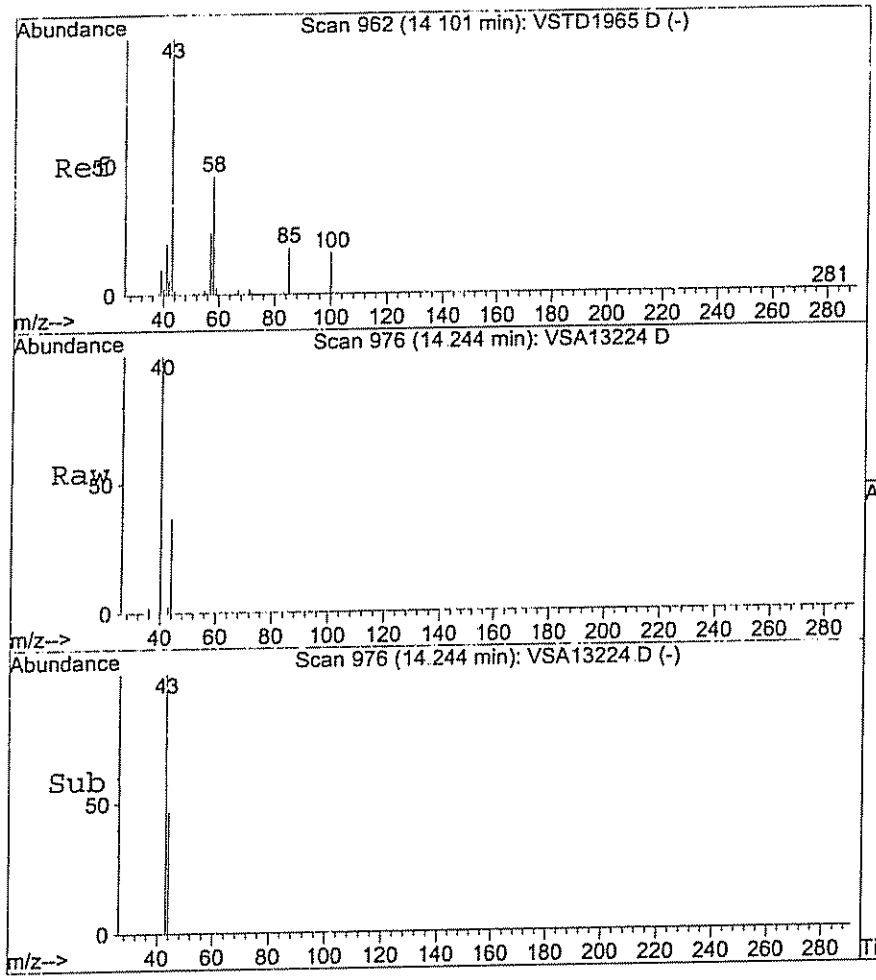


#33
Toluene
Concen: 49.90 ug/L
RT: 15.03 min Scan# 1056
Delta R.T. 0.08 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 92 Resp: 460695

Ion	Ratio	Lower	Upper
92	100		
91	161.5	132.6	192.6
92	100.0	70.0	130.0

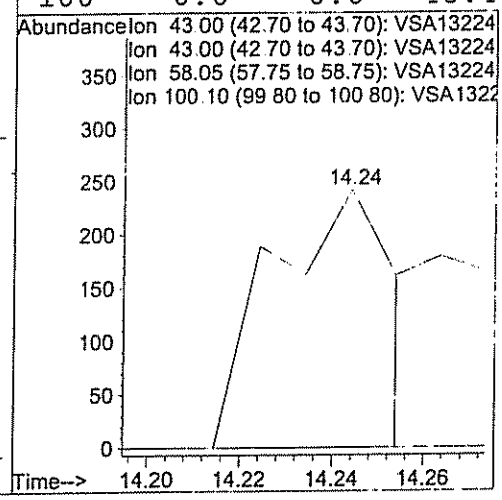


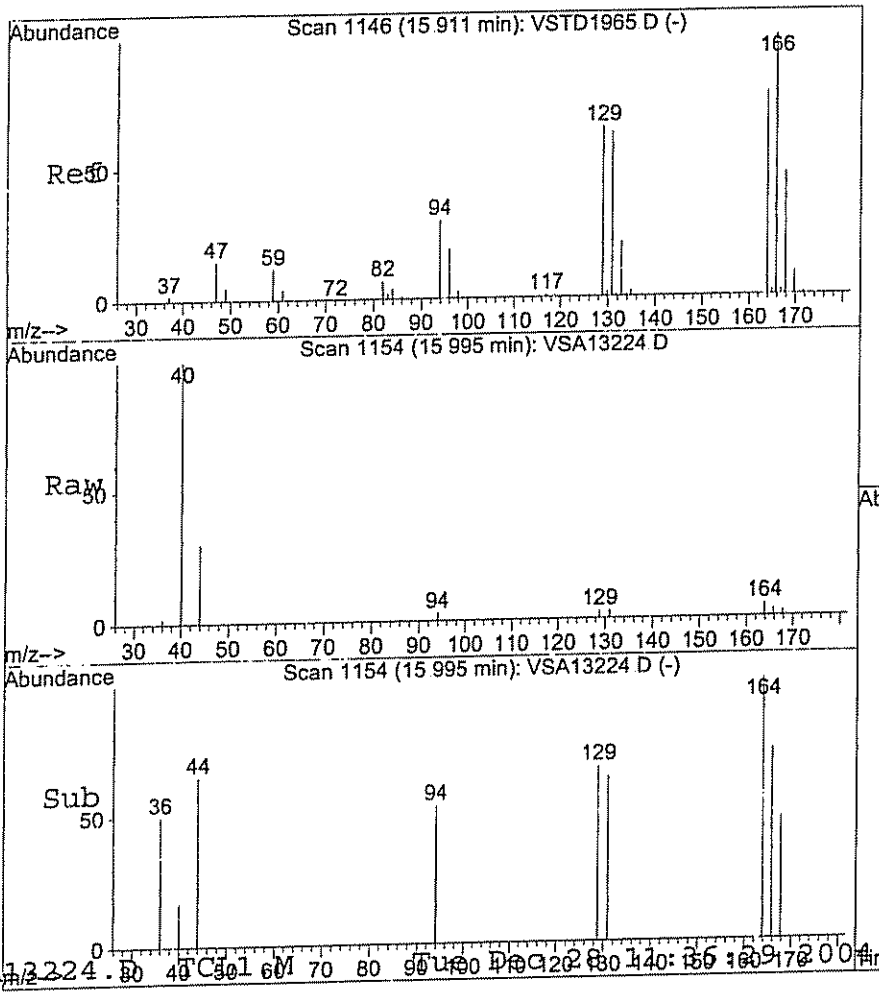


#34
4-methyl-2-Pentanone
Concen: 0.14 ug/L
RT: 14.24 min Scan# 976
Delta R.T. 0.12 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 43 Resp: 445

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	15.8	75.8#
100	0.0	0.0	46.4

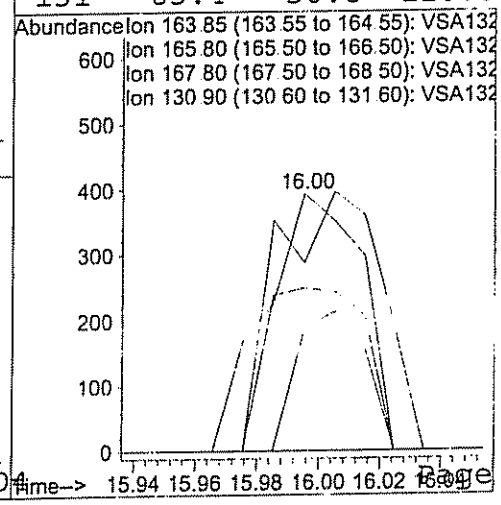


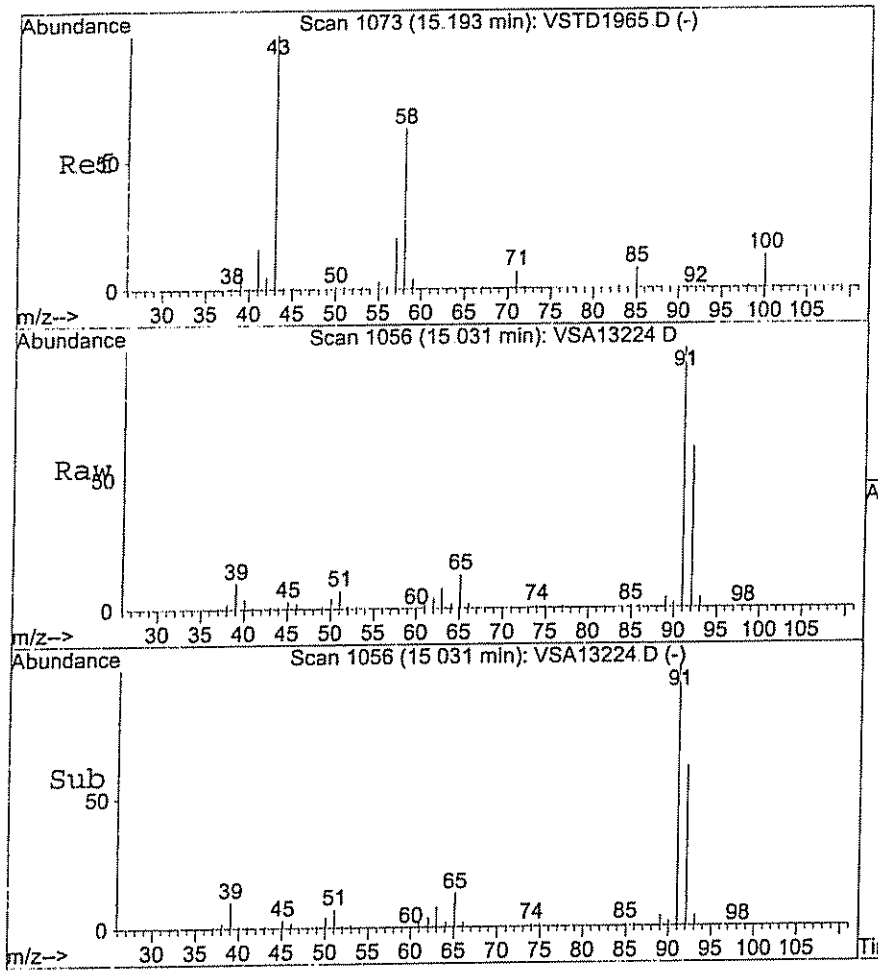


#35
Tetrachloroethene
Concen: 0.24 ug/L
RT: 16.00 min Scan# 1154
Delta R.T. 0.08 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion:164 Resp: 848

Ion	Ratio	Lower	Upper
164	100		
166	49.0	98.3	158.3#
168	47.3	30.5	90.5
131	63.4	50.6	110.6

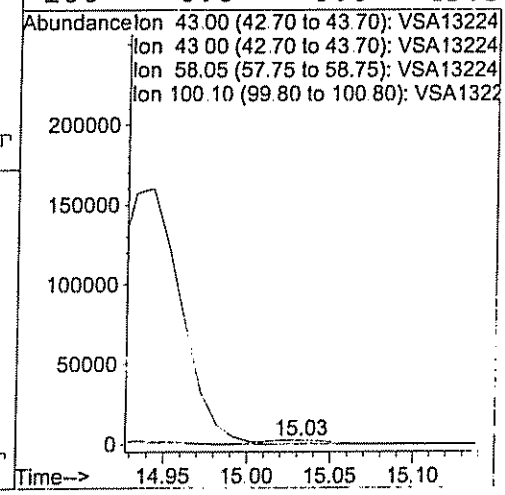


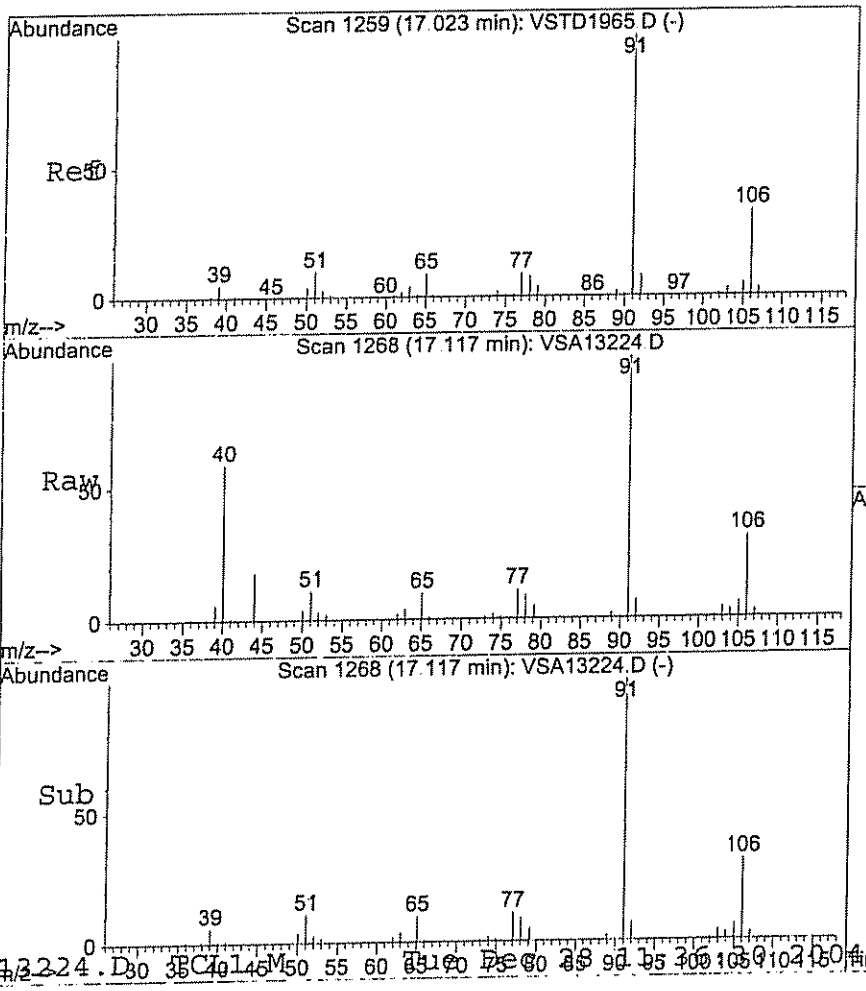


#36
2-Hexanone
Concen: 3.22 ug/L
RT: 15.03 min Scan# 1056
Delta R.T. -0.18 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 43 Resp: 7197

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	33.5	93.5#
100	0.0	0.0	43.5

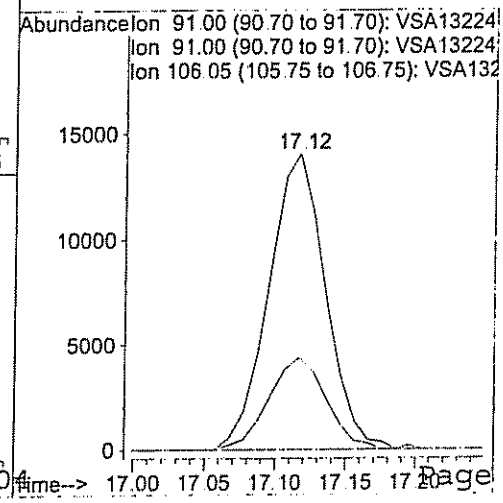


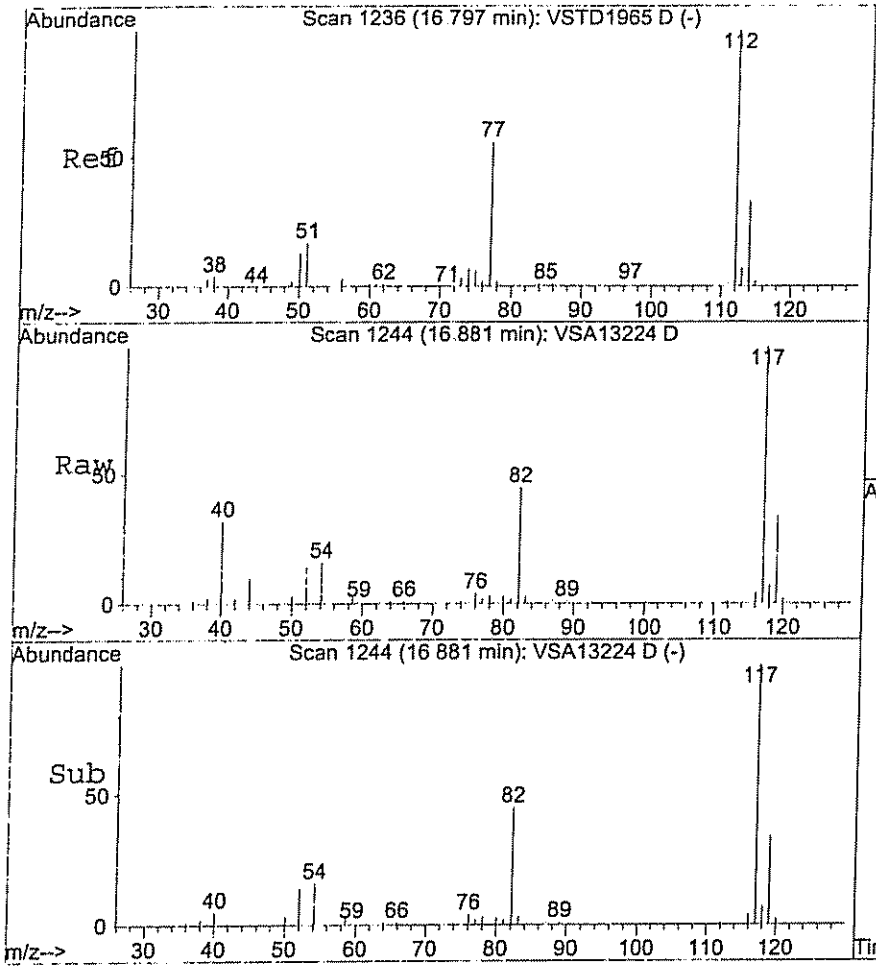


#37
Ethyl benzene
Concen: 2.33 ug/L
RT: 17.12 min Scan# 1268
Delta R.T. 0.09 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion: 91 Resp: 39243

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	31.1	2.9	62.9

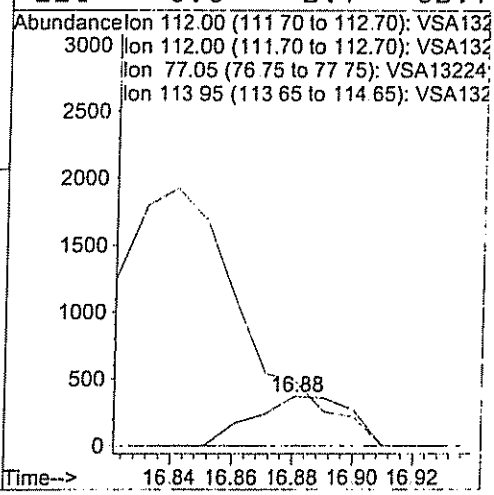


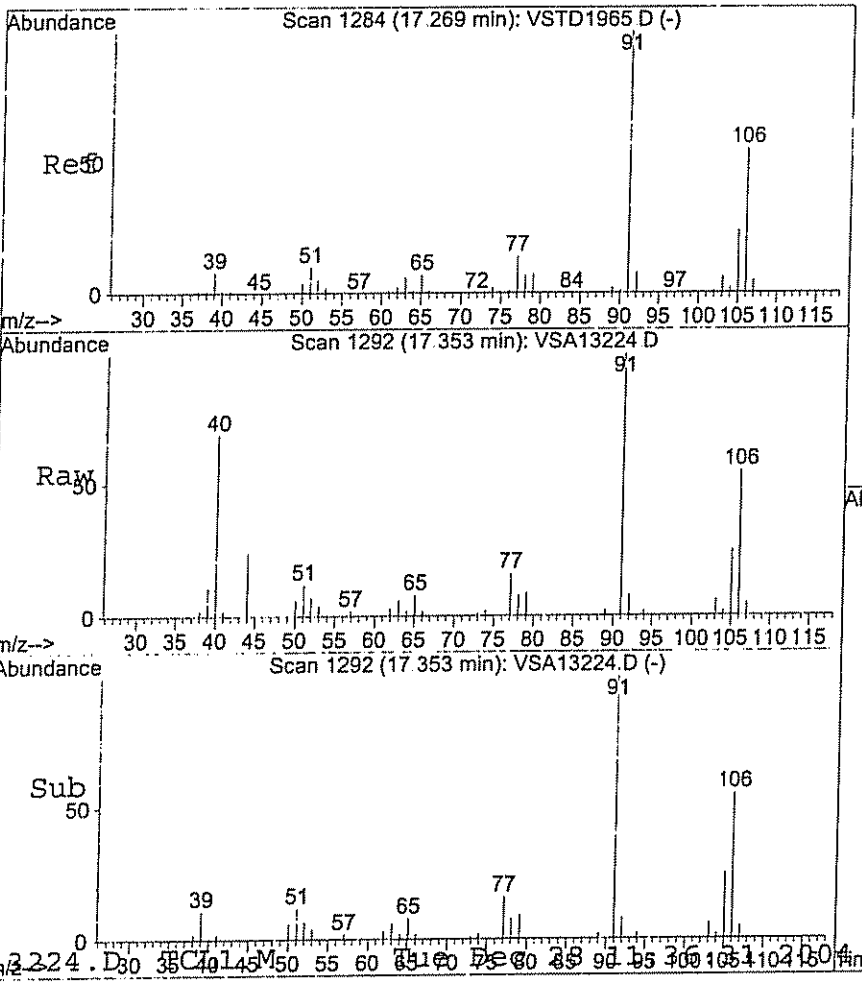


#38
Chlorobenzene
Concen: 0.07 ug/L
RT: 16.88 min Scan# 1244
Delta R.T. 0.08 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion:112 Resp: 828

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	0.0	26.0	86.0#
114	0.0	2.7	62.7#

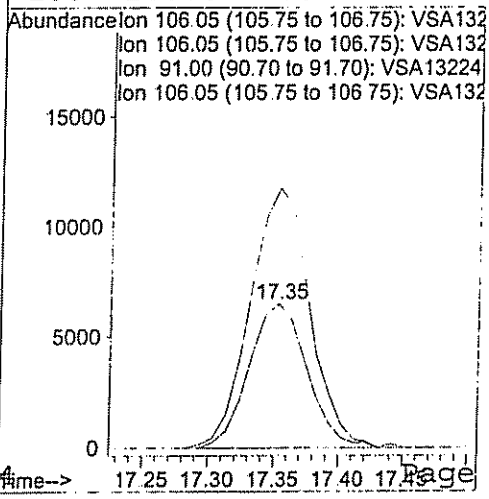


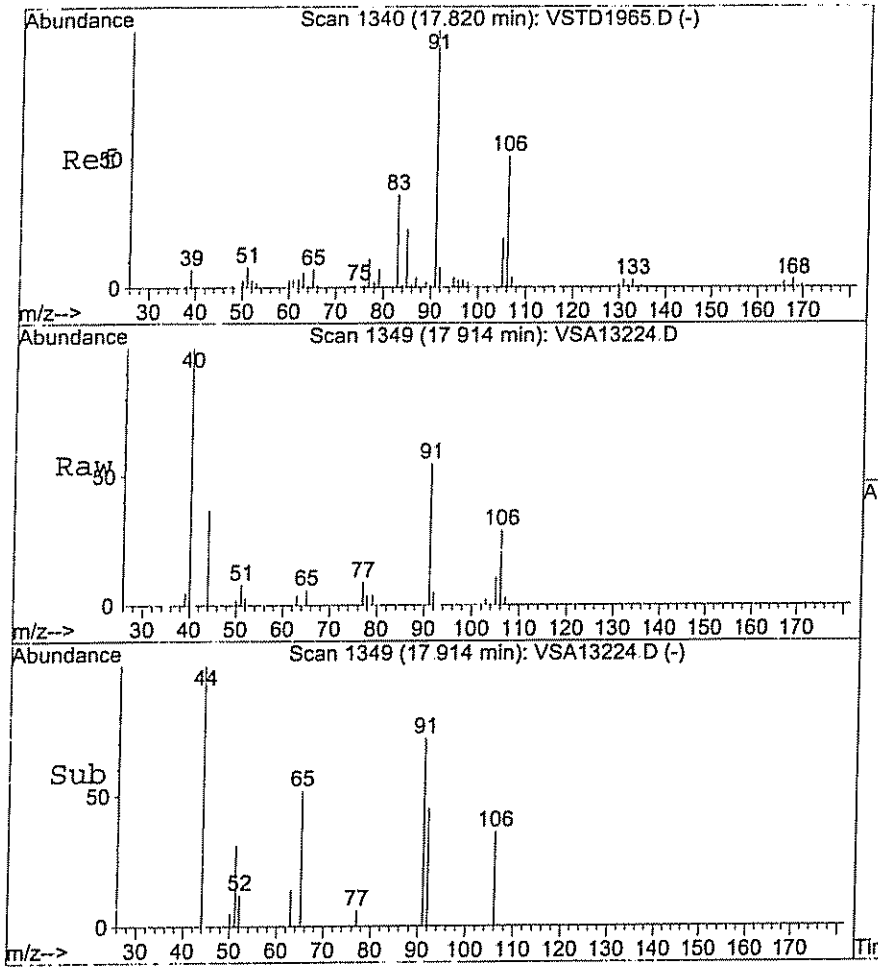


#39
m&p-Xylenes
Concen: 2.95 ug/L
RT: 17.35 min Scan# 1292
Delta R.T. 0.08 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion:106 Resp: 20109

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	180.3	150.2	210.2
106	100.0	70.0	130.0

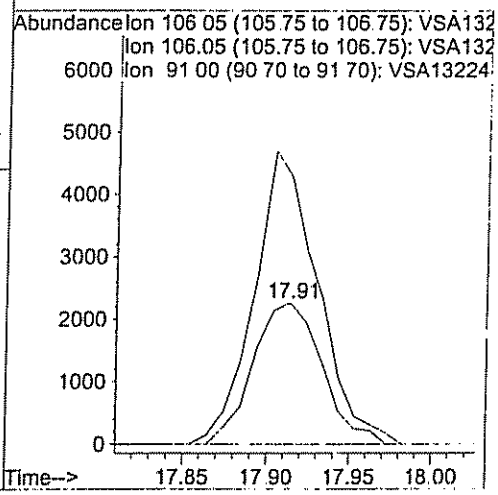


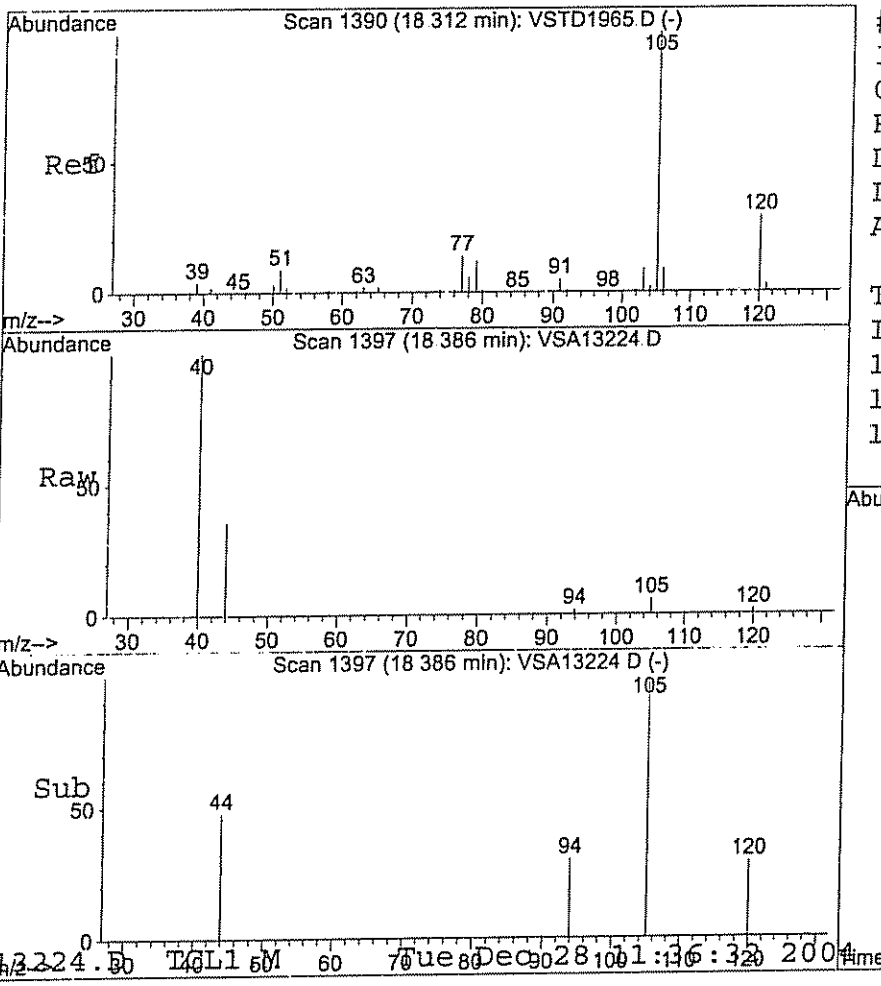


#40
o-Xylene
Concen: 0.99 ug/L
RT: 17.91 min Scan# 1349
Delta R.T. 0.09 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion:106 Resp: 6544

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	182.2	164.9	224.9

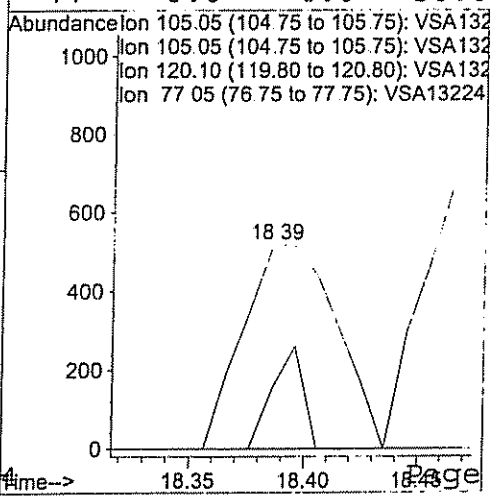


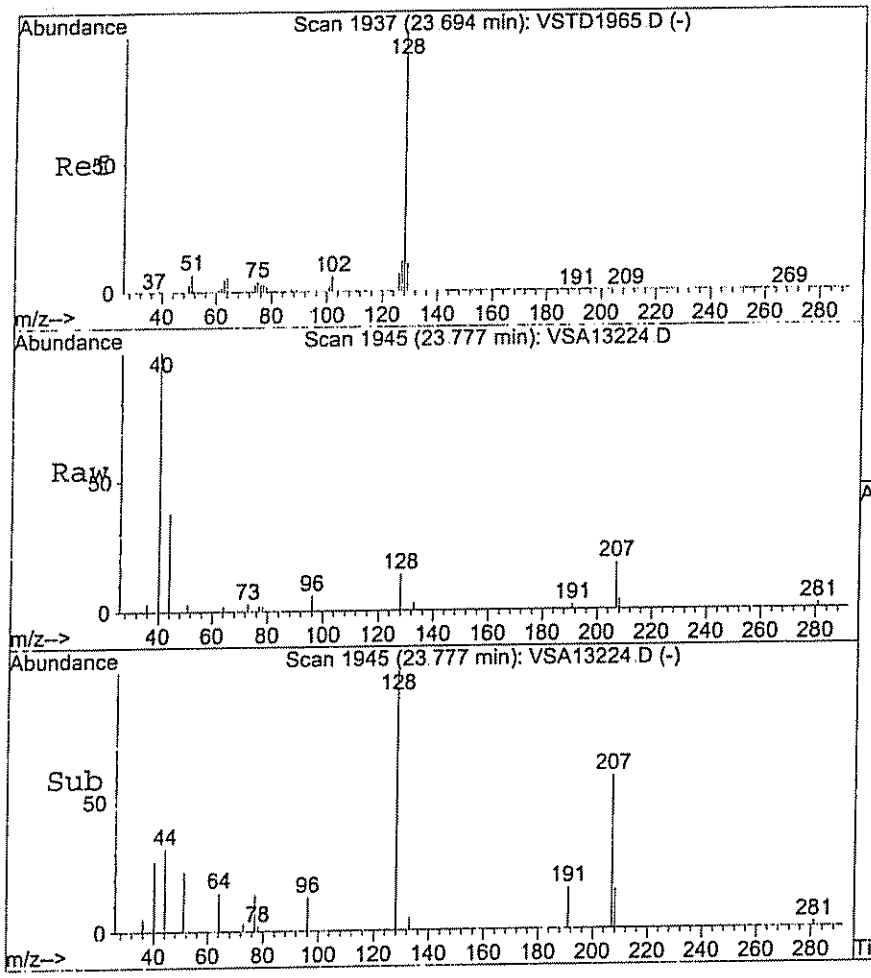


#42
Isopropylbenzene
Concen: 0.09 ug/L
RT: 18.39 min Scan# 1397
Delta R.T. 0.07 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion:105 Resp: 1466

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	0.0	0.0	59.3
77	0.0	0.0	30.0

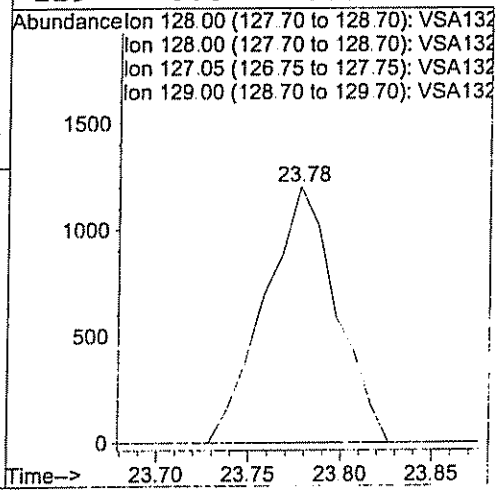




#45
Naphthalene
Concen: 0.24 ug/L
RT: 23.78 min Scan# 1945
Delta R.T. 0.08 min
Lab File: VSA13224.D
Acq: 23 Dec 2004 5:01

Tgt Ion:128 Resp: 3251

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	0.0	0.0	40.8



Other Data

EPASampleNo: MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil / water): Water Lab Sample ID: P0412024-01A

Level (low/med): Date Received: 12/1/2004

% Solids:

Concentration Units :

CAS No.	Analyte	Concentration	Units	C	Q	M
16887-00-6	Chloride	410	mg/L		M	
14797-65-0	Nitrite	0.50	mg/L	U		
14797-55-8	Nitrate	360	mg/L		M	
14808-79-8	Sulfate	3400	mg/L		M	
14596-37-3	Phosphate	1.0	mg/L	U	M	
	Total Organic Carbon	27	mg/L			
18496-25-8	Sulfide	2.0	mg/L	U		T
74-82-8	Methane	68	ug/L			
74-85-1	Ethene	14000	ng/L			
74-84-0	Ethane	850	ng/L			

EPASampleNo: MWB-1

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil / water): Water Lab Sample ID: P0412024-02A

Level (low/med): Date Received: 12/1/2004

% Solids:

Concentration Units :

CAS No.	Analyte	Concentration	Units	C	Q	M
16887-00-6	Chloride	260	mg/L		M	
14797-65-0	Nitrite	1.3	mg/L			
14797-55-8	Nitrate	43	mg/L		M	
14808-79-8	Sulfate	2300	mg/L		M	
14596-37-3	Phosphate	1.0	mg/L	U	M	
	Total Organic Carbon	18	mg/L			
18496-25-8	Sulfide	2.0	mg/L	U		T
74-82-8	Methane	44	ug/L			
74-85-1	Ethene	11000	ng/L			
74-84-0	Ethane	800	ng/L			

EPASampleNo: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil / water): Water Lab Sample ID: P0412024-03A

Level (low/med): Date Received: 12/1/2004

% Solids:

Concentration Units :

CAS No.	Analyte	Concentration	Units	C	Q	M
16887-00-6	Chloride	620	mg/L		M	
14797-65-0	Nitrite	1.0	mg/L			
14797-55-8	Nitrate	460	mg/L		M	
14808-79-8	Sulfate	4300	mg/L		M	
14596-37-3	Phosphate	1.0	mg/L	U	M	
	Total Organic Carbon	35	mg/L			
18496-25-8	Sulfide	2.0	mg/L	U		T
74-82-8	Methane	48	ug/L			
74-85-1	Ethene	13000	ng/L			
74-84-0	Ethane	490	ng/L			

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Initial Calibration Source: ERA

Continuing Calibration Source: ERA

Concentration Units: mg/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R	True	Found	%R	Found	%R	
Chloride	10.0	10.78	108	10.0	10.98	110	10.87	109	
Nitrate	10.0	10.37	104	10.0	10.26	103	10.96	110	
Nitrite	10.0	10.02	100	10.0	10.31	103	10.82	108	
Phosphate	10.0	10.09	101	10.0	10.61	106	10.54	105	
Sulfate	10.0	10.98	110	10.0	10.68	107	10.79	108	

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Initial Calibration Source: ERA

Continuing Calibration Source: ERA

Concentration Units: mg/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R	True	Found	%R	Found	%R	
Chloride	10.0	10.78	108	10.0	10.78	108	10.25	102	
Nitrate	10.0	10.37	104	10.0	10.43	104	10.94	109	
Nitrite	10.0	10.02	100	10.0	10.41	104	10.33	103	
Phosphate	10.0	10.09	101	10.0	10.32	103	10.08	101	
Sulfate	10.0	10.98	110	10.0	10.53	105	10.54	105	

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: _____ SAS No.: _____ SDG No.: MWB-2

Initial Calibration Source: _____

Continuing Calibration Source: ERA

Concentration Units: mg/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R	True	Found	%R	Found	%R	
Total Organic Carbon				25.0	24.28	97.1	24.38	97.5	

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Initial Calibration Source: Scotty
Continuing Calibration Source: Spectra

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R	Continuing Calibration True	Found	%R	Found	%R	M
Methane	5.0	5.03	101	4.92	5.17	105			
Ethane	10000	9490	94.9	9420	9607	102			
Ethene	10000	10600	106	10580	10689	101			

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation blank Matrix Water

Preparation Blank Concentration mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Chloride	1.0	U	1.0	U	1.0	U			1.0	U	
Nitrite	0.50	U	0.50	U	0.50	U			0.50	U	
Nitrate	0.50	U	0.50	U	0.50	U			0.50	U	
Sulfate	1.0	U	1.0	U	1.0	U			1.0	U	
Phosphate	1.0	U	1.0	U	1.0	U			1.0	U	

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation blank Matrix Water

Preparation Blank Concentration mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Chloride	1.0	U	1.0	U	1.0	U			1.0	U	
Nitrate	0.50	U	0.50	U	0.50	U			0.50	U	
Nitrite	0.50	U	0.50	U	0.50	U			0.50	U	
Phosphate	1.0	U	1.0	U	1.0	U			1.0	U	
Sulfate	1.0	U	5.1	B	1.0	U			1.0	U	

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation blank Matrix Water

Preparation Blank Concentration mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Sulfide									2.0	U	T

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation blank Matrix Water

Preparation Blank Concentration mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Total Organic Carbon	5.0	U	5.0	U	5.0	U			5.0	U	

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation blank Matrix Water

Preparation Blank Concentration ug/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Methane	0.015	U	0.015	U					0.015	U	

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Preparation blank Matrix Water

Preparation Blank Concentration ng/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Ethene	5.0	U	5.0	U					5.0	U	
Ethane	5.0	U	5.0	U					5.0	U	

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA Sample No.: MWB-3

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil/water): Water Level (low/med):

% Solids for Sample:

Concentration Units : mg/L

Analyte	Control Limit %R	Spike Sample Result	C	Sample Result	C	Spike Added	%R	Q	M
Chloride	70-130	620		625		50	0		M
Nitrite	70-130	10.2		1.0		10	92.0		
Nitrate	70-130	500		460		10	0		M
Sulfate	70-130	3500		4300		50	0		M
Phosphate	70-130	1.0	U	1.0	U	10	0		M

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA Sample No.
MWB-2

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil/water): Water Level (low/med):

% Solids for Sample:

Concentration Units : mg/L

Analyte	Control Limit %R	Spike Sample Result	C	Sample Result	C	Spike Added	%R	Q	M
Sulfide	52-79	21.6		2.0	U	34.0	63.5		I

Comments:

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Total Organic Carbon	mg/L	19.7	19.3	98.0						

EPA Sample No.

Lab Name: Microseeps, Inc. Contract: 7464127E MWB-3

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil/water): Water Level (low/med):

% Solids for Sample: % Solids for Duplicate:

Concentration Units : mg/L

Analyte	Control Limit	Sample	C	Duplicate	C	RPD	Q	M
Chloride	0-20	620		640		3.2		
Nitrite	0-20	1.0		0.96		4.1		
Nitrate	0-20	460		440		4.4		
Sulfate	0-20	4300		4000		7.2		
Phosphate	0-20	1.0	U	1.0	U	0		

EPA Sample No.

MWB-2 MS

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil/water): Water Level (low/med):

% Solids for Sample: % Solids for Duplicate:

Concentration Units : mg/L

Analyte	Control Limit	Sample	C	Duplicate	C	RPD	Q	M
Sulfide	0-20	21.6		20.6		4.7		T

EPA Sample No.

LCS

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil/water): Water Level (low/med):

% Solids for Sample: % Solids for Duplicate:

Concentration Units : ug/L

Analyte	Control Limit	Sample	C	Duplicate	C	RPD	Q	M
Methane	0-20	73.68		74.05		0.50		

EPA Sample No.

LCS

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Matrix (soil/water): Water Level (low/med):

% Solids for Sample: % Solids for Duplicate:

Concentration Units : ng/L

Analyte	Control Limit	Sample	C	Duplicate	C	RPD	Q	M
Ethane	0-20	50269		50465		0.4		
Ethene	0-20	55570		55750		0.3		

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Chloride	mg/L	10.0	11.77	118						
Nitrite	mg/L	10.0	11.69	117						
Nitrate	mg/L	10.0	11.14	111						
Sulfate	mg/L	10.0	11.58	116						
Phosphate	mg/L	10.0	10.57	106						

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Chloride	mg/L	10.0	10.93	109						
Nitrate	mg/L	10.0	10.26	103						
Nitrite	mg/L	10.0	10.49	105						
Phosphate	mg/L	10.0	10.72	107						
Sulfate	mg/L	10.0	10.73	107						

MWB-2

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: Fisher

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Sulfide	mg/L	34.0	24.0	70.6						

MWB-2

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: Spectra

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Methane	ug/L	71.93	73.68	102						

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412024 Case No.: SAS No.: SDG No.: MWB-2

Solid LCS Source:

Aqueous LCS Source: Spectra

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Ethene	ng/L	51975	55570	107						
Ethane	ng/L	47200	50269	106						

Sulfide

(Water)

Method : EPA 376.1 (Titration)

Analyst's Name : Dan Somma

LIMS Batch Number: M041206031

Date of Analysis: 12-6-04

LCS Source : Sulfide Stock 680 ppm

LCS Actual Value : 34

Iodine N = 0.0244 $Na_2S_2O_3$ N = 0.0250

Sample Identification	Analysis Time	Spl. Vol. (ml)	Iodine Soln. Added (ml)	Na2S2O3 Titrant Volumes (ml) Initial	Final	Titer	*Sulfide (mg/l)
PBW	10:45	125	25	0.00	24.3	24.3	0.32
LCSW % Rec: 70.59	11:00	100	25	0.00	18.4	18.4	24.00
P041202 4-01AL	11:20	125	25	0.00	24.3	24.3	0.32
62.59% -01AK, MS	11:35	100	25	0.00	19.0	19.0	31.60
59.65% -01AI, MSD	11:40	100	25	0.00	19.25	19.25	20.60
-02AJ	12:50	125	25	0.00	24.2	24.2	0.64
-03AJ	12:55	125	25	0.00	24.1	24.1	0.96
P041203 7 -01AG-01AH	13:05	125	25	-0.00	23.8	23.8	1.92
-02AG	13:20	125	25	0.00	23.9	23.9	1.60
P041204 1 -01AI	13:35	125	25	0.00	24.0	24.0	1.28
-02AI	13:40	125	25	0.00	23.6	23.6	2.56
P041204 2 -01AH	13:50	125	25	0.00	23.7	23.7	2.24
-02AE	14:05	125	25	0.00	23.7	23.7	2.24
-03AF	14:10	125	25	0.00	23.5	23.5	2.88
-04AE	14:20	125	25	0.00	23.4	23.4	3.20
-05AF	14:30	125	25	0.00	23.6	23.6	2.56
-06AE	14:40	125	25	0.00	23.4	23.4	3.20
P041205 5 -01AH	14:50	125	25	0.00	23.5	23.5	2.88
-02AK	15:00	125	25	0.00	23.4	23.4	3.20
-03AK	15:15	125	25	0.00	23.3	23.3	3.52

S/MSD RPD: 4.74%

quired QC:
- PBW: < 2 ppm (reporting limit)
- LCSW % Rec.: 50% - 87%
- MS/MSD % Rec.: 52% - 79%
- MS/MSD RPD: < or = 8%

Titrate to "clear" End Pt.

ecord all calculation results this data sheet)

ir signature indicates that all data is within acceptance criteria or justified in a narrative form.

entered by : Daniel J Somma Date : 12-6-04

reviewed & approved by : Maureen Conlin Date : 12-8-04

culation: mg/l Sulfide = { [(A x B) - (C x D)] x 16,000 } / Sample Vol.

e: A = Vol. of Iodine Soln., B = N of Iodine Soln., C = Vol of Na2S2O3, D = N of Na2S2O3

DOC
M041210008
P0411515-2

M041210041

P0412041-1+2 * DP?

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Queue report.
Maureen Donlin
12-10-04

Signal : 1 (C)

120904MD

P0412010-1+2
P0412024-1+3
P0412035-1+4
P0412037-1+2
P0412055-1+3


18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
1	blank	fault	1000	µL	33.14	0	mg/L	1349.1			UV Sparge	LOW-112404 Cal 0-50	1	1	1	12/9/2004 12:07:5
2	blank	fault	1000	µL	3.47	0	mg/L	277.7			UV Replicate	LOW-112404 Cal 0-50	1	1	1	12/9/2004 12:10:1
3	blank	fault	1000	µL	3.00	0	mg/L	260.8			UV Replicate	LOW-112404 Cal 0-50	1	1	1	12/9/2004 12:12:3
4	blank	fault	1000	µL	2.19	0	mg/L	231.7			UV Replicate	LOW-112404 Cal 0-50	1	1	1	12/9/2004 12:14:4
5	blank	fault	1000	µL	1.05	0	mg/L	190.4			UV Replicate	LOW-112404 Cal 0-50	1	1	1	12/9/2004 12:17:0
6	CCB	fault	1000	µL	-1.46	0	mg/L	99.9			UV Sparge	LOW-112404 Cal 0-50	2	1	1	12/9/2004 12:26:0
7	CCB	sample	1000	µL	-1.73	0	mg/L	90.0			UV Replicate	LOW-112404 Cal 0-50	2	1	1	12/9/2004 12:28:2
8	CCB	sample	1000	µL	-1.96	0	mg/L	81.8			UV Replicate	LOW-112404 Cal 0-50	2	1	1	12/9/2004 12:30:4
9	CCB	sample	1000	µL	-1.80	0	mg/L	87.4			UV Replicate	LOW-112404 Cal 0-50	2	1	1	12/9/2004 12:32:5
10	CCB	sample	1000	µL	-1.96	0	mg/L	81.8	-1.86	6.09	UV Replicate	LOW-112404 Cal 0-50	2	1	1	12/9/2004 12:35:1
11	CCV 25ppm	fault	1000	µL	26.67	0	mg/L	1115.5			UV Sparge	LOW-112404 Cal 0-50	3	1	1	12/9/2004 12:44:3
12	CCV 25ppm	sample	1000	µL	25.02	0	mg/L	1055.8			UV Replicate	LOW-112404 Cal 0-50	3	1	1	12/9/2004 12:46:4
13	CCV 25ppm	sample	1000	µL	24.57	0	mg/L	1039.6			UV Replicate	LOW-112404 Cal 0-50	3	1	1	12/9/2004 12:49:0
14	CCV 25ppm	sample	1000	µL	24.76	0	mg/L	1046.7			UV Replicate	LOW-112404 Cal 0-50	3	1	1	12/9/2004 12:51:2
15	CCV 25ppm	sample	1000	µL	24.50	0	mg/L	1037.3	24.71	0.94	UV Replicate	LOW-112404 Cal 0-50	3	1	1	12/9/2004 12:53:3
16	PBW	fault	1000	µL	-1.87	0	mg/L	85.0			UV Sparge	LOW-112404 Cal 0-50	4	1	1	12/9/2004 1:02:5
17	PBW	sample	1000	µL	-1.78	0	mg/L	88.3			UV Replicate	LOW-112404 Cal 0-50	4	1	1	12/9/2004 1:05:1
18	PBW	sample	1000	µL	-2.35	0	mg/L	67.6			UV Replicate	LOW-112404 Cal 0-50	4	1	1	12/9/2004 1:07:3
19	PBW	sample	1000	µL	-2.09	0	mg/L	77.1			UV Replicate	LOW-112404 Cal 0-50	4	1	1	12/9/2004 1:09:4
20	PBW	sample	1000	µL	-2.05	0	mg/L	78.4	-2.07	11.30	UV Replicate	LOW-112404 Cal 0-50	4	1	1	12/9/2004 1:12:0
21	LCSW 19.7	fault	1000	µL	20.87	0	mg/L	898.8			UV Sparge	LOW-112404 Cal 0-50	5	1	1	12/9/2004 1:21:2
22	LCSW 19.7	sample	1000	µL	19.37	0	mg/L	852.0			UV Replicate	LOW-112404 Cal 0-50	5	1	1	12/9/2004 1:23:4
23	LCSW 19.7	sample	1000	µL	19.28	0	mg/L	848.7			UV Replicate	LOW-112404 Cal 0-50	5	1	1	12/9/2004 1:26:0
24	LCSW 19.7	sample	1000	µL	19.43	0	mg/L	854.1			UV Replicate	LOW-112404 Cal 0-50	5	1	1	12/9/2004 1:28:1
25	LCSW 19.7	sample	1000	µL	18.73	0	mg/L	828.8	19.20	1.68	UV Replicate	LOW-112404 Cal 0-50	5	1	1	12/9/2004 1:30:3
26	P0411515-02A dil 1/5	fault	1000	µL	81.94	0	mg/L	3110.9			UV Sparge	LOW-112404 Cal 0-50	6	1	1	12/9/2004 1:40:0
27	P0411515-02A dil 1/5	sample	1000	µL	78.58	0	mg/L	2989.8			UV Replicate	LOW-112404 Cal 0-50	6	1	1	12/9/2004 1:42:1
28	P0411515-02A dil 1/5	sample	1000	µL	78.37	0	mg/L	2982.3			UV Replicate	LOW-112404 Cal 0-50	6	1	1	12/9/2004 1:44:3

390

128.8%

97.5%

Analyst name	: Maureen Donlin	Sample blanco	: 0
Print date	: 12/10/2004	Calibration blanco	: 0
		Yield (%)	: 100

MWB-2

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Queue report

Signal : 1 (C)

120904MD

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
29	P0411515-02A dil 1/5	sample	1000	µL	78.30	0	mg/L	2979.8			UV Replicate	Low-112404 Cal 0-50	6	1	1	12/9/2004 1:46:5
30	P0411515-02A dil 1/5	sample	1000	µL	78.15	0	mg/L	2974.4	78.25	0.23	UV Replicate	Low-112404 Cal 0-50	6	1	1	12/9/2004 1:49:0
31	P0411515-02A dil 1/10	fault	1000	µL	41.63	0	mg/L	1652.1			UV Sparge	Low-112404 Cal 0-50	7	1	1	12/9/2004 1:58:2
32	P0411515-02A dil 1/10	sample	1000	µL	40.72	0	mg/L	1622.6			UV Replicate	Low-112404 Cal 0-50	7	1	1	12/9/2004 2:00:4
33	P0411515-02A dil 1/10	sample	1000	µL	39.86	0	mg/L	1591.7			UV Replicate	Low-112404 Cal 0-50	7	1	1	12/9/2004 2:03:0
34	P0411515-02A dil 1/10	sample	1000	µL	39.94	0	mg/L	1594.7			UV Replicate	Low-112404 Cal 0-50	7	1	1	12/9/2004 2:05:1
35	P0411515-02A dil 1/10	sample	1000	µL	39.54	0	mg/L	1580.3	40.02	1.24	UV Replicate	Low-112404 Cal 0-50	7	1	1	12/9/2004 2:07:3
36	P0412041-01A	fault	1000	µL	18.93	0	mg/L	836.1			UV Sparge	Low-112404 Cal 0-50	8	1	1	12/9/2004 2:16:4
37	P0412041-01A	sample	1000	µL	17.87	0	mg/L	797.7			UV Replicate	Low-112404 Cal 0-50	8	1	1	12/9/2004 2:18:5
38	P0412041-01A	sample	1000	µL	18.07	0	mg/L	805.0			UV Replicate	Low-112404 Cal 0-50	8	1	1	12/9/2004 2:21:1
39	P0412041-01A	sample	1000	µL	18.22	0	mg/L	810.3			UV Replicate	Low-112404 Cal 0-50	8	1	1	12/9/2004 2:23:3
40	P0412041-01A	sample	1000	µL	18.19	0	mg/L	809.5	18.09	0.88	UV Replicate	Low-112404 Cal 0-50	8	1	1	12/9/2004 2:25:5
41	P0412041-01A DUP	fault	1000	µL	18.02	0	mg/L	803.3			UV Sparge	Low-112404 Cal 0-50	9	1	1	12/9/2004 2:35:0
42	P0412041-01A DUP	sample	1000	µL	17.12	0	mg/L	770.5			UV Replicate	Low-112404 Cal 0-50	9	1	1	12/9/2004 2:37:1
43	P0412041-01A DUP	sample	1000	µL	16.70	0	mg/L	755.7			UV Replicate	Low-112404 Cal 0-50	9	1	1	12/9/2004 2:39:3
44	P0412041-01A DUP	sample	1000	µL	16.76	0	mg/L	757.7			UV Replicate	Low-112404 Cal 0-50	9	1	1	12/9/2004 2:41:5
45	P0412041-01A DUP	sample	1000	µL	16.78	0	mg/L	758.4	16.84	1.11	UV Replicate	Low-112404 Cal 0-50	9	1	1	12/9/2004 2:44:0
46	P0412041-01A MS 20ppm	fault	1000	µL	38.85	0	mg/L	1591.5			UV Sparge	Low-112404 Cal 0-50	10	1	1	12/9/2004 2:53:2
47	P0412041-01A MS 20ppm	sample	1000	µL	36.68	0	mg/L	1476.0			UV Replicate	Low-112404 Cal 0-50	10	1	1	12/9/2004 2:55:4
48	P0412041-01A MS 20ppm	sample	1000	µL	36.71	0	mg/L	1477.8			UV Replicate	Low-112404 Cal 0-50	10	1	1	12/9/2004 2:57:5
49	P0412041-01A MS 20ppm	sample	1000	µL	36.34	0	mg/L	1464.5			UV Replicate	Low-112404 Cal 0-50	10	1	1	12/9/2004 3:00:1
50	P0412041-01A MS 20ppm	sample	1000	µL	37.27	0	mg/L	1498.2	36.74	1.06	UV Replicate	Low-112404 Cal 0-50	10	1	1	12/9/2004 3:02:3
51	P0412041-01A MSD 20ppm	fault	1000	µL	39.73	0	mg/L	1587.0			UV Sparge	Low-112404 Cal 0-50	11	1	1	12/9/2004 3:11:5
52	P0412041-01A MSD 20ppm	sample	1000	µL	38.35	0	mg/L	1537.3			UV Replicate	Low-112404 Cal 0-50	11	1	1	12/9/2004 3:14:0
53	P0412041-01A MSD 20ppm	sample	1000	µL	38.05	0	mg/L	1526.3			UV Replicate	Low-112404 Cal 0-50	11	1	1	12/9/2004 3:16:2
54	P0412041-01A MSD 20ppm	sample	1000	µL	38.23	0	mg/L	1532.9			UV Replicate	Low-112404 Cal 0-50	11	1	1	12/9/2004 3:18:4
55	P0412041-01A MSD 20ppm	sample	1000	µL	38.12	0	mg/L	1528.8	38.19	0.35	UV Replicate	Low-112404 Cal 0-50	11	1	1	12/9/2004 3:20:5
56	P0412041-02A	fault	1000	µL	19.24	0	mg/L	847.1			UV Sparge	Low-112404 Cal 0-50	12	1	1	12/9/2004 3:30:1

Analyst name : Maureen Donlin
Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

MWB-2

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Queue report

Signal : 1 (C)

120904MD

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
57	P0412041-02A	sample	1000	µL	18.17	0	mg/L	808.7			UV Replicate	Low-112404 Cal 0-50	12	1	1	12/9/2004 3:32:
58	P0412041-02A	sample	1000	µL	18.03	0	mg/L	803.6			UV Replicate	Low-112404 Cal 0-50	12	1	1	12/9/2004 3:34:
59	P0412041-02A	sample	1000	µL	18.27	0	mg/L	812.2			UV Replicate	Low-112404 Cal 0-50	12	1	1	12/9/2004 3:37:
60	P0412041-02A	sample	1000	µL	18.22	0	mg/L	810.3	18.17	0.56	UV Replicate	Low-112404 Cal 0-50	12	1	1	12/9/2004 3:39:
61	P0412010-01A	fault	1000	µL	27.49	0	mg/L	1145.0			UV Sparge	Low-112404 Cal 0-50	13	1	1	12/9/2004 3:46:
62	P0412010-01A	sample	1000	µL	26.59	0	mg/L	1112.7			UV Replicate	Low-112404 Cal 0-50	13	1	1	12/9/2004 3:51:
63	P0412010-01A	sample	1000	µL	26.74	0	mg/L	1117.8			UV Replicate	Low-112404 Cal 0-50	13	1	1	12/9/2004 3:53:
64	P0412010-01A	sample	1000	µL	26.38	0	mg/L	1105.0			UV Replicate	Low-112404 Cal 0-50	13	1	1	12/9/2004 3:55:
65	P0412010-01A	sample	1000	µL	26.11	0	mg/L	1095.2	26.45	1.03	UV Replicate	Low-112404 Cal 0-50	13	1	1	12/9/2004 3:57:
66	CCB	fault	1000	µL	-1.45	0	mg/L	100.2			UV Sparge	Low-112404 Cal 0-50	14	1	1	12/9/2004 4:07:1
67	CCB	sample	1000	µL	-1.59	0	mg/L	95.0			UV Replicate	Low-112404 Cal 0-50	14	1	1	12/9/2004 4:09:
68	CCB	sample	1000	µL	-1.84	0	mg/L	86.1			UV Replicate	Low-112404 Cal 0-50	14	1	1	12/9/2004 4:11:
69	CCB	sample	1000	µL	-1.87	0	mg/L	85.2			UV Replicate	Low-112404 Cal 0-50	14	1	1	12/9/2004 4:14:
70	CCB	sample	1000	µL	-1.95	0	mg/L	82.2	-1.81	8.41	UV Replicate	Low-112404 Cal 0-50	14	1	1	12/9/2004 4:16:
71	CCV 25ppm	fault	1000	µL	25.66	0	mg/L	1079.0			UV Sparge	Low-112404 Cal 0-50	15	1	1	12/9/2004 4:25:
72	CCV 25ppm	sample	1000	µL	24.67	0	mg/L	1043.3			UV Replicate	Low-112404 Cal 0-50	15	1	1	12/9/2004 4:27:
73	CCV 25ppm	sample	1000	µL	24.24	0	mg/L	1027.7			UV Replicate	Low-112404 Cal 0-50	15	1	1	12/9/2004 4:30:1
74	CCV 25ppm	sample	1000	µL	23.91	0	mg/L	1016.0			UV Replicate	Low-112404 Cal 0-50	15	1	1	12/9/2004 4:32:
75	CCV 25ppm	sample	1000	µL	24.28	0	mg/L	1029.3	24.28	1.28	UV Replicate	Low-112404 Cal 0-50	15	1	1	12/9/2004 4:34:
76	PBW	fault	1000	µL	-1.99	0	mg/L	80.7			UV Sparge	Low-112404 Cal 0-50	16	1	1	12/9/2004 4:43:
77	PBW	sample	1000	µL	-1.96	0	mg/L	81.9			UV Replicate	Low-112404 Cal 0-50	16	1	1	12/9/2004 4:46:1
78	PBW	sample	1000	µL	-1.78	0	mg/L	88.4			UV Replicate	Low-112404 Cal 0-50	16	1	1	12/9/2004 4:48:
79	PBW	sample	1000	µL	-1.98	0	mg/L	80.9			UV Replicate	Low-112404 Cal 0-50	16	1	1	12/9/2004 4:50:
80	PBW	sample	1000	µL	-1.94	0	mg/L	82.5	-1.91	4.85	UV Replicate	Low-112404 Cal 0-50	16	1	1	12/9/2004 4:53:
81	LCSW 19.7	fault	1000	µL	20.88	0	mg/L	899.2			UV Sparge	Low-112404 Cal 0-50	17	1	1	12/9/2004 5:02:
82	LCSW 19.7	sample	1000	µL	19.33	0	mg/L	850.5			UV Replicate	Low-112404 Cal 0-50	17	1	1	12/9/2004 5:04:
83	LCSW 19.7	sample	1000	µL	19.63	0	mg/L	861.3			UV Replicate	Low-112404 Cal 0-50	17	1	1	12/9/2004 5:06:
84	LCSW 19.7	sample	1000	µL	18.74	0	mg/L	829.2			UV Replicate	Low-112404 Cal 0-50	17	1	1	12/9/2004 5:09:1

97.1%

Analyst name : Maureen Donlin
Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

MWB-2

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Queue report

Signal : 1 (C)

120904MD

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
85	LCSW 19.7	sample	1000	µL	19.34	0	mg/L	850.9	19.26	1.94	UV Replicate	Low-112404 Cal 0-50	17	1	1	12/9/2004 5:11:
86	P0412010-02A	fault	1000	µL	2.03	0	mg/L	225.7			UV Sparge	Low-112404 Cal 0-50	18	1	1	12/9/2004 5:20:
87	P0412010-02A	sample	1000	µL	2.05	0	mg/L	226.6			UV Replicate	Low-112404 Cal 0-50	18	1	1	12/9/2004 5:23:
88	P0412010-02A	sample	1000	µL	2.15	0	mg/L	230.3			UV Replicate	Low-112404 Cal 0-50	18	1	1	12/9/2004 5:25:
89	P0412010-02A	sample	1000	µL	2.10	0	mg/L	228.3			UV Replicate	Low-112404 Cal 0-50	18	1	1	12/9/2004 5:27:
90	P0412010-02A	sample	1000	µL	2.41	0	mg/L	239.6	2.18	7.37	UV Replicate	Low-112404 Cal 0-50	18	1	1	12/9/2004 5:29:
91	P0412024-01A	fault	1000	µL	24.66	0	mg/L	1043.1			UV Sparge	Low-112404 Cal 0-50	19	1	1	12/9/2004 5:39:1
92	P0412024-01A	sample	1000	µL	27.28	0	mg/L	1137.5			UV Replicate	Low-112404 Cal 0-50	19	1	1	12/9/2004 5:41:
93	P0412024-01A	sample	1000	µL	27.50	0	mg/L	1145.5			UV Replicate	Low-112404 Cal 0-50	19	1	1	12/9/2004 5:43:
94	P0412024-01A	sample	1000	µL	27.65	0	mg/L	1150.9			UV Replicate	Low-112404 Cal 0-50	19	1	1	12/9/2004 5:46:
95	P0412024-01A	sample	1000	µL	27.13	0	mg/L	1132.1	27.39	0.84	UV Replicate	Low-112404 Cal 0-50	19	1	1	12/9/2004 5:48:
96	P0412024-02A	fault	1000	µL	19.08	0	mg/L	841.6			UV Sparge	Low-112404 Cal 0-50	20	1	1	12/9/2004 5:57:
97	P0412024-02A	sample	1000	µL	18.14	0	mg/L	807.5			UV Replicate	Low-112404 Cal 0-50	20	1	1	12/9/2004 6:00:
98	P0412024-02A	sample	1000	µL	17.90	0	mg/L	798.9			UV Replicate	Low-112404 Cal 0-50	20	1	1	12/9/2004 6:02:
99	P0412024-02A	sample	1000	µL	17.87	0	mg/L	790.6			UV Replicate	Low-112404 Cal 0-50	20	1	1	12/9/2004 6:04:
100	P0412024-02A	sample	1000	µL	18.14	0	mg/L	807.5	17.96	1.25	UV Replicate	Low-112404 Cal 0-50	20	1	1	12/9/2004 6:06:
101	P0412024-03A	fault	1000	µL	35.86	0	mg/L	1447.4			UV Sparge	Low-112404 Cal 0-50	21	1	1	12/9/2004 6:16:1
102	P0412024-03A	sample	1000	µL	35.09	0	mg/L	1419.7			UV Replicate	Low-112404 Cal 0-50	21	1	1	12/9/2004 6:18:
103	P0412024-03A	sample	1000	µL	34.77	0	mg/L	1407.8			UV Replicate	Low-112404 Cal 0-50	21	1	1	12/9/2004 6:20:
104	P0412024-03A	sample	1000	µL	35.33	0	mg/L	1428.3			UV Replicate	Low-112404 Cal 0-50	21	1	1	12/9/2004 6:23:1
105	P0412024-03A	sample	1000	µL	34.82	0	mg/L	1409.8	35.00	0.75	UV Replicate	Low-112404 Cal 0-50	21	1	1	12/9/2004 6:25:
106	P0412035-01A	fault	1000	µL	0.53	0	mg/L	171.8			UV Sparge	Low-112404 Cal 0-50	22	1	1	12/9/2004 6:34:
107	P0412035-01A	sample	1000	µL	0.07	0	mg/L	155.2			UV Replicate	Low-112404 Cal 0-50	22	1	1	12/9/2004 6:37:
108	P0412035-01A	sample	1000	µL	-0.19	0	mg/L	145.8			UV Replicate	Low-112404 Cal 0-50	22	1	1	12/9/2004 6:39:
109	P0412035-01A	sample	1000	µL	-0.13	0	mg/L	147.9			UV Replicate	Low-112404 Cal 0-50	22	1	1	12/9/2004 6:41:
110	P0412035-01A	sample	1000	µL	-0.09	0	mg/L	149.1	-0.08	133.07	UV Replicate	Low-112404 Cal 0-50	22	1	1	12/9/2004 6:43:
111	P0412035-02A	fault	1000	µL	-0.11	0	mg/L	148.6			UV Sparge	Low-112404 Cal 0-50	23	1	1	12/9/2004 6:53:1
112	P0412035-02A	sample	1000	µL	-0.63	0	mg/L	129.8			UV Replicate	Low-112404 Cal 0-50	23	1	1	12/9/2004 6:55:

Analyst name : Maureen Donlin
Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

MWB-2

Thermo
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Queue report

Signal : 1 (C)

120904MD

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
113	P0412035-02A	sample	1000	µL	-0.50	0	mg/L	134.6			UV Replicate	Low-112404 cal 0-50	23	1	1	12/9/2004 6:57:
114	P0412035-02A	sample	1000	µL	-0.30	0	mg/L	141.8			UV Replicate	Low-112404 cal 0-50	23	1	1	12/9/2004 7:00:
115	P0412035-02A	sample	1000	µL	-0.58	0	mg/L	131.7	-0.50	29.22	UV Replicate	Low-112404 cal 0-50	23	1	1	12/9/2004 7:02:1
116	P0412035-02A DUP	fault	1000	µL	-0.11	0	mg/L	148.6			UV Sparge	Low-112404 cal 0-50	24	1	1	12/9/2004 7:11:
117	P0412035-02A DUP	sample	1000	µL	-0.37	0	mg/L	139.2			UV Replicate	Low-112404 cal 0-50	24	1	1	12/9/2004 7:13:
118	P0412035-02A DUP	sample	1000	µL	-0.23	0	mg/L	144.3			UV Replicate	Low-112404 cal 0-50	24	1	1	12/9/2004 7:16:1
119	P0412035-02A DUP	sample	1000	µL	-0.49	0	mg/L	134.7			UV Replicate	Low-112404 cal 0-50	24	1	1	12/9/2004 7:18:
120	P0412035-02A DUP	sample	1000	µL	-0.46	0	mg/L	136.1	-0.39	30.41	UV Replicate	Low-112404 cal 0-50	24	1	1	12/9/2004 7:20:
121	P0412035-02A MS 20ppm	fault	1000	µL	21.93	0	mg/L	944.2			UV Sparge	Low-112404 cal 0-50	25	1	1	12/9/2004 7:30:
122	P0412035-02A MS 20ppm	sample	1000	µL	21.24	0	mg/L	919.3			UV Replicate	Low-112404 cal 0-50	25	1	1	12/9/2004 7:32:1
123	P0412035-02A MS 20ppm	sample	1000	µL	21.77	0	mg/L	938.5			UV Replicate	Low-112404 cal 0-50	25	1	1	12/9/2004 7:34:
124	P0412035-02A MS 20ppm	sample	1000	µL	20.89	0	mg/L	906.7			UV Replicate	Low-112404 cal 0-50	25	1	1	12/9/2004 7:36:
125	P0412035-02A MS 20ppm	sample	1000	µL	21.21	0	mg/L	918.4	21.28	1.71	UV Replicate	Low-112404 cal 0-50	25	1	1	12/9/2004 7:39:1
126	P0412035-02A MSD 20ppm	fault	1000	µL	22.28	0	mg/L	956.9			UV Sparge	Low-112404 cal 0-50	26	1	1	12/9/2004 7:48:
127	P0412035-02A MSD 20ppm	sample	1000	µL	21.76	0	mg/L	938.2			UV Replicate	Low-112404 cal 0-50	26	1	1	12/9/2004 7:50:
128	P0412035-02A MSD 20ppm	sample	1000	µL	21.30	0	mg/L	921.5			UV Replicate	Low-112404 cal 0-50	26	1	1	12/9/2004 7:53:
129	P0412035-02A MSD 20ppm	sample	1000	µL	21.37	0	mg/L	924.2			UV Replicate	Low-112404 cal 0-50	26	1	1	12/9/2004 7:55:
130	P0412035-02A MSD 20ppm	sample	1000	µL	21.67	0	mg/L	935.0	21.53	1.05	UV Replicate	Low-112404 cal 0-50	26	1	1	12/9/2004 7:57:
131	CCB	fault	1000	µL	-1.72	0	mg/L	90.6			UV Sparge	Low-112404 cal 0-50	2	1	1	12/9/2004 8:06:
132	CCB	sample	1000	µL	-2.00	0	mg/L	80.2			UV Replicate	Low-112404 cal 0-50	2	1	1	12/9/2004 8:09:1
133	CCB	sample	1000	µL	-1.97	0	mg/L	81.3			UV Replicate	Low-112404 cal 0-50	2	1	1	12/9/2004 8:11:
134	CCB	sample	1000	µL	-2.11	0	mg/L	76.2			UV Replicate	Low-112404 cal 0-50	2	1	1	12/9/2004 8:13:
135	CCB	sample	1000	µL	-2.24	0	mg/L	71.6	-2.08	5.86	UV Replicate	Low-112404 cal 0-50	2	1	1	12/9/2004 8:16:
136	CCV 25ppm	fault	1000	µL	25.66	0	mg/L	1078.8			UV Sparge	Low-112404 cal 0-50	3	1	1	12/9/2004 8:25:
137	CCV 25ppm	sample	1000	µL	24.29	0	mg/L	1029.7			UV Replicate	Low-112404 cal 0-50	3	1	1	12/9/2004 8:27:
138	CCV 25ppm	sample	1000	µL	24.59	0	mg/L	1040.2			UV Replicate	Low-112404 cal 0-50	3	1	1	12/9/2004 8:29:
139	CCV 25ppm	sample	1000	µL	24.23	0	mg/L	1027.5			UV Replicate	Low-112404 cal 0-50	3	1	1	12/9/2004 8:32:1
140	CCV 25ppm	sample	1000	µL	24.40	0	mg/L	1033.5	24.38	0.63	UV Replicate	Low-112404 cal 0-50	3	1	1	12/9/2004 8:34:

RPD 0%

106.5%

107.6%

97.5%

Analyst name : Maureen Donlin
Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

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Queue report

Signal : 1 (C)

120904MD

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
141	PBW	fault	1000	µL	-2.04	0	mg/L	78.8			UV Sparge	LOW-120404 cal 0-50	4	1	1	12/9/2004 8:43:
142	PBW	sample	1000	µL	-2.11	0	mg/L	76.5			UV Replicate	LOW-120404 cal 0-50	4	1	1	12/9/2004 8:46:
143	PBW	sample	1000	µL	-2.30	0	mg/L	69.6			UV Replicate	LOW-120404 cal 0-50	4	1	1	12/9/2004 8:48:
144	PBW	sample	1000	µL	-2.03	0	mg/L	79.3			UV Replicate	LOW-120404 cal 0-50	4	1	1	12/9/2004 8:50:
145	PBW	sample	1000	µL	-2.29	0	mg/L	69.9	-2.18	6.17	UV Replicate	LOW-120404 cal 0-50	4	1	1	12/9/2004 8:52:
146	LCSW 19.7	fault	1000	µL	19.38	0	mg/L	852.4			UV Sparge	LOW-120404 cal 0-50	5	1	1	12/9/2004 9:02:1
147	LCSW 19.7	sample	1000	µL	19.15	0	mg/L	843.8			UV Replicate	LOW-120404 cal 0-50	5	1	1	12/9/2004 9:04:
148	LCSW 19.7	sample	1000	µL	18.76	0	mg/L	829.8			UV Replicate	LOW-120404 cal 0-50	5	1	1	12/9/2004 9:06:
149	LCSW 19.7	sample	1000	µL	18.90	0	mg/L	834.8			UV Replicate	LOW-120404 cal 0-50	5	1	1	12/9/2004 9:09:
150	LCSW 19.7	sample	1000	µL	18.55	0	mg/L	822.2	18.84	1.33	UV Replicate	LOW-120404 cal 0-50	5	1	1	12/9/2004 9:11:
151	P0412035-03A	fault	1000	µL	-1.00	0	mg/L	116.6			UV Sparge	LOW-120404 cal 0-50	27	1	1	12/9/2004 9:20:
152	P0412035-03A	sample	1000	µL	-0.70	0	mg/L	127.3			UV Replicate	LOW-120404 cal 0-50	27	1	1	12/9/2004 9:23:
153	P0412035-03A	sample	1000	µL	-0.99	0	mg/L	116.8			UV Replicate	LOW-120404 cal 0-50	27	1	1	12/9/2004 9:25:
154	P0412035-03A	sample	1000	µL	-0.94	0	mg/L	118.7			UV Replicate	LOW-120404 cal 0-50	27	1	1	12/9/2004 9:27:
155	P0412035-03A	sample	1000	µL	-0.98	0	mg/L	117.1	-0.90	15.15	UV Replicate	LOW-120404 cal 0-50	27	1	1	12/9/2004 9:29:
156	P0412035-04A	fault	1000	µL	-1.41	0	mg/L	101.6			UV Sparge	LOW-120404 cal 0-50	28	1	1	12/9/2004 9:38:
157	P0412035-04A	sample	1000	µL	-1.49	0	mg/L	98.9			UV Replicate	LOW-120404 cal 0-50	28	1	1	12/9/2004 9:41:
158	P0412035-04A	sample	1000	µL	-1.61	0	mg/L	94.5			UV Replicate	LOW-120404 cal 0-50	28	1	1	12/9/2004 9:43:
159	P0412035-04A	sample	1000	µL	-1.61	0	mg/L	94.6			UV Replicate	LOW-120404 cal 0-50	28	1	1	12/9/2004 9:46:1
160	P0412035-04A	sample	1000	µL	-1.24	0	mg/L	107.8	-1.48	11.70	UV Replicate	LOW-120404 cal 0-50	28	1	1	12/9/2004 9:48:
161	P0412037-01A	fault	1000	µL	1.77	0	mg/L	216.3			UV Sparge	LOW-120404 cal 0-50	29	1	1	12/9/2004 9:57:
162	P0412037-01A	sample	1000	µL	1.62	0	mg/L	211.0			UV Replicate	LOW-120404 cal 0-50	29	1	1	12/9/2004 10:00:
163	P0412037-01A	sample	1000	µL	2.10	0	mg/L	228.5			UV Replicate	LOW-120404 cal 0-50	29	1	1	12/9/2004 10:02:
164	P0412037-01A	sample	1000	µL	1.71	0	mg/L	214.3			UV Replicate	LOW-120404 cal 0-50	29	1	1	12/9/2004 10:04:
165	P0412037-01A	sample	1000	µL	1.88	0	mg/L	220.6	1.83	11.67	UV Replicate	LOW-120404 cal 0-50	29	1	1	12/9/2004 10:06:
166	P0412037-02A	fault	1000	µL	19.42	0	mg/L	853.9			UV Sparge	LOW-120404 cal 0-50	30	1	1	12/9/2004 10:16:1
167	P0412037-02A	sample	1000	µL	19.41	0	mg/L	853.4			UV Replicate	LOW-120404 cal 0-50	30	1	1	12/9/2004 10:18:
168	P0412037-02A	sample	1000	µL	19.18	0	mg/L	845.0			UV Replicate	LOW-120404 cal 0-50	30	1	1	12/9/2004 10:20:

Analyst name : Maureen Donlin

Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

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Queue report

Signal : 1 (C)

120904MD

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
169	P0412037-02A	sample	1000	µL	19.39	0	mg/L	852.6			UV Replicate	Low-112404 cal 0-50	30	1	1	12/9/2004 10:23:(
170	P0412037-02A	sample	1000	µL	18.97	0	mg/L	837.6	19.24	1.07	UV Replicate	Low-112404 cal 0-50	30	1	1	12/9/2004 10:25:2
171	P0412055-01A	fault	1000	µL	-1.31	0	mg/L	105.1			UV Sparge	Low-112404 cal 0-50	31	1	1	12/9/2004 10:34:3
172	P0412055-01A	sample	1000	µL	-1.68	0	mg/L	91.7			UV Replicate	Low-112404 cal 0-50	31	1	1	12/9/2004 10:36:5
173	P0412055-01A	sample	1000	µL	-1.53	0	mg/L	97.3			UV Replicate	Low-112404 cal 0-50	31	1	1	12/9/2004 10:39:1
174	P0412055-01A	sample	1000	µL	-1.42	0	mg/L	101.2			UV Replicate	Low-112404 cal 0-50	31	1	1	12/9/2004 10:41:2
175	P0412055-01A	sample	1000	µL	-1.52	0	mg/L	97.7	-1.54	7.04	UV Replicate	Low-112404 cal 0-50	31	1	1	12/9/2004 10:43:4
176	P0412055-02A	fault	1000	µL	-2.08	0	mg/L	76.3			UV Sparge	Low-112404 cal 0-50	32	1	1	12/9/2004 10:53:(
177	P0412055-02A	sample	1000	µL	-1.93	0	mg/L	83.0			UV Replicate	Low-112404 cal 0-50	32	1	1	12/9/2004 10:55:1
178	P0412055-02A	sample	1000	µL	-1.91	0	mg/L	83.6			UV Replicate	Low-112404 cal 0-50	32	1	1	12/9/2004 10:57:3
179	P0412055-02A	sample	1000	µL	-2.13	0	mg/L	75.6			UV Replicate	Low-112404 cal 0-50	32	1	1	12/9/2004 10:59:5
180	P0412055-02A	sample	1000	µL	-1.76	0	mg/L	89.1	-1.93	7.90	UV Replicate	Low-112404 cal 0-50	32	1	1	12/9/2004 11:02:1
181	P0412055-03A	fault	1000	µL	-2.11	0	mg/L	76.3			UV Sparge	Low-112404 cal 0-50	33	1	1	12/9/2004 11:11:3
182	P0412055-03A	sample	1000	µL	-2.23	0	mg/L	71.9			UV Replicate	Low-112404 cal 0-50	33	1	1	12/9/2004 11:13:4
183	P0412055-03A	sample	1000	µL	-1.97	0	mg/L	81.5			UV Replicate	Low-112404 cal 0-50	33	1	1	12/9/2004 11:16:(
184	P0412055-03A	sample	1000	µL	-1.84	0	mg/L	86.2			UV Replicate	Low-112404 cal 0-50	33	1	1	12/9/2004 11:18:2
185	P0412055-03A	sample	1000	µL	-2.12	0	mg/L	75.9	-2.04	8.52	UV Replicate	Low-112404 cal 0-50	33	1	1	12/9/2004 11:20:4
186	rinse	fault	1000	µL	-1.69	0	mg/L	91.5			UV Sparge	Low-112404 cal 0-50	34	1	1	12/9/2004 11:30:(
187	rinse	sample	1000	µL	-1.92	0	mg/L	83.4			UV Replicate	Low-112404 cal 0-50	34	1	1	12/9/2004 11:32:2
188	rinse	sample	1000	µL	-1.89	0	mg/L	84.2			UV Replicate	Low-112404 cal 0-50	34	1	1	12/9/2004 11:34:4
189	rinse	sample	1000	µL	-2.19	0	mg/L	73.6			UV Replicate	Low-112404 cal 0-50	34	1	1	12/9/2004 11:36:5
190	rinse	sample	1000	µL	-2.03	0	mg/L	79.3	-2.01	6.69	UV Replicate	Low-112404 cal 0-50	34	1	1	12/9/2004 11:39:1
191	CCB	fault	1000	µL	-1.53	0	mg/L	97.3			UV Sparge	Low-112404 cal 0-50	35	1	1	12/9/2004 11:48:3
192	CCB	sample	1000	µL	-1.44	0	mg/L	100.6			UV Replicate	Low-112404 cal 0-50	35	1	1	12/9/2004 11:50:5
193	CCB	sample	1000	µL	-1.20	0	mg/L	109.2			UV Replicate	Low-112404 cal 0-50	35	1	1	12/9/2004 11:53:1
194	CCB	sample	1000	µL	-1.89	0	mg/L	87.6			UV Replicate	Low-112404 cal 0-50	35	1	1	12/9/2004 11:55:2
195	CCB	sample	1000	µL	-1.64	0	mg/L	93.2	-1.52	17.05	UV Replicate	Low-112404 cal 0-50	35	1	1	12/9/2004 11:57:4
196	CCV 25ppm	fault	1000	µL	25.51	0	mg/L	1073.5			UV Sparge	Low-112404 cal 0-50	36	1	1	12/10/2004 12:07:1

Analyst name : Maureen Donlin

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Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

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Queue report

Signal : 1 (C)

120904MD

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
197	CCV 25ppm	sample	1000	µL	24.68	0	mg/L	1043.6			UV Replicate	Low-112404 cal 0-50	36	1	1	12/10/2004 12:09:2
198	CCV 25ppm	sample	1000	µL	24.09	0	mg/L	1022.3			UV Replicate	Low-112404 cal 0-50	36	1	1	12/10/2004 12:11:4
199	CCV 25ppm	sample	1000	µL	24.47	0	mg/L	1036.0			UV Replicate	Low-112404 cal 0-50	36	1	1	12/10/2004 12:14:0
200	CCV 25ppm	sample	1000	µL	24.86	0	mg/L	1050.1			UV Replicate	Low-112404 cal 0-50	36	1	1	12/10/2004 12:16:1
201	CCB	sample	1000	µL	41.06	0	mg/L	1635.0	24.52	1.35	HT Sparge	Low-112404 cal 0-50	37	1	1	12/10/2004 12:28:0
202	CCB	sample	1000	µL	5.35	0	mg/L	345.6			HT Replicate	Low-112404 cal 0-50	37	1	1	12/10/2004 12:32:0
203	CCB	sample	1000	µL	0.97	0	mg/L	187.6			HT Replicate	Low-112404 cal 0-50	37	1	1	12/10/2004 12:36:0
204	CCB	sample	1000	µL	-1.64	0	mg/L	93.3			HT Replicate	Low-112404 cal 0-50	37	1	1	12/10/2004 12:40:1
205	CCB	sample	1000	µL	-1.89	0	mg/L	84.4			HT Replicate	Low-112404 cal 0-50	37	1	1	12/10/2004 12:44:2
206	CCV 50ppm	sample	1000	µL	45.86	0	mg/L	1809.0	8.77	208.50	HT Sparge	Low-112404 cal 0-50	38	1	1	12/10/2004 12:55:1
207	CCV 50ppm	sample	1000	µL	44.76	0	mg/L	1768.1			HT Replicate	Low-112404 cal 0-50	38	1	1	12/10/2004 12:59:4
208	CCV 50ppm	sample	1000	µL	47.79	0	mg/L	1878.0			HT Replicate	Low-112404 cal 0-50	38	1	1	12/10/2004 1:04:3
209	CCV 50ppm	sample	1000	µL	45.87	0	mg/L	1808.8			HT Replicate	Low-112404 cal 0-50	38	1	1	12/10/2004 1:09:2
210	CCV 50ppm	sample	1000	µL	44.48	0	mg/L	1758.4	45.75	2.66	HT Replicate	Low-112404 cal 0-50	38	1	1	12/10/2004 1:14:1
211	IDOP #1 10ppm	sample	1000	µL	11.16	0	mg/L	555.2			HT Sparge	Low-112404 cal 0-50	39	1	1	12/10/2004 1:24:5
212	IDOP #1 10ppm	sample	1000	µL	8.16	0	mg/L	447.3			HT Replicate	Low-112404 cal 0-50	39	1	1	12/10/2004 1:29:0
213	IDOP #1 10ppm	sample	1000	µL	8.30	0	mg/L	452.1			HT Replicate	Low-112404 cal 0-50	39	1	1	12/10/2004 1:33:0
214	IDOP #1 10ppm	sample	1000	µL	9.18	0	mg/L	484.0			HT Replicate	Low-112404 cal 0-50	39	1	1	12/10/2004 1:37:1
215	IDOP #1 10ppm	sample	1000	µL	8.31	0	mg/L	452.7	9.02	13.94	HT Replicate	Low-112404 cal 0-50	39	1	1	12/10/2004 1:41:1
216	IDOP #2 10ppm	sample	1000	µL	8.79	0	mg/L	469.8			HT Sparge	Low-112404 cal 0-50	40	1	1	12/10/2004 1:51:4
217	IDOP #2 10ppm	sample	1000	µL	7.94	0	mg/L	439.3			HT Replicate	Low-112404 cal 0-50	40	1	1	12/10/2004 1:55:5
218	IDOP #2 10ppm	sample	1000	µL	7.92	0	mg/L	438.4			HT Replicate	Low-112404 cal 0-50	40	1	1	12/10/2004 1:59:5
219	IDOP #2 10ppm	sample	1000	µL	8.68	0	mg/L	466.1			HT Replicate	Low-112404 cal 0-50	40	1	1	12/10/2004 2:03:5
220	IDOP #2 10ppm	sample	1000	µL	7.81	0	mg/L	434.5	8.23	5.68	HT Replicate	Low-112404 cal 0-50	40	1	1	12/10/2004 2:08:0
221	IDOP #3 10ppm	sample	1000	µL	9.24	0	mg/L	486.2			HT Sparge	Low-112404 cal 0-50	41	1	1	12/10/2004 2:18:3
222	IDOP #3 10ppm	sample	1000	µL	7.63	0	mg/L	428.0			HT Replicate	Low-112404 cal 0-50	41	1	1	12/10/2004 2:22:3
223	IDOP #3 10ppm	sample	1000	µL	8.35	0	mg/L	454.1			HT Replicate	Low-112404 cal 0-50	41	1	1	12/10/2004 2:26:4
224	IDOP #3 10ppm	sample	1000	µL	7.40	0	mg/L	419.7			HT Replicate	Low-112404 cal 0-50	41	1	1	12/10/2004 2:30:4

98.19%

HT Steady

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HT Steady

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Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
225	IDOP #3 10ppm	sample	1000	µL	8.39	0	mg/L	455.4	8.20	8.66	HT Replicate	Low-112404 cal 0-50	41	1	1	12/10/2004 2:34:5
226	IDOP #4 10ppm	sample	1000	µL	8.63	0	mg/L	464.2			HT Sparge	Low-112404 cal 0-50	42	1	1	12/10/2004 2:45:3
227	IDOP #4 10ppm	sample	1000	µL	7.05	0	mg/L	407.0			HT Replicate	Low-112404 cal 0-50	42	1	1	12/10/2004 2:49:4
228	IDOP #4 10ppm	sample	1000	µL	7.93	0	mg/L	439.0			HT Replicate	Low-112404 cal 0-50	42	1	1	12/10/2004 2:53:4
229	IDOP #4 10ppm	sample	1000	µL	8.04	0	mg/L	442.9			HT Replicate	Low-112404 cal 0-50	42	1	1	12/10/2004 2:57:5
230	IDOP #4 10ppm	sample	1000	µL	7.81	0	mg/L	434.5	7.89	7.20	HT Replicate	Low-112404 cal 0-50	42	1	1	12/10/2004 3:01:5
231	P0411515-01A dil 1/100	sample	1000	µL	373.14	0	mg/L	13624.9			HT Sparge	Low-112404 cal 0-50	43	1	1	12/10/2004 3:16:5
232	P0411515-01A dil 1/100	sample	1000	µL	359.11	0	mg/L	13118.3			HT Replicate	Low-112404 cal 0-50	43	1	1	12/10/2004 3:25:3
233	P0411515-01A dil 1/100	sample	1000	µL	382.23	0	mg/L	13953.2			HT Replicate	Low-112404 cal 0-50	43	1	1	12/10/2004 3:34:5
234	P0411515-01A dil 1/100	sample	1000	µL	378.09	0	mg/L	13803.8			HT Replicate	Low-112404 cal 0-50	43	1	1	12/10/2004 3:44:2
235	P0411515-01A dil 1/100	sample	1000	µL	371.92	0	mg/L	13581.1	372.90	2.34	HT Replicate	Low-112404 cal 0-50	43	1	1	12/10/2004 3:53:3
236	P0411515-01A dil 1/200	sample	1000	µL	242.36	0	mg/L	8903.2			HT Sparge	Low-112404 cal 0-50	44	1	1	12/10/2004 4:07:5
237	P0411515-01A dil 1/200	sample	1000	µL	205.36	0	mg/L	7567.4			HT Replicate	Low-112404 cal 0-50	44	1	1	12/10/2004 4:16:4
238	P0411515-01A dil 1/200	sample	1000	µL	209.00	0	mg/L	7698.6			HT Replicate	Low-112404 cal 0-50	44	1	1	12/10/2004 4:24:5
239	P0411515-01A dil 1/200	sample	1000	µL	209.33	0	mg/L	7710.6			HT Replicate	Low-112404 cal 0-50	44	1	1	12/10/2004 4:33:2
240	P0411515-01A dil 1/200	sample	1000	µL	206.79	0	mg/L	7619.0	214.57	7.28	HT Replicate	Low-112404 cal 0-50	44	1	1	12/10/2004 4:41:0
241	P0411515-02A	sample	1000	µL	396.11	0	mg/L	14418.3			HT Sparge	Low-112404 cal 0-50	45	1	1	12/10/2004 4:55:4
242	P0411515-02A	sample	1000	µL	388.81	0	mg/L	14191.0			HT Replicate	Low-112404 cal 0-50	45	1	1	12/10/2004 5:05:1
243	P0411515-02A	sample	1000	µL	396.82	0	mg/L	14479.9			HT Replicate	Low-112404 cal 0-50	45	1	1	12/10/2004 5:15:2
244	P0411515-02A	sample	1000	µL	398.82	0	mg/L	14552.2			HT Replicate	Low-112404 cal 0-50	45	1	1	12/10/2004 5:24:3
245	P0411515-02A	sample	1000	µL	376.00	0	mg/L	13728.3	391.11	2.36	HT Replicate	Low-112404 cal 0-50	45	1	1	12/10/2004 5:33:3
246	P0411515-02A dil 1/5	sample	1000	µL	125.49	0	mg/L	4683.5			HT Sparge	Low-112404 cal 0-50	46	1	1	12/10/2004 5:46:2
247	P0411515-02A dil 1/5	sample	1000	µL	89.56	0	mg/L	3386.3			HT Replicate	Low-112404 cal 0-50	46	1	1	12/10/2004 5:52:3
248	P0411515-02A dil 1/5	sample	1000	µL	86.43	0	mg/L	3273.2			HT Replicate	Low-112404 cal 0-50	46	1	1	12/10/2004 5:58:4
249	P0411515-02A dil 1/5	sample	1000	µL	89.15	0	mg/L	3371.4			HT Replicate	Low-112404 cal 0-50	46	1	1	12/10/2004 6:04:5
250	P0411515-02A dil 1/5	sample	1000	µL	87.78	0	mg/L	3321.0	95.66	17.47	HT Replicate	Low-112404 cal 0-50	46	1	1	12/10/2004 6:11:0
251	CCV 50ppm	sample	1000	µL	58.92	0	mg/L	2279.7			HT Sparge	Low-112404 cal 0-50	47	1	1	12/10/2004 6:22:0
252	CCV 50ppm	sample	1000	µL	53.77	0	mg/L	2093.8			HT Replicate	Low-112404 cal 0-50	47	1	1	12/10/2004 6:26:4

Analyst name : Maureen Donlin

Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

MWB-2

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Queue report

Signal : 1 (C)

120904MD

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
253	CCV 50ppm	sample	1000	µL	50.34	0	mg/L	1970.2			HT Replicate	Low-112404 cal 0-50	47	1	1	12/10/2004 6:31:4
254	CCV 50ppm	sample	1000	µL	47.68	0	mg/L	1874.1			HT Replicate	Low-112404 cal 0-50	47	1	1	12/10/2004 6:37:2
255	CCV 50ppm	sample	1000	µL	49.16	0	mg/L	1927.4	51.97	6.63	HT Replicate	Low-112404 cal 0-50	47	1	1	12/10/2004 6:42:2
256	CCB	sample	1000	µL	4.10	0	mg/L	300.6			HT Sparge	Low-112404 cal 0-50	48	1	1	12/10/2004 6:52:5
257	CCB	sample	1000	µL	-0.80	0	mg/L	123.6			HT Replicate	Low-112404 cal 0-50	48	1	1	12/10/2004 6:57:0
258	CCB	sample	1000	µL	-0.23	0	mg/L	144.1			HT Replicate	Low-112404 cal 0-50	48	1	1	12/10/2004 7:01:0
259	CCB	sample	1000	µL	-0.68	0	mg/L	127.9			HT Replicate	Low-112404 cal 0-50	48	1	1	12/10/2004 7:05:1
260	CCB	sample	1000	µL	-1.49	0	mg/L	98.7	0.18	125.37	HT Replicate	Low-112404 cal 0-50	48	1	1	12/10/2004 7:09:1

End of queue

399

Analyst name : Maureen Donlin
Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

MWB-2

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Queue report

Signal : 1 (C)

112404 cal 0-50

1

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
1	Blank	fault	1000	µL	2.32	0	mg/L	236.3			UV Sparge	LOW-112404 cal 0-50	1	1	1	11/24/2004 2:12:
2	Blank	fault	1000	µL	-0.50	0	mg/L	134.3			UV Replicate	LOW-112404 cal 0-50	1	1	1	11/24/2004 2:14:
3	Blank	fault	1000	µL	-1.11	0	mg/L	112.4			UV Replicate	LOW-112404 cal 0-50	1	1	1	11/24/2004 2:17:1
4	Blank	fault	1000	µL	-0.82	0	mg/L	122.8			UV Replicate	LOW-112404 cal 0-50	1	1	1	11/24/2004 2:19:
5	Blank	fault	1000	µL	-0.89	0	mg/L	120.6			UV Replicate	LOW-112404 cal 0-50	1	1	1	11/24/2004 2:21:
6	0 PPM	fault	1000	µL	-1.30	0	mg/L	105.6			UV Sparge	LOW-112404 cal 0-50	2	1	1	11/24/2004 2:31:(
7	0 PPM	calibration	1000	µL	-1.34	0	mg/L	104.0			UV Replicate	LOW-112404 cal 0-50	2	1	1	11/24/2004 2:33:1
8	0 PPM	calibration	1000	µL	-1.16	0	mg/L	110.5			UV Replicate	LOW-112404 cal 0-50	2	1	1	11/24/2004 2:35:
9	0 PPM	calibration	1000	µL	-1.23	0	mg/L	108.3			UV Replicate	LOW-112404 cal 0-50	2	1	1	11/24/2004 2:37:
10	0 PPM	calibration	1000	µL	-1.33	0	mg/L	104.4	-1.27	6.85	UV Replicate	LOW-112404 cal 0-50	2	1	1	11/24/2004 2:40:1
11	0.5 PPM	calibration	1000	µL	0.61	0.50	mg/L	174.6			UV Sparge	LOW-112404 cal 0-50	3	1	1	11/24/2004 2:49:
12	0.5 PPM	calibration	1000	µL	0.33	0.50	mg/L	164.4			UV Replicate	LOW-112404 cal 0-50	3	1	1	11/24/2004 2:51:
13	0.5 PPM	calibration	1000	µL	0.47	0.50	mg/L	169.4			UV Replicate	LOW-112404 cal 0-50	3	1	1	11/24/2004 2:54:(
14	0.5 PPM	calibration	1000	µL	0.09	0.50	mg/L	155.8			UV Replicate	LOW-112404 cal 0-50	3	1	1	11/24/2004 2:56:1
15	0.5 PPM	calibration	1000	µL	0.31	0.50	mg/L	163.9	0.36	53.39	UV Replicate	LOW-112404 cal 0-50	3	1	1	11/24/2004 2:58:
16	1 PPM	fault	1000	µL	1.14	1.00	mg/L	193.8			UV Sparge	LOW-112404 cal 0-50	4	1	1	11/24/2004 3:07:
17	1 PPM	calibration	1000	µL	0.92	1.00	mg/L	185.7			UV Replicate	LOW-112404 cal 0-50	4	1	1	11/24/2004 3:10:(
18	1 PPM	calibration	1000	µL	1.22	1.00	mg/L	196.7			UV Replicate	LOW-112404 cal 0-50	4	1	1	11/24/2004 3:12:
19	1 PPM	calibration	1000	µL	1.23	1.00	mg/L	196.8			UV Replicate	LOW-112404 cal 0-50	4	1	1	11/24/2004 3:14:
20	1 PPM	calibration	1000	µL	1.11	1.00	mg/L	192.7	1.12	12.90	UV Replicate	LOW-112404 cal 0-50	4	1	1	11/24/2004 3:16:
21	5 PPM	fault	1000	µL	5.75	5.00	mg/L	360.1			UV Sparge	LOW-112404 cal 0-50	5	1	1	11/24/2004 3:26:1
22	5 PPM	calibration	1000	µL	5.46	5.00	mg/L	350.4			UV Replicate	LOW-112404 cal 0-50	5	1	1	11/24/2004 3:28:
23	5 PPM	calibration	1000	µL	5.68	5.00	mg/L	357.5			UV Replicate	LOW-112404 cal 0-50	5	1	1	11/24/2004 3:30:
24	5 PPM	calibration	1000	µL	5.47	5.00	mg/L	350.0			UV Replicate	LOW-112404 cal 0-50	5	1	1	11/24/2004 3:33:(
25	5 PPM	calibration	1000	µL	5.46	5.00	mg/L	349.8	5.52	1.66	UV Replicate	LOW-112404 cal 0-50	5	1	1	11/24/2004 3:35:
26	10PPM	fault	1000	µL	11.24	10.00	mg/L	558.5			UV Sparge	LOW-112404 cal 0-50	6	1	1	11/24/2004 3:44:
27	10PPM	calibration	1000	µL	11.04	10.00	mg/L	551.2			UV Replicate	LOW-112404 cal 0-50	6	1	1	11/24/2004 3:47:(
28	10PPM	calibration	1000	µL	10.80	10.00	mg/L	542.5			UV Replicate	LOW-112404 cal 0-50	6	1	1	11/24/2004 3:49:

400

Analyst name : Maureen Donlin
Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

MWB-2

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Queue report

Signal : 1 (C)

112404 cal 0-50

1

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
29	10PPM	calibration	1000	µL	10.35	10.00	mg/L	526.1								
30	10PPM	calibration	1000	µL	10.88	10.00	mg/L	545.3	10.77	2.76	UV Replicate	LOW-112404 cal 0-50	6	1	1	11/24/2004 3:51:
31	25PPM	fault	1000	µL	26.88	25.00	mg/L	1123.2			UV Replicate	LOW-112404 cal 0-50	6	1	1	11/24/2004 3:53:
32	25PPM	calibration	1000	µL	25.42	25.00	mg/L	1070.5			UV Sparge	LOW-112404 cal 0-50	7	1	1	11/24/2004 4:03:1
33	25PPM	calibration	1000	µL	25.64	25.00	mg/L	1078.2			UV Replicate	LOW-112404 cal 0-50	7	1	1	11/24/2004 4:05:
34	25PPM	calibration	1000	µL	25.34	25.00	mg/L	1067.5			UV Replicate	LOW-112404 cal 0-50	7	1	1	11/24/2004 4:07:
35	25PPM	calibration	1000	µL	25.50	25.00	mg/L	1073.3	25.48	0.49	UV Replicate	LOW-112404 cal 0-50	7	1	1	11/24/2004 4:10:(
36	50PPM	fault	1000	µL	51.81	50.00	mg/L	2023.2			UV Replicate	LOW-112404 cal 0-50	7	1	1	11/24/2004 4:12:
37	50PPM	calibration	1000	µL	49.79	50.00	mg/L	1950.4			UV Sparge	LOW-112404 cal 0-50	8	1	1	11/24/2004 4:21:
38	50PPM	calibration	1000	µL	49.77	50.00	mg/L	1949.4			UV Replicate	LOW-112404 cal 0-50	8	1	1	11/24/2004 4:23:
39	50PPM	calibration	1000	µL	49.65	50.00	mg/L	1945.3			UV Replicate	LOW-112404 cal 0-50	8	1	1	11/24/2004 4:26:(
40	50PPM	calibration	1000	µL	49.01	50.00	mg/L	1922.1	49.56	0.74	UV Replicate	LOW-112404 cal 0-50	8	1	1	11/24/2004 4:28:
											UV Replicate	LOW-112404 cal 0-50	8	1	1	11/24/2004 4:30:

4p1

End of queue

Analyst name	: Maureen Donlin	Sample blanco	: 0
Print date	: 12/10/2004	Calibration blanco	: 0
		Yield (%)	: 100

MWB-2

Sequence: AN120204MAD M041207004
Operator: mdonlin

Title:
Datasource: WETCHEM11_local
Location: Anions\Sequences\AN1004
Timebase: Anions
#Samples: 62

Created: 12/2/2004 7:32:14 AM by mdonlin
Last Update: 12/2/2004 4:36:24 PM by mdonlin

No.	Name	Inj. Date/Time	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID
1	CCB	12/2/2004 7:32:41 AM	1.0000	1.0000	1.0000		01
2	CCB	12/2/2004 7:54:42 AM	1.0000	1.0000	1.0000		01
3	CCV 10ppm	12/2/2004 8:16:43 AM	1.0000	1.0000	1.0000		01
4	CCV 10ppm	12/2/2004 8:38:44 AM	1.0000	1.0000	1.0000		01
5	PBW,	12/2/2004 9:00:44 AM	1.0000	1.0000	1.0000		01
6	LCSW 10ppm	12/2/2004 9:22:45 AM	1.0000	1.0000	1.0000		01
7	P0412024-01AA Cl SO4 NO2 NO3 Phos	12/2/2004 9:44:45 AM	1.0000	1.0000	1.0000		01
8	P0412024-02AA	12/2/2004 10:06:46 AM	1.0000	1.0000	1.0000		01
9	P0412024-03AA	12/2/2004 10:28:46 AM	1.0000	1.0000	1.0000		01
10	P0412024-03AA DUP	12/2/2004 10:50:47 AM	1.0000	1.0000	1.0000		01
11	P0412024-03AA MS 10/50ppm	12/2/2004 11:12:47 AM	1.0000	1.0000	1.0000		01
12	P0412024-03AA MSD 10/50ppm	12/2/2004 11:34:48 AM	1.0000	1.0000	1.0000		01
13	P0412022-01AB NO3 SO4	12/2/2004 11:56:48 AM	1.0000	1.0000	1.0000		01
14	CCB	12/2/2004 12:18:49 PM	1.0000	1.0000	1.0000		01
15	CCV 10ppm	12/2/2004 12:40:49 PM	1.0000	1.0000	1.0000		01
16	CCB	12/2/2004 1:02:50 PM	1.0000	1.0000	1.0000		01
17	A2 water P0412044-01A	12/2/2004 1:24:51 PM	1.0000	1.0000	1.0000		01
18	P0412037-01AA		1.0000	1.0000	1.0000		01
19	P0412037-02AA		1.0000	1.0000	1.0000		01
20	P0412035-01AA		1.0000	1.0000	1.0000		01
21	P0412035-02AA		1.0000	1.0000	1.0000		01
22	P0412035-03AA		1.0000	1.0000	1.0000		01
23	P0412035-04AA		1.0000	1.0000	1.0000		01
24	P0412042-01AA		1.0000	1.0000	1.0000		01
25	P0412042-02AA		1.0000	1.0000	1.0000		01
26	P0412042-03AA		1.0000	1.0000	1.0000		01
27	CCB		1.0000	1.0000	1.0000		01
28	CCV 10ppm		1.0000	1.0000	1.0000		01
29	PBW		1.0000	1.0000	1.0000		01
30	LCSW 10ppm		1.0000	1.0000	1.0000		01
31	P0412042-04AA		1.0000	1.0000	1.0000		01
32	P0412042-04AA DUP		1.0000	1.0000	1.0000		01
33	P0412042-04AA MS 10/50ppm		1.0000	1.0000	1.0000		01
34	P0412042-04AA MSD 10/50ppm		1.0000	1.0000	1.0000		01
35	P0412042-05AA		1.0000	1.0000	1.0000		01
36	P0412042-06AA		1.0000	1.0000	1.0000		01
37	P0412041-01AE		1.0000	1.0000	1.0000		01
38	P0412041-02AE		1.0000	1.0000	1.0000		01
39	CCB		1.0000	1.0000	1.0000		01
40	CCV 10ppm		1.0000	1.0000	1.0000		01
41	PBW		1.0000	1.0000	1.0000		01
42	LCSW 10ppm		1.0000	1.0000	1.0000		01

Sequence: AN120204MAD
Operator: mdonlin

Title:
Datasource: WETCHEM11_local
Location: Anions\Sequences\AN1004
Timebase: Anions
#Samples: 62

Created: 12/2/2004 7:32:14 AM by mdonlin
Last Update: 12/2/2004 4:36:24 PM by mdonlin

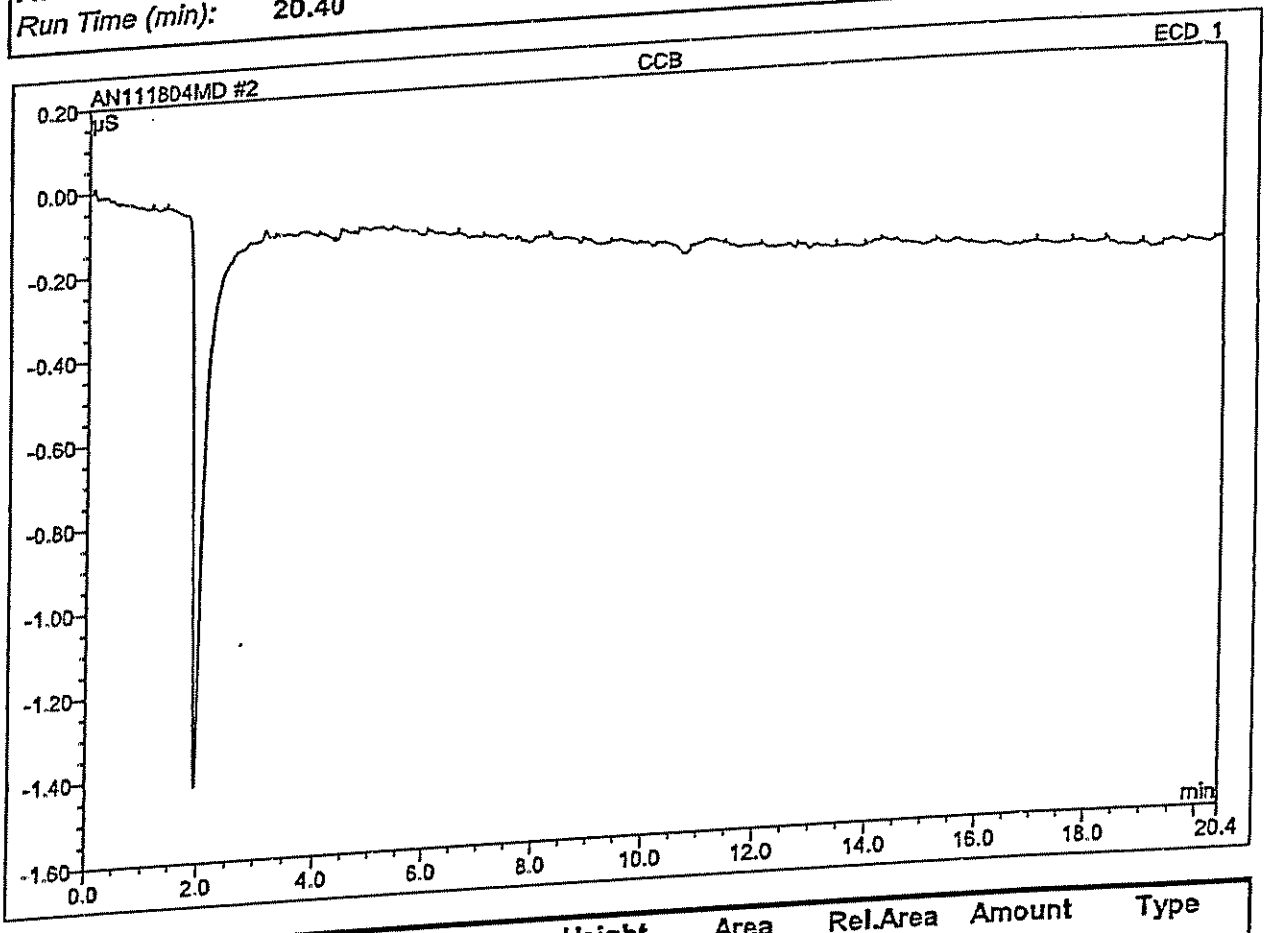
No.	Name	Inj. Date/Time	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID
43	P0412010-01AC DIL 1/5		1.0000	1.0000	1.0000		01
44	P0412010-02AC DIL 1/2		1.0000	1.0000	1.0000		01
45	PGW025C P0412055-01AD		1.0000	1.0000	1.0000		01
46	PGW014DU 3		1.0000	1.0000	1.0000		01
47	PGW024C – 55-2		1.0000	1.0000	1.0000		01
48	P0412053-01AC		1.0000	1.0000	1.0000		01
49	P0412053-01AC DUP		1.0000	1.0000	1.0000		01
50	P0412053-01AC MS		1.0000	1.0000	1.0000		01
51	CCB		1.0000	1.0000	1.0000		01
52	CCV 10ppm		1.0000	1.0000	1.0000		01
53	P0412053-01AC MSD		1.0000	1.0000	1.0000		01
54	P0412053-02AC		1.0000	1.0000	1.0000		01
55	P0412053-03AC		1.0000	1.0000	1.0000		01
56	P0412053-04AC		1.0000	1.0000	1.0000		01
57	P0412053-05AC		1.0000	1.0000	1.0000		01
58	P0412053-06AC		1.0000	1.0000	1.0000		01
59	CCB		1.0000	1.0000	1.0000		01
60	CCV 10ppm		1.0000	1.0000	1.0000		01
61	CCB		1.0000	1.0000	1.0000		01
62	anion shutdown		1.0000	1 0000	1.0000		01

Chromeleon © Dionex Corporation, Version 6.60 Build 1428

Operator:mdonlin Timebase:Anions Sequence:AN111804MD 11/22/2004 4:24 PM

2 CCB

Sample Name:	CCB	*Injection Volume:*	1.0
Vial Number:	53	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 15:57	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000

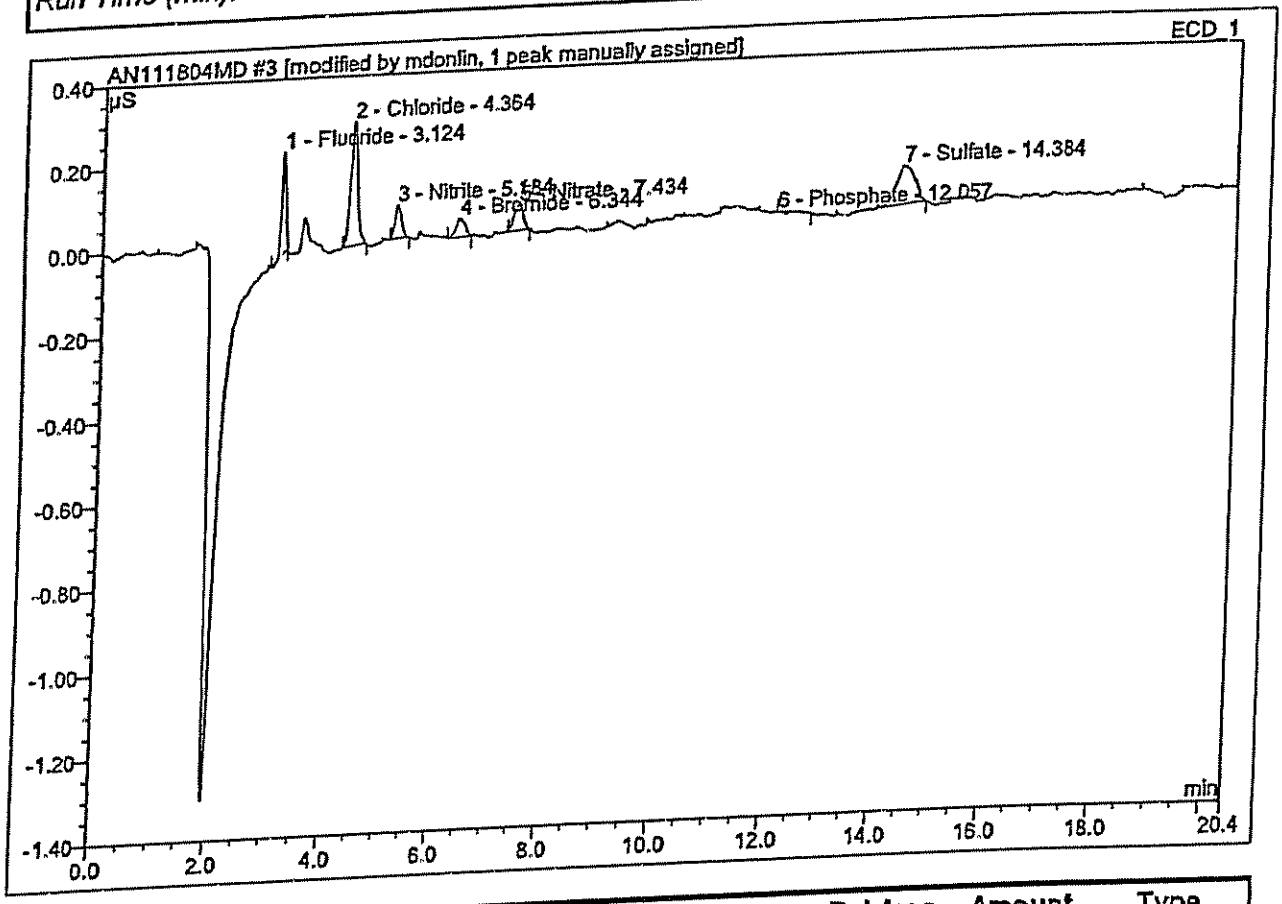


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Chromeleon (c) Dionex 1996-2001
Version 6.60 Build 1428

3 0.1ppm anion std

Sample Name:	0.1ppm anion std	*Injection Volume:*	1.0
Vial Number:	53	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 16:19	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	0.244	0.021	15.53	0.370	BMB*
2	4.36	Chloride	0.297	0.046	34.04	4.218	BMB*
3	5.18	Nitrite	0.079	0.011	8.16	0.770	BMB^
4	6.34	Bromide	0.045	0.009	6.70	1.273	BMB
5	7.43	Nitrate	0.061	0.012	8.89	1.331	BMB
6	12.06	Phosphate	0.000	0.000	0.08	0.653	BMB*
7	14.38	Sulfate	0.091	0.036	26.59	3.812	BMB*
Total:			0.817	0.134	100.00	12.426	

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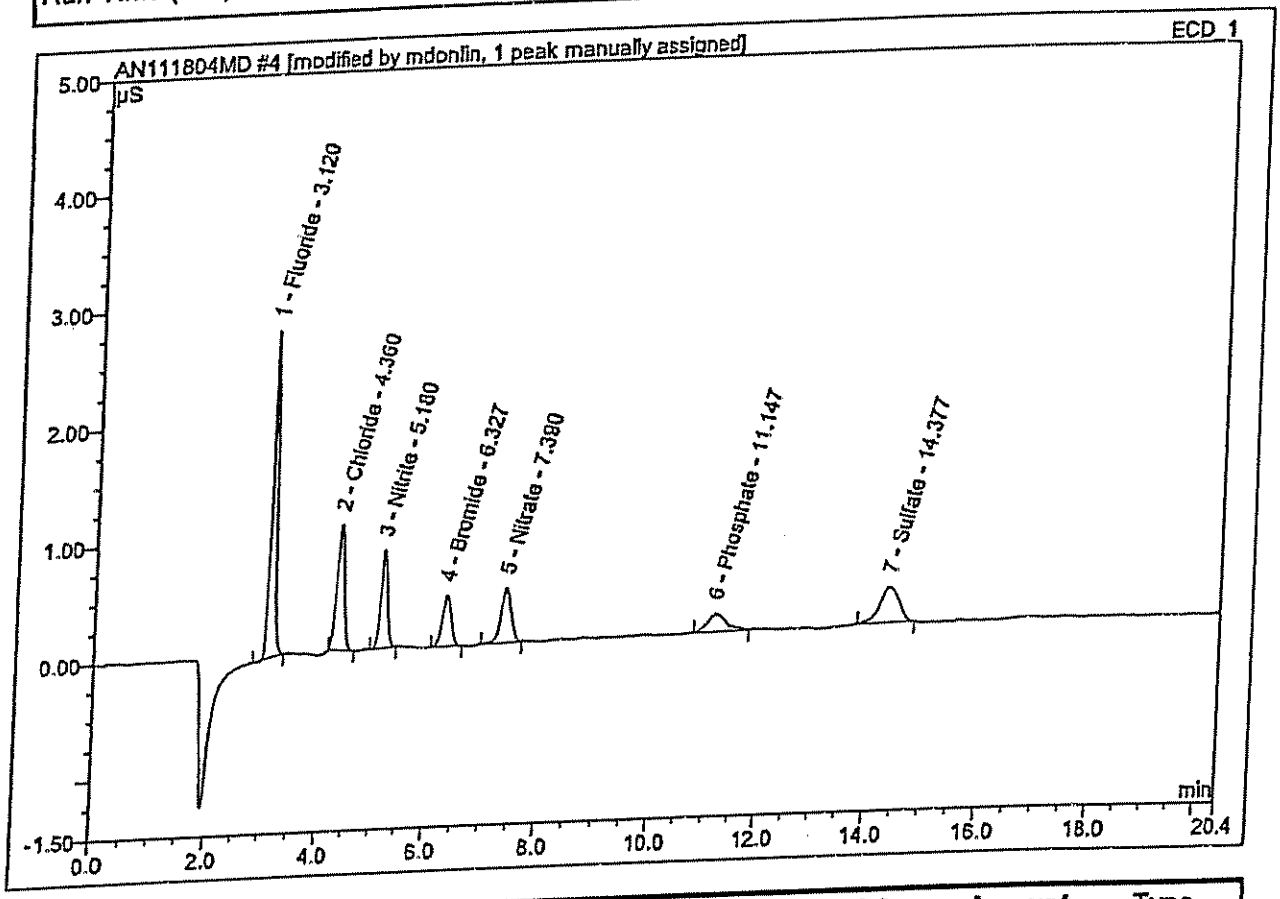
4 1.0ppm anion std

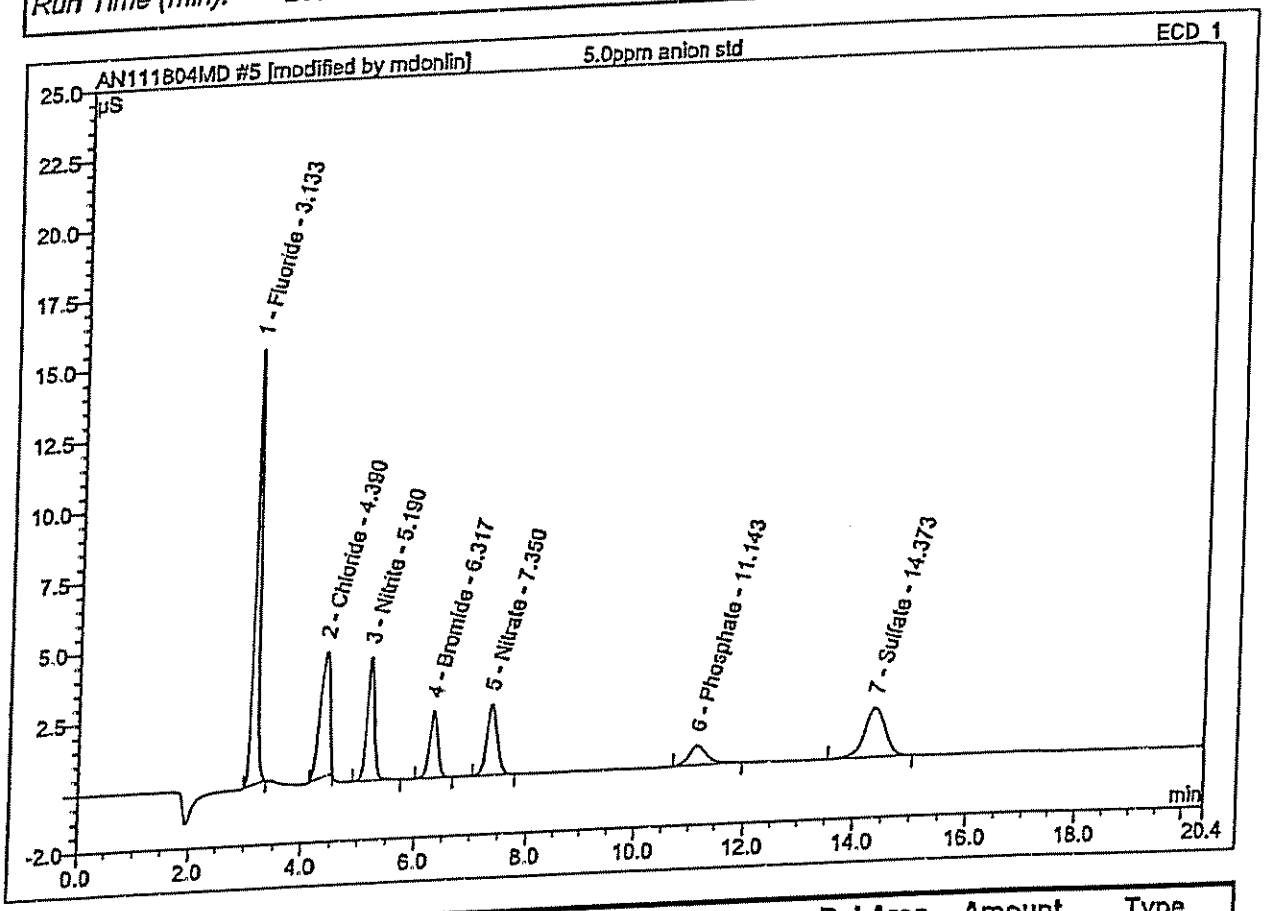
Sample Name:	1.0ppm anion std	*Injection Volume:*	1.0
Vial Number:	54	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 16:41	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	2.790	0.267	28.99	1.000	BMB*
2	4.36	Chloride	1.070	0.169	18.35	1.000	BMB*
3	5.18	Nitrite	0.834	0.121	13.15	0.898	BMB
4	6.33	Bromide	0.436	0.078	8.44	1.885	BMB
5	7.39	Nitrate	0.466	0.099	10.70	1.458	BMB
6	11.15	Phosphate	0.158	0.065	7.09	1.478	BMB^
7	14.38	Sulfate	0.304	0.122	13.28	4.196	BMB
Total:			6.057	0.921	100.00	11.915	

5 5.0ppm anion std

Sample Name:	5.0ppm anion std	*Injection Volume:*	1.0
Vial Number:	56	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 17:03	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.13	Fluoride	15.388	1.461	29.59	5.007	BMB*
2	4.39	Chloride	4.391	0.872	17.65	5.018	BMB*
3	5.19	Nitrite	4.336	0.651	13.19	4.481	BMB
4	6.32	Bromide	2.338	0.408	8.26	4.825	BMB
5	7.35	Nitrate	2.468	0.523	10.60	4.381	BMB
6	11.14	Phosphate	0.694	0.283	5.73	4.717	BMB
7	14.37	Sulfate	1.730	0.740	14.98	6.929	BMB
Total:			31.344	4.938	100.00	35.358	

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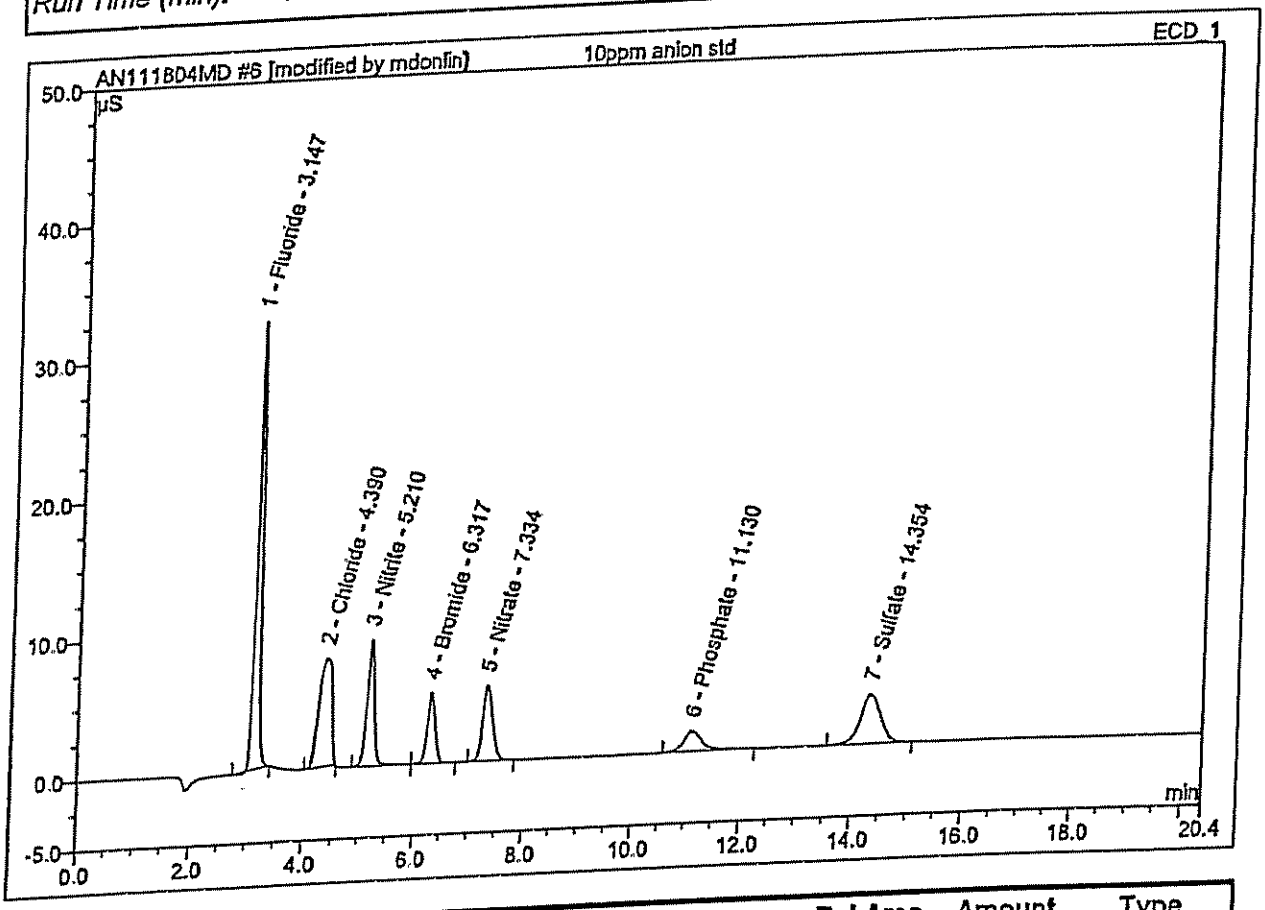
6 10ppm anion std

Sample Name:	10ppm anion std	*Injection Volume:*	1.0
Vial Number:	59	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 17:25	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.15	Fluoride	32.208	3.182	29.86	10.129	BMB*
2	4.39	Chloride	7.736	1.975	18.53	10.216	BMB*
3	5.21	Nitrite	9.078	1.408	13.21	9.411	BMB
4	6.32	Bromide	5.072	0.875	8.21	8.982	BMB
5	7.33	Nitrate	5.387	1.130	10.61	8.560	BMB
6	11.13	Phosphate	1.464	0.598	5.61	9.409	BMB
7	14.35	Sulfate	3.535	1.489	13.97	10.245	BMB
Total:			64.481	10.658	100.00	66.952	

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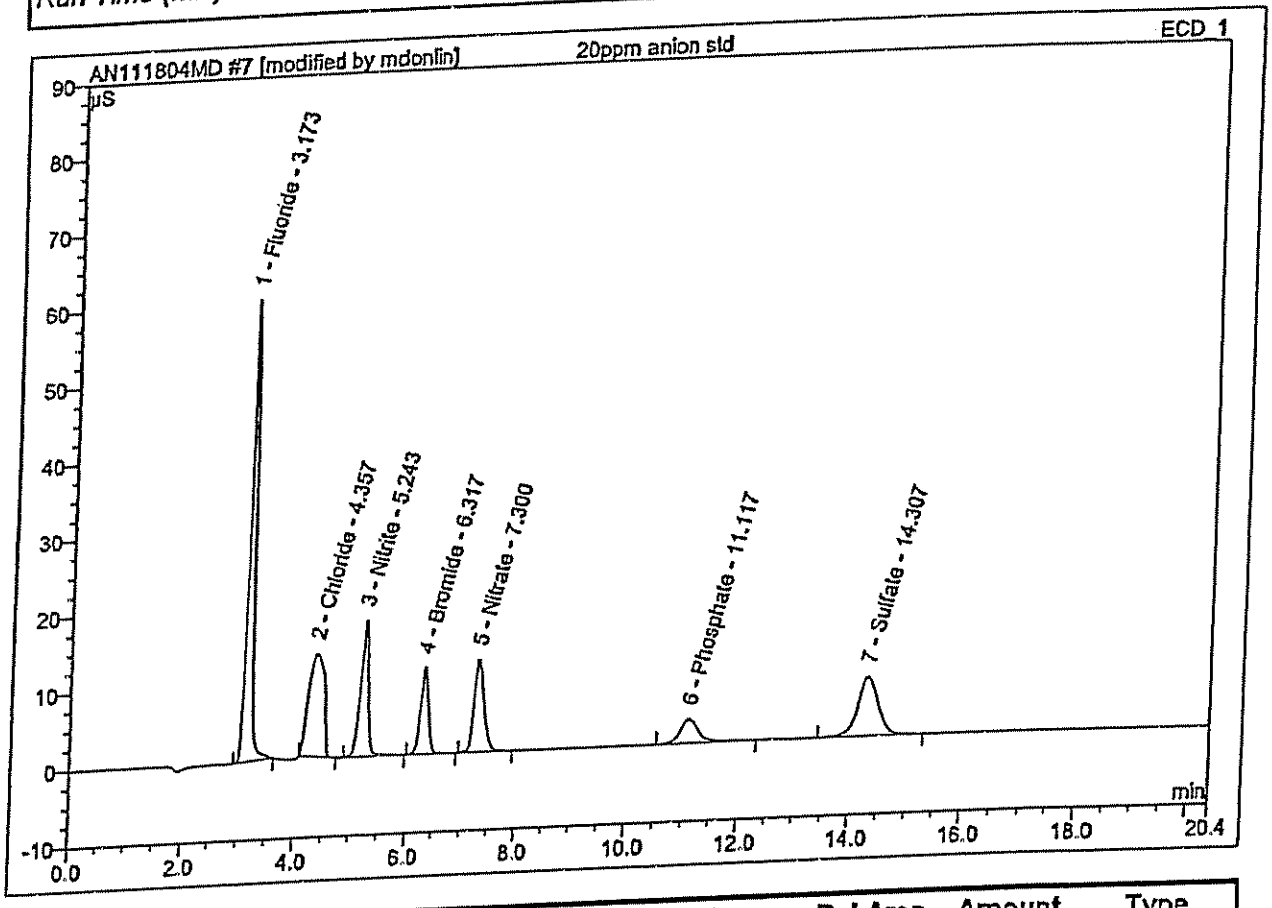
7 20ppm anion std

Sample Name:	20ppm anion std	*Injection Volume:*	1.0
Vial Number:	60	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 17:47	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.17	Fluoride	60.364	7.066	30.57	20.380	BMB*
2	4.36	Chloride	13.392	4.291	18.56	20.346	BMB*
3	5.24	Nitrite	17.706	2.874	12.43	18.897	BMB
4	6.32	Bromide	11.295	1.913	8.27	18.222	BMB
5	7.30	Nitrate	12.011	2.494	10.79	17.946	BMB
6	11.12	Phosphate	3.158	1.234	5.34	18.877	BMB
7	14.31	Sulfate	7.701	3.243	14.03	18.011	BMB
Total:			125.628	23.114	100.00	132.680	

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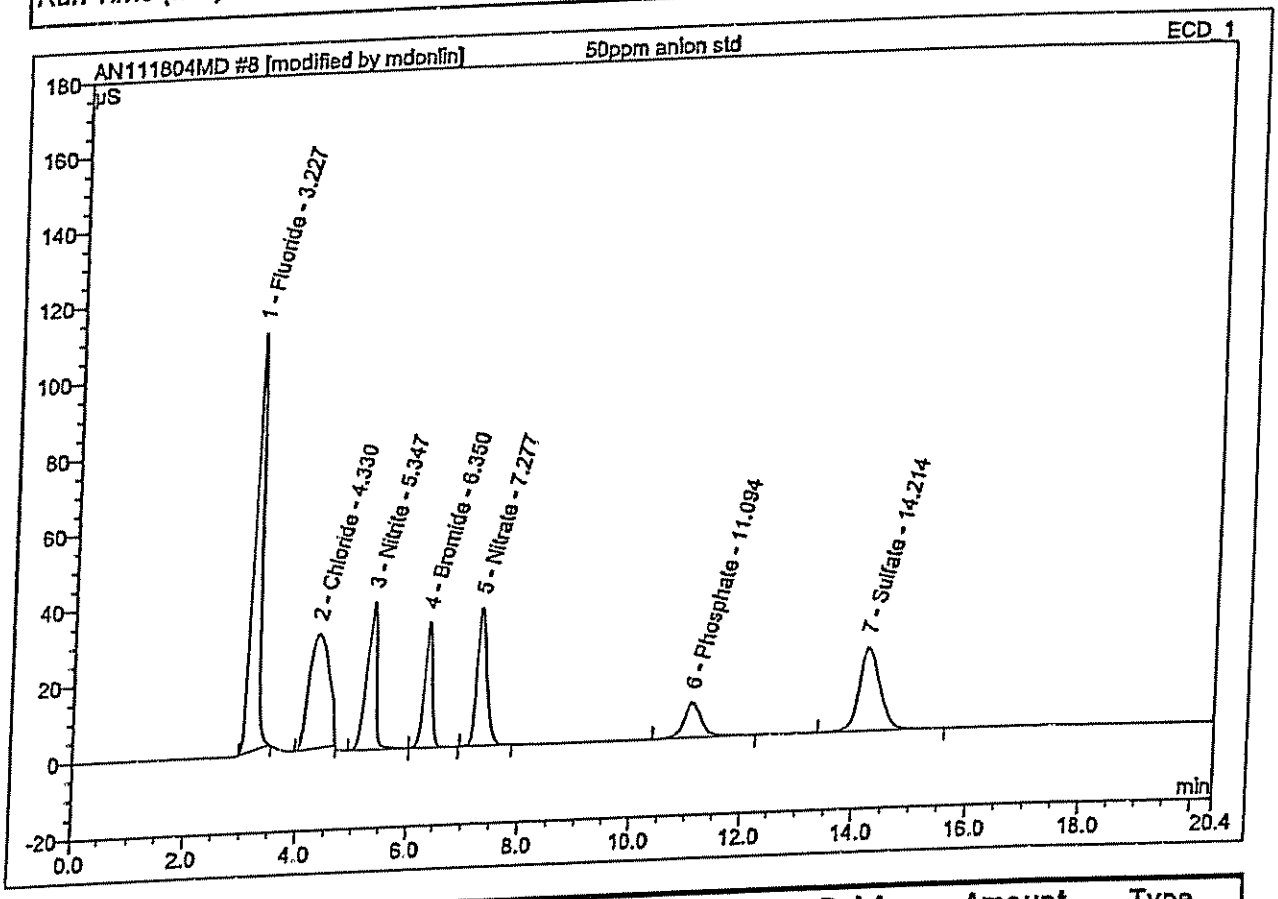
8 50ppm anion std

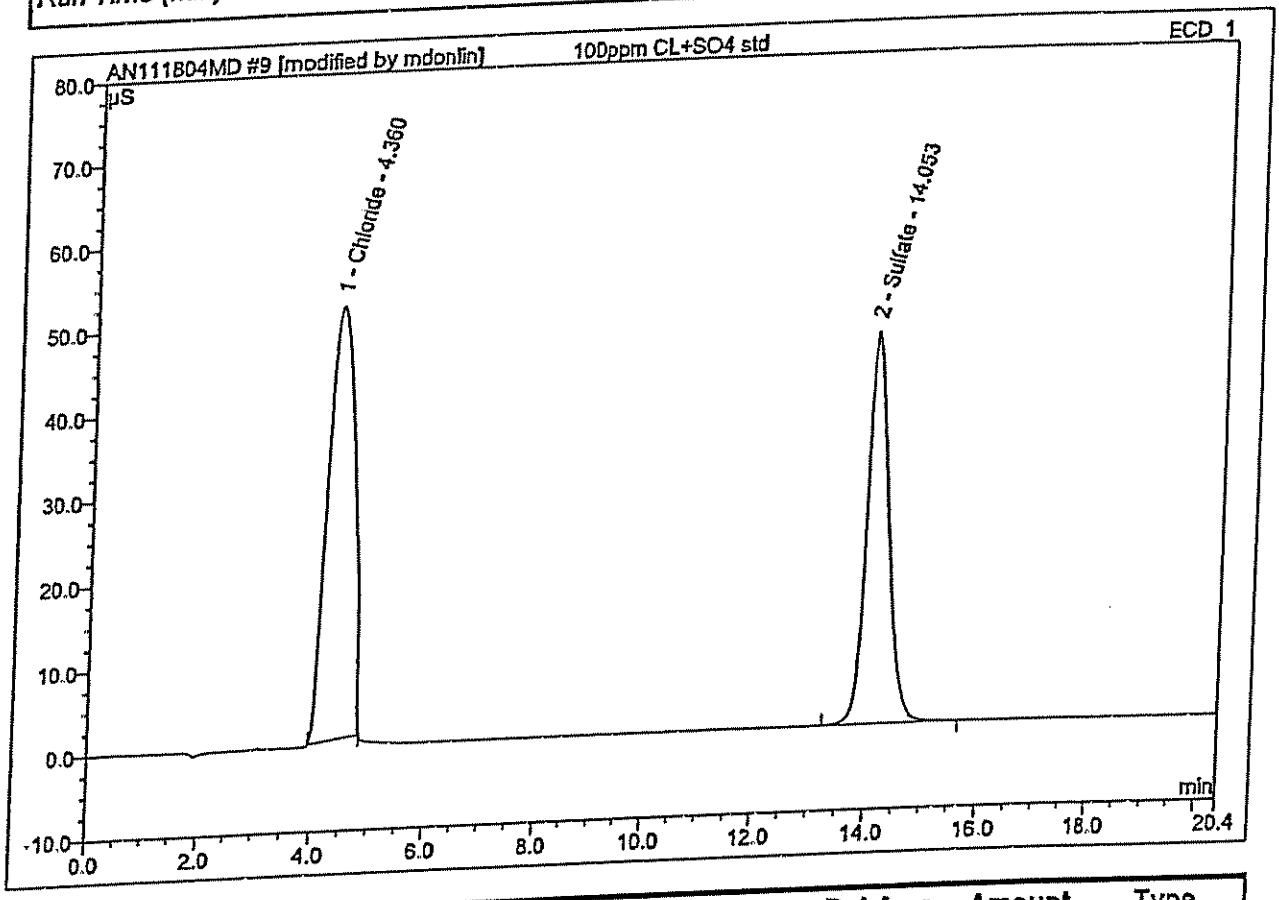
Sample Name:	50ppm anion std	*Injection Volume:*	1.0
Vial Number:	61	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 18:09	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.23	Fluoride	109.721	17.118	27.31	49.839	BMB*
2	4.33	Chloride	29.982	12.262	19.57	50.801	BMB*
3	5.35	Nitrite	38.722	7.868	12.55	50.525	BMB
4	6.35	Bromide	32.934	5.584	8.91	50.912	BMB
5	7.28	Nitrate	36.184	7.320	11.68	51.161	BMB
6	11.09	Phosphate	9.144	3.364	5.37	50.585	BMB
7	14.21	Sulfate	21.875	9.154	14.61	44.179	BMB
Total:			278.561	62.671	100.00	348.002	

9 100ppm CL+SO4 std

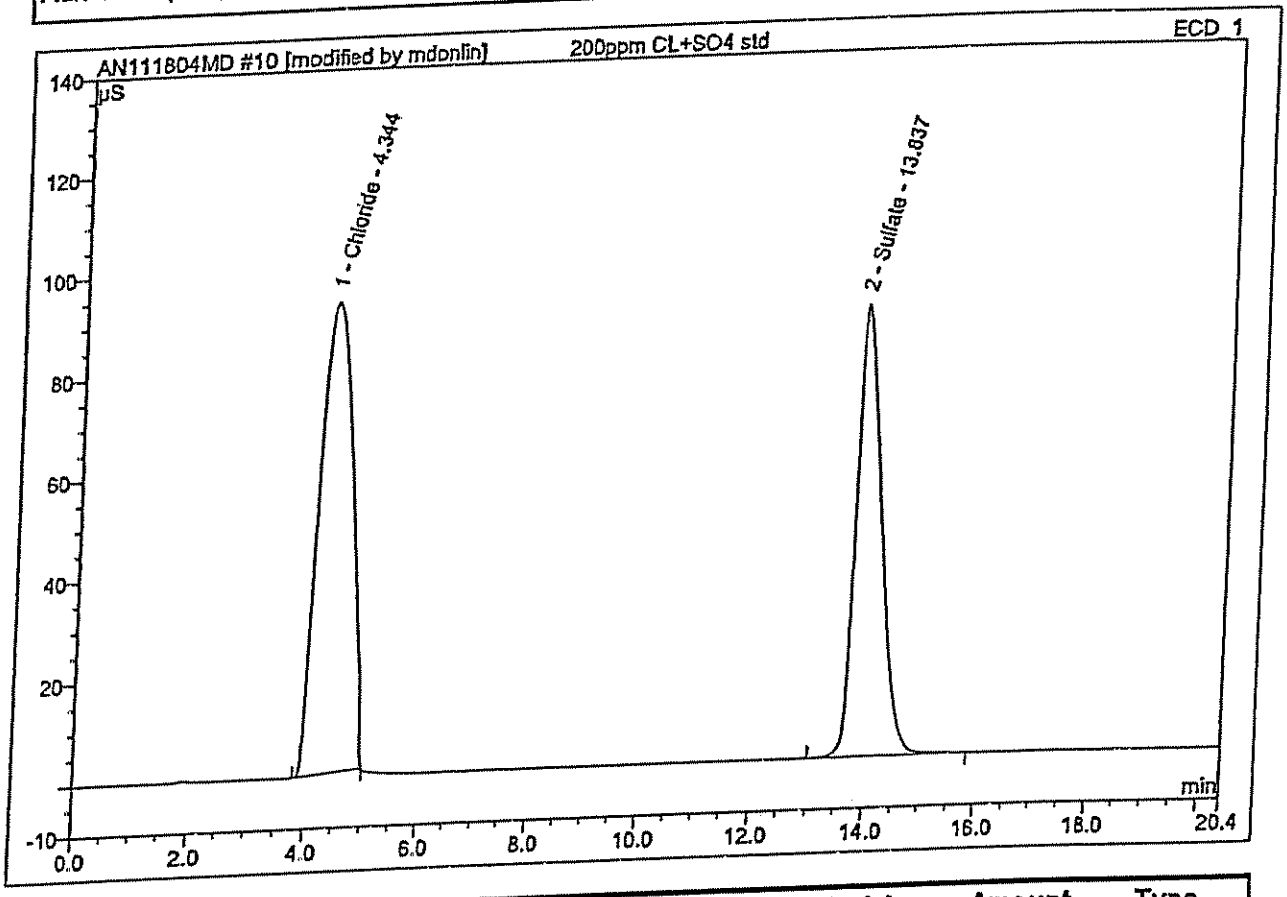
Sample Name:	100ppm CL+SO4 std	*Injection Volume:*	1.0
Vial Number:	62	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 18:31	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.36	Chloride	51.247	27.599	57.41	102.203	BMB*
2	14.05	Sulfate	46.348	20.476	42.59	94.304	BMB
Total:			97.594	48.076	100.00	196.508	

10 200ppm CL+SO4 std

Sample Name:	200ppm CL+SO4 std	*Injection Volume:*	1.0
Vial Number:	63	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 18:53	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.34	Chloride	92.991	62.222	57.84	205.081	BMB*
2	13.84	Sulfate	89.072	45.351	42.16	204.424	BMB
Total:			182.063	107.573	100.00	409.505	

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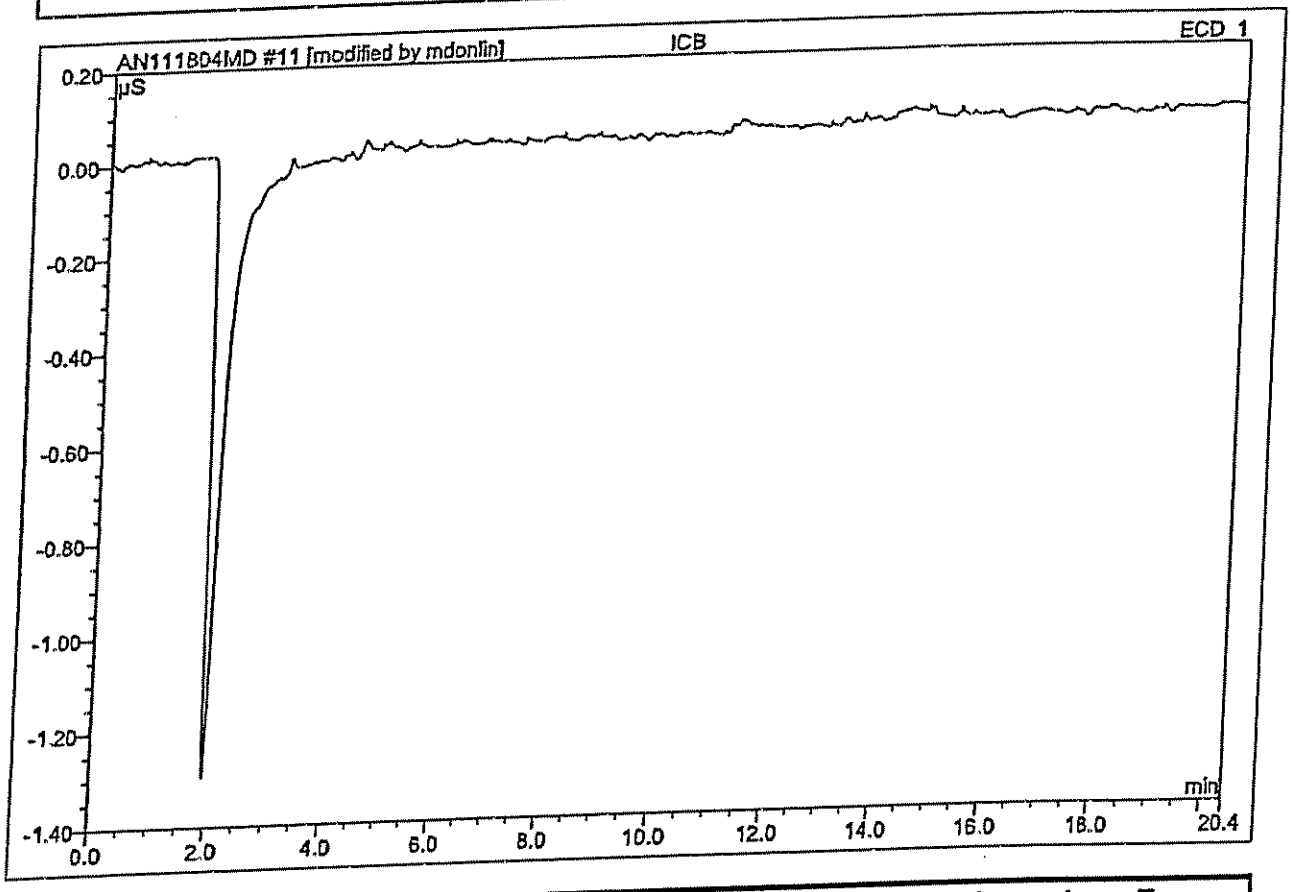
11 ICB

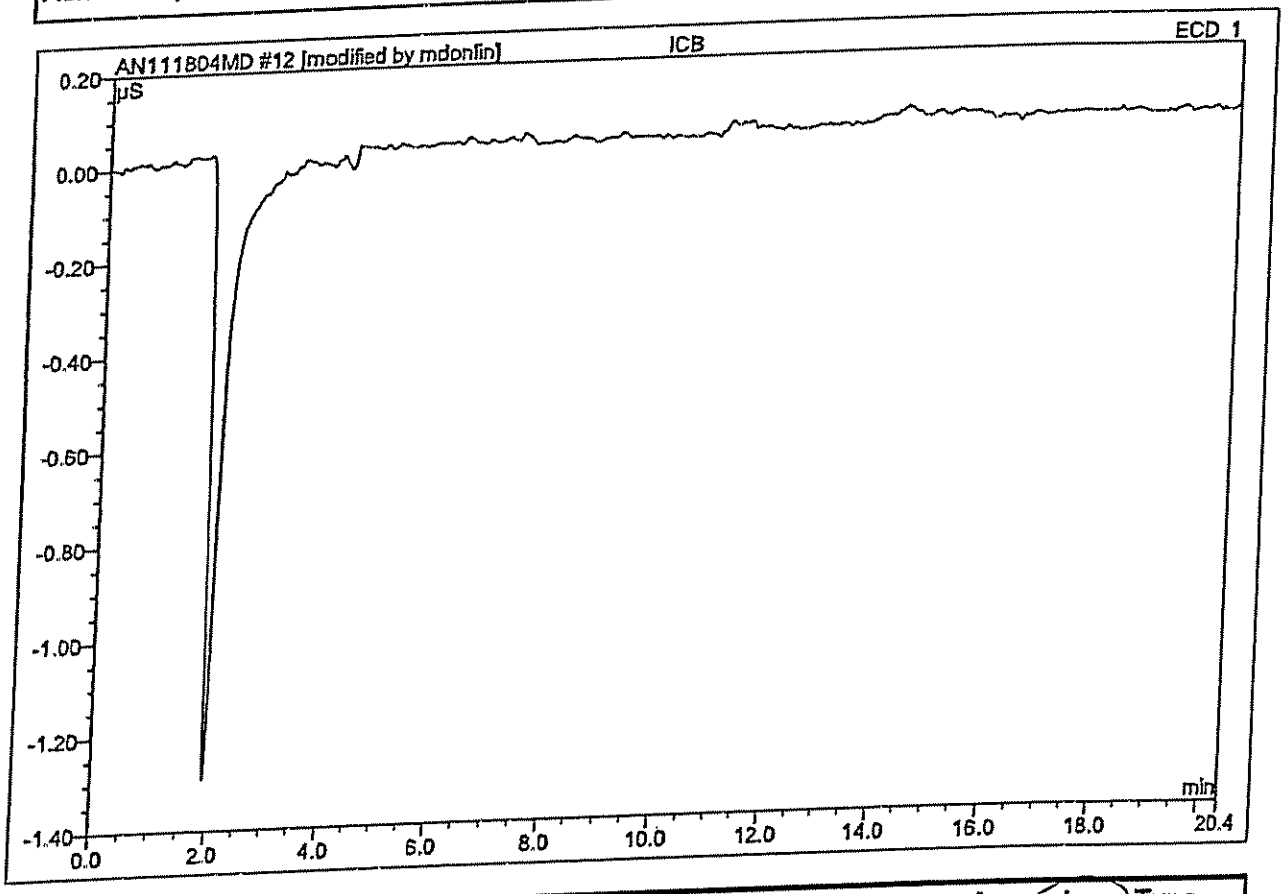
Sample Name:	ICB	*Injection Volume:*	1.0
Vial Number:	64	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 19:15	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

12 ICB

Sample Name:	ICB	*Injection Volume:*	1.0
Vial Number:	65	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 19:37	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

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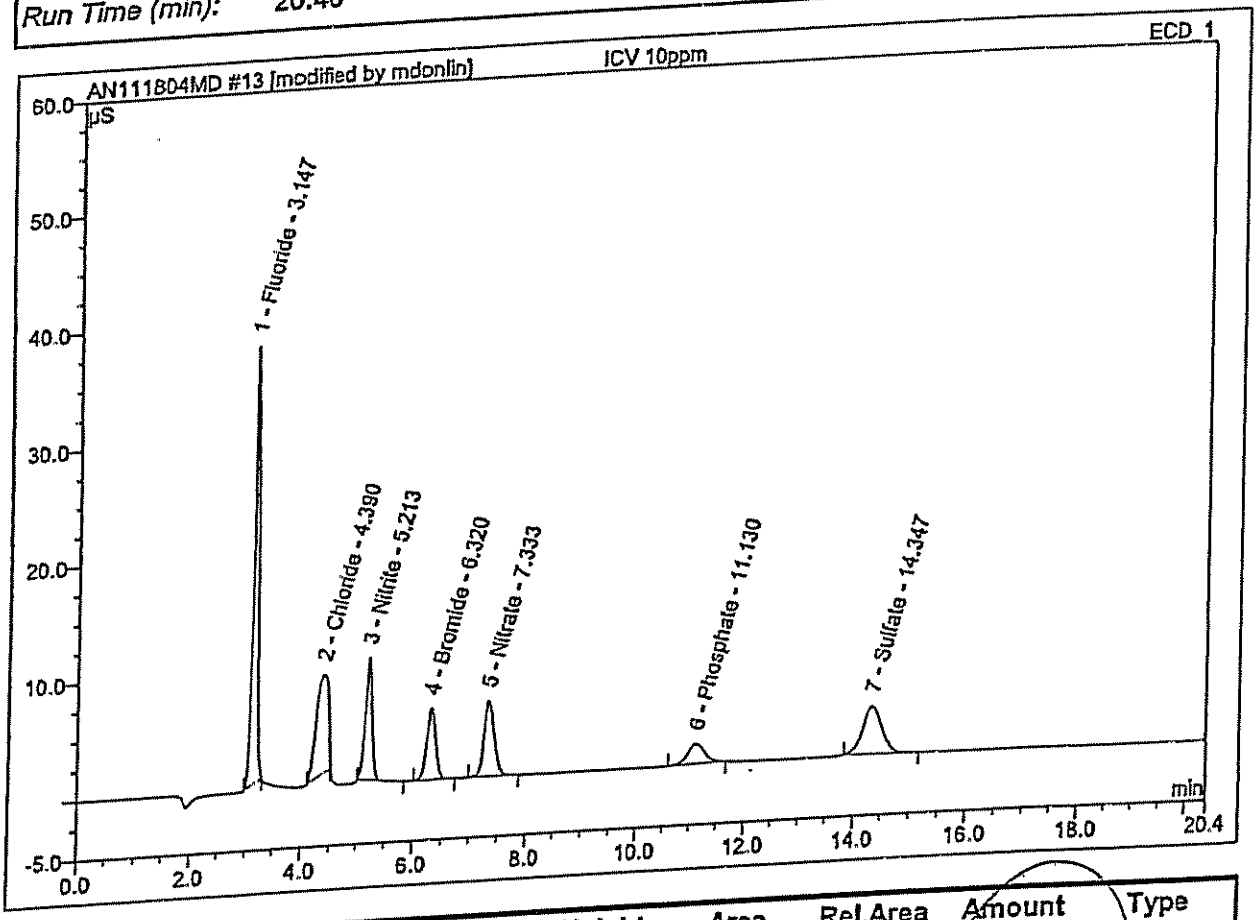
default_letter/Integration

Operator:mdonlin Timebase:Anions Sequence:AN111804MD

11/19/2004 11:56 AM

13 ICV 10ppm

Sample Name:	ICV 10ppm	*Injection Volume:*	1.0
Vial Number:	66	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 19:59	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.15	Fluoride	37.424	3.692	30.98	10.992	BMB*
2	4.39	Chloride	8.406	2.075	17.41	10.775	BMB*
3	5.21	Nitrite	10.361	1.471	12.35	10.017	BMB*
4	6.32	Bromide	6.074	1.043	8.75	10.478	BMB
5	7.33	Nitrate	6.412	1.344	11.28	10.373	BMB
6	11.13	Phosphate	1.714	0.637	5.34	10.093	BMB*
7	14.35	Sulfate	4.061	1.655	13.89	10.982	BMB*
Total:			74.452	11.918	100.00	73.711	

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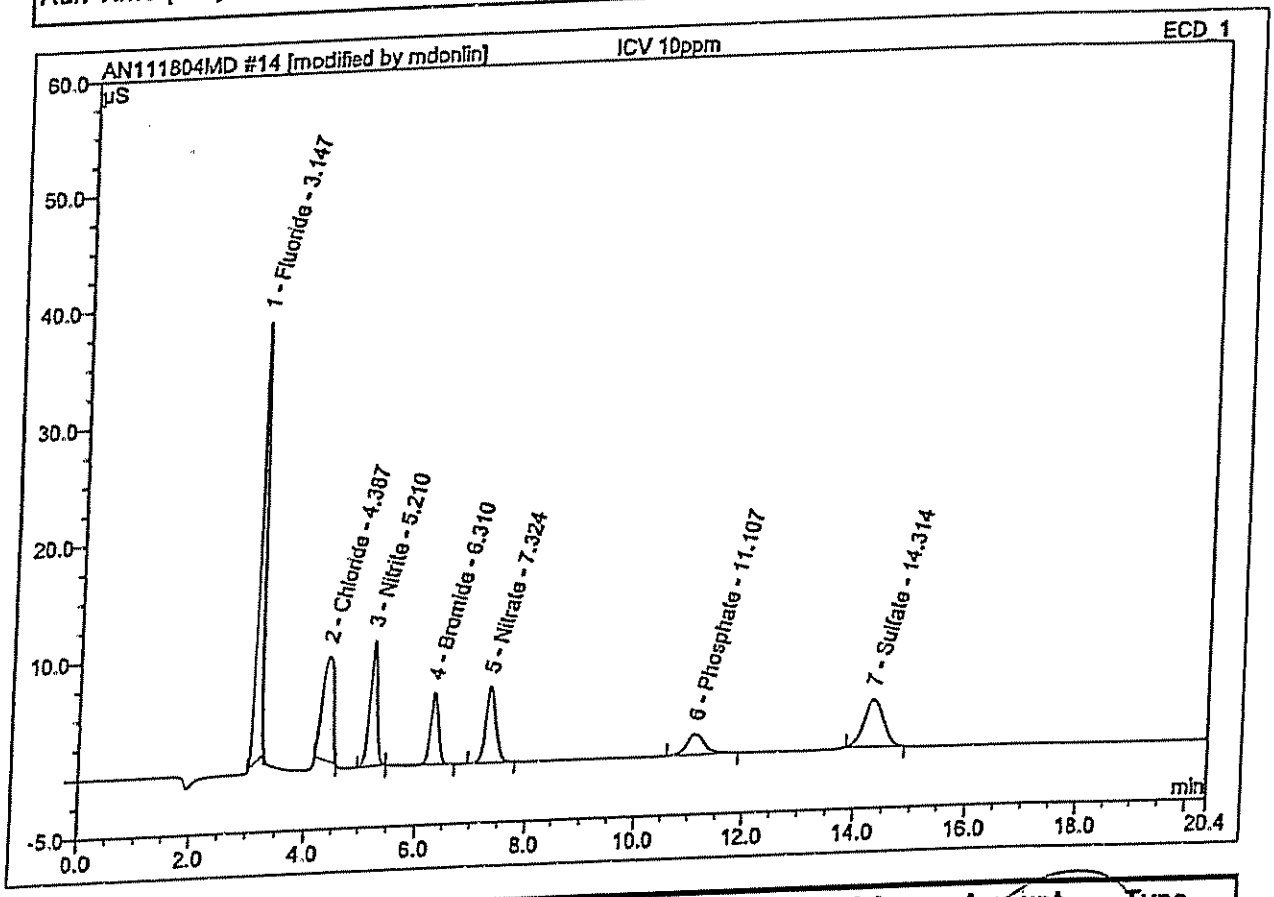
default_letter/Integration

14 ICV 10ppm

Sample Name:	ICV 10ppm	*Injection Volume:*	1.0
Vial Number:	67	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 20:21	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.15	Fluoride	37.454	3.608	30.20	10.750	BMB*
2	4.39	Chloride	8.895	2.132	17.84	10.957	BMB*
3	5.21	Nitrite	10.685	1.572	13.15	10.652	BMb*
4	6.31	Bromide	6.085	0.977	8.18	9.891	bMB*
5	7.32	Nitrate	6.494	1.354	11.33	10.438	BMB*
6	11.11	Phosphate	1.771	0.690	5.77	10.874	BMB
7	14.31	Sulfate	4.034	1.615	13.52	10.806	BMB*
Total:			75.418	11.947	100.00	74.369	

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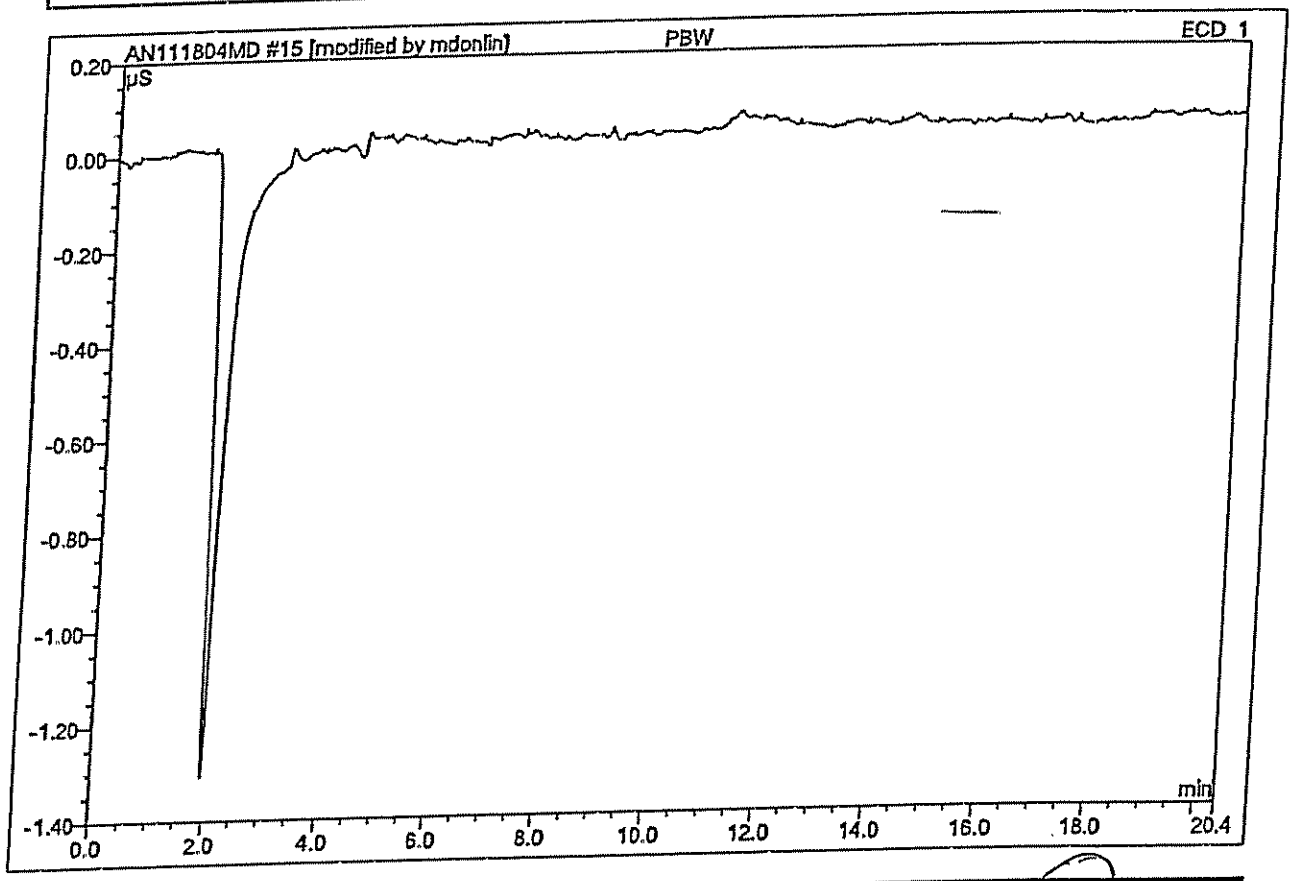
15 PBW

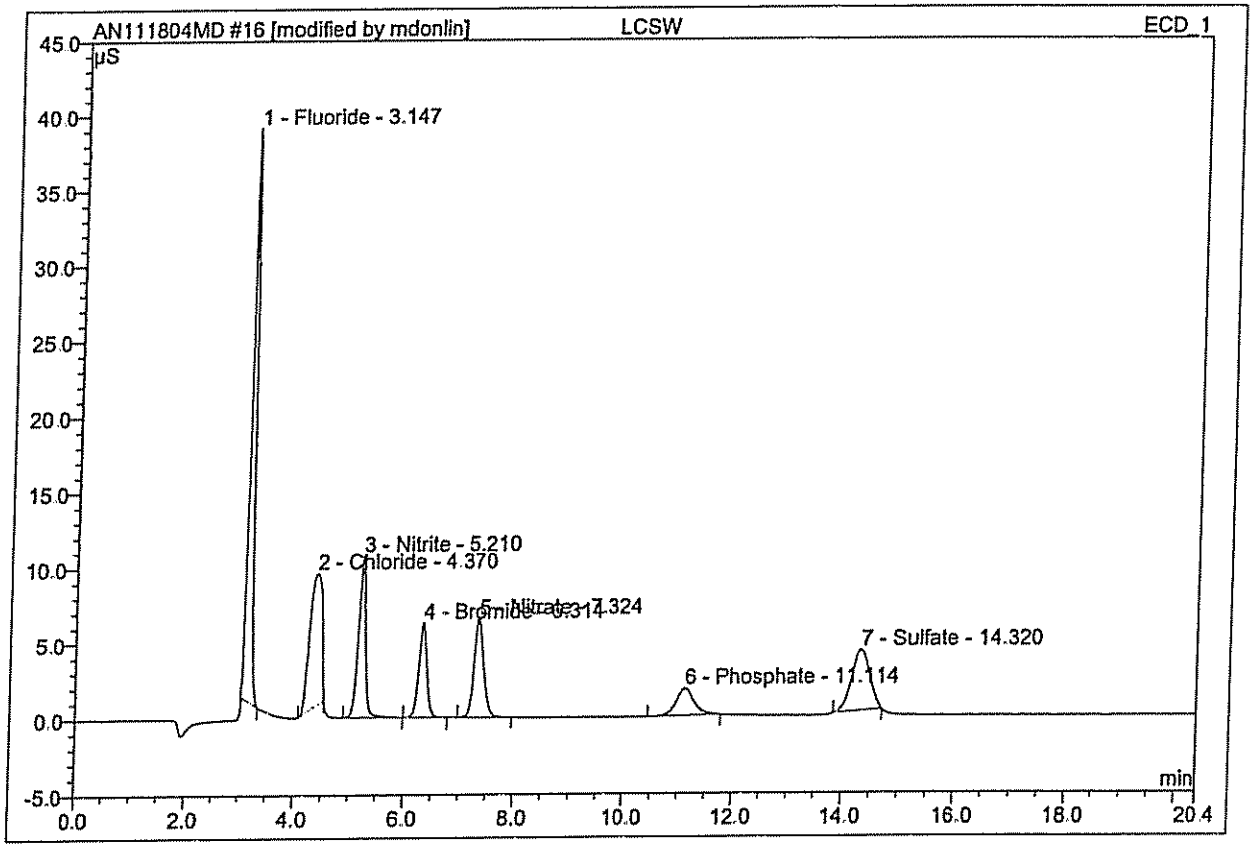
Sample Name:	PBW	*Injection Volume:*	1.0
Vial Number:	68	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 20:43	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

16 LCSW

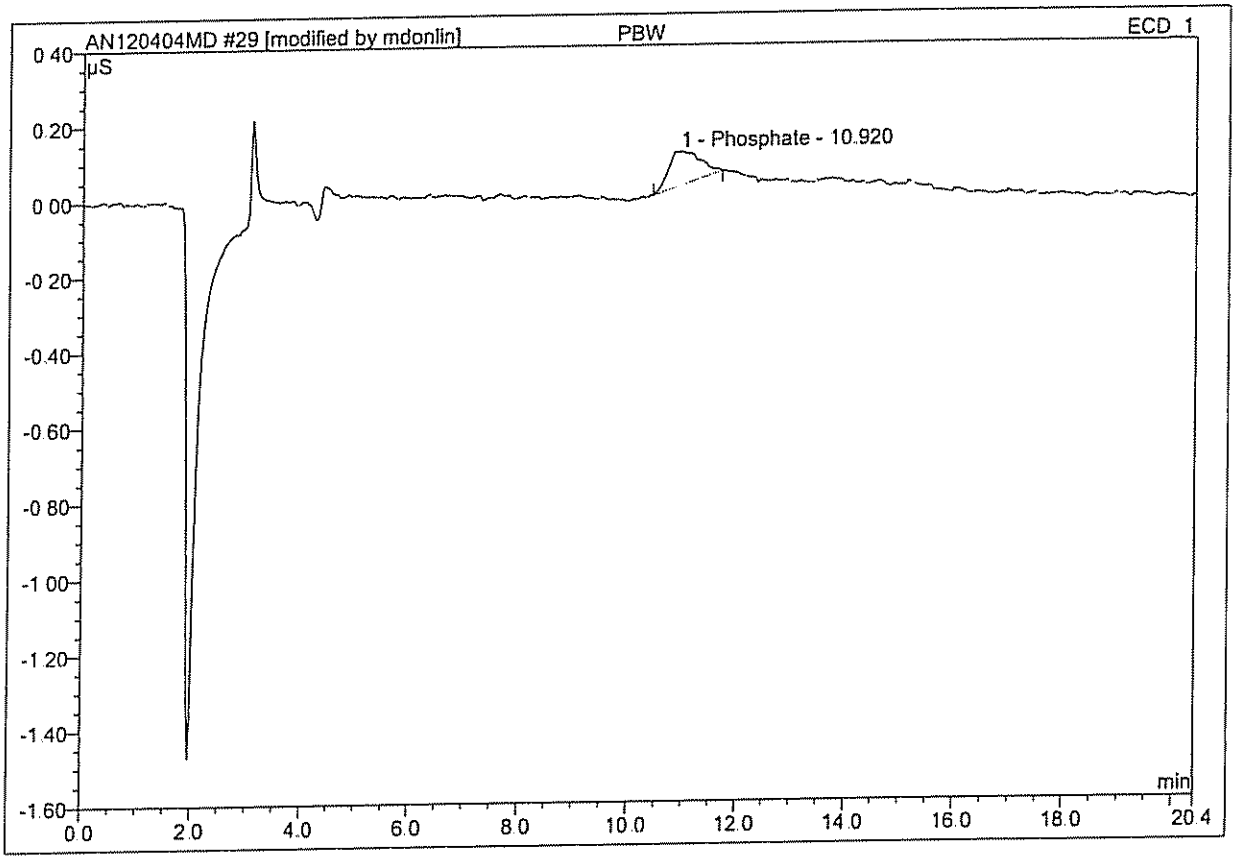
Sample Name:	**LCSW**	*Injection Volume:*	**1.0**
Vial Number:	**69**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/18/2004 21:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.15	Fluoride	37.934	3.659	29.99	10.896	BMB*
2	4.37	Chloride	8.840	2.252	18.46	11.345	BMB*
3	5.21	Nitrite	10.705	1.641	13.45	11.092	BMB
4	6.31	Bromide	6.260	1.069	8.76	10.713	BMB
5	7.32	Nitrate	6.531	1.367	11.21	10.533	BMB
6	11.11	Phosphate	1.790	0.692	5.67	10.914	BMB*
7	14.32	Sulfate	4.024	1.520	12.46	10.383	BMB*
Total:			76.083	12.200	100.00	75.876	

29 PBW

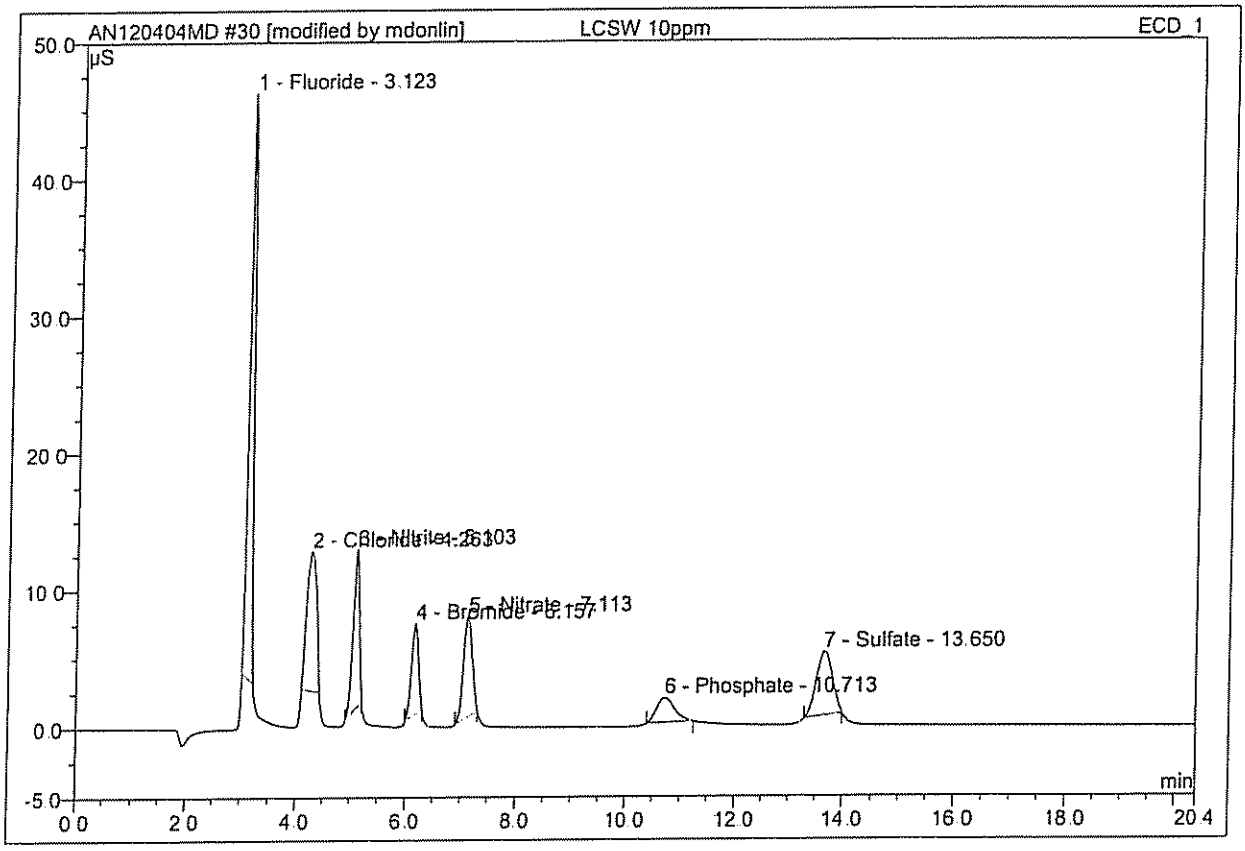
Sample Name:	PBW	*Injection Volume:*	1.0
Vial Number:	82	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	12/4/2004 22:58	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	10.92	Phosphate	0.092	0.062	100.00	1.568	BMB
Total:			0.092	0.062	100.00	1.568	

30 LCSW 10ppm

Sample Name:	**LCSW 10ppm**	*Injection Volume:*	**1.0**
Vial Number:	**83**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/4/2004 23:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**

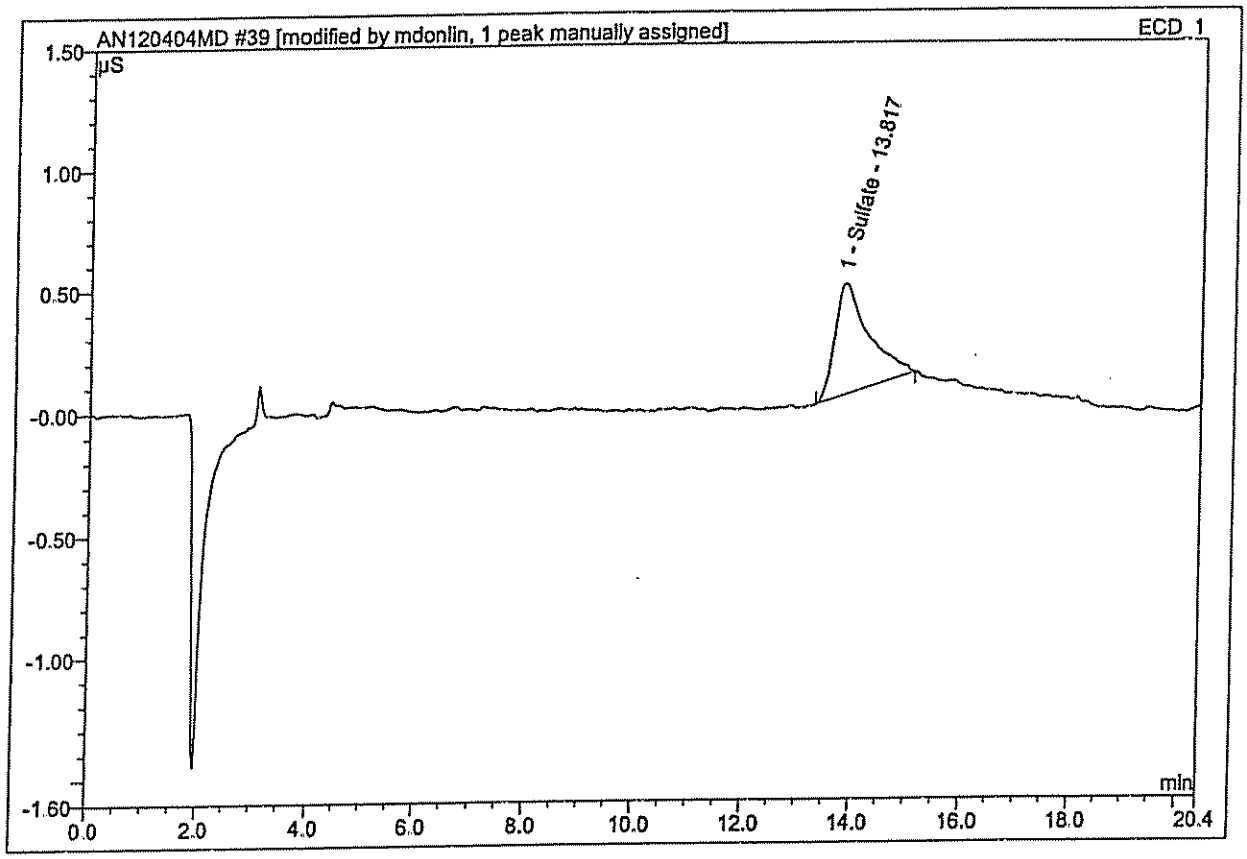


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	42.646	3.959	32.45	11.766	BMB*
2	4.26	Chloride	10.112	2.124	17.41	10.931	BMB*
3	5.10	Nitrite	11.577	1.546	12.67	10.488	BMB*
4	6.16	Bromide	6.635	0.968	7.94	9.814	BMB*
5	7.11	Nitrate	7.346	1.328	10.88	10.262	BMB*
6	10.71	Phosphate	1.783	0.679	5.57	10.717	BMB*
7	13.65	Sulfate	4.627	1.598	13.09	10.728	BMB*
Total:			84.725	12.201	100.00	74.706	

118%
109%
105%
98.1%
102.6%
107%
107%

39 CCB

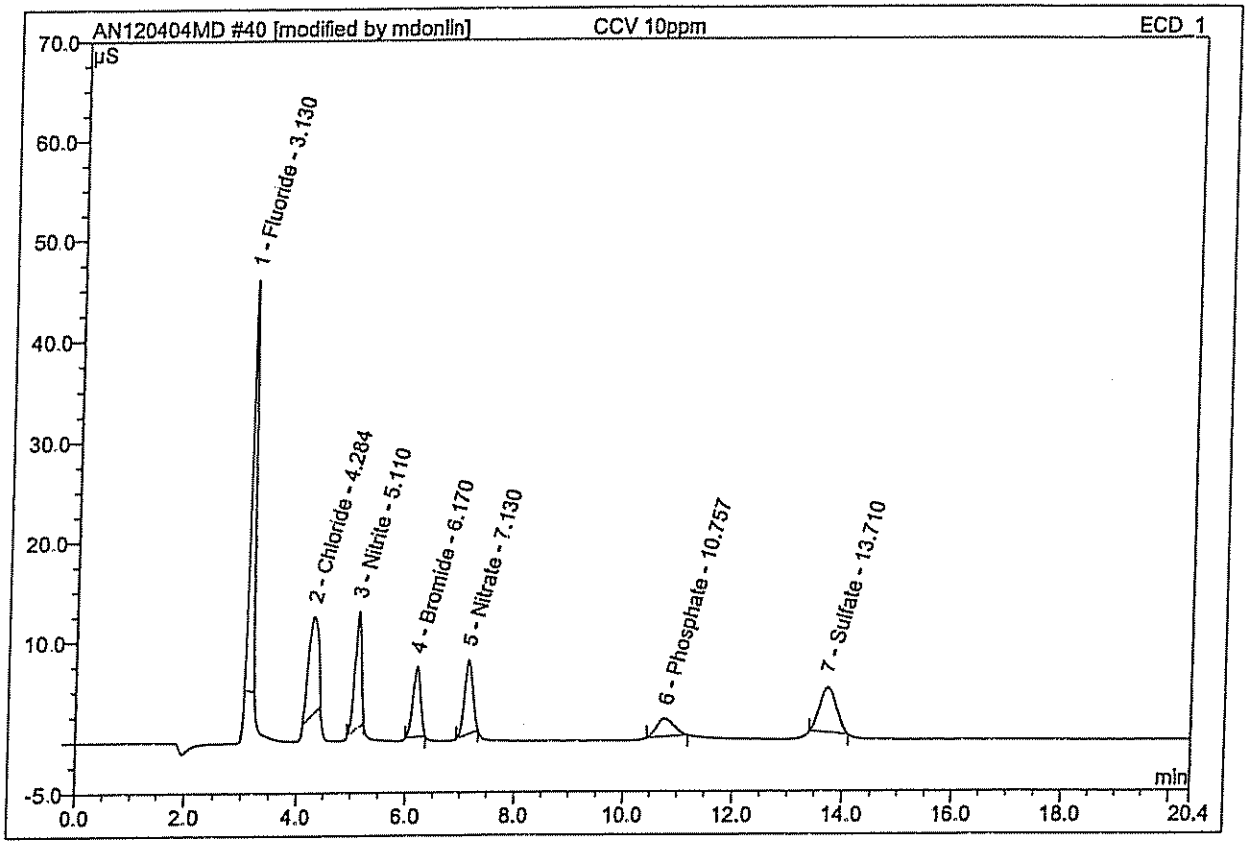
Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**92**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 2:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	13.82	Sulfate	0.454	0.326	100.00	5.096	BMB*^
Total:			0.454	0.326	100.00	5.096	

40 CCV 10ppm

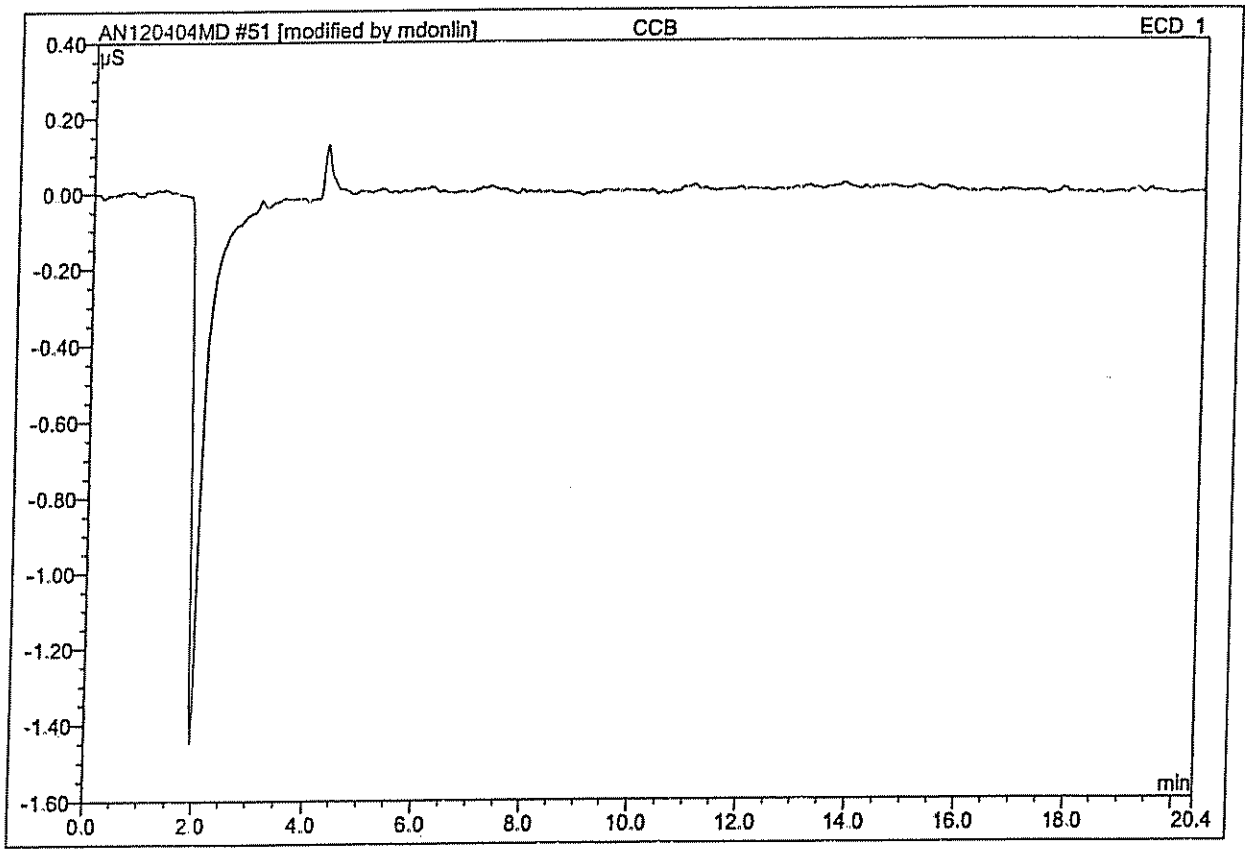
Sample Name:	**CCV 10ppm**	*Injection Volume:*	**1.0**
Vial Number:	**93**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 3:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.13	Fluoride	40.870	3.639	30.57	10.838	BMB*
2	4.28	Chloride	9.759	2.076	17.44	10.778	BMB*
3	5.11	Nitrite	11.545	1.533	12.88	10.408	BMB*
4	6.17	Bromide	6.966	1.097	9.21	10.957	BMB*
5	7.13	Nitrate	7.393	1.352	11.36	10.431	BMB*
6	10.76	Phosphate	1.786	0.653	5.48	10.325	BMB*
7	13.71	Sulfate	4.463	1.553	13.04	10.528	BMB*
Total:			82.782	11.902	100.00	74.266	

51 CCB

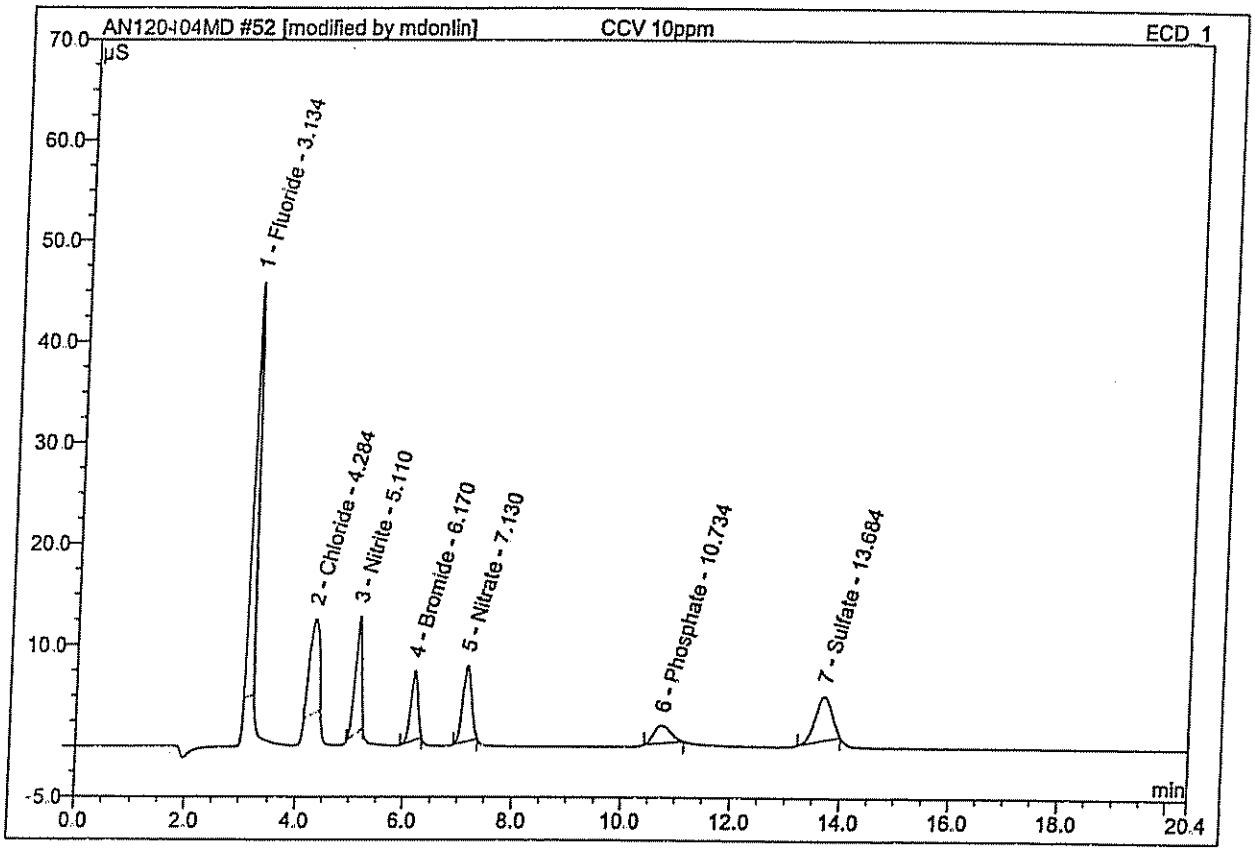
Sample Name:	CCB	*Injection Volume:*	1.0
Vial Number:	104	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	12/5/2004 7:02	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

52 CCV 10ppm

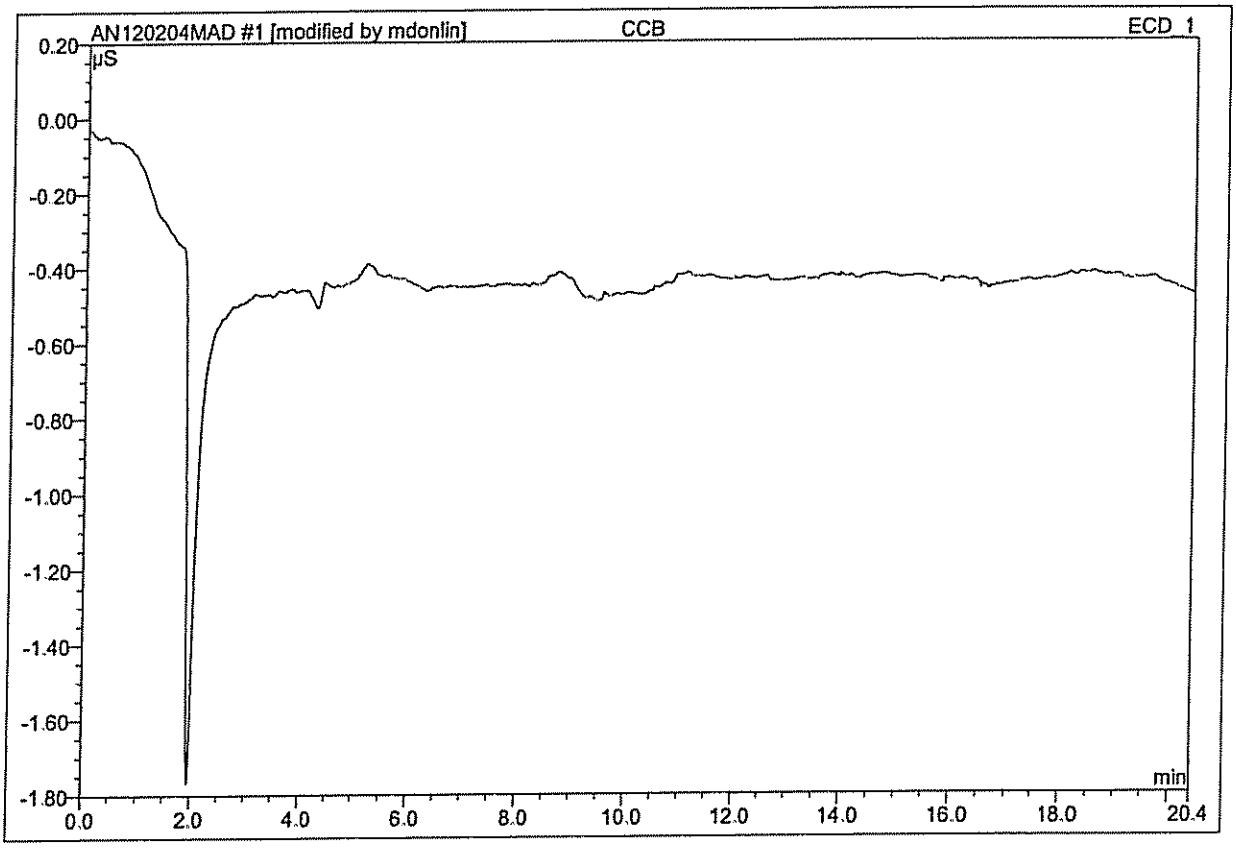
Sample Name:	CCV 10ppm	*Injection Volume:*	1.0
Vial Number:	105	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	12/5/2004 7:24	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.13	Fluoride	40.847	3.636	30.93	10.829	BMB*
2	4.28	Chloride	9.340	1.911	16.26	10.246	BMB*
3	5.11	Nitrite	11.464	1.521	12.94	10.333	BMB*
4	6.17	Bromide	6.875	1.065	9.06	10.679	BMB*
5	7.13	Nitrate	7.544	1.427	12.14	10.936	BMB*
6	10.73	Phosphate	1.781	0.636	5.42	10.085	BMB*
7	13.68	Sulfate	4.423	1.556	13.24	10.544	BMB*
Total:			82.273	11.753	100.00	73.653	

1 CCB

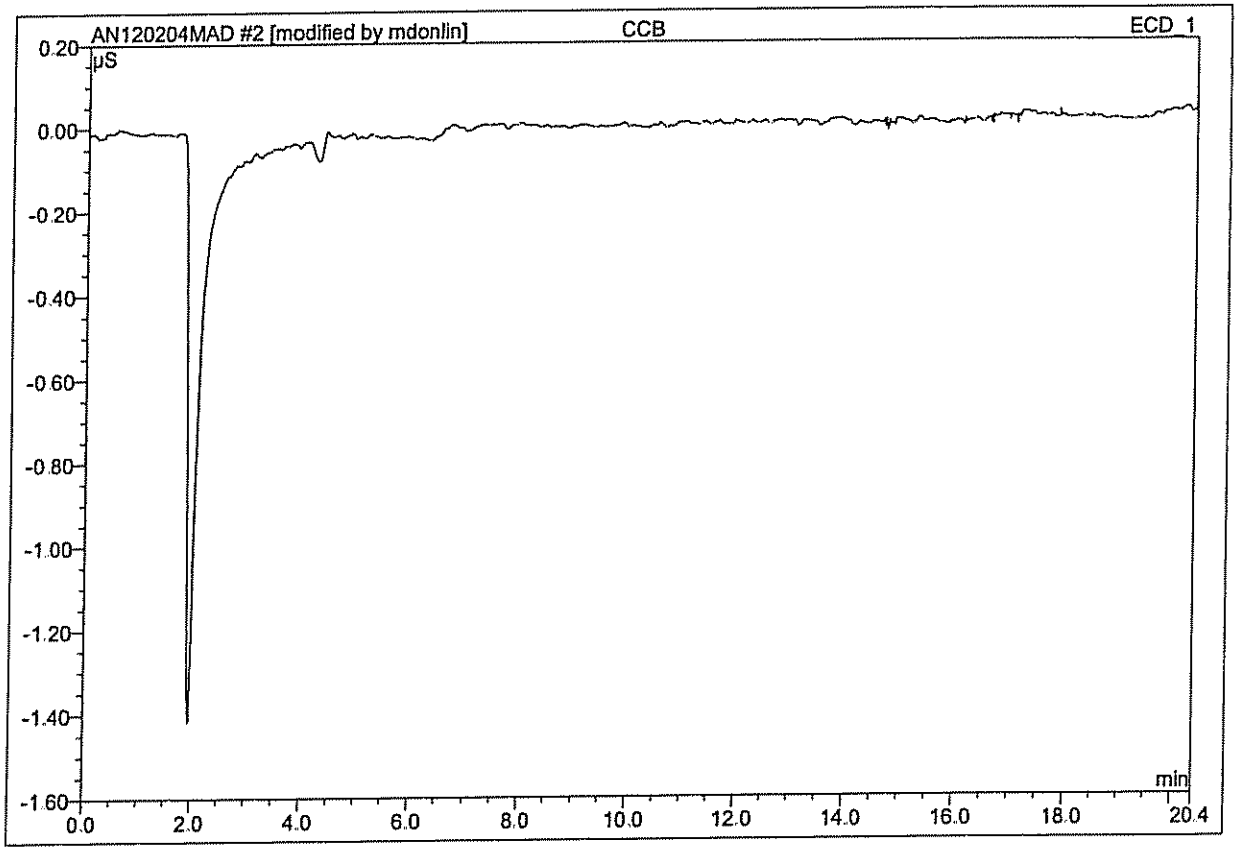
Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**52**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 7:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

2 CCB

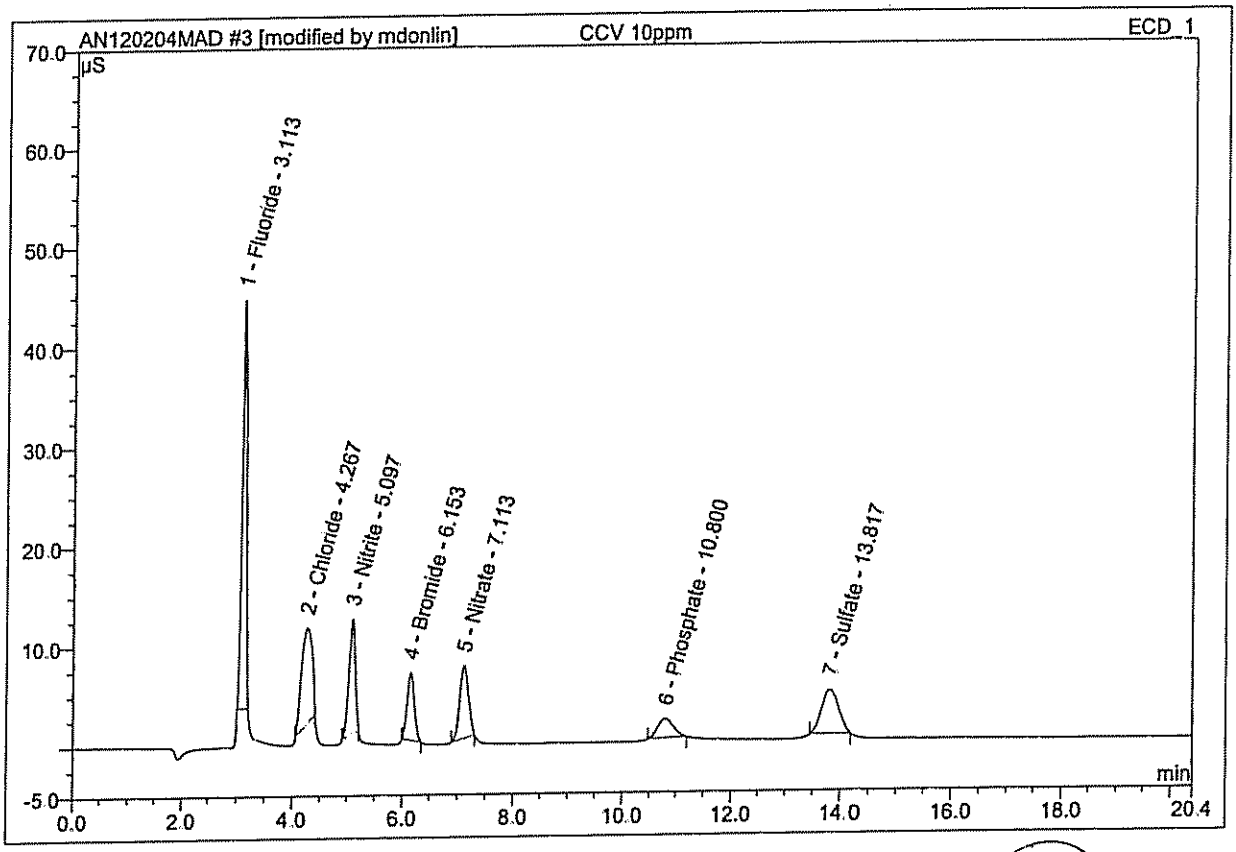
Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 7:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

3 CCV 10ppm

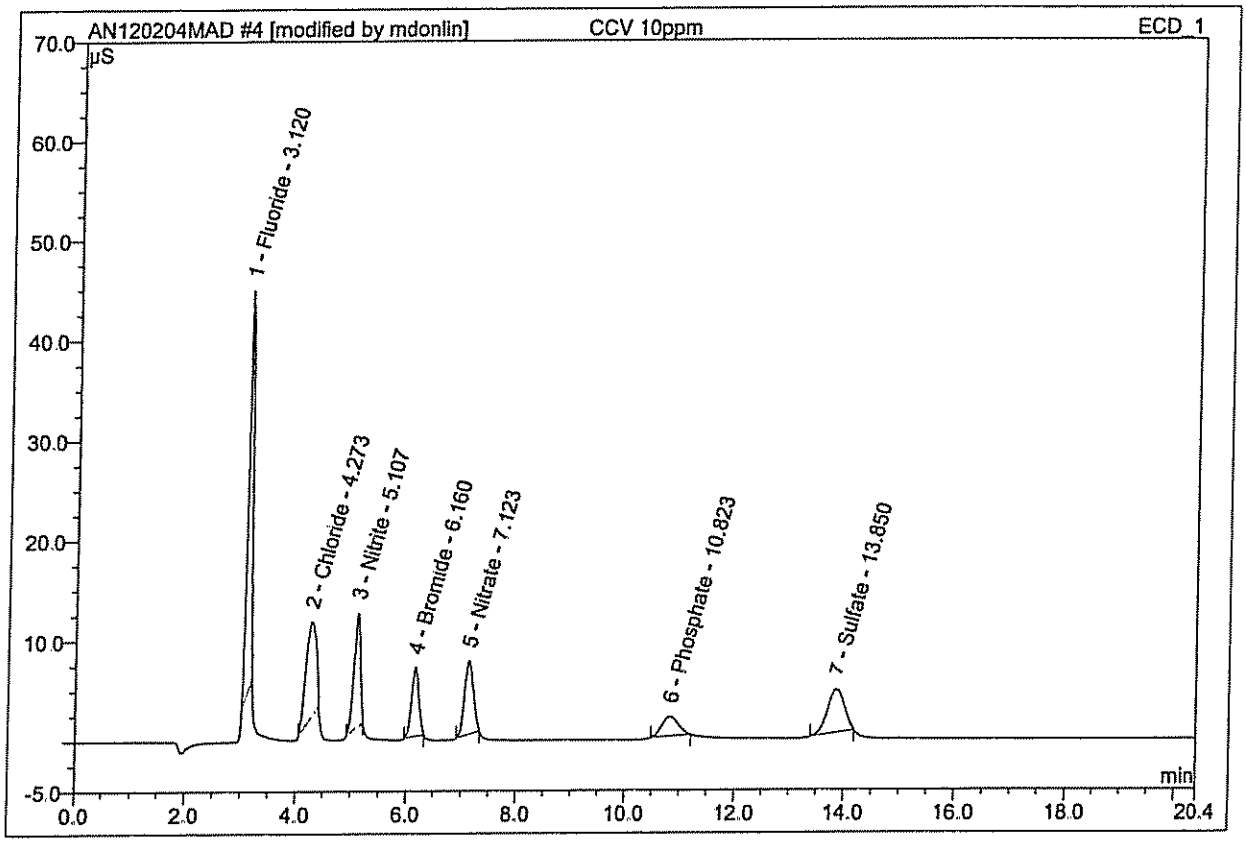
Sample Name:	**CCV 10ppm**	*Injection Volume:*	**1.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 8:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.11	Fluoride	40.887	3.646	30.54	10.858	MB*
2	4.27	Chloride	9.655	2.138	17.91	10.977	BMB*
3	5.10	Nitrite	11.492	1.518	12.72	10.313	BMB*
4	6.15	Bromide	6.782	1.048	8.78	10.523	BMB*
5	7.11	Nitrate	7.290	1.328	11.13	10.265	BMB*
6	10.80	Phosphate	1.950	0.672	5.63	10.607	BMB*
7	13.82	Sulfate	4.450	1.586	13.29	10.677	BMB*
Total:			82.507	11.935	100.00	74.219	

4 CCV 10ppm

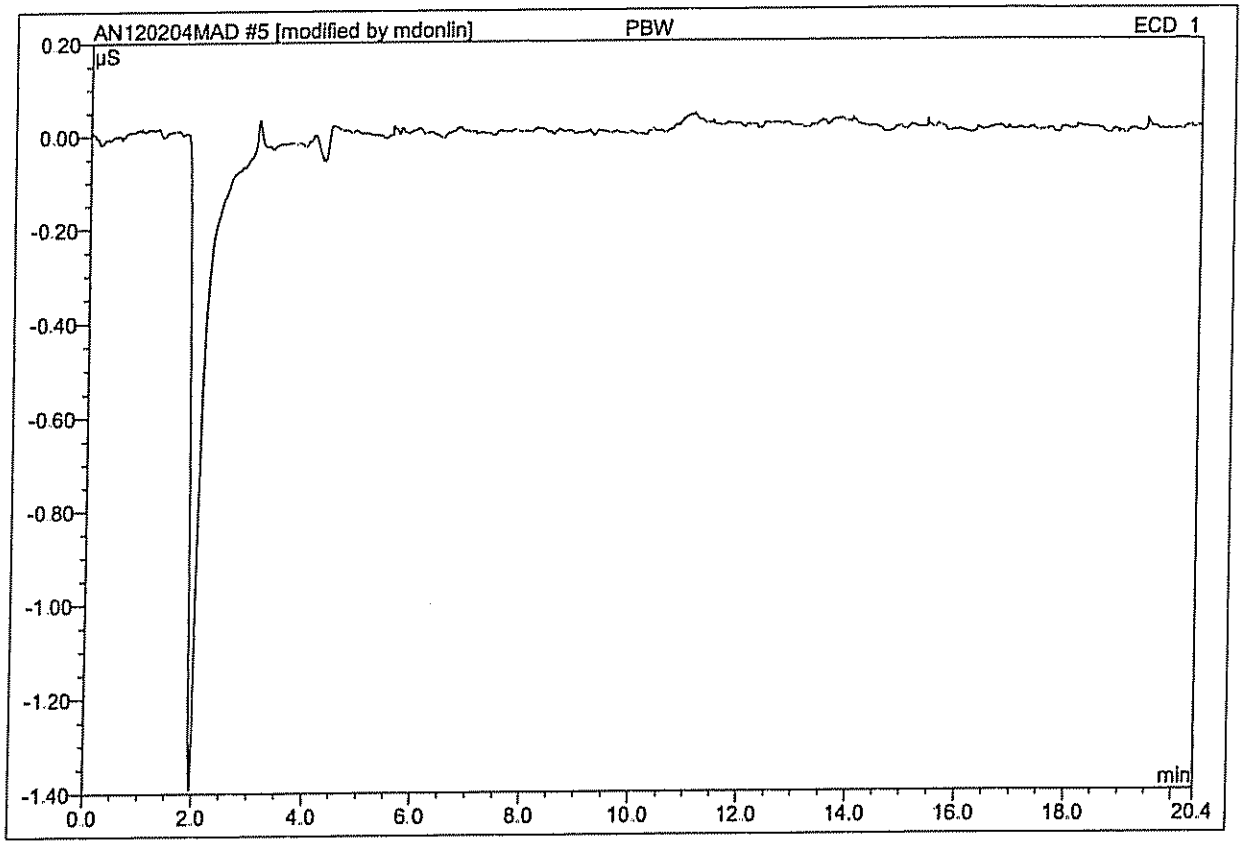
Sample Name:	**CCV 10ppm**	*Injection Volume:*	**1.0**
Vial Number:	**54**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 8:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	40.067	3.500	29.80	10.437	BMB*
2	4.27	Chloride	9.580	2.125	18.10	10.937	BMB*
3	5.11	Nitrite	11.370	1.493	12.71	10.157	BMB*
4	6.16	Bromide	6.870	1.071	9.12	10.733	BMB*
5	7.12	Nitrate	7.311	1.334	11.35	10.303	BMB*
6	10.82	Phosphate	1.960	0.670	5.70	10.577	BMB*
7	13.85	Sulfate	4.334	1.551	13.21	10.522	BMB*
Total:			81.493	11.745	100.00	73.666	

5 PBW

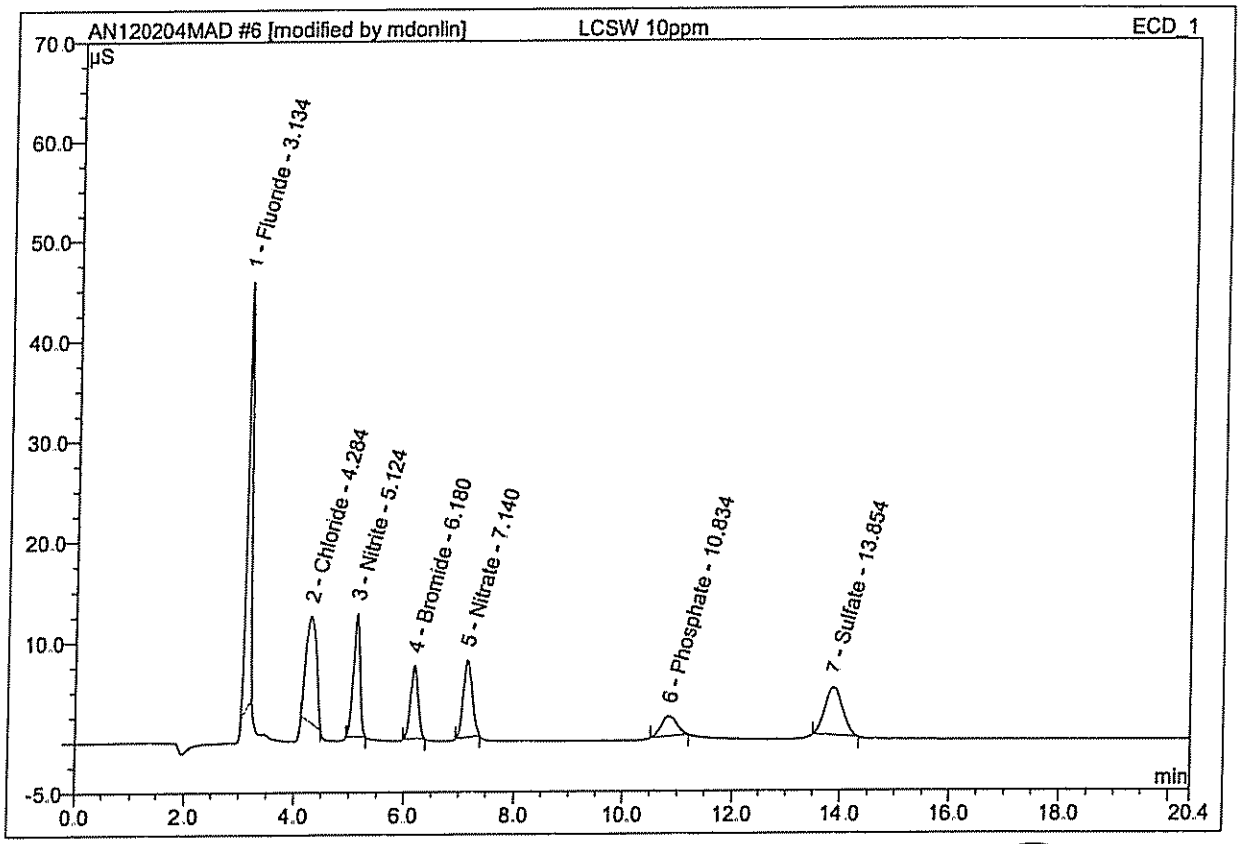
Sample Name:	**PBW**	*Injection Volume:*	**1.0**
Vial Number:	**56**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 9:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

6 LCSW 10ppm

Sample Name:	**LCSW 10ppm**	*Injection Volume:*	**1.0**
Vial Number:	**59**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 9:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**

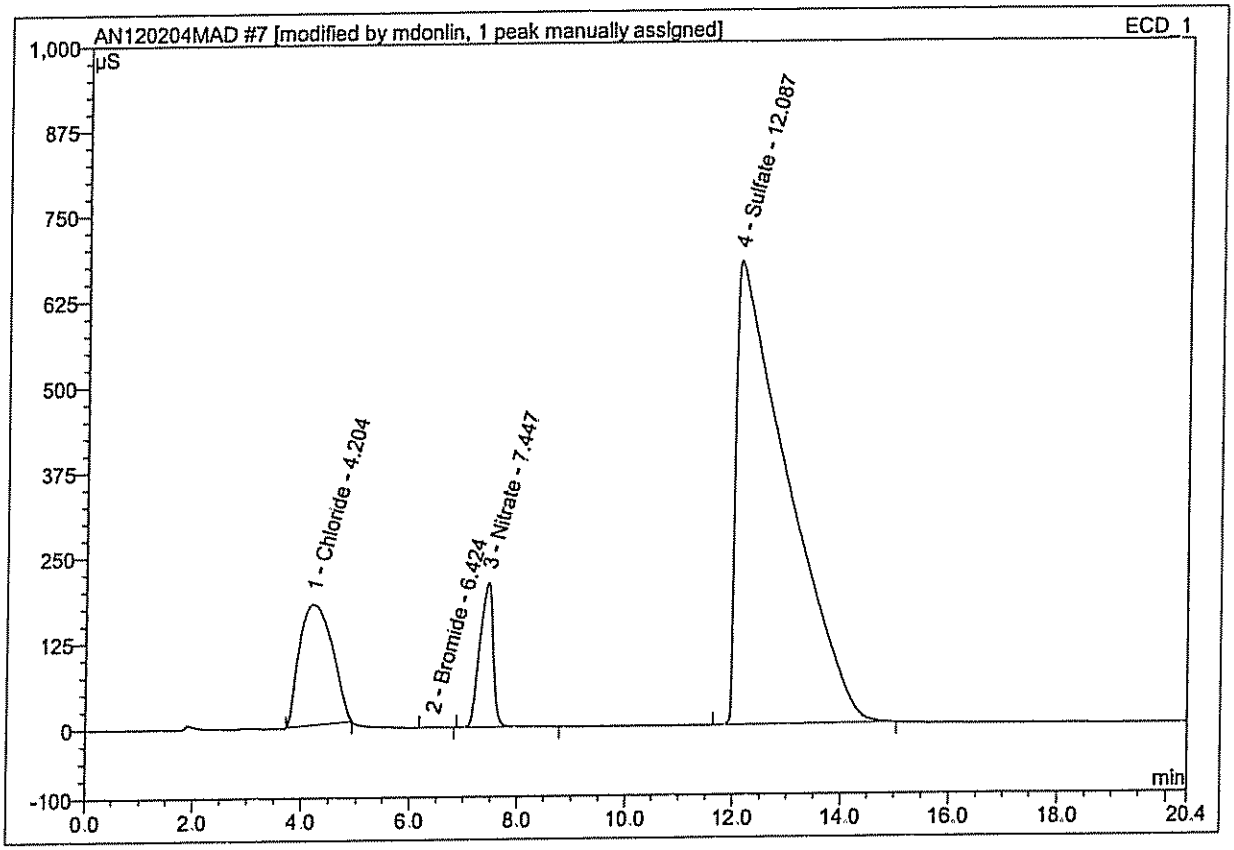


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.13	Fluoride	42.372	3.870	29.59	11.507	BMB*
2	4.28	Chloride	10.558	2.383	18.22	11.770	BMB*
3	5.12	Nitrite	12.247	1.735	13.26	11.687	BMB*
4	6.18	Bromide	7.314	1.175	8.98	11.650	BMB*
5	7.14	Nitrate	7.690	1.457	11.14	11.139	BMB*
6	10.83	Phosphate	1.987	0.669	5.11	10.567	BMB*
7	13.85	Sulfate	4.762	1.791	13.69	11.584	BMB*
Total:			86.929	13.079	100.00	79.904	

115%
118%
117%
116%
111%
106%
116%

7 P0412024-01AA

Sample Name:	**P0412024-01AA**	*Injection Volume:*	**1.0**
Vial Number:	**60**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 9:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**

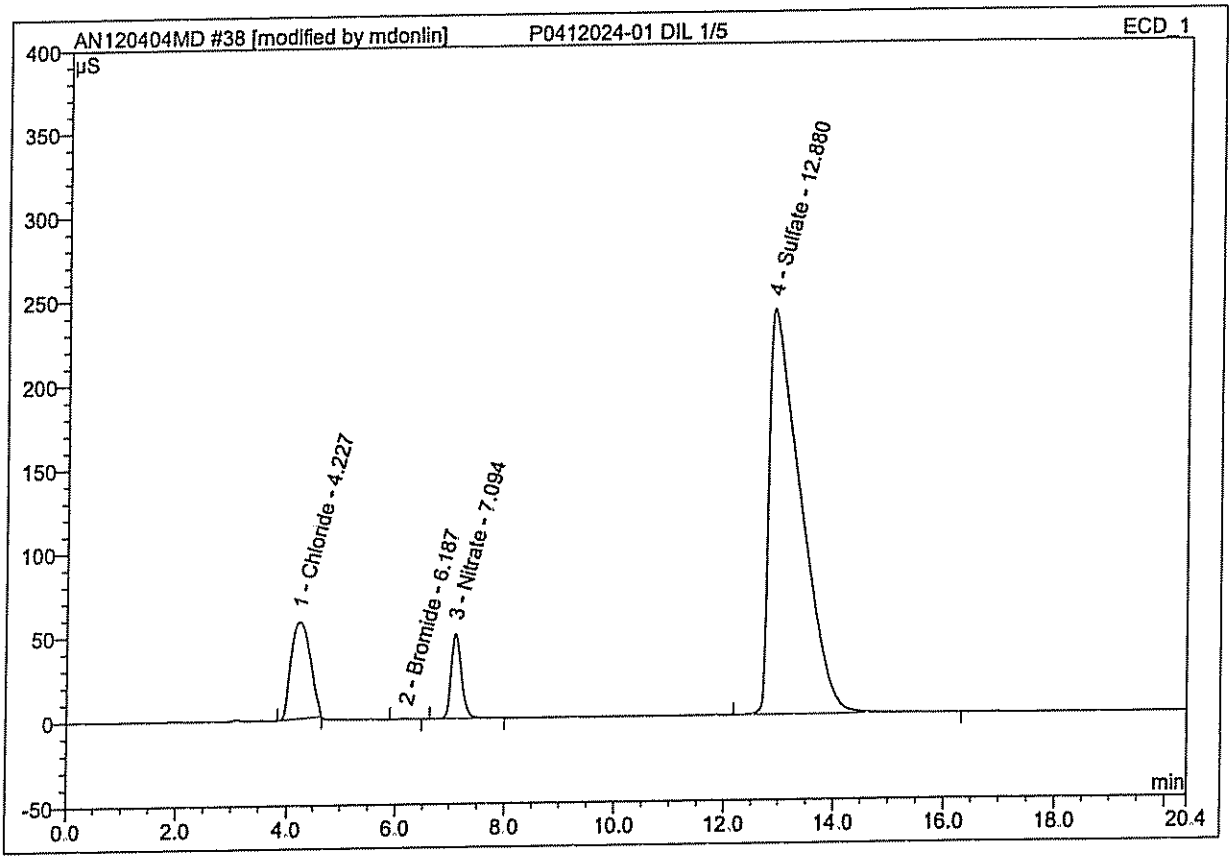


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.20	Chloride	175.655	122.720	13.19	400.521	BMB*
2	6.42	Bromide	0.905	0.235	0.03	3.290	BMB
3	7.45	Nitrate	210.246	60.423	6.49	411.429	BMB
4	12.09	Sulfate	676.737	747.107	80.29	3311.119	BMB*^
Total:			1063.543	930.486	100.00	4126.360	

See DF 1/5 1/50

38 P0412024-01 DIL 1/5

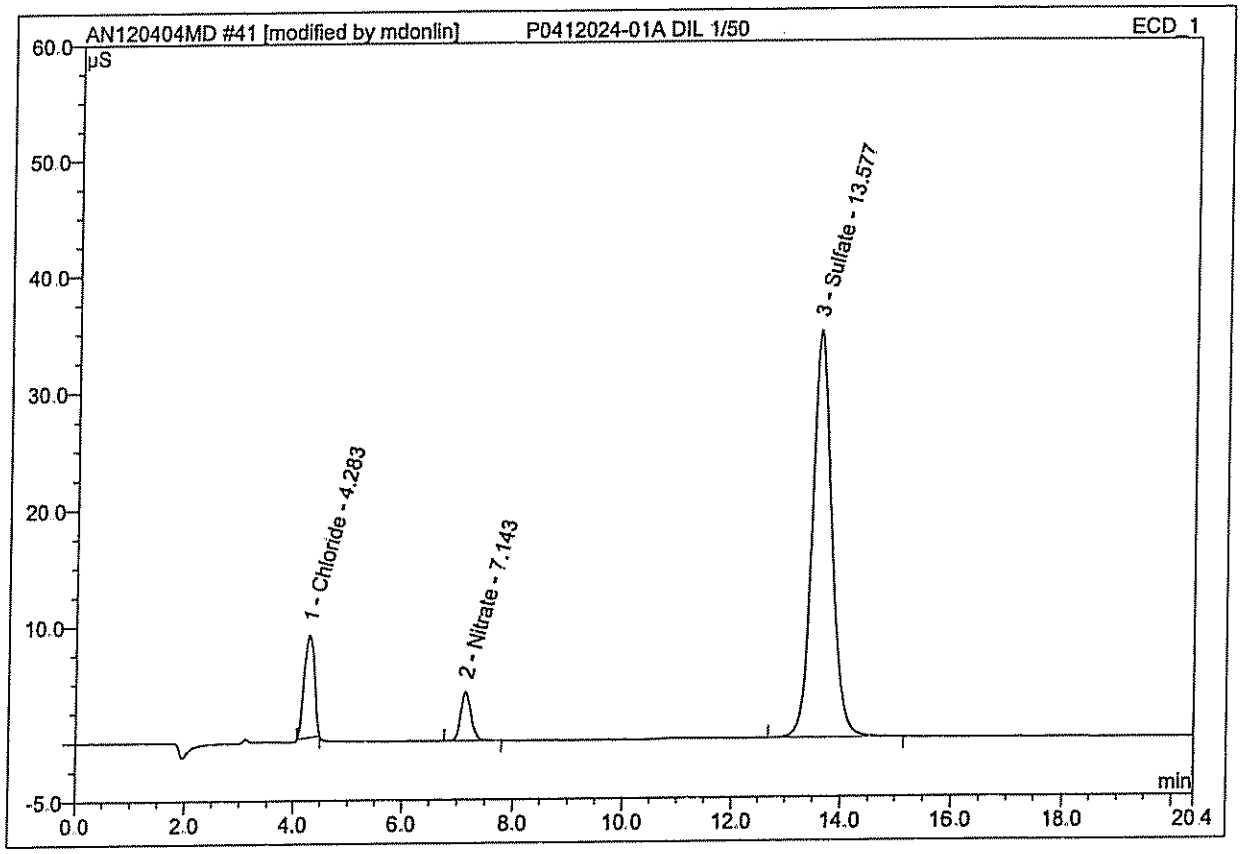
Sample Name:	**P0412024-01 DIL 1/5**	*Injection Volume:*	**1.0**
Vial Number:	**91**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 2:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.23	Chloride	57.460	24.176	12.32	82.171	BMB*
2	6.19	Bromide	0.271	0.053	0.03	1.664	BMB
3	7.09	Nitrate	50.116	10.911	5.56	75.320	BMB
4	12.88	Sulfate	240.827	161.084	82.09	716.778	BMB*
Total:			348.674	196.224	100.00	875.933	

41 P0412024-01A DIL 1/50

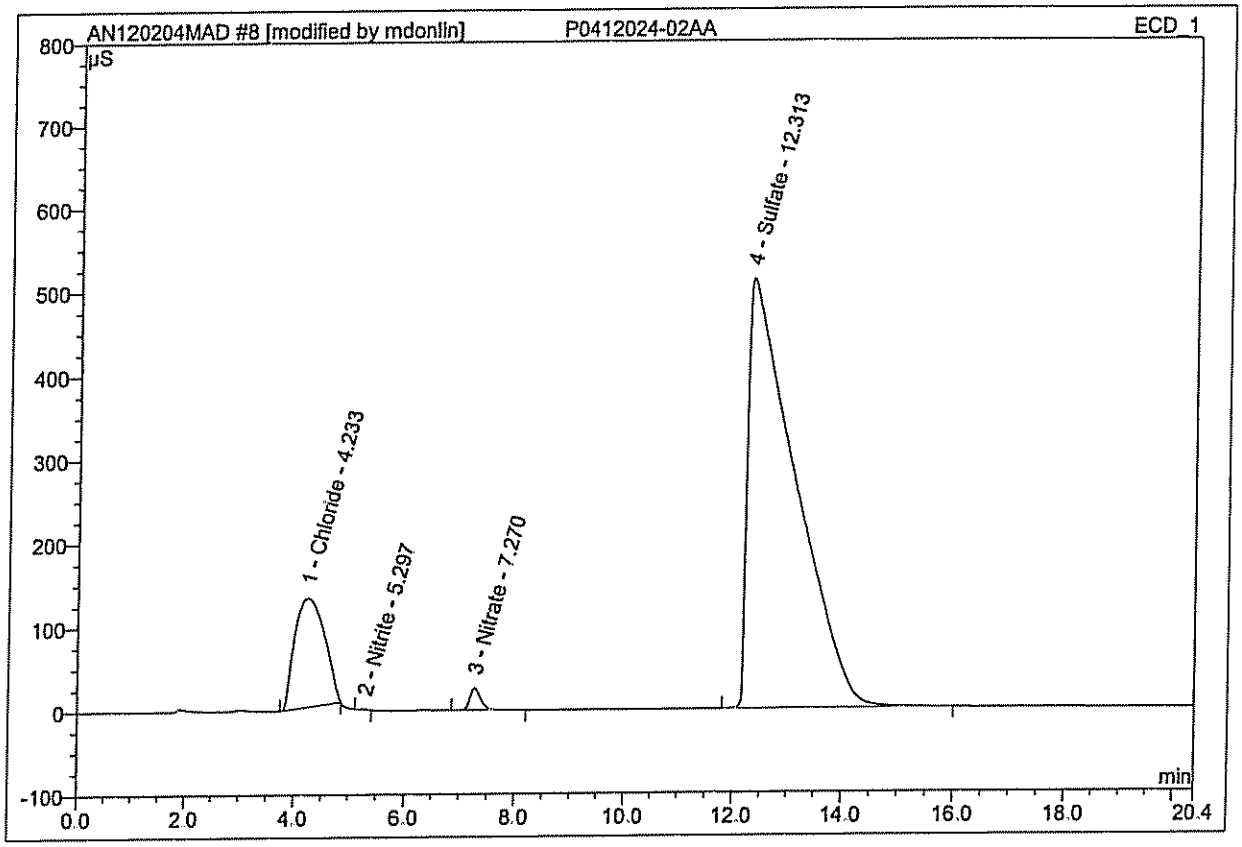
Sample Name:	**P0412024-01A DIL 1/50**	*Injection Volume:*	**1.0**
Vial Number:	**94**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 3:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.28	Chloride	8.816	1.946	11.32	10.358	BMB*
2	7.14	Nitrate	4.174	0.893	5.19	7.309	BMB
3	13.58	Sulfate	34.844	14.351	83.49	67.187	BMB
Total:			47.834	17.190	100.00	84.854	

8 P0412024-02AA

Sample Name:	**P0412024-02AA**	*Injection Volume:*	**1.0**
Vial Number:	**61**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 10:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



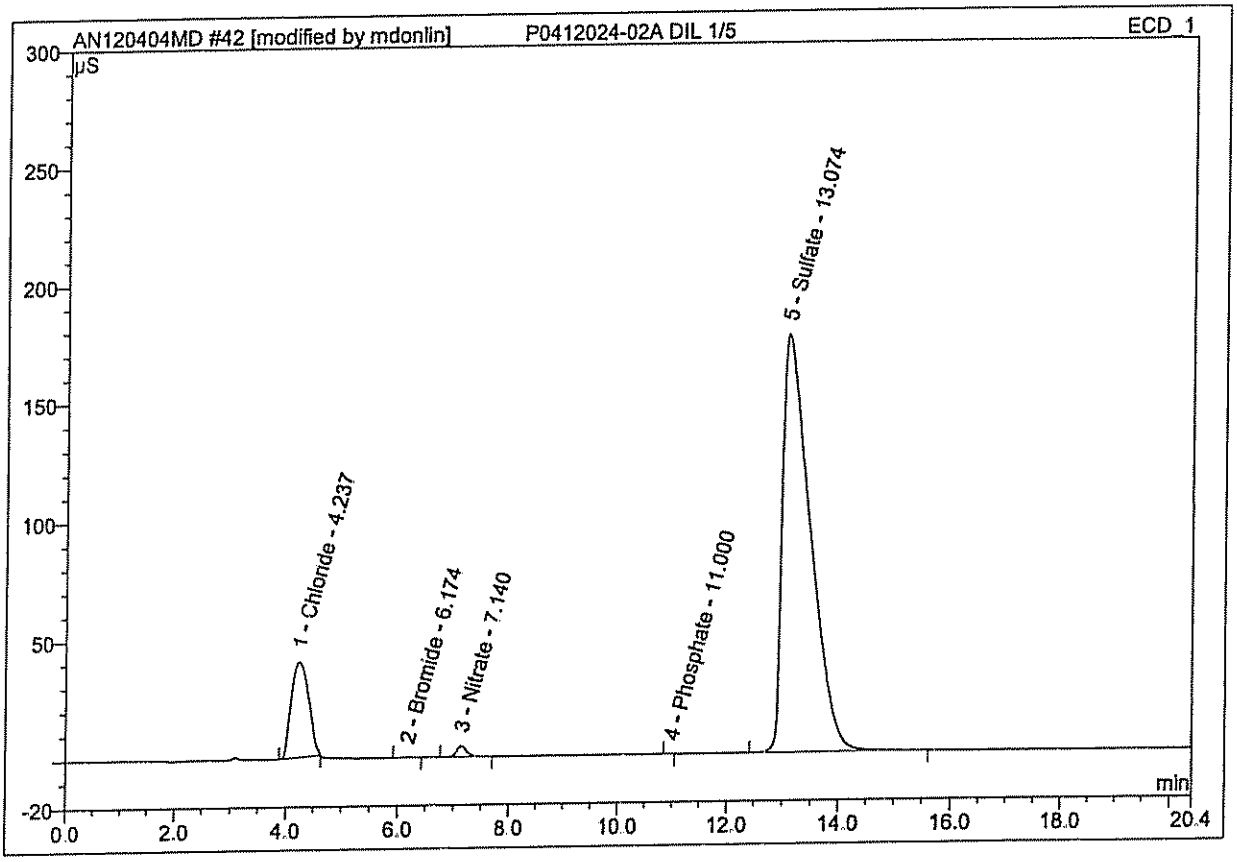
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.23	Chloride	130.454	82.526	13.69	270.674	BMB*
2	5.30	Nitrite	1.149	0.102	0.02	1.344	BMB
3	7.27	Nitrate	26.427	6.100	1.01	42.662	BMB
4	12.31	Sulfate	512.308	514.139	85.28	2279.764	BMB*
Total:			670.338	602.868	100.00	2594.444	

see DF 1/5

1/50

42 P0412024-02A DIL 1/5

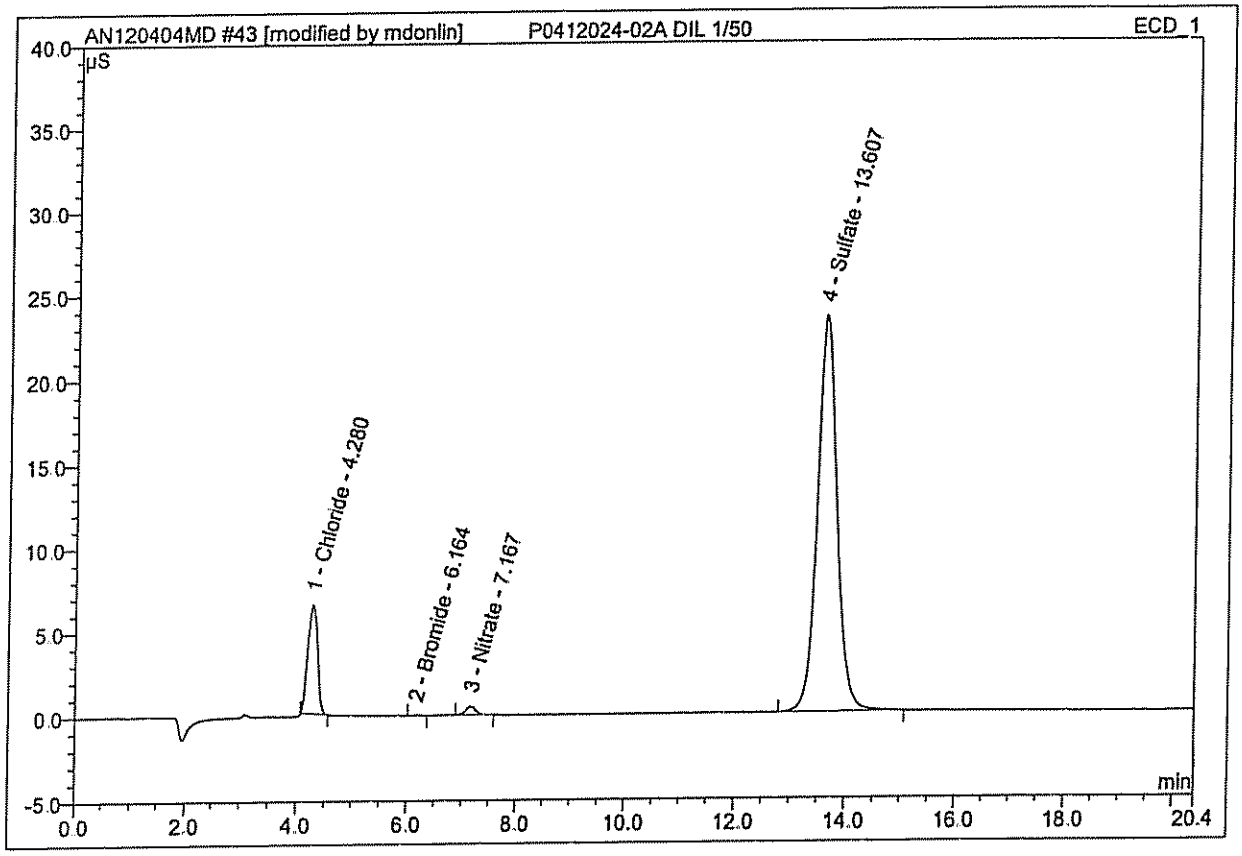
Sample Name:	**P0412024-02A DIL 1/5**	*Injection Volume:*	**1.0**
Vial Number:	**95**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 3:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.24	Chloride	39.995	14.809	12.74	51.912	BMB*
2	6.17	Bromide	0.198	0.037	0.03	1.519	BMB
3	7.14	Nitrate	4.571	1.006	0.87	8.077	BMB
4	11.00	Phosphate	0.011	0.001	0.00	0.671	BMB
5	13.07	Sulfate	176.041	100.344	86.36	447.879	BMB
Total:			220.816	116.196	100.00	510.057	

43 P0412024-02A DIL 1/50

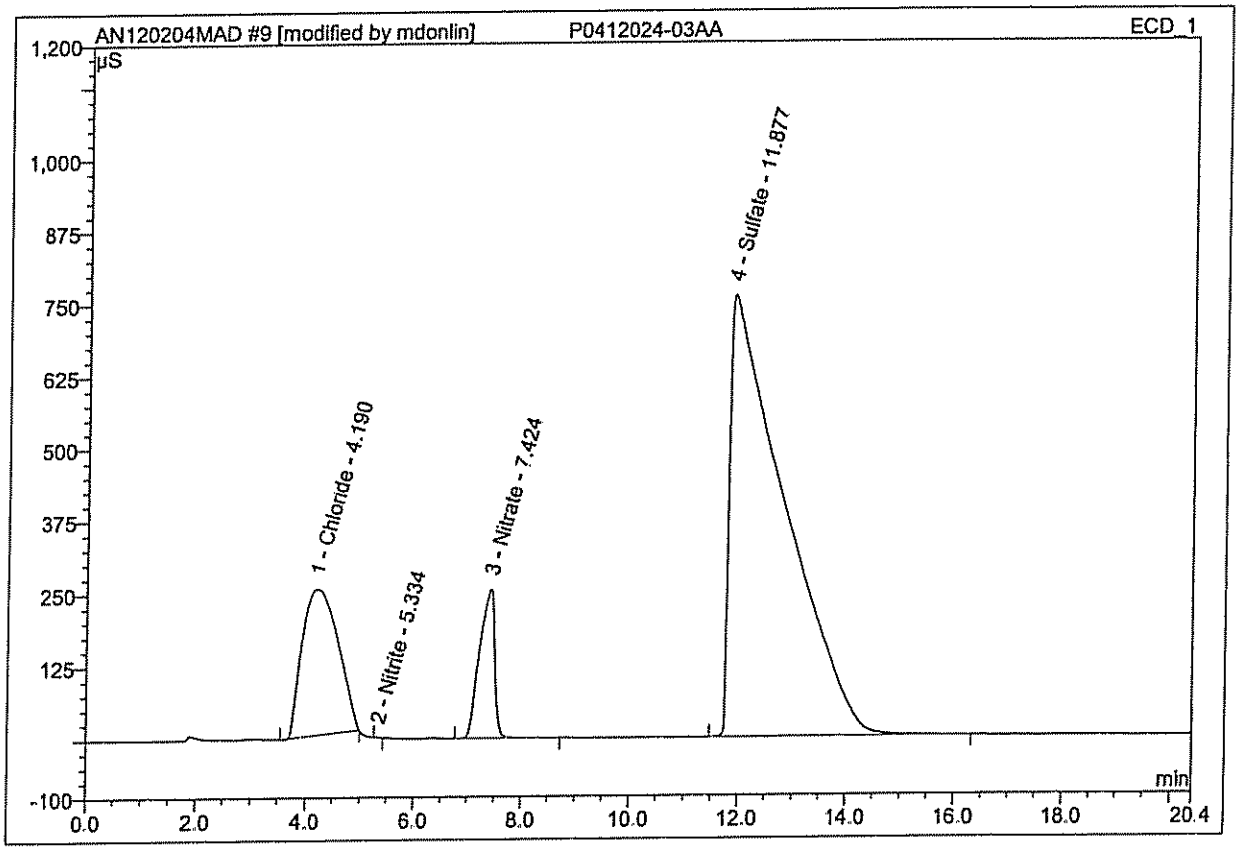
Sample Name:	**P0412024-02A DIL 1/50**	*Injection Volume:*	**1.0**
Vial Number:	**96**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 4:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.28	Chloride	6.450	1.331	11.94	8.371	BMB*
2	6.16	Bromide	0.029	0.004	0.04	1.232	BMB
3	7.17	Nitrate	0.515	0.109	0.98	1.993	BMB
4	13.61	Sulfate	23.509	9.700	87.03	46.595	BMB*
Total:			30.504	11.145	100.00	58.191	

9 P0412024-03AA

Sample Name:	**P0412024-03AA**	*Injection Volume:*	**1.0**
Vial Number:	**62**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 10:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



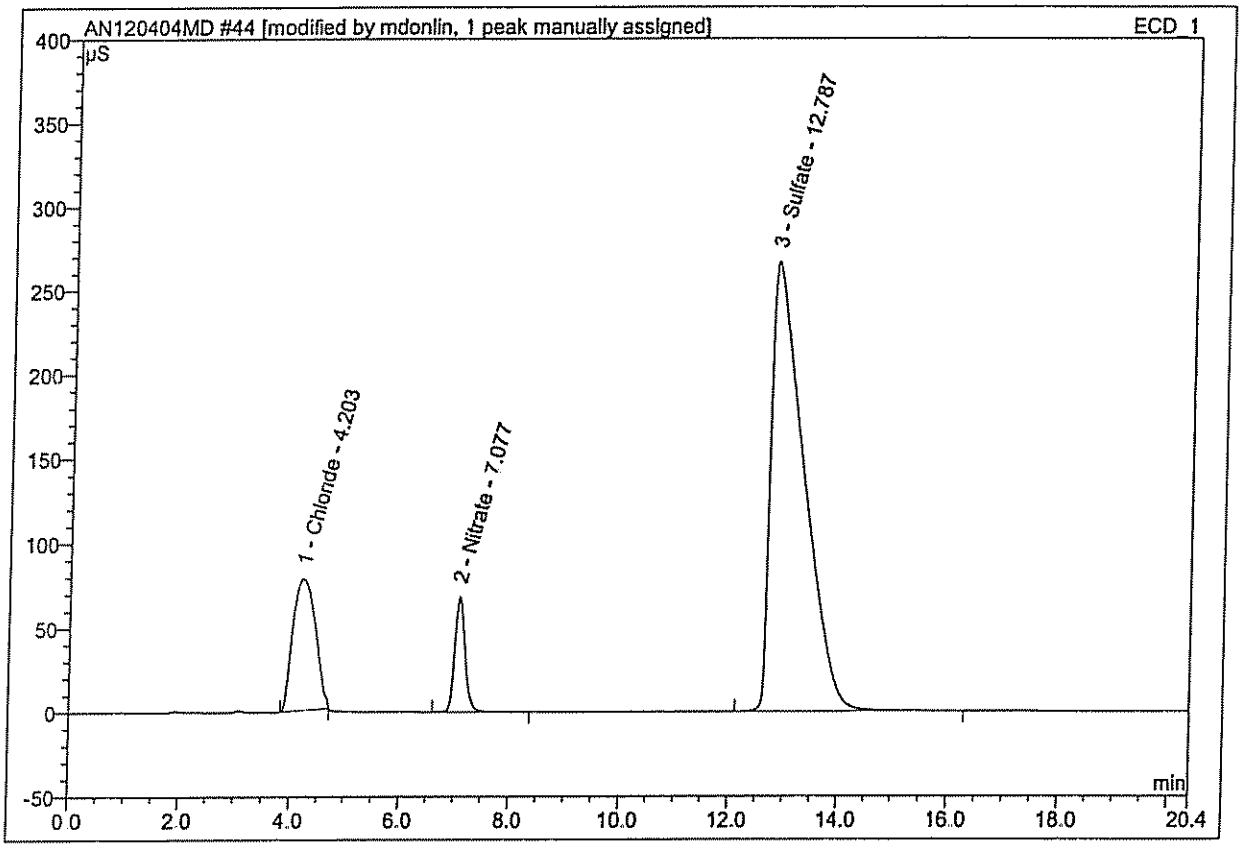
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.19	Chloride	251.369	193.989	16.59	630.755	BMB*
2	5.33	Nitrite	0.685	0.048	0.00	1.005	BMB
3	7.42	Nitrate	255.666	83.406	7.13	567.447	BMB
4	11.88	Sulfate	760.691	892.015	76.28	3952.628	BMB*
Total:			1268.411	1169.458	100.00	5151.835	

Jen DF 1/5

1/50

44 P0412024-03A DIL 1/5

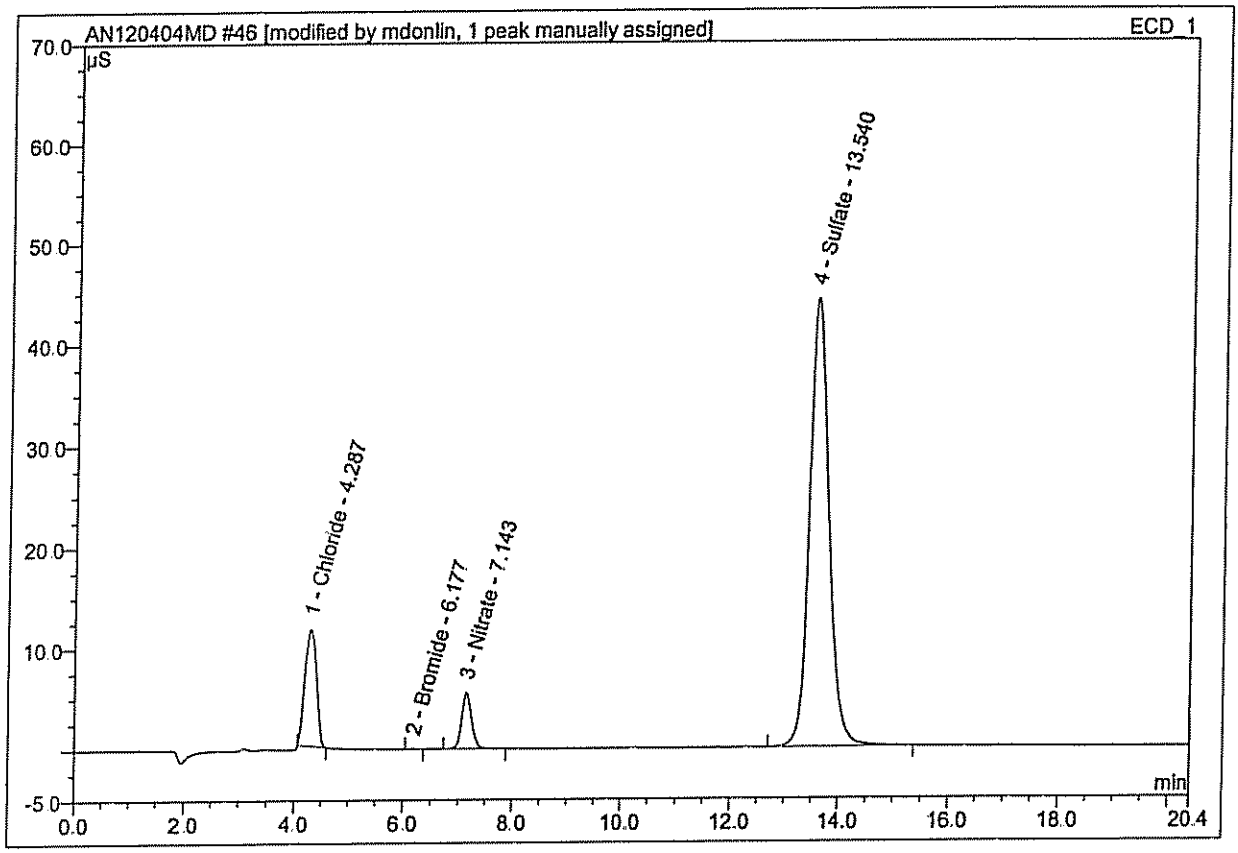
Sample Name:	**P0412024-03A DIL 1/5**	*Injection Volume:*	**1.0**
Vial Number:	**97**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 4:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.20	Chloride	78.197	37.468	15.63	125.111	BMB*
2	7.08	Nitrate	68.350	15.090	6.30	103.689	BMB
3	12.79	Sulfate	266.913	187.110	78.07	831.997	BMB^
Total:			413.460	239.668	100.00	1060.797	

46 P0412024-03A DIL 1/50

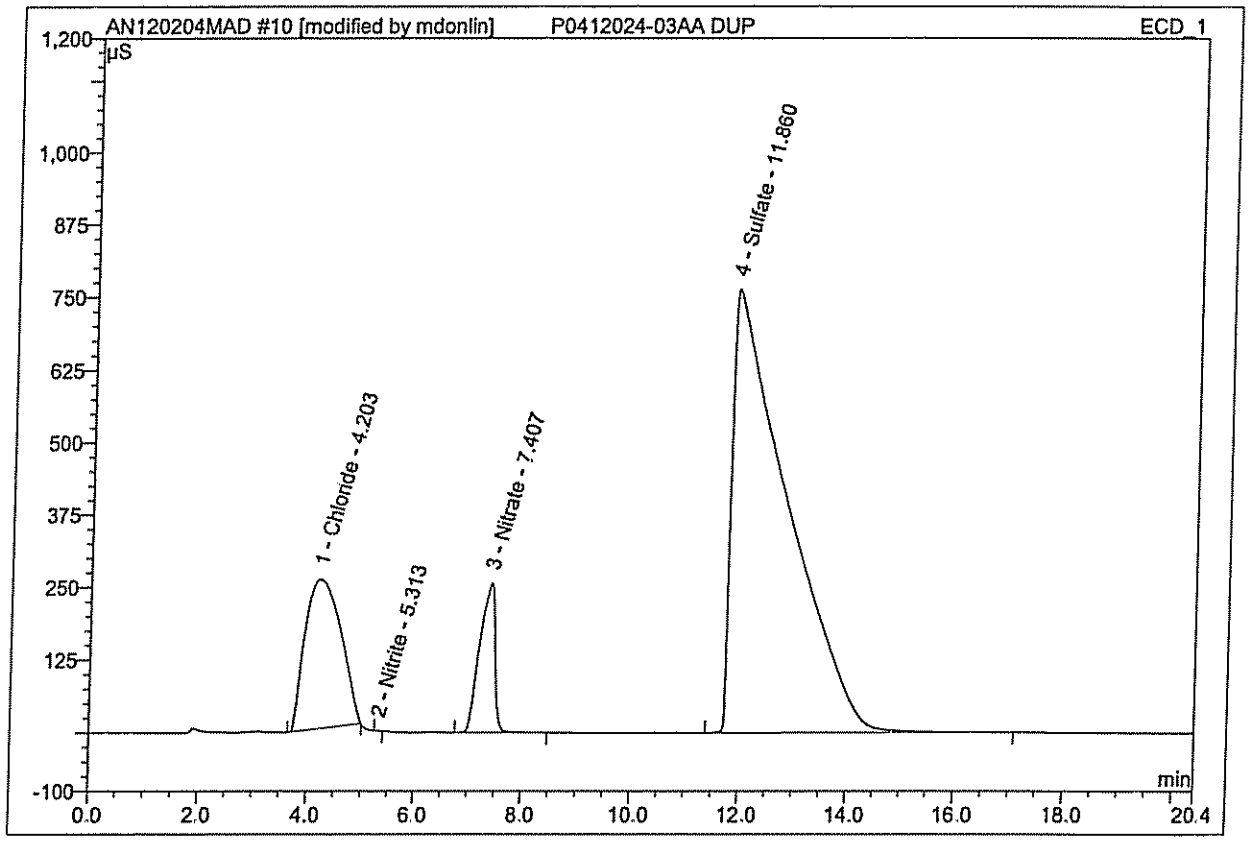
Sample Name:	**P0412024-03A DIL 1/50**	*Injection Volume:*	**1.0**
Vial Number:	**99**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 5:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.29	Chloride	11.561	2.957	13.02	13.623	BMB*
2	6.18	Bromide	0.042	0.006	0.03	1.247	BMB
3	7.14	Nitrate	5.536	1.178	5.19	9.244	BMB
4	13.54	Sulfate	44.271	18.563	81.76	85.832	BMB^
Total:			61.410	22.703	100.00	109.945	

10 P0412024-03AA DUP

Sample Name:	**P0412024-03AA DUP**	*Injection Volume:*	**1.0**
Vial Number:	**63**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 10:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**

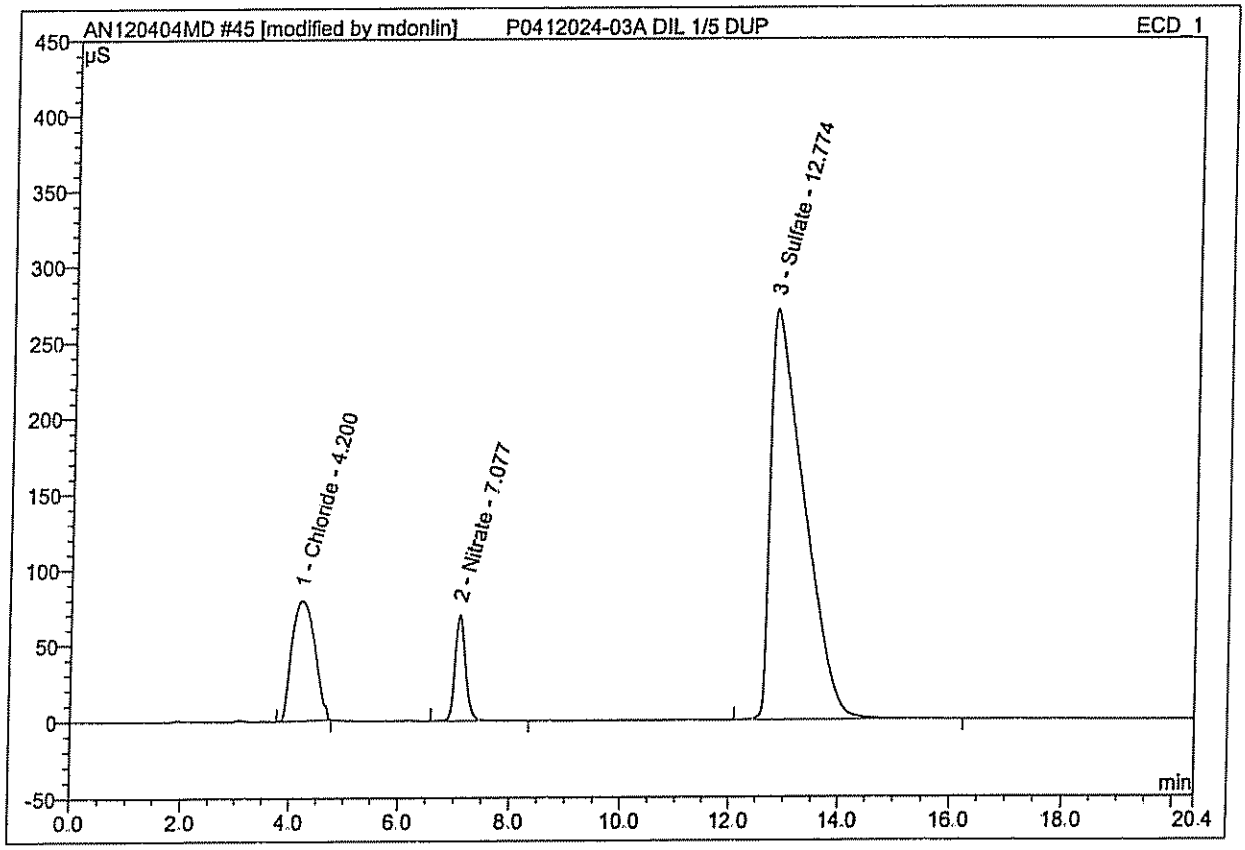


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.20	Chloride	257.233	197.686	16.63	642.697	BMB*
2	5.31	Nitrite	0.606	0.040	0.00	0.955	BMB
3	7.41	Nitrate	256.121	84.521	7.11	575.018	BMB
4	11.86	Sulfate	762.930	906.415	76.26	4016.380	BMB
Total:			1276.890	1188.662	100.00	5235.049	

See DF 1/5
RIP 5.1%
1/50

45 P0412024-03A DIL 1/5 DUP

Sample Name:	**P0412024-03A DIL 1/5 DUP**	*Injection Volume:*	**1.0**
Vial Number:	**98**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 4:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**

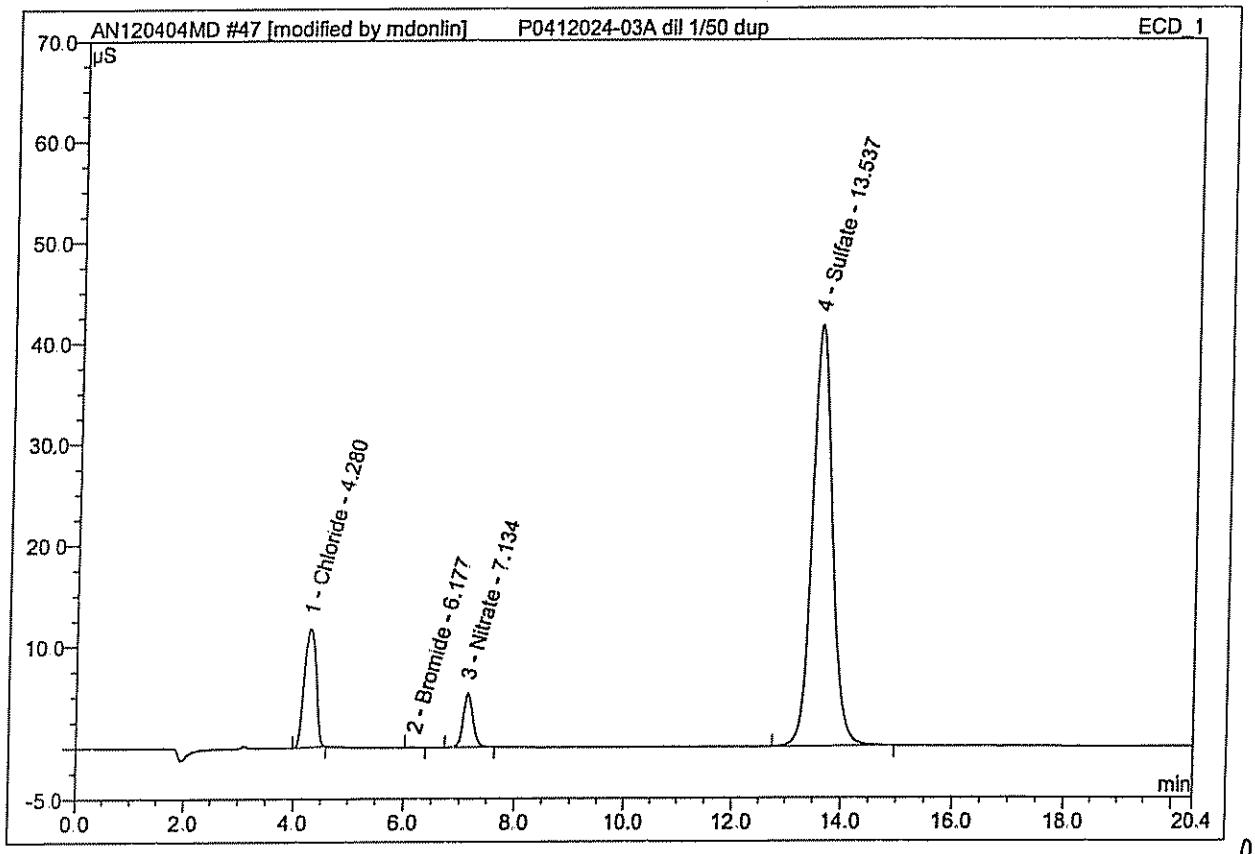


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.20	Chloride	79.008	38.693	15.74	129.070	BMB*
2	7.08	Nitrate	69.497	15.373	6.25	105.606	BMB
3	12.77	Sulfate	270.711	191.840	78.01	852.935	BMB*
Total:			419.217	245.906	100.00	1087.611	

RPD
3.1%

47 P0412024-03A dil 1/50 dup

Sample Name:	**P0412024-03A dil 1/50 dup**	*Injection Volume:*	**1.0**
Vial Number:	**100**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2004 5:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



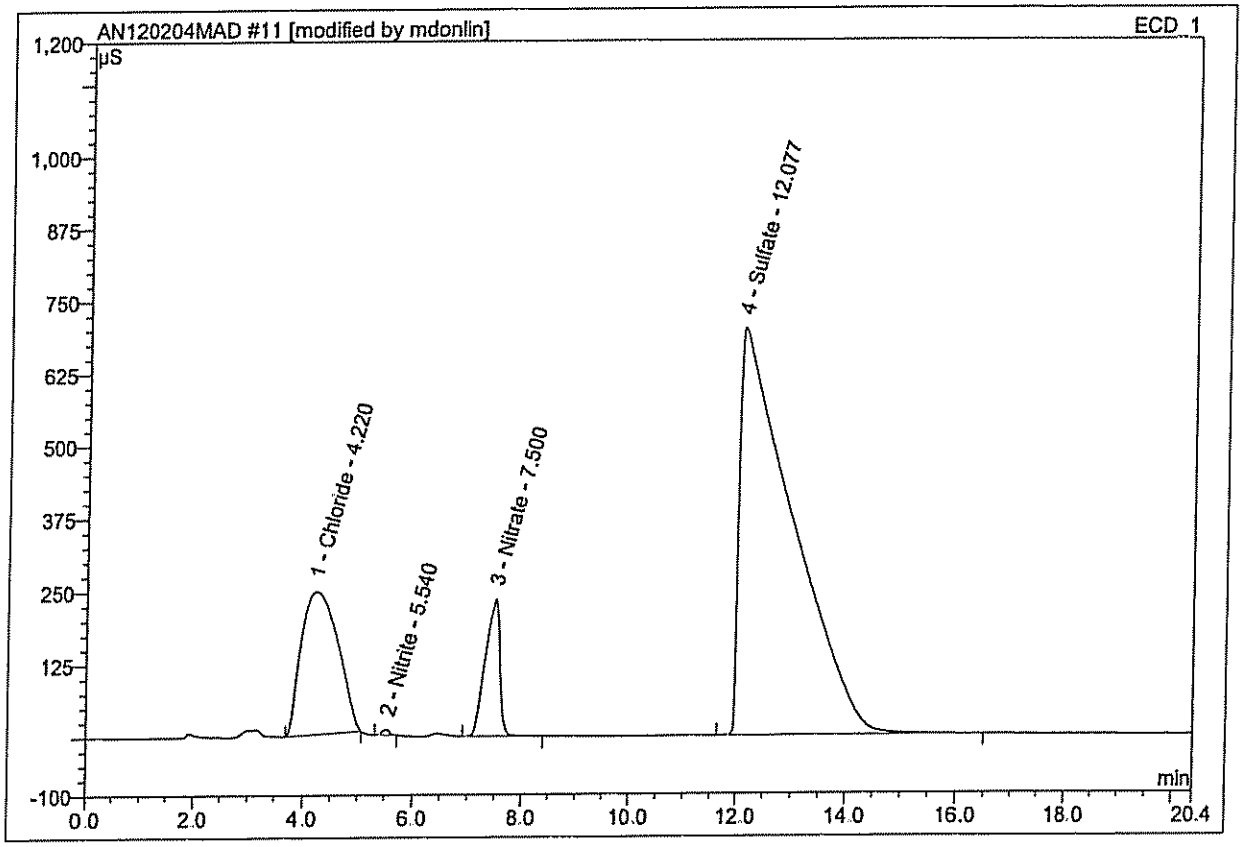
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.28	Chloride	11.697	2.942	13.80	13.575	BMB*
2	6.18	Bromide	0.045	0.008	0.04	1.264	BMB
3	7.13	Nitrate	5.284	1.114	5.23	8.814	BMB
4	13.54	Sulfate	41.612	17.254	80.94	80.040	BMB*
Total:			58.639	21.318	100.00	103.693	

RPD

4.4%
6.98%

11 P0412024-03AA MS 10/50ppm

Sample Name:	**P0412024-03AA MS 10/50ppm**	*Injection Volume:*	**1.0**
Vial Number:	**64**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 11:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**

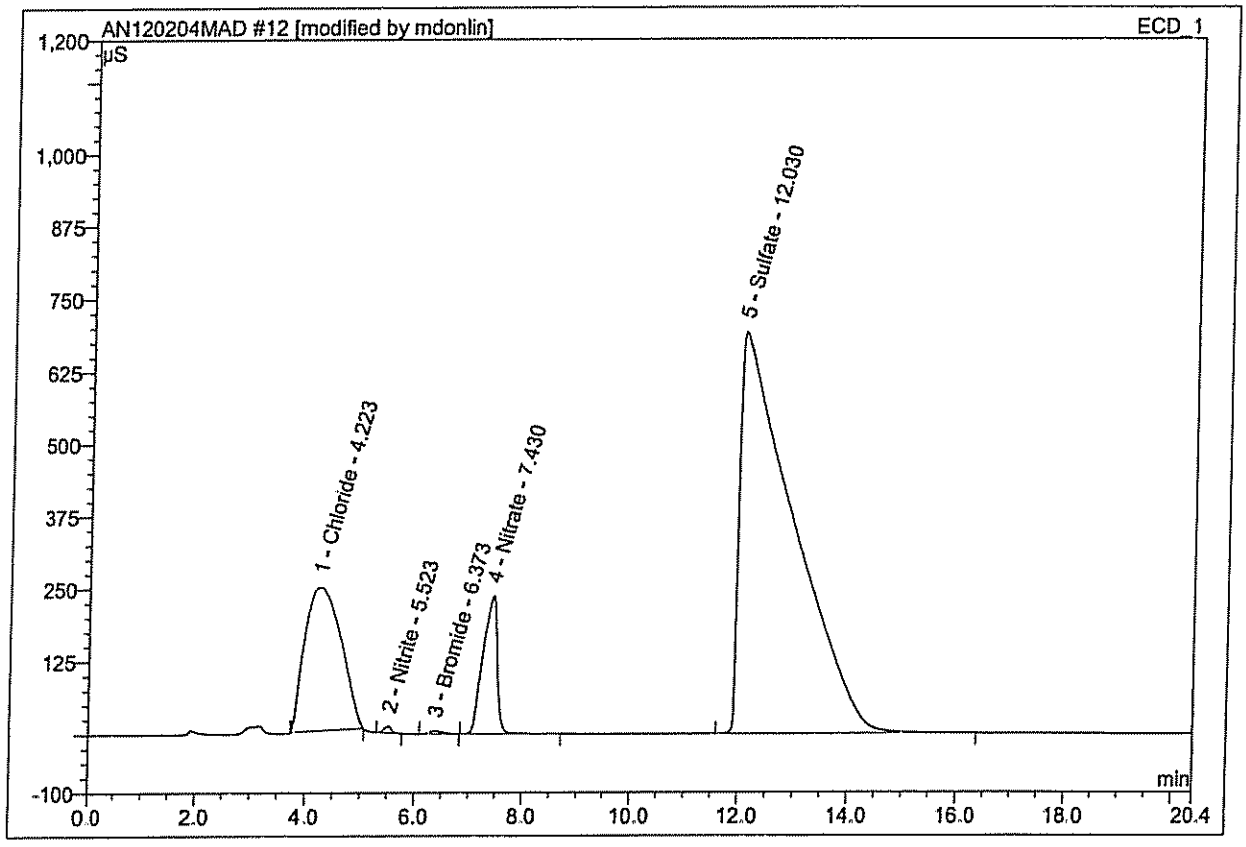


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.22	Chloride	245.591	191.495	18.14	622.698	BMB*
2	5.54	Nitrite	10.086	1.504	0.14	10.227	BMB
3	7.50	Nitrate	234.555	73.863	7.00	502.665	BMB
4	12.08	Sulfate	700.468	789.008	74.73	3496.615	BMB*
Total:			1190.700	1055.870	100.00	4632.205	

92%

12 P0412024-03AA MSD 10/50ppm

Sample Name:	**P0412024-03AA MSD 10/50ppm**	*Injection Volume:*	**1.0**
Vial Number:	**65**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 11:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**

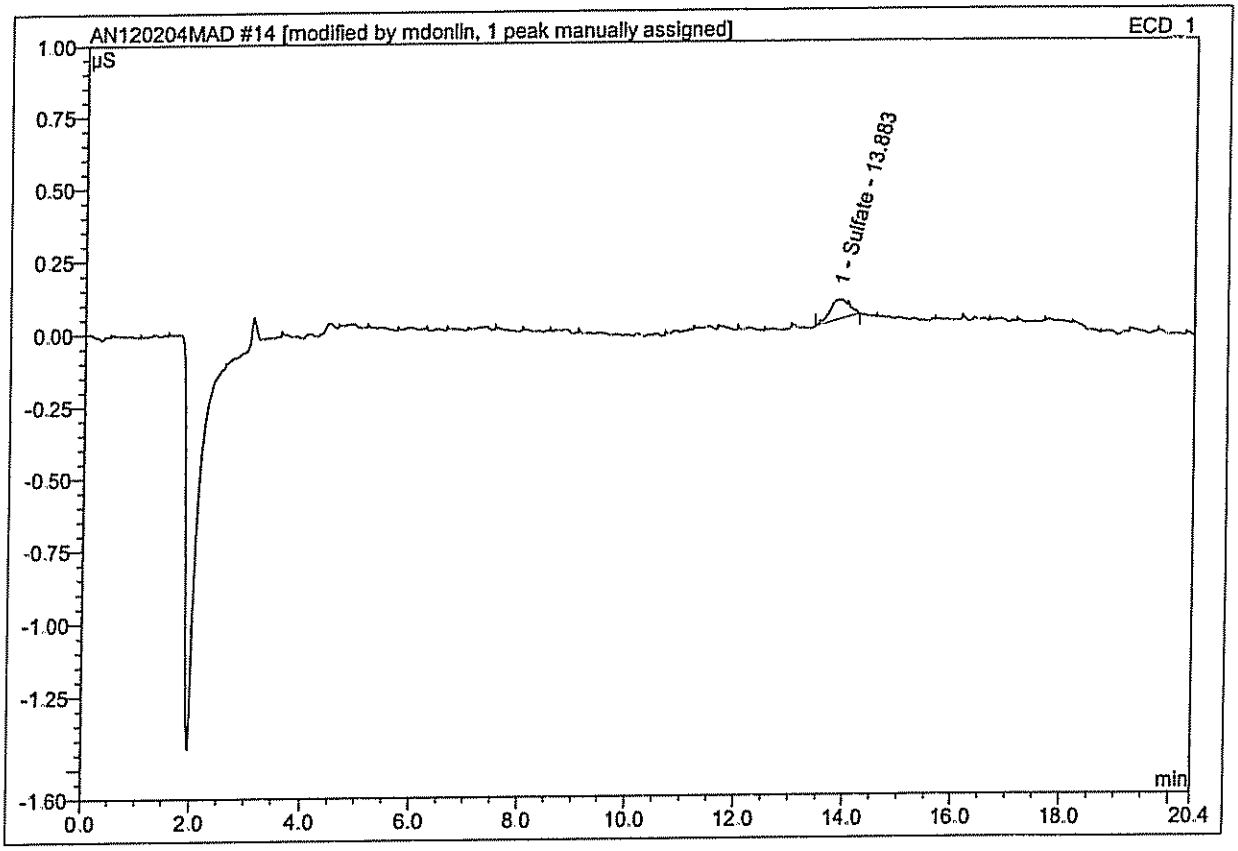


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.22	Chloride	246.672	190.766	18.05	620.343	BMB*
2	5.52	Nitrite	11.650	1.838	0.17	12.341	BMB
3	6.37	Bromide	5.469	1.556	0.15	15.047	BMB
4	7.43	Nitrate	236.478	74.122	7.01	504.420	BMB
5	12.03	Sulfate	691.674	788.704	74.62	3495.271	BMB*
Total:			1191.943	1056.986	100.00	4647.423	

113%

14 CCB

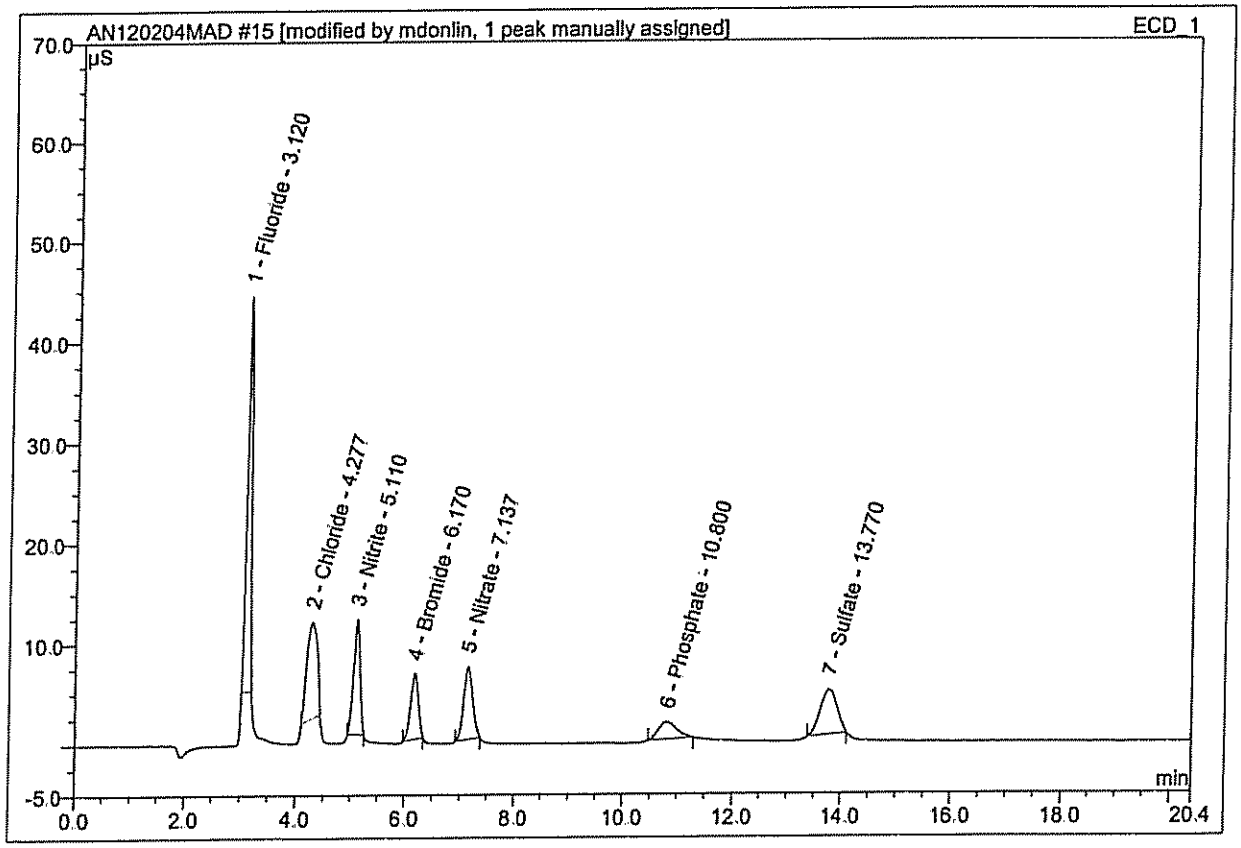
Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**67**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 12:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	13.88	Sulfate	0.066	0.028	100.00	3.779	BMB*^
Total:			0.066	0.028	100.00	3.779	

15 CCV 10ppm

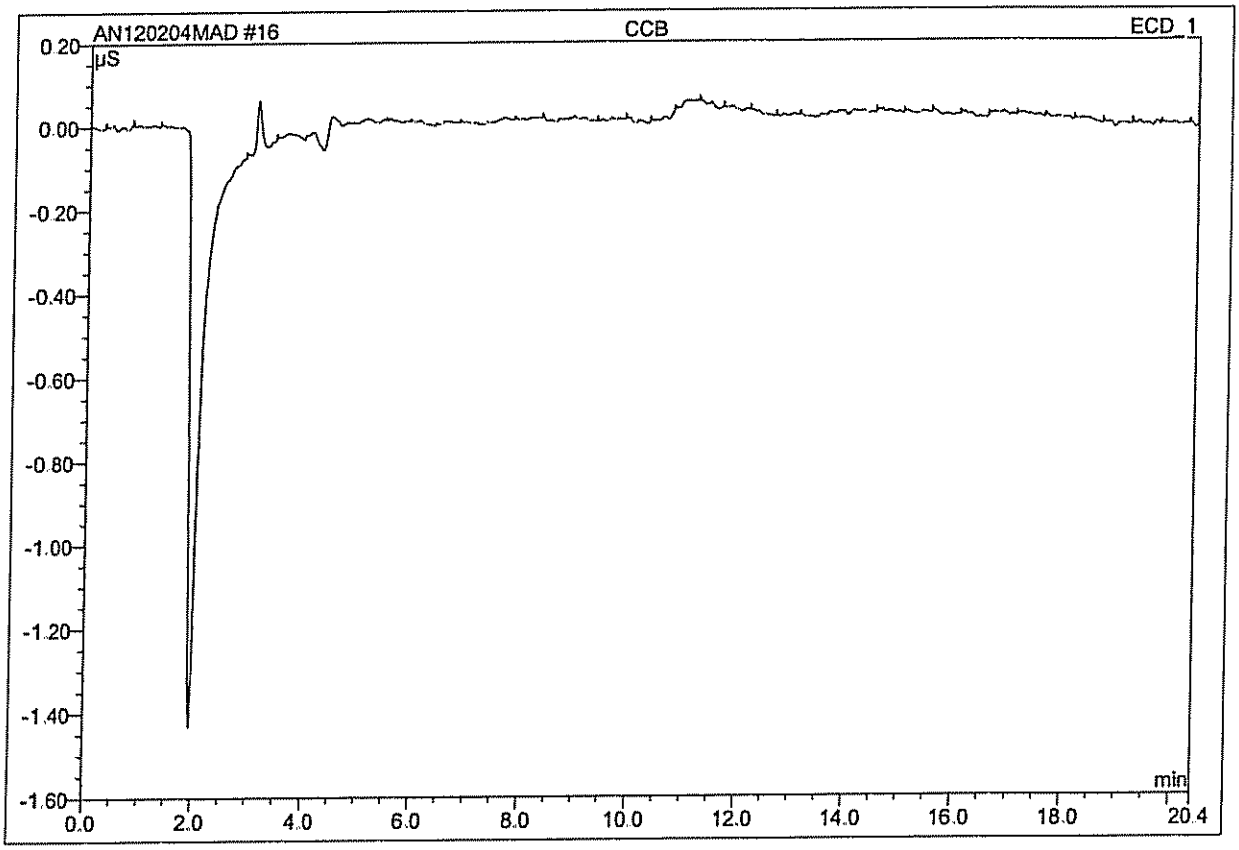
Sample Name:	**CCV 10ppm**	*Injection Volume:*	**1.0**
Vial Number:	**68**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 12:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	39.196	3.483	29.13	10.389	MB*
2	4.28	Chloride	9.613	2.106	17.61	10.874	BMB*
3	5.11	Nitrite	11.439	1.597	13.36	10.815	BMB*^
4	6.17	Bromide	6.527	1.064	8.89	10.663	BMB*
5	7.14	Nitrate	7.223	1.430	11.96	10.957	BMB*
6	10.80	Phosphate	1.712	0.667	5.58	10.541	BMB*
7	13.77	Sulfate	4.448	1.612	13.48	10.792	BMB*
Total:			80.159	11.960	100.00	75.031	

16 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**69**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/2/2004 13:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Method File: H20
Operator: bcarnicelli
Printed: 11/16/2004 10:31:05 AM

Title:
Datasource: BIOREM11_local
Location: BIOREM14\NOV, 2004 H2O SEQ
Created: 5/6/2004 3:13:36 PM by bcarnicelli
(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Ret.Time FID	Ret.Time TCD	Ret.Time RGD	Resp.Fact.	Amount STD X 2500X 050404
1	Methane	0.660 min	0.660 min			1.000000	
2	Ethane	0.920 min	0.920 min			1.000000	
3	Ethene	1.180 min	1.180 min			1.000000	
4	Propane	1.790 min	1.790 min			1.000000	
5	Propene	3.280 min	3.280 min			1.000000	
6	Hydrogen	3.360 min			3.360 min	1.000000	0.077000
7	iso-Butane	4.410 min	4.410 min			1.000000	
8	Carbon Dioxide	4.600 min		4.600 min		1.000000	
9	n-Butane	5.050 min	5.050 min			1.000000	
10	Oxygen	6.400 min		6.400 min		1.000000	
11	Acetylene	6.550 min	6.550 min			1.000000	
12	Nitrogen	7.200 min		7.200 min		1.000000	
13	Methane	9.400 min		9.400 min		1.000000	
14	Carbon Monoxide	10.900 min		10.900 min		1.000000	

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Method File: H20
Operator: bcarnicelli
Printed: 11/16/2004 10:31:05 AM

Title:
Datasource: BIOREM11_local
Location: BIOREM14\NOV, 2004 H2O.SEQ
Created: 5/6/2004 3:13:36 PM by bcarnicelli
(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Amount STD X 25X 050404	Amount STD X 10X 050404	Amount STD 237 100X 050504	Amount STD 237 10X 050504
1	Methane	0.660 min				
2	Ethane	0.920 min				
3	Ethene	1.180 min				
4	Propane	1.790 min				
5	Propene	3.280 min				
6	Hydrogen	3.360 min	6.700000	16.750000		
7	iso-Butane	4.410 min				
8	Carbon Dioxide	4.600 min			3.200000	31.990000
9	n-Butane	5.050 min				
10	Oxygen	6.400 min			0.340000	3.400000
11	Acetylene	6.550 min				
12	Nitrogen	7.200 min			2.700000	26.990000
13	Methane	9.400 min			109.350000	1093.500000
14	Carbon Monoxide	10.900 min			0.295000	2.952000

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Method File: H20
Operator: bcarnicelli
Printed: 11/16/2004 10:31:05 AM

Title:
Datasource: BIOREM11_local
Location: BIOREM14\NOV, 2004 H2O.SEQ
Created: 5/6/2004 3:13:36 PM by bcarnicelli
(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Amount STD 237 2X 050504	Amount STD 237 050504	Amount STD X 2500X 050704	Amount STD X 250X 050704
1	Methane	0.660 min			0.049400	0.494000
2	Ethane	0.920 min			94.400000	944.000000
3	Ethene	1.180 min			105.840000	1058.400000
4	Propane	1.790 min			134.940000	1349.400000
5	Propene	3.280 min			156.400000	1564.000000
6	Hydrogen	3.360 min				
7	iso-Butane	4.410 min			170.800000	1708.000000
8	Carbon Dioxide	4.600 min	159.970000	319.300000		
9	n-Butane	5.050 min			174.380000	1743.840000
10	Oxygen	6.400 min	17.000000	34.000000		
11	Acetylene	6.550 min				
12	Nitrogen	7.200 min	134.950000	269.910000		
13	Methane	9.400 min	5467.000000	10935.000000		
14	Carbon Monoxide	10.900 min	14.760000	29.520000		

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Method File: H20
Operator: bcarnicelli
Printed: 11/16/2004 10:31:05 AM

Title:
Datasource: BIOREM11_local
Location: BIOREM14\NOV, 2004 H2O SEQ
Created: 5/6/2004 3:13:36 PM by bcarnicelli
(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Amount STD X 25X 050704	Amount STD X	Amount ACETYLENE 2000X	Amount ACETYLENE 200X	Amount ACETYLENE 20X
1	Methane	0.660 min	4.940000	123.440000			
2	Ethane	0.920 min	9440.000000	236000.000000			
3	Ethene	1.180 min	10584.000000	264600.000000			
4	Propane	1.790 min	13493.800000	337344.000000			
5	Propene	3.280 min	15640.000000	391000.000000			
6	Hydrogen	3.360 min					
7	iso-Butane	4.410 min	17080.000000	427000.000000			
8	Carbon Dioxide	4.600 min					
9	n-Butane	5.050 min	17438.400000	435960.000000			
10	Oxygen	6.400 min					
11	Acetylene	6.550 min			742.000000	7420.000000	74200.000000
12	Nitrogen	7.200 min					
13	Methane	9.400 min					
14	Carbon Monoxide	10.900 min					

Chromeleon © Dionex Corporation, Version 6.60 Build 1428

Method File:	H20		Printed: 11/16/2004 10:31:05 AM
Operator:	bcarnicelli		
Title:			
Datasource:	BIOREM11_local	Created:	5/6/2004 3:13:36 PM by bcarnicelli
Location:	BIOREM14\NOV, 2004 H2O SEQ		(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Amount ACETYLENE 2X
1	Methane	0.660 min	
2	Ethane	0.920 min	
3	Ethene	1.180 min	
4	Propane	1.790 min	
5	Propene	3.280 min	
6	Hydrogen	3.360 min	
7	iso-Butane	4.410 min	
8	Carbon Dioxide	4.600 min	
9	n-Butane	5.050 min	
10	Oxygen	6.400 min	
11	Acetylene	6.550 min	742000.000000
12	Nitrogen	7.200 min	
13	Methane	9.400 min	
14	Carbon Monoxide	10.900 min	

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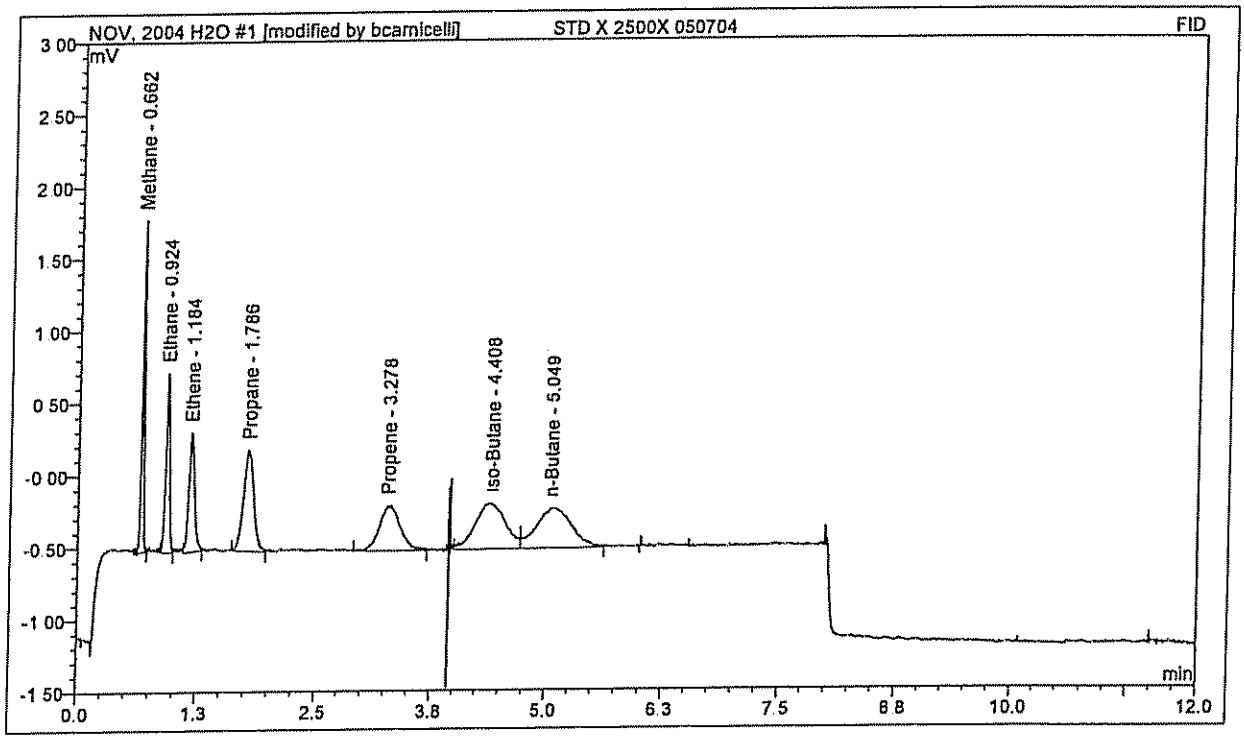
LIGHT HYDROCARBONS

5/7/2004

Peak Name	Area	Height	Cal.Type	Slope	#Points	Rel.Std.Dev.	Corr.Coeff.
	mV*min	mV				%	%
Methane	0.063	2.305	Lin	0.661	4	0.279	100.000
Ethane	0.060	1.241	Lin	0.001	4	0.133	100.000
Ethene	0.059	0.827	Lin	0.001	4	0.122	100.000
Propane	0.088	0.700	Lin	0.001	4	0.105	100.000
Propene	0.082	0.316	Lin	0.001	4	0.066	100.000
iso-Butane	0.120	0.320	Lin	0.001	4	0.047	100.000
n-Butane	0.123	0.279	Lin	0.001	4	0.032	100.000

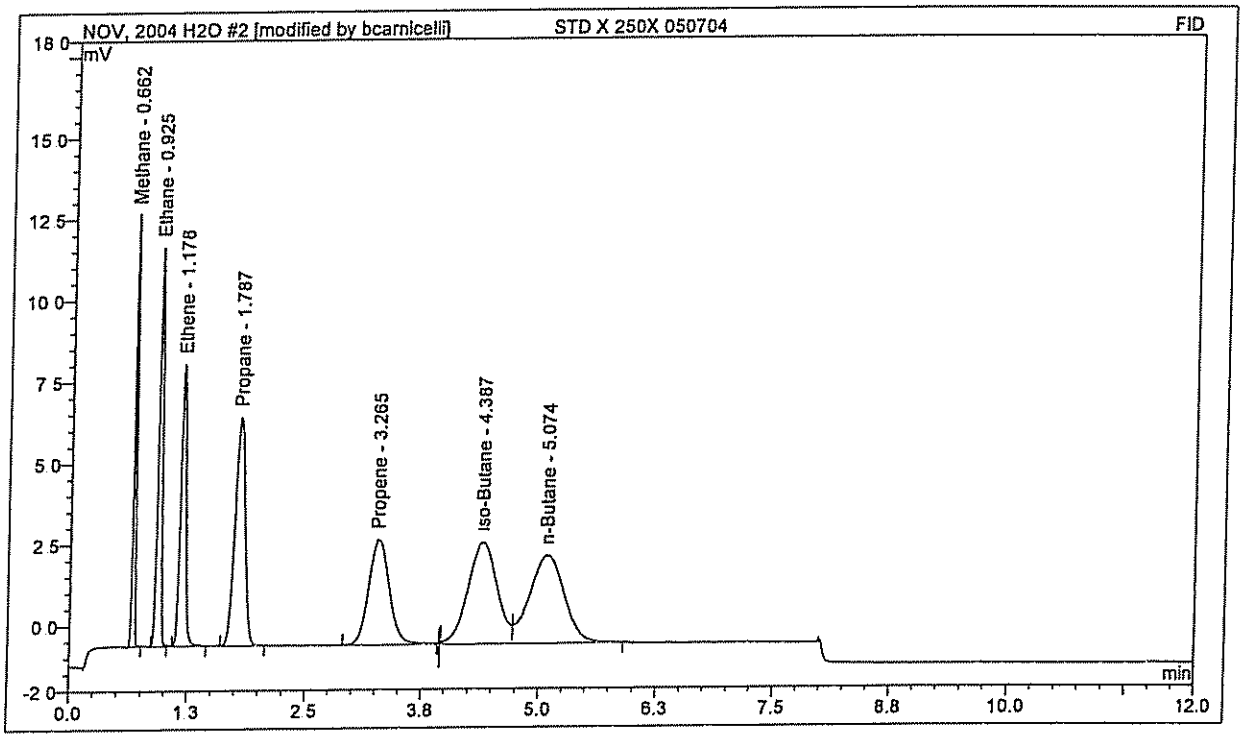
Sample Name:	STD X 2500X 050704
Sample Type:	standard
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 11:02
Run Time (min):	12.00

FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	0.063	2.3050	0.09449
Ethane	0.924	0.060	1.2406	93.85325
Ethene	1.184	0.059	0.8270	102.93003
Propane	1.786	0.088	0.6995	132.51576
Propene	3.278	0.082	0.3163	149.54618
iso-Butane	4.408	0.120	0.3198	175.70545
n-Butane	5.049	0.123	0.2791	177.96491

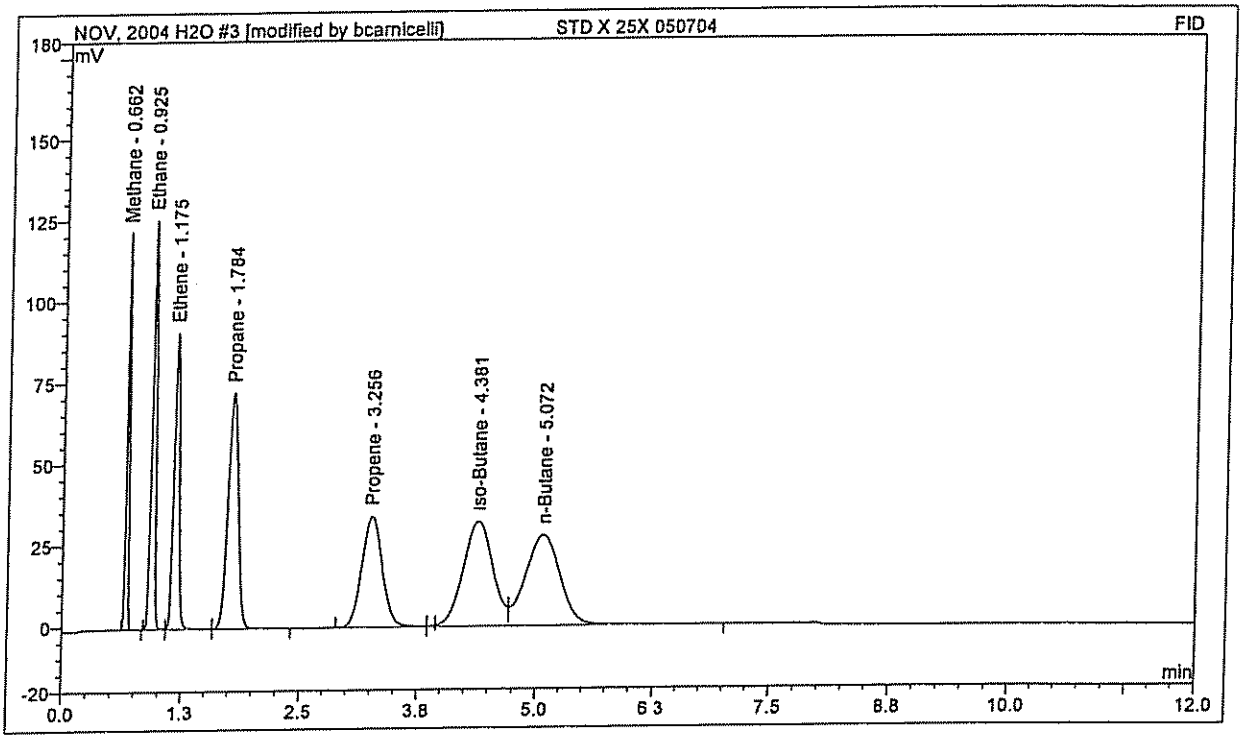
Sample Name:	STD X 250X 050704	FID UNITS (ug/L&ng/L) TCD UNITS (ug/L&mg/L) RGD UNITS (nM)
Sample Type:	standard	
Control Program:	BIOREM14	
Quantif. Method:	WATER NOV04	
Recording Time:	5/7/2004 11:15	
Run Time (min):	12.00	



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	0.364	13.3112	0.54973
Ethane	0.925	0.592	12.2719	933.43070
Ethene	1.178	0.595	8.6789	1039.55261
Propane	1.787	0.877	7.0357	1324.06539
Propene	3.265	0.840	3.2483	1537.21262
iso-Butane	4.387	1.150	3.1436	1687.38716
n-Butane	5.074	1.167	2.7139	1689.84081

Sample Name:	STD X 25X 050704
Sample Type:	standard
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 11:27
Run Time (min):	12.00

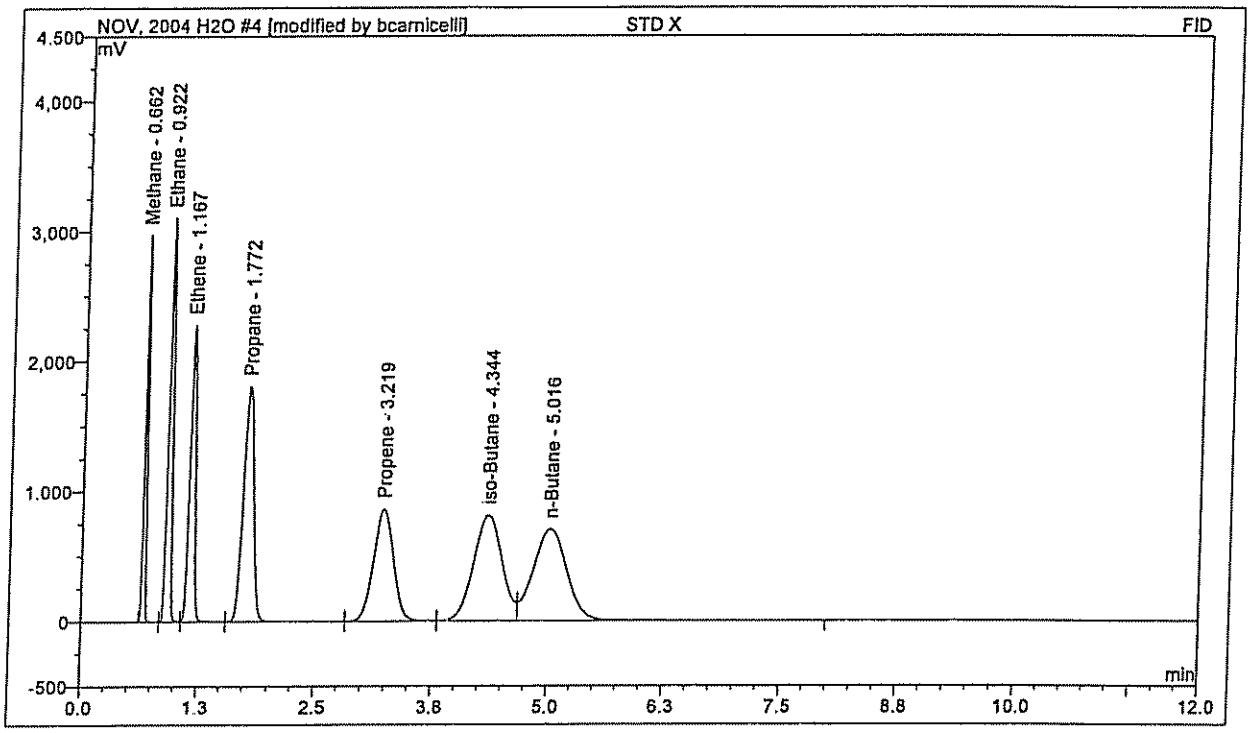
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	3.359	122.2935	5.07821
Ethane	0.925	6.075	125.9177	9581.00770
Ethene	1.175	6.136	91.1611	10728.78954
Propane	1.784	9.045	72.5459	13652.26203
Propene	3.256	8.606	34.0597	15753.28496
iso-Butane	4.381	11.700	32.2272	17169.14090
n-Butane	5.072	12.024	27.8701	17404.76654

Sample Name:	STD X
Sample Type:	standard
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 11:48
Run Time (min):	12.00

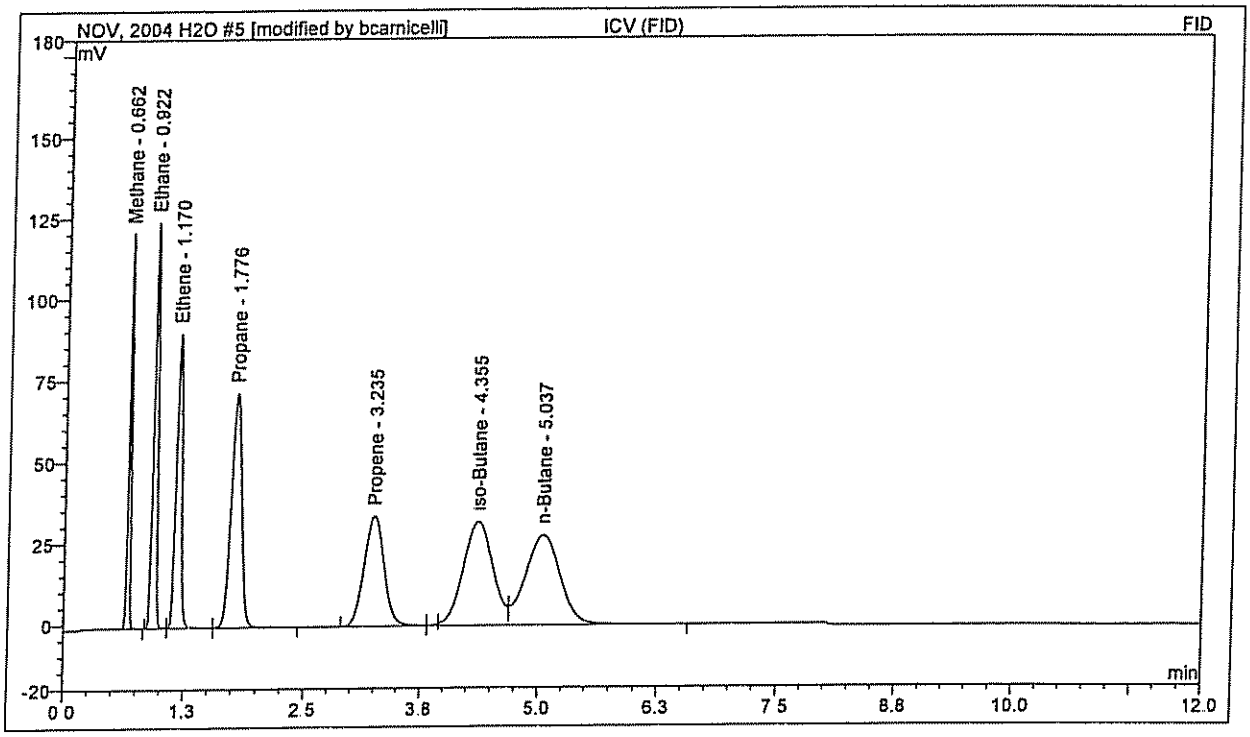
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	81.647	2978.6935	123.43423
Ethane	0.922	149.637	3109.2074	235994.40219
Ethene	1.167	151.331	2280.6065	264594.28497
Propane	1.772	223.506	1809.5373	337337.76381
Propene	3.219	213.594	862.8061	390995.57849
iso-Butane	4.344	290.986	813.4911	426996.51485
n-Butane	5.016	301.189	706.0781	435961.55990

Sample Name:	ICV (FID)
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 12:02
Run Time (min):	12.00

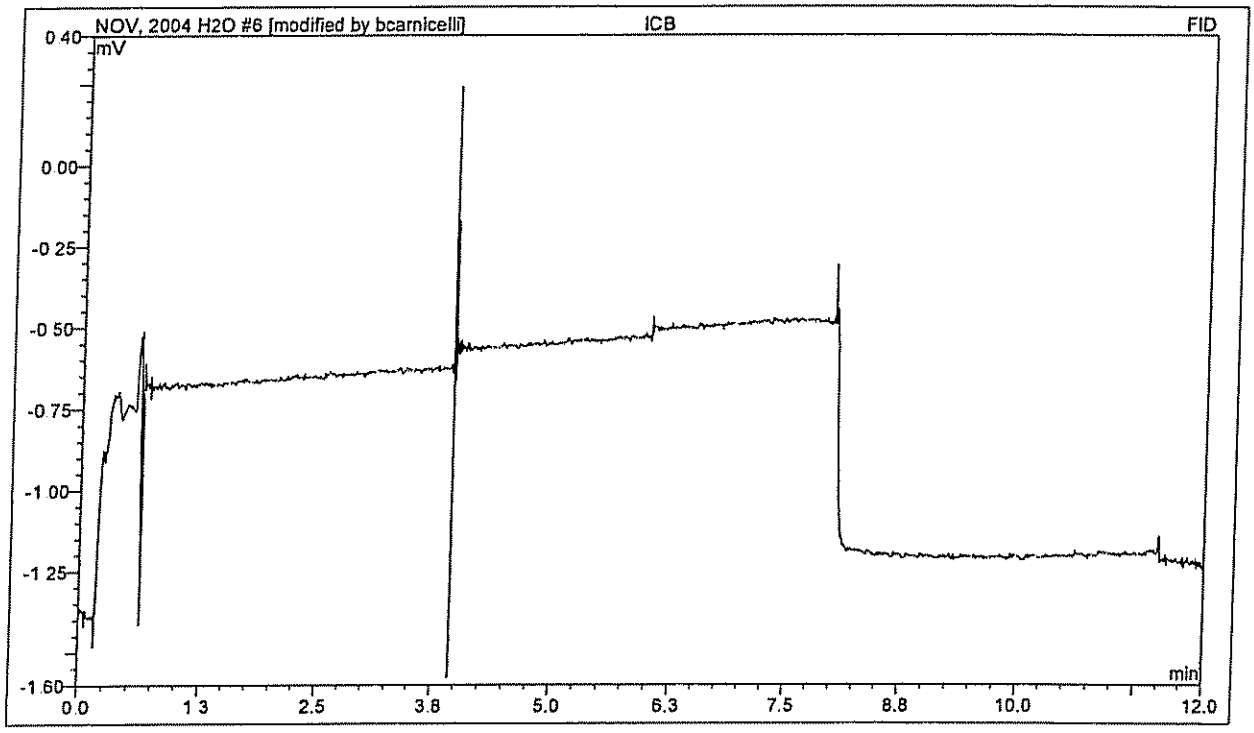
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	3.329	121.6079	5.03308
Ethane	0.922	6.020	124.9217	9493.76281
Ethene	1.170	6.072	90.4753	10616.14282
Propane	1.776	8.954	72.0116	13513.69737
Propene	3.235	8.522	33.9495	15599.36577
iso-Butane	4.355	11.602	31.9690	17025.66575
n-Butane	5.037	11.859	27.7210	17165.89150

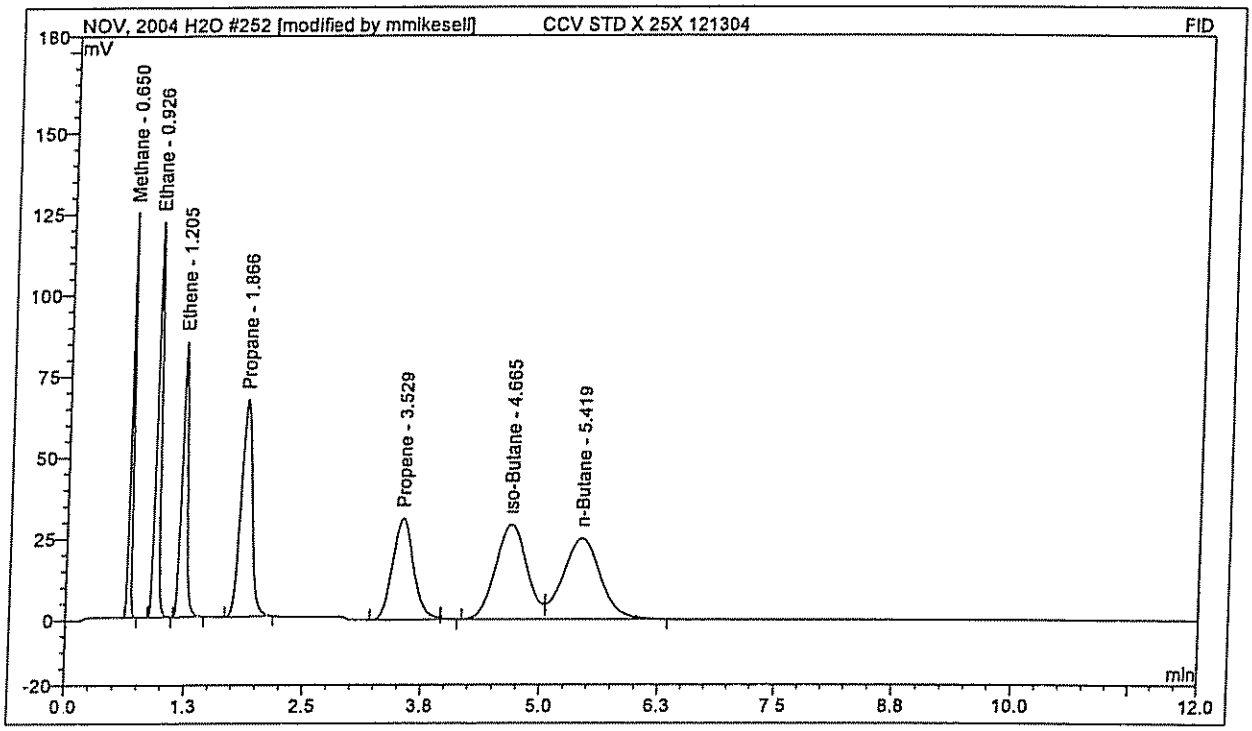
Sample Name:	ICB
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 12:15
Run Time (min):	12.00

FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	

Sample Name:	CCV STD X 25X 121304	FID UNITS (ug/L&ng/L) TCD UNITS (ug/L&mg/L) RGD UNITS (nM)
Sample Type:	unknown	
Control Program:	BIOREM14	
Quantif. Method:	WATER NOV04	
Recording Time:	12/13/2004 9:20	
Run Time (min):	12.00	

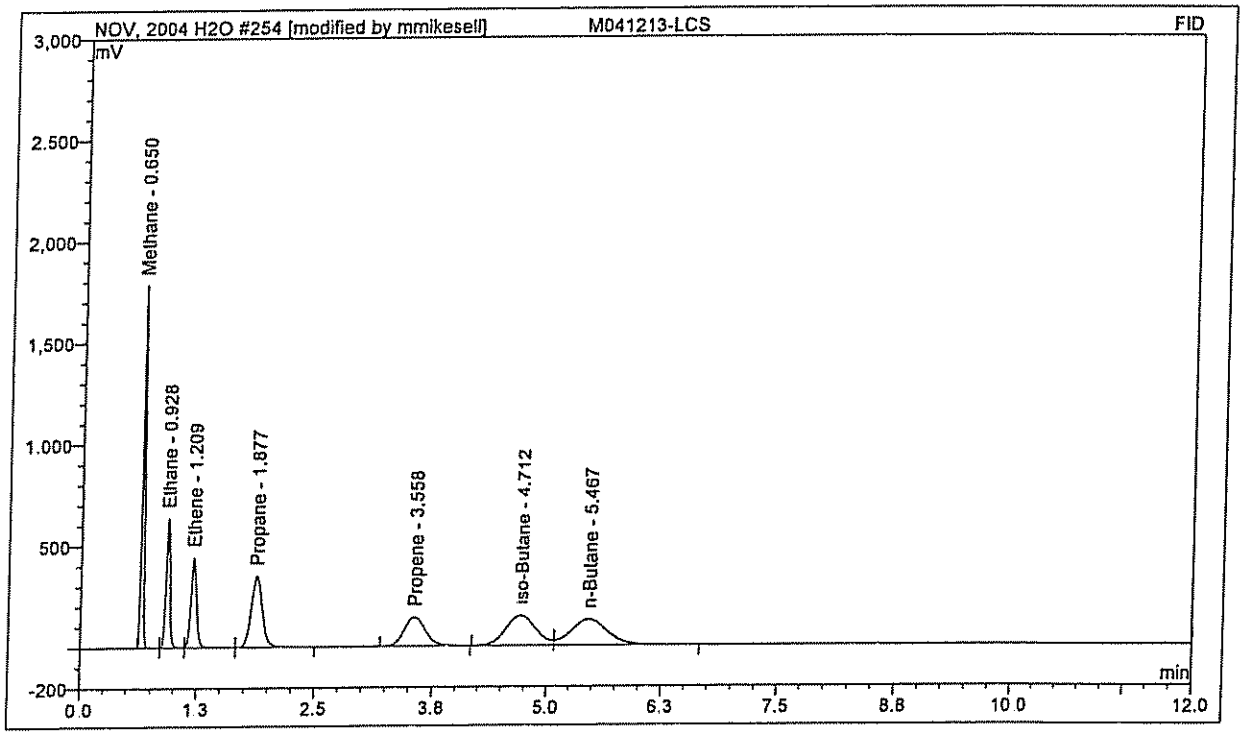


Peak Name	Ret.Time	Area	Height	Amount	
	min	mV*min	mV		
Methane	0.650	3.421	124.6814	5.17170	105%R.
Ethane	0.926	6.092	121.6993	9607.67074	102
Ethene	1.205	6.114	84.7018	10689.39067	101
Propane	1.866	8.970	66.7216	13537.83076	100
Propene	3.529	8.141	31.1422	14902.06483	95
Iso-Butane	4.665	10.927	29.1170	16034.24762	94
n-Butane	5.419	11.431	24.9693	16546.26123	95

MB. 121304

Sample Name:	M041213-LCS
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 9:45
Run Time (min):	12.00

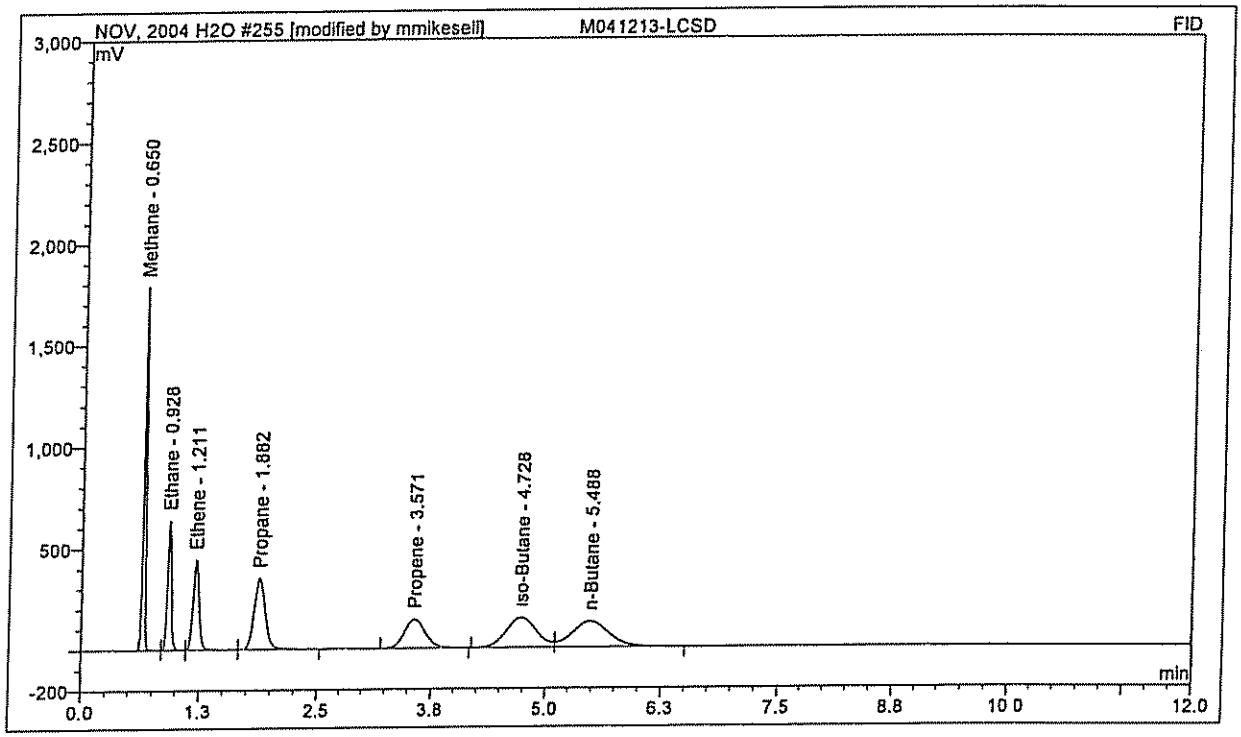
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.650	48.738	1785.4481	73.68301
Ethane	0.928	31.875	636.1278	50269.77873
Ethene	1.209	31.783	442.6502	55570.15711
Propane	1.877	47.746	350.1099	72063.09632
Propene	3.558	37.615	142.8272	68855.80065
iso-Butane	4.712	56.050	147.9151	82248.01134
n-Butane	5.467	59.224	127.0662	85725.48259

Sample Name:	M041213-LCSD
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 9:58
Run Time (min):	12.00

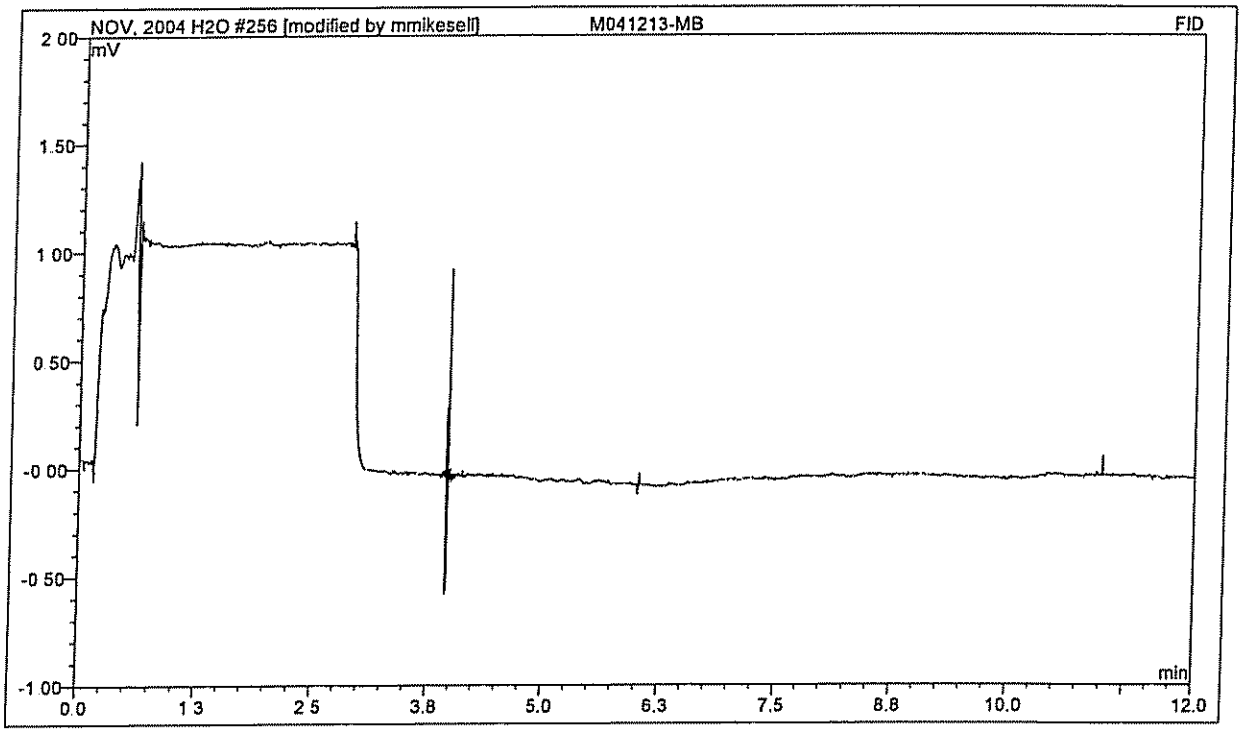
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.650	48.984	1790.5123	74.05380
Ethane	0.928	31.999	637.4244	50465.26144
Ethene	1.211	31.886	443.0349	55750.57813
Propane	1.882	47.904	350.1703	72302.04133
Propene	3.571	37.717	142.3715	69043.11317
iso-Butane	4.728	56.189	147.3190	82452.62566
n-Butane	5.488	58.982	126.7641	85374.01374

Sample Name:	M041213-MB
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 10:10
Run Time (min):	12.00

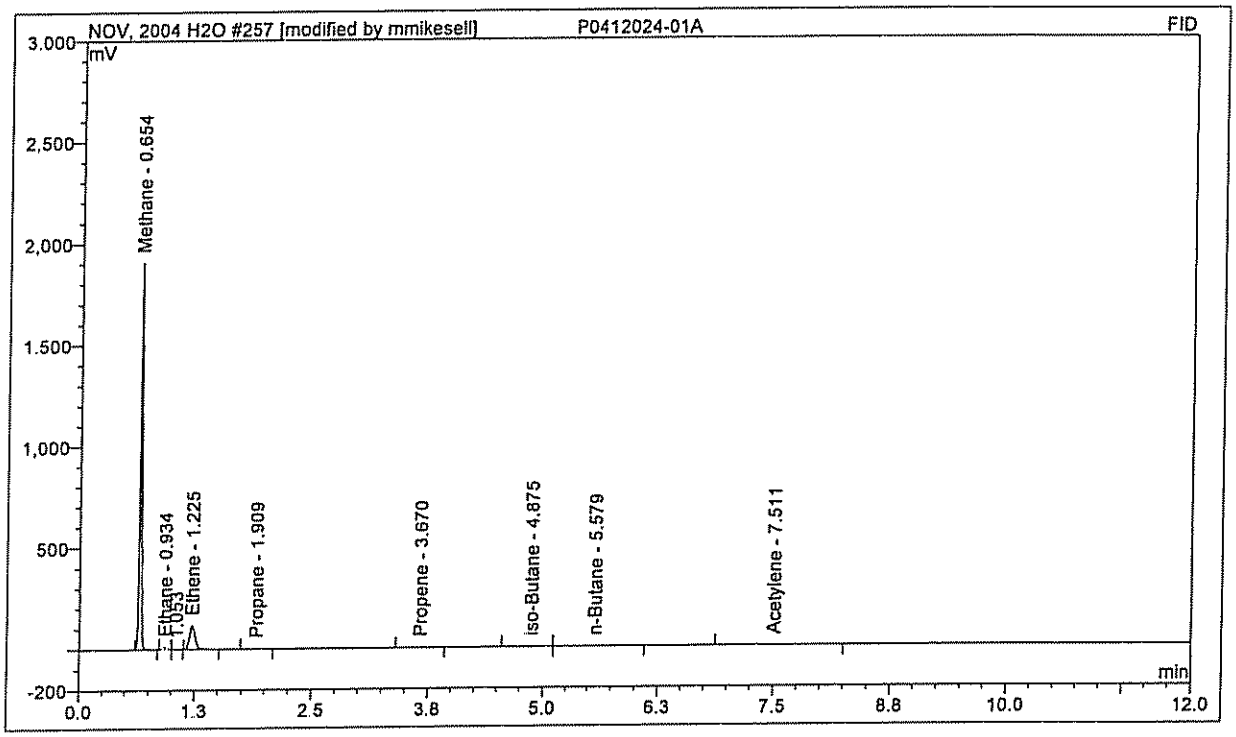
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	

Sample Name:	P0412024-01A
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 10:23
Run Time (min):	12.00

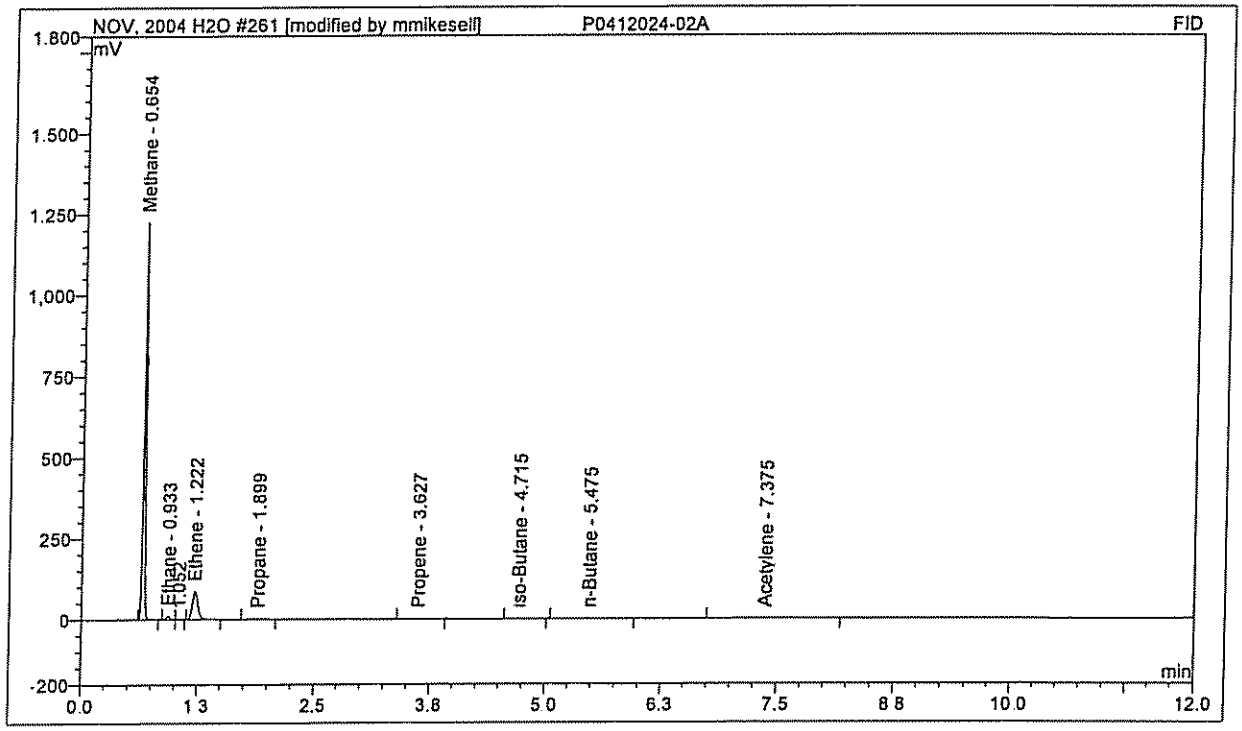
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.654	45.147	1905.5462	68.25324
Ethane	0.934	0.540	11.3044	851.11520
Ethene	1.225	8.164	114.4014	14275.03087
Propane	1.909	0.093	0.7007	140.88738
Propene	3.670	0.152	0.6381	278.48362
iso-Butane	4.875	0.016	0.0472	23.65309
n-Butane	5.579	0.096	0.2147	138.34515
Acetylene	7.511	0.556	0.9669	2835.58451

Sample Name:	P0412024-02A
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 11:14
Run Time (min):	12.00

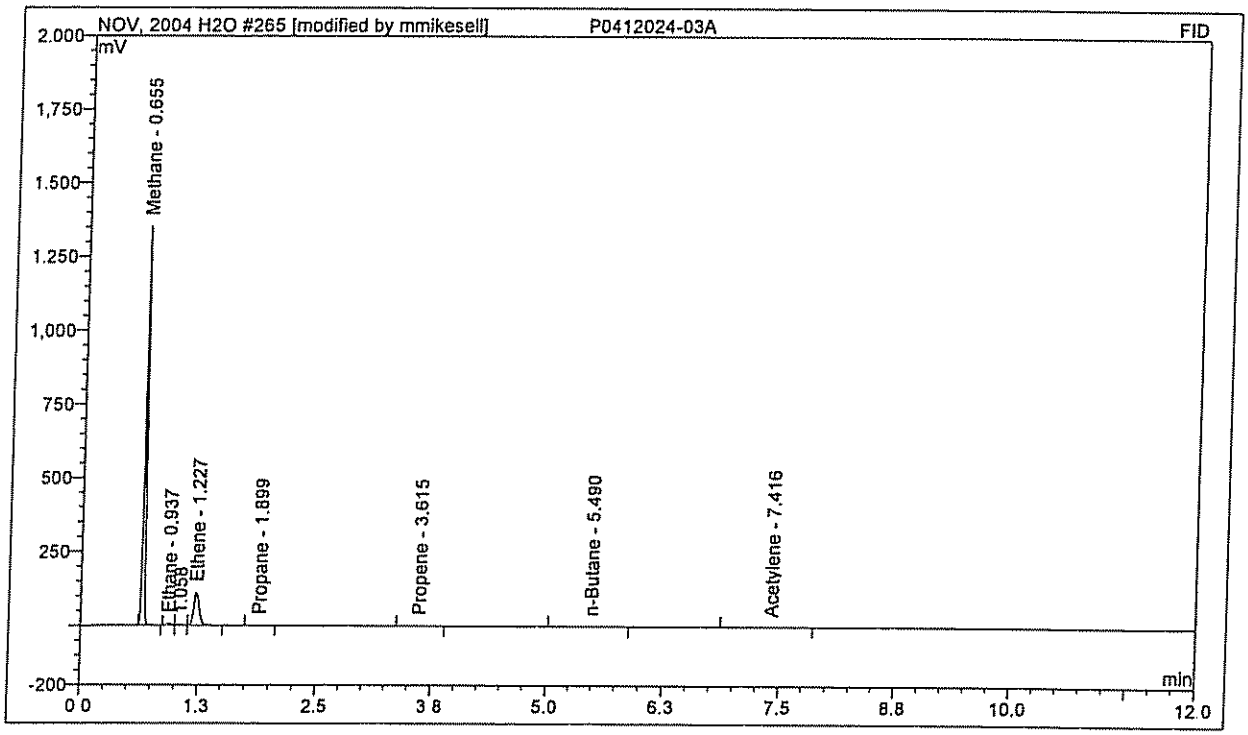
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.654	29.105	1225.1319	44.00128
Ethane	0.933	0.507	10.4839	799.06210
Ethene	1.222	6.174	86.2209	10795.58658
Propane	1.899	0.101	0.7594	151.90890
Propene	3.627	0.147	0.6093	269.95996
iso-Butane	4.715	0.008	0.0318	11.44611
n-Butane	5.475	0.058	0.1433	84.05409
Acetylene	7.375	0.433	0.7537	2207.11867

Sample Name:	P0412024-03A
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 12:05
Run Time (min):	12.00

FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.655	32.066	1352.4925	48.47723
Ethane	0.937	0.309	6.5704	487.46205
Ethene	1.227	7.715	110.3952	13489.12150
Propane	1.899	0.050	0.3818	75.48631
Propene	3.615	0.095	0.3996	173.15192
n-Butane	5.490	0.055	0.1358	79.90919
Acetylene	7.416	0.029	0.0604	147.26205

MICROSEEPS

Case Narrative
Tetra Tech NUS, Incorporated

Date: January 19, 2005

Project Number:	7464127E
Project Manager:	Mr. Keith Henn/Nisha Bansal
Site Name:	Martin State Airport
Laboratory Project Manager:	Rebecca Hans
SDG:	MWB-4

Sample Name	Lab ID	Date Sampled	Date Received
MWB-4	P0412041-01	12/1/04	12/2/04
MWA-3	P0412041-02	12/1/04	12/2/04
TB120104	P0412041-03		12/2/04

Samples in MWB-4 were received at Microseeps on December 2, 2004. COC records indicated that the samples were to be analyzed for TCL Volatiles, Phosphate, Light Hydrocarbons TOC, Anions, Sulfide, Total and Dissolved Iron and Cadmium.

Sample Receiving

All samples for SDG MWB-2 were received intact and at 4 degrees C.

Metals

Metal results are reported in mg/L rather than ug/L on all metals forms. This is due to the constraints of Microseeps' LIM system.

Form 11a was not used in the metals data package. The ICP instrument that Microseeps employs for this method does not produce the information needed for the ICP Interelement Correction Factor form.

Volatiles

The percent recovery for TCE was outside of control limits for the LCSD. The recovery for TCE in the LCS, as well as the RPD for both analyses were within limits. Therefore no further action was taken.

Wet Chemistry

The batch MS/MSD percent recoveries were outside of control limits for Phosphate. All other QC analyses were acceptable. No further action was taken.

The anion analyses were initially started on 12/2/04. The samples required reanalysis because of an autosampler malfunction.

Risk Analysis

No anomalies were encountered.

Chain-of-Custody Forms

P0412041

2217 D

CHAIN - OF - CUSTODY RECORD

Phone: (412) 826-5245 **Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238** Fax No. : (412) 826-3433

Company : Tetra Tech NUS
Co. Address : Pittsburgh, PA
Proj. Manager: Nisha Bansal (916-276-7846)
Proj. Location: Martin State Airport
Proj. Number: 7464127E
Phone # : (626) 351-4664 **Fax # :** (626) 351-5291

Sampler's signature : Walter & Pa

Results to :

Invoice to :

Cooler ID	Cooler Temp.
	4°C

Parameters Requested

	Sample ID	Sample Description	Date	Time	Comp.	Grab	# Cont.	VOCs (40ml VOA Vials)	Ortho Phosphate	LT. Hydro Carbons	TOC	Anions	Sulfide	Total Cd & Iron	Dissolved Cd & Iron	Remarks
01	MWB-4	Monitoring Well	12-1-04	1345		X	16	4	1	2	1	2	4	1	1	
02	MWA-3	Monitoring Well	12-1-04	1605		X	16	4	1	2	1	2	4	1	1	
03	TB120104	Trip Blank	12-1-04	0000		X	2	2								

Dissolved Cd & Iron needs to be Lab Filtered

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Walter & Pa	TTNUS	12-1-04	1900	[signature]	Micro	12 2 04	1220

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

MWB-4

Sample Log-In Forms

Lab Project Summary

Lab Project Num: P0412041 **Received:** 12/2/2004 **Report Due:** 12/16/2004 **Lab** 12/13/200

Client: TetraTech NUS Inc.
661 Anderson Drive
Pittsburgh, PA 15220
Phone: 412-921-7090
Fax: 412-921-4040
E-mail:

Report Level: Standard QC Level 1
Quote #: Q04120001
Proj Mgr Amy Thomson

Client Project Martin State Airport

Lab Project Comment: CLP-like data package with CLP forms. Needs all raw data and calibration data. EDD in Tetra Tech Erpims-like format.

Client Sample Name: MWB-4
Sample Number: P0412041-01A
Sample Date/Time: 12/1/2004 1:45:00PM
Sampled By:
Container Description: 125 ml
Container Color: Amber
Container Composition: Glass

Container Volume: 1,500.00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/10/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:

Comment AARON-LAB FILTER FOR DISS METALS.CLP-like data package with CLP forms. Needs all raw data and calibration data. EDD in Tetra Tech Erpims-like format.

Test Pkg Name	Method	Lab	Subcontract(or)
Anions by IC	9056	Pittsburgh	None
Dissolved TAL Metals	3010/6010B	Pittsburgh	None
RA LHC Plus in Water	PM01G/AM20GAX	Pittsburgh	None
RA Methane in water	PM01G/AM20GAX	Pittsburgh	None
Sulfide	376.1	Pittsburgh	None
TAL Metals	3010/6010B	Pittsburgh	None
TOC	9060	Pittsburgh	None
VTCL	5030B/8260B	Pittsburgh	None

Client Sample Name: MWA-3
Sample Number: P0412041-02A
Sample Date/Time: 12/1/2004 4:05:00PM
Sampled By:
Container Description: 125 ml
Container Color: Amber
Container Composition: Glass

Container Volume: 1,500.00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/10/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:

Comment AARON-LAB FILTER FOR DISS METALS CLP-like data package with CLP forms. Needs all raw data and calibration data. EDD in Tetra Tech Erpims-like format.

Test Pkg Name	Method	Lab	Subcontract(or)
Anions by IC	9056	Pittsburgh	None
Dissolved TAL Metals	3010/6010B	Pittsburgh	None
RA LHC Plus in Water	PM01G/AM20GAX	Pittsburgh	None
RA Methane in water	PM01G/AM20GAX	Pittsburgh	None
Sulfide	376.1	Pittsburgh	None
TAL Metals	3010/6010B	Pittsburgh	None
TOC	9060	Pittsburgh	None
VTCL	5030B/8260B	Pittsburgh	None

Lab Project Summary

Lab Project Num: P0412041 **Received:** 12/2/2004 **Report Due:** 12/16/2004 **Lab** 12/13/200

Client Sample Name: TB120104
Sample Number: P0412041-03A
Sample Date/Time: 12/1/2004 12:00:01AM
Sampled By:
Container Description: 40ml VOA
Container Color: Clear
Container Composition: Glass
Comment

Container Volume: 80 00 ml
Container Preservative: HCL
Proposed Disposal Date: 1/10/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:

Test Pkg Name	Method	Lab	Subcontract(or)
VTCL	5030B/8260B	Pittsburgh	None

Cooler Receipt Form

Client: TetraTech NUS Inc **Client Code:** TetraTechP **LabProject #:** P0412041

Project: Martin State Airport

Cooler ID: 1

A. **Preliminary Examination Phase:** **Date cooler opened:** 12/2/2004

Cooler opened by: CW

1. **Was airbill Attached?** Yes **Airbill** 847966281567 **Carrier** FedEx
2. **Custody Seals?** Yes **How many?** 2 **Location:** cooler top **Seal** tetra
3. **Seals intact?** Yes
4. **Screened for** N/A
5. **COC Attached?** Yes **Properly Completed?** Yes **Signed by employee?** Yes
6. **Project Identification from custody paper:** Martin State Airport
7. **Preservative:** Yes **Temperature:** 4

Comments:

B. **Log-In Phase: Samples Log-in** 12/2/2004 **Log-in By:** CW

1. **Packing Type:** Bubble Wrap
2. **Were samples in separate** No
3. **Were containers intact?** Yes **Labels agree with COC?** Yes
4. **Number of bottles** 30 **Number of samples received:** 3
5. **Correct containers used?** Yes **Correct preservatives added?** Yes
6. **Sufficient sample volume?** Yes
7. **Bubbles in VOA samples?** No
8. **Was Project manager called and status discussed?** Yes

Comments:

Have designate person initial here to acknowledge receipt of cooler: CW **Date:** 12/2/04

Metals Data

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.:

EPASampleNo: MWB-4

SDG No.: MWB-4

Matrix (soil / water): Water

Level (low/med):

% Solids:

Lab Sample ID: P0412041-01A

Date Received: 12/2/2004

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013			P
7439-89-6	Iron	48			P

ColorBefore:

ColorAfter:

ClarityBefore:

ClarityAfter:

Texture:

Artifacts:

uments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4
Matrix (soil / water): Water Lab Sample ID: P0412041-01A
Level (low/med): Date Received: 12/2/2004
% Solids:
Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium-dissolved	0.013			P
7439-89-6	Iron-dissolved	50			P

ColorBefore: ClarityBefore: Texture:
ColorAfter: ClarityAfter: Artifacts:

Comments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWA-3

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Matrix (soil / water): Water Lab Sample ID: P0412041-02A

Level (low/med): Date Received: 12/2/2004

% Solids: Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.032			P
7439-89-6	Iron	42			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

U.S. EPA - CLP

I

INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWA-3

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Matrix (soil / water): Water Lab Sample ID: P0412041-02A

Level (low/med): Date Received: 12/2/2004

% Solids: Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium-dissolved	0.031			P
7439-89-6	Iron-dissolved	42			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Initial Calibration Source: SCP Sci
Continuing Calibration SCP Sci

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Cadmium	0.500	0.517	103	0.625	0.655	105	0.631	101	P
Iron	1.00	1.06	106	12.50	13.28	106	13.02	104	P

(1) Control Limits: Mercury 80-120; other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Initial Calibration Source:

Continuing Calibration SCP Sci

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Cadmium				0.625	0.611	97.8			P
Iron				12.50	12.64	10			P

(1) Control Limits: Mercury 80-120; other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Initial Calibration Source: SCP SCi

Continuing Calibration SCP SCI

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Cadmium-dissolved	0.500	0.517	103	0.625	0.606	97.0	0.597	95.5	P
Iron-dissolved	1.00	1.06	106	12.50	12.61	101	12.48	99.8	P

(1) Control Limits: Mercury 80-120; other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2B
CRDL STANDARD FOR AA AND ICP

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

AA CRDL Standard Source:

ICP CRDL Standard Source: CPI

Concentration Units mg/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Cadmium				0.010	0.0107	107		
Iron								

Control Limits: no limits have been established by EPA at this time

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

AA CRDL Standard Source:

ICP CRDL Standard Source: CPI

Concentration Units mg/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial True	Initial Found	Initial %R	Final Found	Final %R
Cadmium-dissolved								
Iron-dissolved				0.010	0.0107	107		

Control Limits: no limits have been established by EPA at this time

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	P
Iron	0.0015	U	0.0015	U	0.0019	B	0.0015	U	0.002	B	P

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium-dissolved	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0000	U	P
Iron-dissolved	0.0015	U	0.0021	B	0.0020	B	0.0030	B	0.0061	B	P

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

ICP ID Number: EL99063568 ICS Source: SCP Sci

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Cadmium		0.9930	0.0021	0.9107	91.7			
Iron	200		216	218	108			

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

ICP ID Number: EL99063568 ICS Source: SCP Sci

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Cadmium-dissolved		0.9930	0.0021	0.9107	91.7			
Iron-dissolved	200		216	218	108			

MWB-4

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (mg/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Cadmium	0.500	0.507	101						
Iron	5.00	5.26	105						

MWB-4

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (mg/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Cadmium-dissolved	0.500	0.4899	98.0						
Iron-dissolved	5.00	5.02	100						

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: SAS No : SDG No.: MWB-4
Method: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (ml)
PBW	12/3/04		50
LCSW	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
MWB-4	12/3/04		50
MWA-3	12/3/04		50

MWB-4

PREPARATION LOG

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Method: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (ml)
PBW DISS	12/3/04		50
LCSW DISS	12/3/04		50
ZZZZZZ	12/3/04		50
ZZZZZZ	12/3/04		50
MWB-4 DISS	12/3/04		50
MWA-3 DISS	12/3/04		50

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID Number: EL99063568 Method: P

Start Date: 12/7/04 End Date: 12/7/04

EPA Sample No.	D/F	Time	%R	Analytes																												
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN					
BLK	1	08:20							X					X	X		X															
STD 1	1	08:23							X					X	X		X															
STD 2	1	08:26							X					X	X		X															
STD 3	1	08:29							X					X	X		X															
ICV	1	08:31							X					X	X		X															
ICB	1	08:34							X					X	X		X															
CRI	1	08:37							X								X															
ICSA	1	08:40							X						X		X															
ICSAB	1	08:43							X						X		X															
ICSA	20	08:46												X																		
ICSAB	20	08:49												X																		
CCV	1	08:52							X					X	X		X															
CCB	1	08:54							X					X	X		X															
CCV	1	10:01							X					X	X		X															
CCB	1	10:04							X					X	X		X															
PBW	1	10:12							X					X	X		X															
LCSW	1	10:15							X					X	X		X															
ZZZZZZ	1	10:18							X					X	X		X															
ZZZZZZ	1	10:21							X					X	X		X															
ZZZZZZ	1	10:24							X					X	X		X															
ZZZZZZ	1	10:27												X			X															
MWB-4	1	10:30							X					X																		
MWA-3	1	10:33							X					X																		
CCV	1	10:36							X					X	X		X															
CCB	1	10:38							X					X	X		X															
ZZZZZZ	1	10:41							X																							
ZZZZZZ	1	10:44							X					X																		
ZZZZZZ	1	10:47							X																							
ZZZZZZ	1	10:50													X																	
ZZZZZZ	1	10:53													X																	
ZZZZZZ	1	10:56													X																	
ZZZZZZ	1	10:59							X					X																		
ZZZZZZ	1	11:02							X					X																		

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID Number: EL99063568 Method: P

Start Date: 12/7/04 End Date: 12/7/04

EPA Sample No.	D/F	Time	%R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
ZZZZZZ	1	11:05							X					X																
ZZZZZZ	1	11:07							X					X																
CCV	1	11:10							X					X	X		X													
CCB	1	11:13							X					X	X		X													
ZZZZZZ	1	11:16												X																
ZZZZZZ	1	11:19												X																
ZZZZZZ	1	11:22												X																
ZZZZZZ	1	11:25												X																
ZZZZZZ	1	11:28												X																
ZZZZZZ	1	11:31												X																
PBW	1	11:34							X					X			X													
LCSW	1	11:37							X					X			X													
ZZZZZZ	1	11:40															X													
ZZZZZZ	1	11:42							X					X			X													
CCV	1	11:45							X					X	X		X													
CCB	1	11:48							X					X	X		X													
ZZZZZZ	1	11:51							X					X			X													
ZZZZZZ	1	11:54							X					X			X													
MWB-4 DISS	1	11:57							X					X																
MWA-3 DISS	1	12:00							X					X																
ZZZZZZ	1	12:03							X																					
ZZZZZZ	1	12:06							X					X																
ZZZZZZ	1	12:09							X																					
ZZZZZZ	1	12:11							X					X																
ZZZZZZ	1	12:14							X					X																
ZZZZZZ	1	12:17							X					X																
CCV	1	12:20							X					X	X		X													
CCB	1	12:23							X					X	X		X													

12-3-04 Method: SOP-P3 Flame: ARK Time: 09:20 11:40 Temp:

Sample#	Volume	Batch#
PBW	50mL	4120602
LCSW		
411582		
2		
3		
4		
5		
6		
412010-ITK		
ITK DUP		
ITK MS		
2TK		
412041-01AN		
02AN		
412022-01AA		4120803
412024-01ATM		
02ATM		
3ATM		4120602
412037-01ATK		4120803
2ATK		4120803
PBW		4120602S
LCSW		
412012-02AA		
02AA DUP		
02AA MS		
412007-01AA		
2AA		
412033-01AC		
02AC		
412041-01AC		
412050-01AC		
412054-01AA		
02AA		
03AA		
04AA		4120602S
PBW		4120602S
LCSW		
412010-01ADL		
02ADL		
412041-01ADM		
02ADM	50mL	4120602S

Sample#	Volume	Batch#
412037-01ADN	50mL	4120602S
02ADN		
03ADN		
412037-01ADL		
02ADL		
412042-01ADK		
02ADK		
03ADK		
04ADK		
05ADK		
06ADK		
412010-01ADL DUP		4120602S
01ADL MS		4120602S
412044-ATG		4120602
412022-01ADA		4120602S
PBW		4120802
LCSW		
412002-01ADO		
1ADO DUP		
1ADO MS		
412033-01ADS		
02ADS		
412040-01ADE		4120802
PBW		4120800
LCSW		
412042-01ATS		
2ATS		
3ATS		
4ATS		
5ATS		
6ATS		
1ATS DUP	50mL	4120800
1ATS MS		

ANALYST: ARK FILE: ICP120704

12/7/2004 8:18:29 AM	Analysis started.
12/7/2004 8:20:28 AM	Measured Blank
12/7/2004 8:23:20 AM	Measured Standard 1(I2-121-6)
12/7/2004 8:26:11 AM	Measured Standard 2(I2-121-5)
12/7/2004 8:29:02 AM	Measured Standard 3(I2-121-4)
12/7/2004 8:31:53 AM	Measured Initial Calib Verif(I2-121-8)
12/7/2004 8:34:45 AM	Measured Initial Calib Blank
12/7/2004 8:37:40 AM	Measured CRI(I2-121-9)
12/7/2004 8:40:31 AM	Measured Interf Check A(I2-120-9)
12/7/2004 8:43:23 AM	Measured Interf Check AB(I2-121-1)
12/7/2004 8:46:15 AM	Measured ICSA 1/20
12/7/2004 8:49:07 AM	Measured ICSAB 1/20
12/7/2004 8:52:00 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 8:54:52 AM	Measured Cont Calib Blank
12/7/2004 8:57:44 AM	Measured PBW
12/7/2004 9:00:37 AM	Measured LCS-W(I2-102-2)
12/7/2004 9:03:29 AM	Measured P0412012-02A
12/7/2004 9:06:22 AM	Measured P0412012-02A - DUP
12/7/2004 9:09:14 AM	Measured P0412012-02A - MSPK(I2-107-5)
12/7/2004 9:12:07 AM	Measured P0412049-01A
12/7/2004 9:14:59 AM	Measured P0412050-01A
12/7/2004 9:17:53 AM	Measured P0412057-01A
12/7/2004 9:20:45 AM	Measured P0412080-01A
12/7/2004 9:23:53 AM	Measured P0412081-01A
12/7/2004 9:26:44 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 9:29:36 AM	Measured Cont Calib Blank
12/7/2004 9:32:28 AM	Measured P0412082-01A
12/7/2004 9:35:20 AM	Measured P0412007-01A
12/7/2004 9:38:12 AM	Measured P0412007-02A
12/7/2004 9:41:05 AM	Measured P0412033-01A
12/7/2004 9:44:02 AM	Measured P0412033-02A
12/7/2004 9:46:58 AM	Measured P0412054-01A
12/7/2004 9:49:49 AM	Measured P0412054-02A
12/7/2004 9:52:40 AM	Measured P0412054-03A
12/7/2004 9:55:33 AM	Measured P0412054-04A
12/7/2004 9:58:26 AM	Measured P0412076-05A
12/7/2004 10:01:20 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 10:04:13 AM	Measured Cont Calib Blank
12/7/2004 10:07:07 AM	Measured P0412063-01A
12/7/2004 10:10:00 AM	Measured P0412064-01A
12/7/2004 10:12:53 AM	Measured PBW
12/7/2004 10:15:46 AM	Measured LCS-W(I2-102-2)
12/7/2004 10:18:38 AM	Measured P0412010-01T
12/7/2004 10:21:33 AM	Measured P0412010-01T - DUP
12/7/2004 10:24:27 AM	Measured P0412010-01T - MSPK(I2-107-5)
12/7/2004 10:27:21 AM	Measured P0412010-02T
12/7/2004 10:30:15 AM	Measured P0412041-01T
12/7/2004 10:33:08 AM	Measured P0412041-02T
12/7/2004 10:36:03 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 10:38:58 AM	Measured Cont Calib Blank
12/7/2004 10:41:53 AM	Measured P0412024-01T
12/7/2004 10:44:48 AM	Measured P0412024-02T
12/7/2004 10:47:40 AM	Measured P0412024-03T
12/7/2004 10:50:33 AM	Measured P0412044-01T
12/7/2004 10:53:28 AM	Measured P0412066-01A

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12/7/2004 10:56:23 AM   Measured P0412066-02A
12/7/2004 10:59:18 AM   Measured P0412077-02A
12/7/2004 11:02:12 AM   Measured P0412077-03A
12/7/2004 11:05:06 AM   Measured P0412077-04A
12/7/2004 11:07:59 AM   Measured P0412077-05A
12/7/2004 11:10:54 AM   Measured Cont Calib Verif(I2-121-7)
12/7/2004 11:13:48 AM   Measured Cont Calib Blank
12/7/2004 11:16:44 AM   Measured P0411587-01A
12/7/2004 11:19:37 AM   Measured P0411587-02A
12/7/2004 11:22:33 AM   Measured P0411587-03A
12/7/2004 11:25:25 AM   Measured P0411587-04A
12/7/2004 11:28:33 AM   Measured P0411587-05A
12/7/2004 11:31:26 AM   Measured P0411587-06A
12/7/2004 11:34:18 AM   Measured PBW
12/7/2004 11:37:11 AM   Measured LCS-W(I2-102-2)
12/7/2004 11:40:04 AM   Measured P0412010-02D
12/7/2004 11:42:58 AM   Measured P0412010-01D
12/7/2004 11:45:55 AM   Measured Cont Calib Verif(I2-121-7)
12/7/2004 11:48:49 AM   Measured Cont Calib Blank
12/7/2004 11:51:44 AM   Measured P0412010-01D - DUP
12/7/2004 11:54:37 AM   Measured P0412010-01D - MSPK(I2-107-5)
12/7/2004 11:57:30 AM   Measured P0412041-01D
12/7/2004 12:00:23 PM   Measured P0412041-02D
12/7/2004 12:03:15 PM   Measured P0412024-01D
12/7/2004 12:06:08 PM   Measured P0412024-02D
12/7/2004 12:09:00 PM   Measured P0412024-03D
12/7/2004 12:11:54 PM   Measured P0412077-02D
12/7/2004 12:14:48 PM   Measured P0412077-03D
12/7/2004 12:17:42 PM   Measured P0412077-04D
12/7/2004 12:20:36 PM   Measured Cont Calib Verif(I2-121-7)
12/7/2004 12:23:30 PM   Measured Cont Calib Blank
12/7/2004 12:26:24 PM   Measured P0412077-05D
12/7/2004 12:29:17 PM   Measured P0412022-01D
12/7/2004 12:32:10 PM   Measured P0412037-01D
12/7/2004 12:35:04 PM   Measured P0412037-02D
12/7/2004 12:37:58 PM   Measured P0412042-01D
12/7/2004 12:40:53 PM   Measured P0412042-02D
12/7/2004 12:43:47 PM   Measured P0412042-03D
12/7/2004 12:46:41 PM   Measured P0412042-04D
12/7/2004 12:49:35 PM   Measured P0412042-05D
12/7/2004 12:52:29 PM   Measured P0412042-06D
12/7/2004 12:55:23 PM   Measured Cont Calib Verif(I2-121-7)
12/7/2004 12:58:17 PM   Measured Cont Calib Blank
12/7/2004 12:59:35 PM   Analysis stopped by user.
```

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Blank (Blk) **12/7/2004, 8:20:28 AM** **Rack 2, Tube 1**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	0.0000	ppm	1.597	90.3	1.770
Fe 261.187	0.0000	ppm	4.843	12.8	37.76
Mn 257.610	0.0000	ppm	2.635	3.6	72.47
Pb 220.353	0.0000	ppm	1.906	27.1	7.024

Standard 1 (Std) **12/7/2004, 8:23:20 AM** **Rack 2, Tube 2**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	0.2500	ppm	10.505	0.2	5904
Fe 261.187	5.000	ppm	334.673	0.5	69269
Mn 257.610	0.6000	ppm	628.001	0.5	136307
Pb 220.353	0.2500	ppm	3.167	0.9	371.8

Standard 2 (Std) **12/7/2004, 8:26:11 AM** **Rack 2, Tube 3**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	1.250	ppm	217.299	0.8	28382
Fe 261.187	25.00	ppm	3036.185	0.9	334132
Mn 257.610	3.000	ppm	3387.777	0.5	657778
Pb 220.353	1.250	ppm	11.944	0.7	1802

Standard 3 (Std) **12/7/2004, 8:29:02 AM** **Rack 2, Tube 4**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	2.500	ppm	82.866	0.2	54710
Fe 261.187	50.00	ppm	1800.540	0.3	630388
Mn 257.610	6.000	ppm	2208.623	0.2	1268680
Pb 220.353	2.500	ppm	12.894	0.4	3457

Cd 214.439 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999809**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		1.770	0.0000	0.0000	-	-
Standard 1		5904	0.2500	0.2618	0.0118	4.7
Standard 2		28382	1.250	1.259	0.0086	0.7
Standard 3		54710	2.500	2.426	-0.0738	-3.0

Curve Type: Linear Equation: y = 22548.8 x + 1.76956

Fe 261.187 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999516**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		37.76	0.0000	0.0000	-	-
Standard 1		69269	5.000	5.360	0.3603	7.2
Standard 2		334132	25.00	25.87	0.8672	3.5
Standard 3		630388	50.00	48.80	-1.195	-2.4

Curve Type: Linear Equation: y = 12915.8 x + 37.758

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Mn 257.610 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999816**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		72.47	0.0000	0.0000	-	-
Standard 1		136307	0.6000	0.6376	0.0376	6.3
Standard 2		657778	3.000	3.078	0.0780	2.6
Standard 3		1268680	6.000	5.937	-0.0630	-1.1

Curve Type: Linear Equation: y = 213680 x + 72.4732

Pb 220.353 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999775**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		7.024	0.0000	0.0000	-	-
Standard 1		371.8	0.2500	0.2605	0.0105	4.2
Standard 2		1802	1.250	1.282	0.0322	2.6
Standard 3		3457	2.500	2.464	-0.0362	-1.4

Curve Type: Linear Equation: y = 1400.26 x + 7.02428

Initial Calib Verif (ICV) **12/7/2004, 8:31:53 AM** **Rack 2, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5172	ppm	0.0056	1.1	11664	103.4
Fe 261.187	1.065	ppm	0.0060	0.6	13790	106.5
Mn 257.610	1.058	ppm	0.0050	0.5	226175	105.8
Pb 220.353	1.061	ppm	0.0074	0.7	1492	106.1

Initial Calib Blank (ICB) **12/7/2004, 8:34:45 AM** **Rack 2, Tube 6**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	17.1	4.950	-
Fe 261.187	0.0015	ppm	0.0003	20.5	56.77	-
Mn 257.610	0.0000uv	ppm	0.0000	765.4	73.65	-
Pb 220.353	-0.0023uv	ppm	0.0003	11.9	3.754	-

CRI (CRI) **12/7/2004, 8:37:40 AM** **Rack 2, Tube 7**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0107	ppm	0.0000	0.2	243.1	107.0
Fe 261.187	0.0006	ppm	0.0003	42.2	45.54	-
Mn 257.610	0.0330	ppm	0.0001	0.4	7120	110.0
Pb 220.353	-0.0012uv	ppm	0.0028	231.0	5.297	-

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Interf Check A (ICSA) **12/7/2004, 8:40:31 AM** **Rack 2, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0021	ppm	0.0002	11.5	48.37	-
Fe 261.187	181.2x	ppm	0.7506	0.4	2340351	-
Mn 257.610	0.0096	ppm	0.0001	1.2	2123	-
Pb 220.353	0.0177	ppm	0.0034	19.0	31.82	-

Interf Check AB (ICSAB) **12/7/2004, 8:43:23 AM** **Rack 2, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.9107	ppm	0.0099	1.1	20536	91.1 -
Fe 261.187	179.9x	ppm	0.3053	0.2	2323328	-
Mn 257.610	0.4822	ppm	0.0005	0.1	103108	96.4 -
Pb 220.353	0.9222	ppm	0.0023	0.2	1298	92.2 -

ICSA 1/20 (Samp) **12/7/2004, 8:46:15 AM** **Rack 1, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	-0.0001uv	ppm	0.0001	80.7	0.1897
Fe 261.187	10.78	ppm	0.0449	0.4	139267
Mn 257.610	0.0004	ppm	0.0000	3.0	156.1
Pb 220.353	-0.0025uv	ppm	0.0009	37.1	3.573

ICSAB 1/20 (Samp) **12/7/2004, 8:49:07 AM** **Rack 1, Tube 2**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0533	ppm	0.0004	0.7	1204
Fe 261.187	10.90	ppm	0.0934	0.9	140780
Mn 257.610	0.0272	ppm	0.0002	0.8	5880
Pb 220.353	0.0521	ppm	0.0019	3.6	79.93

Cont Calib Verif (CCV) **12/7/2004, 8:52:00 AM** **Rack 1, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6549	ppm	0.0106	1.6	14770	104.8 -
Fe 261.187	13.28	ppm	0.3155	2.4	171577	106.2 -
Mn 257.610	1.612	ppm	0.0394	2.4	344599	107.9 -
Pb 220.353	0.6599	ppm	0.0123	1.9	931.1	105.6 -

Cont Calib Blank (CCB) **12/7/2004, 8:54:52 AM** **Rack 1, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	59.3	3.309	-
Fe 261.187	0.0015	ppm	0.0004	29.9	57.19	-
Mn 257.610	-0.0000uv	ppm	0.0000	28.5	64.90	-

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Pb 220.353	-0.0018uv	ppm	0.0009	50.4	4.477	-

Cont Calib Verif (CCV) **12/7/2004, 10:01:20 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6307	ppm	0.0029	0.5	14222	100.9 -
Fe 261.187	13.02	ppm	0.0495	0.4	168160	104.2 -
Mn 257.610	1.595	ppm	0.0062	0.4	340925	106.3 -
Pb 220.353	0.6389	ppm	0.0034	0.5	901.7	102.2 -

Cont Calib Blank (CCB) **12/7/2004, 10:04:13 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001uv	ppm	0.0001	116.9	3.993	-
Fe 261.187	0.0019	ppm	0.0009	48.7	62.93	-
Mn 257.610	0.0000	ppm	0.0000	104.7	80.08	-
Pb 220.353	-0.0013uv	ppm	0.0015	121.3	5.253	-

PBW (PBLK) **12/7/2004, 10:12:53 AM** **Rack 3, Tube 15**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001uv	ppm	0.0001	102.4	3.616	-
Fe 261.187	0.0020	ppm	0.0005	25.0	63.91	-
Mn 257.610	-0.0000uv	ppm	0.0000	124.3	67.93	-
Pb 220.353	-0.0016uv	ppm	0.0008	50.6	4.843	-

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LCS-W (LCS) **12/7/2004, 10:15:46 AM** **Rack 3, Tube 16**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5071	ppm	0.0017	0.3	11437	101.4 -
Fe 261.187	5.256	ppm	0.0164	0.3	67924	105.1 -
Mn 257.610	2.571	ppm	0.0048	0.2	549363	102.8 -
Pb 220.353	0.5009	ppm	0.0027	0.5	708.4	100.2 -

P0412010-01T (Samp) **12/7/2004, 10:18:38 AM** **Rack 3, Tube 17**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0004	ppm	0.0001	26.8	10.30
Fe 261.187	24.59	ppm	0.0821	0.3	317653
Mn 257.610	0.6932	ppm	0.0022	0.3	148187
Pb 220.353	0.3878	ppm	0.0034	0.9	550.1

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P0412010-01T - DUP (DUP) **12/7/2004, 10:21:33 AM** **Rack 3, Tube 18**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0002	ppm	0.0001	68.8	5.991	-*
Fe 261.187	24.43	ppm	0.1255	0.5	315599	-
Mn 257.610	0.6882	ppm	0.0033	0.5	147131	-
Pb 220.353	0.3854	ppm	0.0010	0.3	546.7	-

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P0412010-01T - MSPK (MSPK) **12/7/2004, 10:24:27 AM** **Rack 3, Tube 19**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0485	ppm	0.0002	0.4	1096	96.2 -
Fe 261.187	25.38	ppm	0.0889	0.4	327791	99.0 -
Mn 257.610	1.203	ppm	0.0042	0.3	257135	102.0 -
Pb 220.353	0.8850	ppm	0.0069	0.8	1246	99.4 -

P0412010-02T (Samp) **12/7/2004, 10:27:21 AM** **Rack 3, Tube 20**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0003	ppm	0.0001	28.2	9.041
Fe 261.187	22.88	ppm	0.0510	0.2	295581
Mn 257.610	0.6226	ppm	0.0018	0.3	133119
Pb 220.353	-0.0000uv	ppm	0.0010	7204.6	7.005

P0412041-01T (Samp) **12/7/2004, 10:30:15 AM** **Rack 3, Tube 21**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0131	ppm	0.0002	1.4	296.1
Fe 261.187	47.64	ppm	0.0640	0.1	615324
Mn 257.610	15.71x	ppm	0.0270	0.2	3356739
Pb 220.353	0.0197	ppm	0.0010	5.0	34.60

P0412041-02T (Samp) **12/7/2004, 10:33:08 AM** **Rack 3, Tube 22**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0321	ppm	0.0001	0.2	726.3
Fe 261.187	41.57	ppm	0.1723	0.4	536925
Mn 257.610	16.14x	ppm	0.0475	0.3	3449306
Pb 220.353	0.0131	ppm	0.0032	24.6	25.35

Cont Calib Verif (CCV) **12/7/2004, 10:36:03 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6107	ppm	0.0042	0.7	13772	97.7 -
Fe 261.187	12.64	ppm	0.0678	0.5	163344	101.7 -
Mn 257.610	1.557	ppm	0.0068	0.4	332788	103.8 -

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Pb 220.353	0.6178	ppm	0.0068	1.1	872.1	97.8

Cont Calib Blank (CCB) **12/7/2004, 10:38:58 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	54.2	3.689	-
Fe 261.187	0.0015	ppm	0.0002	15.8	57.77	-
Mn 257.610	-0.0000uv	ppm	0.0000	861.7	71.57	-
Pb 220.353	-0.0012uv	ppm	0.0013	109.3	5.312	-

P0412024-01T (Samp) **12/7/2004, 10:41:53 AM** **Rack 3, Tube 23**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0108	ppm	0.0002	1.7	245.5
Fe 261.187	123.9x	ppm	0.6602	0.5	1599864
Mn 257.610	23.05x	ppm	0.1064	0.5	4925836
Pb 220.353	0.0246	ppm	0.0024	9.8	41.53

P0412024-02T (Samp) **12/7/2004, 10:44:48 AM** **Rack 3, Tube 24**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0107	ppm	0.0001	0.9	242.8
Fe 261.187	84.07	ppm	0.2907	0.3	1085818
Mn 257.610	13.55x	ppm	0.0243	0.2	2895115
Pb 220.353	0.0169	ppm	0.0023	13.7	30.63

P0412024-03T (Samp) **12/7/2004, 10:47:40 AM** **Rack 3, Tube 25**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0069	ppm	0.0001	2.1	157.2
Fe 261.187	174.5x	ppm	0.8062	0.5	2254104
Mn 257.610	28.65x	ppm	0.0635	0.2	6122326
Pb 220.353	0.0450	ppm	0.0020	4.5	70.08

P0412044-01T (Samp) **12/7/2004, 10:50:33 AM** **Rack 3, Tube 26**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	41.7	6.729
Fe 261.187	9.082	ppm	0.0304	0.3	117336
Mn 257.610	0.0437	ppm	0.0002	0.4	9418
Pb 220.353	0.0140	ppm	0.0019	13.4	26.58

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P0412066-01A (Samp) **12/7/2004, 10:53:28 AM** **Rack 3, Tube 27**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0023	ppm	0.0005	22.2	53.66
Fe 261.187	196.5x	ppm	1.159	0.6	2538113
Mn 257.610	1.251	ppm	0.0066	0.5	267394
Pb 220.353	0.3516	ppm	0.0045	1.3	499.4

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P0412066-02A (Samp) **12/7/2004, 10:56:23 AM** **Rack 3, Tube 28**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0031	ppm	0.0003	10.8	70.77
Fe 261.187	253.0x	ppm	0.1243	0.0	3267483
Mn 257.610	0.2695	ppm	0.0002	0.1	57666
Pb 220.353	0.2020	ppm	0.0054	2.7	289.9

P0412077-02A (Samp) **12/7/2004, 10:59:18 AM** **Rack 3, Tube 29**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0221	ppm	0.0001	0.3	499.4
Fe 261.187	7.752	ppm	0.0132	0.2	100156
Mn 257.610	12.89x	ppm	0.0273	0.2	2754059
Pb 220.353	0.0116	ppm	0.0016	13.8	23.26

P0412077-03A (Samp) **12/7/2004, 11:02:12 AM** **Rack 3, Tube 30**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0134	ppm	0.0001	0.8	304.1
Fe 261.187	19.84	ppm	0.0588	0.3	256262
Mn 257.610	12.17x	ppm	0.0674	0.6	2599689
Pb 220.353	0.0094	ppm	0.0018	19.2	20.23

P0412077-04A (Samp) **12/7/2004, 11:05:06 AM** **Rack 3, Tube 31**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0237	ppm	0.0003	1.3	537.0
Fe 261.187	81.66	ppm	0.1723	0.2	1054685
Mn 257.610	12.61x	ppm	0.0468	0.4	2693596
Pb 220.353	0.0186	ppm	0.0020	10.7	33.04

P0412077-05A (Samp) **12/7/2004, 11:07:59 AM** **Rack 3, Tube 32**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0016	ppm	0.0006	37.2	38.22
Fe 261.187	55.91	ppm	0.1819	0.3	722174
Mn 257.610	4.863	ppm	0.0190	0.4	1039187

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	0.0078	ppm	0.0011	13.8	18.00

Cont Calib Verif (CCV) **12/7/2004, 11:10:54 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6111	ppm	0.0021	0.3	13780	97.8 -
Fe 261.187	12.74	ppm	0.0117	0.1	164542	101.9 -
Mn 257.610	1.568	ppm	0.0026	0.2	335204	104.5 -
Pb 220.353	0.6208	ppm	0.0015	0.2	876.4	99.3 -

Cont Calib Blank (CCB) **12/7/2004, 11:13:48 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0001	81.9	3.447	-
Fe 261.187	0.0021	ppm	0.0004	17.8	64.77	-
Mn 257.610	-0.0000uv	ppm	0.0000	745.0	71.11	-
Pb 220.353	-0.0016uv	ppm	0.0017	101.8	4.752	-

P0411587-01A (Samp) **12/7/2004, 11:16:44 AM** **Rack 3, Tube 33**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	105.2	3.456
Fe 261.187	2.207	ppm	0.0066	0.3	28544
Mn 257.610	0.0042	ppm	0.0000	0.4	968.3
Pb 220.353	0.0011uv	ppm	0.0021	186.2	8.566

P0411587-02A (Samp) **12/7/2004, 11:19:37 AM** **Rack 3, Tube 34**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	63.8	3.693
Fe 261.187	3.017	ppm	0.0238	0.8	39002
Mn 257.610	0.0037	ppm	0.0001	1.3	873.3
Pb 220.353	0.0007	ppm	0.0001	10.6	7.935

P0411587-03A (Samp) **12/7/2004, 11:22:33 AM** **Rack 3, Tube 35**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	58.8	3.885
Fe 261.187	1.592	ppm	0.0085	0.5	20595
Mn 257.610	0.0094	ppm	0.0001	0.7	2087
Pb 220.353	0.0025	ppm	0.0009	35.3	10.50

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P0411587-04A (Samp) **12/7/2004, 11:25:25 AM** **Rack 3, Tube 36**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	75.7	6.145
Fe 261.187	0.4276	ppm	0.0032	0.7	5560
Mn 257.610	0.0035	ppm	0.0001	1.8	824.2
Pb 220.353	0.0010uv	ppm	0.0009	90.5	8.426

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P0411587-05A (Samp) **12/7/2004, 11:28:33 AM** **Rack 3, Tube 37**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	83.7	5.573
Fe 261.187	24.21	ppm	0.1311	0.5	312700
Mn 257.610	0.0616	ppm	0.0003	0.5	13241
Pb 220.353	0.0002uv	ppm	0.0009	582.7	7.245

P0411587-06A (Samp) **12/7/2004, 11:31:26 AM** **Rack 3, Tube 38**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	-0.0001uv	ppm	0.0001	91.5	-0.1624
Fe 261.187	16.12	ppm	0.0539	0.3	208186
Mn 257.610	0.0102	ppm	0.0000	0.3	2260
Pb 220.353	-0.0006uv	ppm	0.0017	267.8	6.115

PBW (PBLK) **12/7/2004, 11:34:18 AM** **Rack 3, Tube 39**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value	
Cd 214.439	0.0000uv	ppm	0.0001	379.4	2.072	-	
Fe 261.187	0.0061	ppm	0.0003	5.4	116.2	-	
Mn 257.610	0.0000uv	ppm	0.0000	193.1	76.79	-	
Pb 220.353	-0.0022uv	ppm	0.0016	71.8	3.982	-	

4120628

LCS-W (LCS) **12/7/2004, 11:37:11 AM** **Rack 3, Tube 40**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value	
Cd 214.439	0.4899	ppm	0.0004	0.1	11049	98.0	-
Fe 261.187	5.024	ppm	0.0135	0.3	64932	100.5	-
Mn 257.610	2.480	ppm	0.0031	0.1	529915	99.2	-
Pb 220.353	0.4821	ppm	0.0010	0.2	682.1	96.4	-

P0412010-02D (Samp) **12/7/2004, 11:40:04 AM** **Rack 3, Tube 41**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	42.8	5.164
Fe 261.187	21.91	ppm	0.1378	0.6	283009
Mn 257.610	0.6151	ppm	0.0031	0.5	131508

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	0.0008uv	ppm	0.0024	318.4	8.095

P0412010-01D (Samp) **12/7/2004, 11:42:58 AM** **Rack 3, Tube 42**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	23.5	3.020
Fe 261.187	21.31	ppm	0.0746	0.4	275334
Mn 257.610	0.6846	ppm	0.0016	0.2	146360
Pb 220.353	0.4346	ppm	0.0050	1.2	615.5

4120602B

Cont Calib Verif (CCV) **12/7/2004, 11:45:55 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6058	ppm	0.0035	0.6	13663	96.9 -
Fe 261.187	12.61	ppm	0.0626	0.5	162965	100.7 -
Mn 257.610	1.563	ppm	0.0071	0.5	334147	104.2 -
Pb 220.353	0.6169	ppm	0.0037	0.6	870.8	98.1 -

Cont Calib Blank (CCB) **12/7/2004, 11:48:49 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0001	85.6	3.679	-
Fe 261.187	0.0020	ppm	0.0002	8.1	63.37	-
Mn 257.610	-0.0000uv	ppm	0.0000	598.8	71.34	-
Pb 220.353	-0.0025uv	ppm	0.0010	40.5	3.540	-

P0412010-01D - DUP (DUP) **12/7/2004, 11:51:44 AM** **Rack 3, Tube 43**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0004	ppm	0.0001	21.9	10.40	-*
Fe 261.187	21.39	ppm	0.0071	0.0	276317	-
Mn 257.610	0.6874	ppm	0.0007	0.1	146946	-
Pb 220.353	0.4364	ppm	0.0019	0.4	618.1	-

4120602B

P0412010-01D - MSPK (MSPK) **12/7/2004, 11:54:37 AM** **Rack 3, Tube 44**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0474	ppm	0.0003	0.6	1070	94.6 -
Fe 261.187	22.30	ppm	0.0619	0.3	288099	97.0 -
Mn 257.610	1.195	ppm	0.0029	0.2	255371	102.1 -
Pb 220.353	0.9253	ppm	0.0008	0.1	1303	98.1 -

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

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P0412041-01D (Samp) 12/7/2004, 11:57:30 AM Rack 3, Tube 45
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0134	ppm	0.0001	0.9	304.5
Fe 261.187	50.48	ppm	0.0581	0.1	652054
Mn 257.610	16.75x	ppm	0.0248	0.1	3578507
Pb 220.353	0.0189	ppm	0.0006	3.4	33.46

P0412041-02D (Samp) 12/7/2004, 12:00:23 PM Rack 3, Tube 46
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0310	ppm	0.0009	2.8	700.2
Fe 261.187	42.12	ppm	1.026	2.4	544028
Mn 257.610	16.30x	ppm	0.3855	2.4	3483912
Pb 220.353	0.0168	ppm	0.0010	6.1	30.49

P0412024-01D (Samp) 12/7/2004, 12:03:15 PM Rack 3, Tube 47
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0106	ppm	0.0000	0.4	240.1
Fe 261.187	121.5x	ppm	0.1803	0.1	1569831
Mn 257.610	22.99x	ppm	0.0473	0.2	4913516
Pb 220.353	0.0269	ppm	0.0034	12.8	44.65

P0412024-02D (Samp) 12/7/2004, 12:06:08 PM Rack 3, Tube 48
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0109	ppm	0.0002	2.1	248.7
Fe 261.187	87.50	ppm	0.1736	0.2	1130141
Mn 257.610	14.20x	ppm	0.0230	0.2	3035024
Pb 220.353	0.0168	ppm	0.0025	15.0	30.53

P0412024-03D (Samp) 12/7/2004, 12:09:00 PM Rack 3, Tube 49
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0067	ppm	0.0001	1.4	153.4
Fe 261.187	182.4x	ppm	0.5599	0.3	2355763
Mn 257.610	30.33x	ppm	0.0429	0.1	6481053
Pb 220.353	0.0461	ppm	0.0041	8.8	71.61

P0412077-02D (Samp) 12/7/2004, 12:11:54 PM Rack 3, Tube 50
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0224	ppm	0.0002	0.7	506.4
Fe 261.187	7.817	ppm	0.0347	0.4	101001
Mn 257.610	13.06x	ppm	0.0688	0.5	2791446

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	0.0081	ppm	0.0013	15.9	18.33

P0412077-03D (Samp) **12/7/2004, 12:14:48 PM** **Rack 3, Tube 51**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0133	ppm	0.0000	0.2	302.4
Fe 261.187	20.25	ppm	0.0178	0.1	261530
Mn 257.610	12.29x	ppm	0.0523	0.4	2625840
Pb 220.353	0.0096	ppm	0.0005	4.9	20.49

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P0412077-04D (Samp) **12/7/2004, 12:17:42 PM** **Rack 3, Tube 52**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0231	ppm	0.0001	0.2	523.5
Fe 261.187	79.54	ppm	0.2843	0.4	1027345
Mn 257.610	12.48x	ppm	0.0403	0.3	2666137
Pb 220.353	0.0182	ppm	0.0028	15.3	32.57

J

Cont Calib Verif (CCV) **12/7/2004, 12:20:36 PM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value	
Cd 214.439	0.5972	ppm	0.0022	0.4	13467	95.6	-
Fe 261.187	12.48	ppm	0.0439	0.4	161220	99.8	-
Mn 257.610	1.546	ppm	0.0072	0.5	330445	103.1	-
Pb 220.353	0.6114	ppm	0.0055	0.9	863.1	97.8	-

Cont Calib Blank (CCB) **12/7/2004, 12:23:30 PM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	48.2	3.028	-
Fe 261.187	0.0030	ppm	0.0006	20.0	76.61	-
Mn 257.610	0.0002	ppm	0.0000	16.6	118.7	-
Pb 220.353	-0.0030uv	ppm	0.0006	20.2	2.869	-

P0412077-05D (Samp) **12/7/2004, 12:26:24 PM** **Rack 3, Tube 53**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0015	ppm	0.0004	25.6	36.44
Fe 261.187	53.95	ppm	0.4048	0.8	696821
Mn 257.610	4.739	ppm	0.0344	0.7	1012625
Pb 220.353	0.0041	ppm	0.0019	45.2	12.81

4120628 J

Organics Data

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-01A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13121
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	330	E
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	1200	E
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	400	E
156-60-5	trans-1,2-Dichloroethene	420	E
1634-04-4	Methyl-t-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	680	E
156-59-2	cis-1,2-Dichloroethene	7900	E
78-93-3	2-Butanone		
67-66-3	Chloroform	16	
71-55-6	1,1,1-Trichloroethane	1600	E
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	33	
107-06-2	1,2-Dichloroethane	99	

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-01A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13121
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	850	E
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane	4.4	J
75-27-4	Bromodichloromethane	11	
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	1400	E
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	24	
127-18-4	Tetrachloroethene	39	
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	3.0	J
100-41-4	Ethylbenzene	110	
95-47-6	o-Xylene	120	
	m & p-Xylene	220	
100-42-5	Styrene		
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane	0.85	J
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether	20	U

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA Sample No: MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4

Matrix (soil / sed / water): Water Lab Sample ID: P0412041-01A R1

Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13189

Level (Trace or Date Received: 12/2/2004

% Moisture: not Date 12/21/2004

GC Column: ID: (mm) Dilution 100

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

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride	320	J
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	1000	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	440	J
156-60-5	trans-1,2-Dichloroethene	410	J
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane	690	
156-59-2	cis-1,2-Dichloroethene	22000	E
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane	2100	
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane		

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-01A R1
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13189
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/21/2004
GC Column: ID: (mm) Dilution 100
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	35000	E
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	1500	
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-01A R2
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13220
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/23/2004
GC Column: ID: (mm) Dilution 200
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride		
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride		
156-60-5	trans-1,2-Dichloroethene		
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane		
156-59-2	cis-1,2-Dichloroethene	21000	
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane		
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane		

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-01A R2
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13220
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/23/2004
GC Column: ID: (mm) Dilution 200
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	31000	M
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene		
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWA-3

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4

Matrix (soil / sed / water): Water Lab Sample ID: P0412041-02A

Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13120

Level (Trace or Date Received: 12/2/2004

% Moisture: not Date 12/14/2004

GC Column: ID: (mm) Dilution 1

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

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	180	
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	1800	E
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	830	E
156-60-5	trans-1,2-Dichloroethene	77	
1634-04-4	Methyl-t-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	630	E
156-59-2	cis-1,2-Dichloroethene	4400	E
78-93-3	2-Butanone		
67-66-3	Chloroform	19	
71-55-6	1,1,1-Trichloroethane	2100	E
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	23	
107-06-2	1,2-Dichloroethane	340	E

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWA-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-02A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13120
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	910	E
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane	4.8	J
75-27-4	Bromodichloromethane	3.4	J
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	470	E
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	40	
127-18-4	Tetrachloroethene	140	
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	4.1	J
100-41-4	Ethylbenzene	130	
95-47-6	o-Xylene	120	
	m & p-Xylene	320	
100-42-5	Styrene		
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane	7.5	
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether	20	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWA-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-02A R1
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13190
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/21/2004
GC Column: ID: (mm) Dilution 100
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride		
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	1800	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	1000	
156-60-5	trans-1,2-Dichloroethene		
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane	680	
156-59-2	cis-1,2-Dichloroethene	6000	
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane	2600	
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane	380	J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWA-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-02A R1
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13190
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/21/2004
GC Column: ID: (mm) Dilution 100
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	56000	E
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	460	J
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWA-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-02A R2
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13221
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/23/2004
GC Column: ID: (mm) Dilution 500
Soil Extract Volume: (uL) Soil Aliquot (uL)
Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane		
75-01-4	Vinyl Chloride		
74-83-9	Bromomethane		
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride		
156-60-5	trans-1,2-Dichloroethene		
1634-04-4	Methyl-t-butyl ether		
75-34-3	1,1-Dichloroethane		
156-59-2	cis-1,2-Dichloroethene		
78-93-3	2-Butanone		
67-66-3	Chloroform		
71-55-6	1,1,1-Trichloroethane		
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride		
71-43-2	Benzene		
107-06-2	1,2-Dichloroethane		

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWA-3

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-02A R2
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13221
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/23/2004
GC Column: ID: (mm) Dilution 500
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	52000	M
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane		
75-27-4	Bromodichloromethane		
10061-01-5	cis-1,3-Dichloropropene		
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene		
10061-02-6	trans-1,3-Dichloropropene		
79-00-5	1,1,2-Trichloroethane		
127-18-4	Tetrachloroethene		
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane		
106-93-4	1,2-Dibromoethane		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
95-47-6	o-Xylene		
	m & p-Xylene		
100-42-5	Styrene		
75-25-2	Bromoform		
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene		
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether		

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: TB120104

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-03A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13117
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl-t-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.4	J
78-93-3	2-Butanone		
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: TB120104

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: Mod Ref No.: SDG No.: MWB-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412041-03A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13117
Level (Trace or Date Received: 12/2/2004
% Moisture: not Date 12/14/2004
GC Column: ID: (mm) Dilution 1
Soil Extract Volume: (uL) Soil Aliquot (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	0.68	J
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	0.89	J
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
	m & p-Xylene	10	U
100-42-5	Styrene		
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether	20	U

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4

EPA Sample No.	SMC1 (TOT) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
PBW	102	103	95.0		
LCSW	99.6	101	93.2		
MWB-4	98.8	102	96.1		
MWA-3	99.3	100	104		
TB120104	102	101	96.7		

		QC LIMITS
SMC1 (TOL) #	= Toluene-d8	(70-130)
SMC2 (BFB) #	= Bromofluorobenzene	(70-130)
SMC3 (DCE) #	= 1,2-Dichloroethane-d4	(70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4

EPA Sample No.	SMC1 (TOT) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
PBW	104	101	107		
LCSW	105	104	108		
MWB-4	104	103	113		
MWA-3	104	102	114		

		QC LIMITS
SMC1 (TOL) #	= Toluene-d8	(70-130)
SMC2 (BFB) #	=	(70-130)
SMC3 (DCE) #	= 1,2-Dichloroethane-d4	(70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: Mod.Ref No.: SDG No.: MWB-4

EPA Sample No.	SMC1 (TOT) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
PBW	101	97.8	103		
LCSW	102	98.4	104		
LCSD	102	97.8	104		
MWB-4	101	99.1	107		
MWA-3	104	100	105		

		QC LIMITS
SMC1 (TOL) #	= Toluene-d8	(70-130)
SMC2 (BFB) #	=	(70-130)
SMC3 (DCE) #	= 1,2-Dichloroethane-d4	(70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBW

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Lab File ID: VBLK1443 Lab Sample ID: PBW

Date Analyzed: 12/14/04 Time Analyzed: 15:14

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

Instrument ID: SYS B

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
LCSW	LCSW	LCSW1426	14:41
MWB-4	P0412041-01A	VSA13121	17:55
MWA-3	P0412041-02A	VSA13120	17:23
TB120104	P0412041-03A	VSA13117	15:46

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBW

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Lab File ID: VBLK1450 Lab Sample ID: PBW

Date Analyzed: 12/21/04 Time Analyzed: 12:26

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

Instrument ID: SYS B

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
LCSW	LCSW	LCSW1432	11:54
MWB-4	P0412041-01A R1	VSA13189	17:53
MWA-3	P0412041-02A R1	VSA13190	18:25

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBW

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Lab File ID: VBLK1454 Lab Sample ID: PBW

Date Analyzed: 12/23/04 Time Analyzed: 00:09

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

Instrument ID: SYS B

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
LCSW	LCSW	LCSW1434	23:05
LCSD	LCSD	LCSW1435	23:37
MWB-4	P0412041-01A R2	VSA13220	02:51
MWA-3	P0412041-02A R2	VSA13221	03:24

Comments:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Lab File ID: BF121404 BFB Injection Date: 12/14/04

Instrument ID: SYS B BFB Injection Time: 10:08

GC Column: ID: (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.1
75	30.0 - 66.0% of mass 95	45.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less then 2.0% of mass 174	0.0
174	50.0 - 120% of mass 95	54.5
175	4.0 - 9.0% of mass 174	6.8
176	93.0 - 101.0% of mass 174	96.6
177	5.0 - 9.0% of mass 176	6.8

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

This check applies to the following samples, MS, MSD, BLANKS, and Standards:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
PBW	PBW	VBLK1443	12/14/04	15:14
LCSW	LCSW	LCSW1426	12/14/04	14:41
MWB-4	P0412041-01A	VSA13121	12/14/04	17:55
MWA-3	P0412041-02A	VSA13120	12/14/04	17:23
TB120104	P0412041-03A	VSA13117	12/14/04	15:46

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Lab File ID: BF122104 BFB Injection Date: 12/21/04

Instrument ID: SYS B BFB Injection Time: 10:39

GC Column: ID: (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	17.4
75	30.0 - 66.0% of mass 95	47.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.6
173	Less then 2.0% of mass 174	0.0
174	50.0 - 120% of mass 95	85.9
175	4.0 - 9.0% of mass 174	7.5
176	93.0 - 101.0% of mass 174	97.2
177	5.0 - 9.0% of mass 176	6.3

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

This check applies to the following samples, MS, MSD, BLANKS, and Standards:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
PBW	PBW	VBLK1450	12/21/04	12:26
LCSW	LCSW	LCSW1432	12/21/04	11:54
MWB-4	P0412041-01A R1	VSA13189	12/21/04	17:53
MWA-3	P0412041-02A R1	VSA13190	12/21/04	18:25

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Lab File ID: BB122204 BFB Injection Date: 12/22/04

Instrument ID: SYS B BFB Injection Time: 22:00

GC Column: ID: (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.4
75	30.0 - 66.0% of mass 95	50.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less then 2.0% of mass 174	0.0
174	50.0 - 120% of mass 95	65.8
175	4.0 - 9.0% of mass 174	7.8
176	93.0 - 101.0% of mass 174	96.3
177	5.0 - 9.0% of mass 176	6.2

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

This check applies to the following samples, MS, MSD, BLANKS, and Stand

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
PBW	PBW	VBLK1454	12/23/04	00:09
LCSW	LCSW	LCSW1434	12/22/04	23:05
LCSD	LCSD	LCSW1435	12/22/04	23:37
MWB-4	P0412041-01A R2	VSA13220	12/23/04	02:51
MWA-3	P0412041-02A R2	VSA13221	12/23/04	03:24

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID: SYS B Calibration Date(s): 12/14/04 12/14/04

Heated Purge: (Y/N) Y Calibration Time(s): 10:54 13:47

GC Column: ID: (mm)

RRF5 = VSTD1956 RRF10 = VSTD1955 RRF20 = VSTD1954

RRF50 = VSTD1953 RRF100 = VSTD1952 RRF200 = VSTD1951

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
Dichlorodifluoromethane								
Chloromethane	2.154	2.431	2.136	2.250	2.319	2.227	2.253	4.87
Vinyl Chloride	2.080	2.356	2.120	2.254	2.227	2.089	2.188	5.01
Bromomethane	1.427	1.496	1.258	1.287	1.295	1.228	1.332	7.90
Chloroethane	1.426	1.535	1.344	1.407	1.415	1.386	1.419	4.49
Trichlorofluoromethane								
1,1-Dichloroethene	1.682	1.738	1.645	1.708	1.722	1.684	1.696	1.97
1,1,2-Trichloro-1,2,2-trifluoroethane								
Acetone		0.678	0.474	0.440	0.468	0.425	0.497	20.78
Carbon Disulfide	5.857	6..184	5.818	5.913	5.925	5.708	5.901	2.69
Methyl Acetate								
Methylene Chloride	2.014	2.176	1.961	1.931	1.941	1.839	1.977	5.70
trans-1,2-Dichloroethene	1.883	2.043	1.919	1.972	1.967	1.908	1.949	2.96
Methyl-t-butyl ether	4.066	4.703	4.493	4.441	4.694	4.495	4.482	5.18
1,1-Dichloroethane	2.992	3.216	2.988	2.961	2.985	2.898	3.007	3.60
cis-1,2-Dichloroethene	2.793	2.532	2.245	2.179	2.162	2.063	2.329	11.91
2-Butanone		0.882	0.764	0.668	0.688	0.651	0.731	13.01
Chloroform	2.898	2.927	2.837	2.869	2.8321	2.780	2.857	1.83
1,1,1-Trichloroethane	0.366	0.381	0.364	0.374	0.370	0.352	0.368	2.66
Cyclohexane								
Carbon tetrachloride	0.267	0.294	0.288	0.297	0.302	0.292	0.290	4.29
Benzene	1.012	1.128	1.094	1.055	1.036	0.966	1.049	5.51
1,2-Dichloroethane	1.987	2.088	1.990	1.961	1.964	1.884	1.979	3.32
Trichloroethene	0.243	0.247	0.237	0.230	0.229	0.207	0.232	6.02
Methylcyclohexane								

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

6B

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID: SYS B Calibration Date(s): 12/14/04 12/14/04

Heated Purge: (Y/N) Y Calibration Time(s): 10:54 13:47

GC Column: ID: (mm)

RRF5 = VSTD1956 RRF10 = VSTD1955 RRF20 = VSTD1954

RRF50 = VSTD1953 RRF100 = VSTD1952 RRF200 = VSTD1951

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF10	RRF200	RRF	% RSD
1,2-Dichloropropane	0.260	0.277	0.265	0.265	0.265	0.246	0.263	3.83
Bromodichloromethane	0.317	0.349	0.334	0.329	0.327	0.303	0.327	4.70
cis-1,3-Dichloropropene	0.420	0.474	0.437	0.448	0.465	0.438	0.447	4.43
4-Methyl-2-pentanone		0.222	0.241	0.219	0.222	0.212	0.223	4.83
Toluene	0.709	0.749	0.753	0.727	0.710	0.651	0.716	5.16
trans-1,3-Dichloropropene	0.368	0.397	0.378	0.392	0.405	0.376	0.386	3.70
1,1,2-Trichloroethane	0.235	0.262	0.240	0.235	0.241	0.220	0.239	5.62
Tetrachloroethene	0.173	0.174	0.182	0.184	0.189	0.178	0.180	3.35
2-Hexanone		0.153	0.162	0.148	0.157	0.147	0.153	4.17
Dibromochloromethane	0.241	0.248	0.239	0.238	0.243	0.231	0.240	2.37
1,2-Dibromoethane	0.259	0.295	0.279	0.279	0.287	0.269	0.278	4.67
Chlorobenzene	0.807	0.858	0.814	0.793	0.801	0.760	0.806	3.97
Ethylbenzene	1.254	1.369	1.341	1.305	1.297	1.224	1.299	4.13
m & p-Xylene	0.538	0.594	0.575	0.556	0.544	0.522	0.555	4.71
o-Xylene	0.532	0.578	0.559	0.546	0.523	0.500	0.540	5.12
Styrene	0.849	0.957	0.938	0.946	0.902	0.871	0.910	4.81
Isopropylbenzene	1.295	1.447	1.419	1.449	1.383	1.330	1.387	4.57
Bromoform	0.128	0.144	0.137	0.140	0.140	0.142	0.139	4.07
1,1,2,2-Tetrachloroethane	0.391	0.397	0.393	0.348	0.332	0.302	0.361	10.94
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
1,2-Dichlorobenzene								
1,2-Dibromo-3-chloropropane								
1,2,4-Trichlorobenzene								
2-Chloroethyl vinyl ether								
Toluene-d8	0.938	1.055	1.031	1.015	1.007	0.928	0.996	5.16
Bromofluorobenzene	0.372	0.429	0.397	0.387	0.367	0.362	0.386	6.49
1,2-Dichloroethane-d4	1.524	1.761	1.576	1.588	1.606	1.606	1.610	4.95

* Compounds with required minimum RRF and maximum %RSD values.

All other compounds must meet a minimum RRF of 0.010.

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID SYS B Calibration Date(s): 12/15/04 12/15/04

Heated Purge: (Y/N) Y Calibration Time(s): 13:52 16:37

GC Column: ID: (mm)

RRF5 = VSTD1968 RRF10 = VSTD1967 RRF20 = VSTD1966

RRF50 = VSTD1965 RRF100 = VSTD1964 RRF200 = VSTD1963

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
Dichlorodifluoromethane								
Chloromethane	1.372	1.406	1.428	1.541	1.548	1.458	1.459	4.93
Vinyl Chloride	1.357	1.470	1.459	1.547	1.496	1.410	1.456	4.56
Bromomethane	0.907	0.947	0.874	0.928	0.935	0.855	0.908	4.00
Chloroethane	0.941	0.998	0.979	1.034	1.017	0.991	0.993	3.22
Trichlorofluoromethane								
1,1-Dichloroethene	1.109	1.160	1.091	1.116	1.112	1.115	1.117	2.05
1,1,2-Trichloro-1,2,2-trifluoroethane								
Acetone		0.473	0.435	0.339	0.344	0.331	0.384	16.98
Carbon Disulfide	3.973	4.317	4.010	4.085	4.060	4.026	4.078	3.02
Methyl Acetate								
Methylene Chloride	1.439	1.649	1.349	1.377	1.373	1.308	1.416	8.62
trans-1,2-Dichloroethene	1.373	1.471	1.284	1.322	1.307	1.295	1.342	5.24
Methyl-t-butyl ether	3.035	3.361	3.121	3.100	3.148	3.070	3.139	3.68
1,1-Dichloroethane	2.246	2.510	2.176	2.186	2.188	2.125	2.238	6.18
cis-1,2-Dichloroethene	1.803	1.811	1.503	1.430	1.412	1.377	1.556	12.79
2-Butanone		0.715	0.644	0.555	0.561	0.525	0.600	12.98
Chloroform	2.001	2.273	1.932	1.916	1.945	1.917	1.997	6.94
1,1,1-Trichloroethane	0.285	0.310	0.285	0.283	0.279	0.276	0.286	4.25
Cyclohexane								
Carbon tetrachloride	0.231	0.251	0.244	0.243	0.243	0.244	0.243	2.63
Benzene	0.995	1.143	0.992	0.983	0.964	0.909	0.998	7.84
1,2-Dichloroethane	1.416	1.566	1.395	1.367	1.368	1.339	1.409	5.79
Trichloroethene	0.391	0.365	0.344	0.295	0.282	0.275	0.325	14.79
Methylcyclohexane								

* Compounds with required minimum RRF and maximum %RSD valu

All other compounds must meet a minimum RRF of 0.010

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID SYS B Calibration Date(s): 12/15/04 12/15/04

Heated Purge: (Y/N) Y Calibration Time(s): 13:52 16:37

GC Column: ID: (mm)

RRF5 = VSTD1968 RRF10 = VSTD1967 RRF20 = VSTD1966

RRF50 = VSTD1965 RRF100 = VSTD1964 RRF200 = VSTD1963

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
1,2-Dichloropropane	0.253	0.293	0.250	0.253	0.251	0.241	0.257	7.18
Bromodichloromethane	0.289	0.336	0.281	0.286	0.288	0.274	0.292	7.60
cis-1,3-Dichloropropene	0.289	0.459	0.415	0.418	0.420	0.400	0.417	5.71
4-Methyl-2-pentanone		0.217	0.219	0.208	0.215	0.202	0.212	3.39
Toluene	0.605	0.691	0.605	0.579	0.570	0.549	0.600	8.27
trans-1,3-Dichloropropene	0.329	0.367	0.357	0.348	0.354	0.338	0.349	3.90
1,1,2-Trichloroethane	0.201	0.228	0.217	0.204	0.202	0.192	0.207	6.13
Tetrachloroethene	0.222	0.242	0.222	0.223	0.223	0.221	0.226	3.62
2-Hexanone		0.142	0.151	0.144	0.147	0.142	0.145	2.57
Dibromochloromethane	0.260	0.287	0.266	0.262	0.263	0.251	0.265	4.52
1,2-Dibromoethane	0.229	0.254	0.239	0.236	0.239	0.224	0.237	4.32
Chlorobenzene	0.726	0.829	0.724	0.703	0.707	0.671	0.727	7.42
Ethylbenzene	1.056	1.210	1.113	1.082	1.082	1.016	1.093	6.01
m & p-Xylene	0.441	0.502	0.448	0.438	0.425	0.401	0.442	7.56
o-Xylene	0.430	0.494	0.436	0.414	0.415	0.390	0.430	8.19
Styrene	0.662	0.807	0.722	0.718	0.718	0.678	0.718	7.02
Isopropylbenzene	1.012	1.185	1.091	1.072	1.065	1.008	1.072	6.03
Bromoform	0.175	0.186	0.186	0.179	0.185	0.178	0.181	2.71
1,1,2,2-Tetrachloroethane	0.334	0.337	0.335	0.294	0.290	0.258	0.308	10.57
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
1,2-Dichlorobenzene								
1,2-Dibromo-3-chloropropane								
1,2,4-Trichlorobenzene								
2-Chloroethyl vinyl ether								
Toluene-d8	0.834	0.841	0.839	0.819	0.797	0.762	0.816	3.79
Bromofluorobenzene	0.336	0.323	0.311	0.305	0.295	0.286	0.309	5.99
1,2-Dichloroethane-d4	1.317	1.258	1.214	1.197	1.188	1.179	1.225	4.31

* Compounds with required minimum RRF and maximum %RSD valu

All other compounds must meet a minimum RRF of 0.010

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID SYS B Calibration Date: 12/21/04 Calibration Time: 11:21

EPA Sample No. : VSTD 50 Init. Calib. Date(s): 12/15/04 12/15/04

Lab File ID: VCAL1456 Init. Calib. Time(s): 13:52 16:37

Heated Purge: (Y/N) Y

GC Column: _____ ID: _____ (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX % D
Dichlorodifluoromethane					
Chloromethane	1.459	1.370		6.1	
Vinyl Chloride	1.456	1.458	0.100	-0.1	25.0
Bromomethane	0.908	0.798	0.100	12.1	25.0
Chloroethane	0.993	1.082		-8.9	
Trichlorofluoromethane					
1,1-Dichloroethene	1.117	1.130	0.100	-1.1	25.0
1,1,2-Trichloro-1,2,2-trifluoroethane					
Acetone	0.384	0.382		0.7	
Carbon Disulfide	4.078	4.156		-1.9	
Methyl Acetate					
Methylene Chloride	1.416	1.467		-3.6	
trans-1,2-Dichloroethene	1.342	1.356		-1.1	
Methyl-t-butyl ether	3.139	3.392		-8.0	
1,1-Dichloroethane	2.238	2.459	0.200	-9.9	25.0
cis-1,2-Dichloroethene	1.556	1.446		7.1	
2-Butanone	0.600	0.593		1.1	
Chloroform	1.997	2.084	0.200	-4.3	25.0
1,1,1-Trichloroethane	0.286	0.289	0.100	-1.0	25.0
Cyclohexane					
Carbon tetrachloride	0.243	0.244	0.100	-0.5	25.0
Benzene	0.998	1.010	0.500	-1.2	25.0
1,2-Dichloroethane	1.409	1.601	0.100	-13.7	25.0
Trichloroethene	0.325	0.269	0.300	17.4	25.0
Methylcyclohexane					

All other compounds must meet a minimum RRF of 0.010

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID SYS B Calibration Date: 12/21/04 Calibration Time: 11:21

EPA Sample No.: VSTD 50 Init. Calib. Date(s): 12/15/04 12/15/04

Lab File ID: VCAL1456 Init. Calib. Time(s): 13:52 16:37

Heated Purge: (Y/N) Y

GC Column: _____ ID: _____ (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX D
1,2-Dichloropropane	0.257	0.274		-6.7	
Bromodichloromethane	0.292	0.298	0.200	-1.9	25.0
cis-1,3-Dichloropropene	0.417	0.429	0.200	-2.9	25.0
4-Methyl-2-pentanone	0.212	0.219		-3.5	
Toluene	0.600	0.586	0.400	2.3	25.0
trans-1,3-Dichloropropene	0.349	0.353	0.100	-1.3	25.0
1,1,2-Trichloroethane	0.207	0.216	0.100	-4.2	25.0
Tetrachloroethene	0.226	0.195	0.200	13.3	25.0
2-Hexanone	0.145	0.150		-3.5	
Dibromochloromethane	0.265	0.254	0.100	4.2	25.0
1,2-Dibromoethane	0.237	0.243		-2.4	
Chlorobenzene	0.727	0.702	0.500	3.3	25.0
Ethylbenzene	1.093	1.089	0.100	0.4	25.0
m & p-Xylene	0.442	0.437	0.300	1.3	25.0
o-Xylene	0.430	0.426	0.300	1.0	25.0
Styrene	0.718	0.719	0.300	-0.1	25.0
Isopropylbenzene	1.072	1.077		-0.4	
Bromoform	0.181	0.161	0.100	11.4	25.0
1,1,2,2-Tetrachloroethane	0.308	0.308	0.300	-0.0	25.0
1,3-Dichlorobenzene			0.600		25.0
1,4-Dichlorobenzene			0.500		25.0
1,2-Dichlorobenzene			0.400		25.0
1,2-Dibromo-3-chloropropane					
1,2,4-Trichlorobenzene			0.200		25.0
2-Chloroethyl vinyl ether					
Toluene-d8	0.816	0.842		-3.2	
Bromofluorobenzene	0.309	0.312	0.200	-0.8	25.0
1,2-Dichloroethane-d4	1.225	1.341		-9.4	

All other compounds must meet a minimum RRF of 0.010

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID SYS B Calibration Date: 12/22/04 Calibration Time: 22:32

EPA Sample No. : VSTD 50 Init. Calib. Date(s): 12/15/04 12/15/04

Lab File ID: VCAL1458 Init. Calib. Time(s): 13:52 16:37

Heated Purge: (Y/N) Y

GC Column: _____ ID: _____ (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX % D
Dichlorodifluoromethane					
Chloromethane	1.459	1.009		30.8	
Vinyl Chloride	1.456	1.197	0.100	17.8	25.0
Bromomethane	0.908	0.618	0.100	31.9	25.0
Chloroethane	0.993	0.940		5.3	
Trichlorofluoromethane					
1,1-Dichloroethene	1.117	1.003	0.100	10.2	25.0
1,1,2-Trichloro-1,2,2-trifluoroethane					
Acetone	0.384	0.362		5.7	
Carbon Disulfide	4.078	3.450		15.4	
Methyl Acetate					
Methylene Chloride	1.416	1.356		4.2	
trans-1,2-Dichloroethene	1.342	1.243		7.3	
Methyl-t-butyl ether	3.139	3.053		2.8	
1,1-Dichloroethane	2.238	2.333	0.200	-4.2	25.0
cis-1,2-Dichloroethene	1.556	1.364		12.3	
2-Butanone	0.600	0.555		7.5	
Chloroform	1.997	1.970	0.200	1.4	25.0
1,1,1-Trichloroethane	0.286	0.263	0.100	8.1	25.0
Cyclohexane					
Carbon tetrachloride	0.243	0.223	0.100	8.0	25.0
Benzene	0.998	0.900	0.500	9.8	25.0
1,2-Dichloroethane	1.409	1.530	0.100	-8.6	25.0
Trichloroethene	0.325	0.235	0.300	27.8	25.0
Methylcyclohexane					

All other compounds must meet a minimum RRF of 0.010

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Instrument ID SYS B Calibration Date: 12/22/04 Calibration Time: 22:32

EPA Sample No. : VSTD 50 Init. Calib. Date(s): 12/15/04 12/15/04

Lab File ID: VCAL1458 Init. Calib. Time(s): 13:52 16:37

Heated Purge: (Y/N) Y

GC Column: ID: (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX D
1,2-Dichloropropane	0.257	0.253		1.5	
Bromodichloromethane	0.292	0.271	0.200	7.2	25.0
cis-1,3-Dichloropropene	0.417	0.377	0.200	9.4	25.0
4-Methyl-2-pentanone	0.212	0.212		0.1	
Toluene	0.600	0.543	0.400	9.5	25.0
trans-1,3-Dichloropropene	0.349	0.322	0.100	7.6	25.0
1,1,2-Trichloroethane	0.207	0.194	0.100	6.3	25.0
Tetrachloroethene	0.226	0.182	0.200	19.5	25.0
2-Hexanone	0.145	0.144		0.7	
Dibromochloromethane	0.265	0.230	0.100	13.0	25.0
1,2-Dibromoethane	0.237	0.221		6.5	
Chlorobenzene	0.727	0.674	0.500	7.3	25.0
Ethylbenzene	1.093	1.023	0.100	6.4	25.0
m & p-Xylene	0.442	0.418	0.300	5.6	25.0
o-Xylene	0.430	0.415	0.300	3.6	25.0
Styrene	0.718	0.693	0.300	3.4	25.0
Isopropylbenzene	1.072	1.058		1.3	
Bromoform	0.181	0.144	0.100	20.5	25.0
1,1,2,2-Tetrachloroethane	0.308	0.301	0.300	2.1	25.0
1,3-Dichlorobenzene			0.600		25.0
1,4-Dichlorobenzene			0.500		25.0
1,2-Dichlorobenzene			0.400		25.0
1,2-Dibromo-3-chloropropane					
1,2,4-Trichlorobenzene			0.200		25.0
2-Chloroethyl vinyl ether					
Toluene-d8	0.816	1.603		-96.5	
Bromofluorobenzene	0.309	0.613	0.200	-98.3	25.0
1,2-Dichloroethane-d4	1.225	2.637		-115.2	

All other compounds must meet a minimum RRF of 0.010

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

EPA Sample no. (VSTD050##)VSTD 50 Date Analyzed: 12/14/04

Lab File ID (Standard): VSTD1953 Time Analyzed: 12:10

Instrument ID: SYS b Heated Purge: (Y/N)Y

GC Column: ID: (mm)

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 Hour STD	100234	10.94	670432	12.60	571081	16.78
Upper Limit	200468	11.44	335216	13.10	1142162	17.28
Lower Limit	50117	10.44	335216	12.10	285540	16.28
EPA SAMPLE						
PBW	90073	10.94	596587	12.60	492765	16.77
LCSW	94094	10.94	613258	12.60	524670	16.78
MWB-4	77612	10.94	563173	12.60	499340	16.77
MWA-3	79492	10.94	552478	12.60	485062	16.77
TB120104	86077	10.93	574059	12.60	484210	16.78

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

EPA Sample no. (VSTD050##)VSTD 50 Date Analyzed: 12/21/04

Lab File ID (Standard): VCAL1456 Time Analyzed: 11:21

Instrument ID: SYS B Heated Purge: (Y/N)Y

GC Column: ID: (mm)

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 Hour STD	166530	10.97	894040	12.63	851307	16.81
Upper Limit	333030	11.47	1788080	13.13	1702614	17.31
Lower Limit	83265	10.47	447020	12.13	425653	16.31
EPA SAMPLE						
PBW	167295	10.97	907742	12.63	848750	16.81
LCSW	168881	10.97	895260	12.63	845064	16.81
MWB-4	160586	10.97	882397	12.63	823240	16.80
MWA-3	160521	10.96	883065	12.63	818788	16.80

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

EPA Sample no. (VSTD050##)VSTD 50 Date Analyzed: 12/22/04

Lab File ID (Standard): VCAL1458 Time Analyzed: 22:32

Instrument ID: SYS B Heated Purge: (Y/N)Y

GC Column: ID: (mm)

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 Hour STD	157372	10.97	868209	12.63	790546	16.80
Upper Limit	314744	11.47	1736418	13.13	1581092	17.30
Lower Limit	78686	10.47	434104	12.13	395273	16.30
EPA SAMPLE						
PBW	166356	10.98	879115	12.64	803149	16.82
LCSW	168932	10.97	888103	12.63	798997	16.80
LCSD	169656	10.97	888940	12.64	794557	16.81
MWB-4	158521	10.99	858963	12.65	787170	16.83
MWA-3	162958	11.00	865283	12.66	759394	16.83

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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

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

GC/MS QA-QC Check Report

MWB-4

'une File : C:\HPCHEM\1\DATA\BF121404.D
'une Time : 14 Dec 2004 10:08

aily Calibration File : C:\HPCHEM\1\DATA\VSTD1953.D

					100234	670432	571081
ile	Sample	Surrogate Recovery %			Internal Standard Responses		
CSW1426.D	50UG/L TCL LCS	93	100	101	94094	613258	524670
BLK1443.D	WATER METHOD BLK	95	102	103	90073	596587	492765
SA13117.D	P0412041-03A	97	103	101	86077	574059	484210
SA13118.D	P0412024-04A	100	104	103	85218	568175	472532
SA13119.D	P0412077-01A	99	104	105	81627	557562	462388
SA13120.D	P0412041-02A	104	99	100	79492	552478	485062
SA13121.D	P0412041-01A	96	99	102	77612	563173	499340
SA13122.D	P0412024-01A	88	182*	95	90686	622484	539399
SA13123.D	P0412024-02A	93	100	98	80495	607881	502453
SA13124.D	P0412024-03A	92	192*	97	84243	591795	524925
SA13125.D	P0412077-02A	98	97	98	79950	592617	514927
SA13126.D	P0412077-03A	98	97	97	81794	600421	509044
SA13127.D	P0412077-04A	100	179*	100	79790	574377	501376
SA13128.D	P0412077-05A	102	185*	99	79436	597853	513258

t - fails 12hr time check * - fails criteria

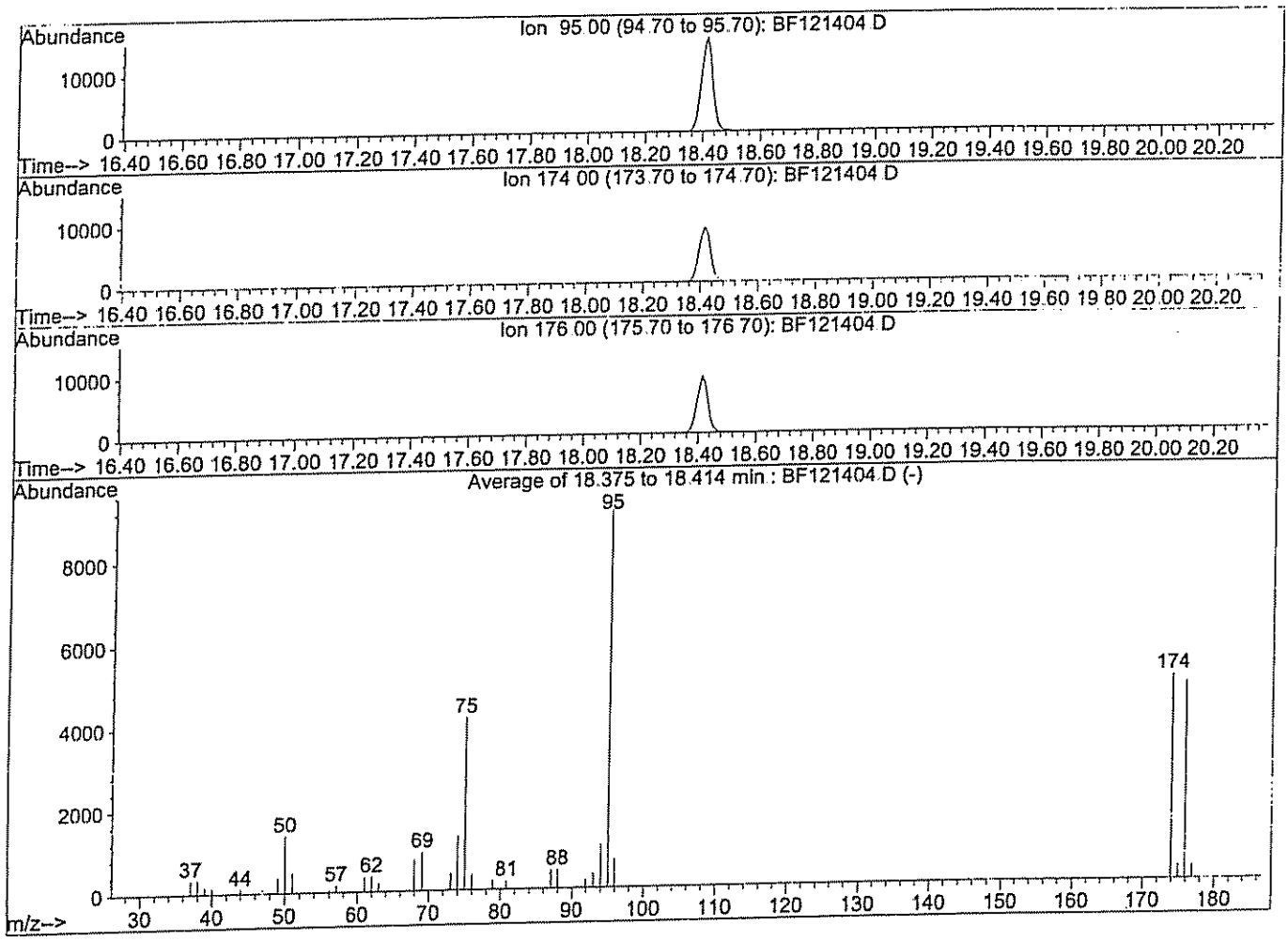
Created: Mon Dec 20 11:56:25 2004 GC

3 Ins

Data File : C:\HPCHEM\1\data\BF121404.D
Acq On : 14 Dec 2004 10:08
Sample : 50NG BFB TUNING STD
Misc : SOIL

Vial: 1
Operator: hfg system
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

Method : C:\HPCHEM\1\METHODS\BFB.M (Chemstation Integrator)
Title :



Spectrum Information: Average of 18.375 to 18.414 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.1	1380	PASS
75	95	30	60	45.7	4183	PASS
95	95	100	100	100.0	9145	PASS
96	95	5	9	7.5	683	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	54.5	4983	PASS
175	174	5	9	6.8	337	PASS
176	174	95	101	96.6	4815	PASS
177	176	5	9	6.8	329	PASS

BF121404.D BFB.M Tue Dec 14 11:07:30 2004

Average of 18.375 to 18.414 min.: BF121404.D

50NG BFB TUNING STD

MWB-4

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	30	51.05	482	73.05	413	95.00	9145
37.05	342	56.05	62	74.00	1310	95.95	683
38.00	324	57.00	167	75.00	4183	173.95	4983
39.00	169	61.05	358	76.00	371	174.90	337
40.05	134	62.00	365	78.90	235	175.90	4815
43.00	33	63.00	206	80.85	208	176.90	329
44.00	106	65.00	31	87.00	449		
45.00	38	67.95	756	87.95	453		
47.00	87	69.05	938	91.95	206		
49.05	359	69.95	31	92.95	356		
50.00	1380	72.90	36	94.00	1050		

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 14:19:44 2004
Response via : Initial Calibration

Calibration Files
5 =VSTD1956.D 10 =VSTD1955.D 20 =VSTD1954.D
50 =VSTD1953.D 100 =VSTD1952.D 200 =VSTD1951.D

		Compound	5	10	20	50	100	200	Avg	%RSD
1)	I	Bromochloromethane	ISTD							
2)	TP	Chloromethane	2.154	2.431	2.136	2.250	2.319	2.227	2.253	4.87
3)	TC	Vinyl chloride	2.080	2.356	2.120	2.254	2.227	2.089	2.188	5.01
4)	T	Bromomethane	1.427	1.496	1.258	1.287	1.295	1.228	1.332	7.90
5)	T	Chloroethane	1.426	1.535	1.344	1.407	1.415	1.386	1.419	4.49
6)	TCM	1,1-Dichloroethene	1.682	1.738	1.645	1.708	1.722	1.684	1.696	1.97
7)	T	Carbon disulfide	5.857	6.184	5.818	5.913	5.925	5.708	5.901	2.69
8)	T	Methylene chloride	2.014	2.176	1.961	1.931	1.941	1.839	1.977	5.70
9)	T	Acetone		0.678	0.474	0.440	0.468	0.425	0.497	20.78
10)	T	trans-1,2-Dichloroe	1.883	2.043	1.919	1.972	1.967	1.908	1.949	2.96
11)	T	methyl-tert-butyl-E	4.066	4.703	4.493	4.441	4.694	4.495	4.482	5.18
12)	TP	1,1-Dichloroethane	2.992	3.216	2.988	2.961	2.985	2.898	3.007	3.60
13)	T	cis-1,2-Dichloroeth	2.793	2.532	2.245	2.179	2.162	2.063	2.329	11.91
14)	TC	Chloroform	2.898	2.927	2.837	2.869	2.831	2.780	2.857	1.83
15)	T	2-Butanone		0.882	0.764	0.668	0.688	0.651	0.731	13.01
16)	S	1,2-Dichloroethane-	1.524	1.761	1.576	1.588	1.606	1.606	1.610	4.95
17)	T	1,2-Dichloroethane	1.987	2.088	1.990	1.961	1.964	1.884	1.979	3.32
18)	I	1,4-Difluorobenzene	ISTD							
19)	T	Carbon tetrachlorid	0.267	0.294	0.288	0.297	0.302	0.292	0.290	4.29
20)	T	1,1,1-Trichloroetha	0.366	0.381	0.364	0.374	0.370	0.352	0.368	2.66
21)	TM	Benzene	1.012	1.128	1.094	1.055	1.036	0.966	1.049	5.51
22)	TM	Trichloroethene	0.243	0.247	0.237	0.230	0.229	0.207	0.232	6.02
23)	TC	1,2-Dichloropropane	0.260	0.277	0.265	0.265	0.265	0.246	0.263	3.83
24)	T	Bromodichloromethan	0.317	0.349	0.334	0.329	0.327	0.303	0.327	4.70
25)	T	cis-1,3-Dichloropro	0.420	0.474	0.437	0.448	0.465	0.438	0.447	4.43
26)	T	trans-1,3-Dichlorop	0.368	0.397	0.378	0.392	0.405	0.376	0.386	3.70
27)	T	1,1,2-Trichloroetha	0.235	0.262	0.240	0.235	0.241	0.220	0.239	5.62
28)	T	Dibromochloromethan	0.241	0.248	0.239	0.238	0.243	0.231	0.240	2.37
29)		1,2-Dibromoethane	0.259	0.295	0.279	0.279	0.287	0.269	0.278	4.67
30)	TP	Bromoform	0.128	0.144	0.137	0.140	0.140	0.142	0.139	4.07
31)	I	Chlorobenzene-d5	ISTD							
32)	S	Toluene-d8	0.938	1.055	1.031	1.015	1.007	0.928	0.996	5.16
33)	TMC	Toluene	0.709	0.749	0.753	0.727	0.710	0.651	0.716	5.16
34)	T	4-methyl-2-Pentanon		0.222	0.241	0.219	0.222	0.212	0.223	4.83
35)	T	Tetrachloroethene	0.173	0.174	0.182	0.184	0.189	0.178	0.180	3.35
36)	T	2-Hexanone		0.153	0.162	0.148	0.157	0.147	0.153	4.17
37)	TC	Ethyl benzene	1.254	1.369	1.341	1.305	1.297	1.224	1.299	4.13

#) = Out of Range

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 14:19:44 2004
Response via : Initial Calibration

Calibration Files
5 =VSTD1956.D 10 =VSTD1955.D 20 =VSTD1954.D
50 =VSTD1953.D 100 =VSTD1952.D 200 =VSTD1951.D

		Compound	5	10	20	50	100	200	Avg	%RSD
38)	TMP	Chlorobenzene	0.807	0.858	0.814	0.793	0.801	0.760	0.806	3.97
39)	T	m&p-Xylenes	0.538	0.594	0.575	0.556	0.544	0.522	0.555	4.71
40)	T	o-Xylene	0.532	0.578	0.559	0.546	0.523	0.500	0.540	5.12
41)	T	Styrene	0.849	0.957	0.938	0.946	0.902	0.871	0.910	4.81
42)	T	Isopropylbenzene	1.295	1.447	1.419	1.449	1.383	1.330	1.387	4.57
43)	S	4-Bromofluorobenzen	0.372	0.429	0.397	0.387	0.367	0.362	0.386	6.49
44)	TP	1,1,2,2-Tetrachloro	0.391	0.397	0.393	0.348	0.332	0.302	0.361	10.94
45)	T	Naphthalene	0.664	0.745	0.766	0.724	0.774	0.685	0.726	6.05

Data File : C:\HPCHEM\1\DATA\VSTD1956.D
Acq On : 14 Dec 2004 13:47
Sample : 5UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 14:19 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Bromochloromethane	10.94	128	93412	50.00 ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	625566	50.00 ug/L	0.00
31) Chlorobenzene-d5	16.78	117	527329	50.00 ug/L	0.00
System Monitoring Compounds					
16) 1,2-Dichloroethane-d4	11.67	65	14236	4.68 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 9.36%#		
32) Toluene-d8	14.87	98	49473	4.66 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 9.32%#		
43) 4-Bromofluorobenzene	18.40	95	19618	4.79 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 9.58%#		
Target Compounds					Qvalue
2) Chloromethane	6.30	50	20122	4.74 ug/L	99
3) Vinyl chloride	6.57	62	19432	4.71 ug/L	99
4) Bromomethane	7.17	94	13328	5.43 ug/L	97
5) Chloroethane	7.37	64	13319	5.03 ug/L	98
6) 1,1-Dichloroethene	8.81	96	15715	4.95 ug/L	94
7) Carbon disulfide	9.32	76	54716	4.96 ug/L	100
8) Methylene chloride	8.96	84	18817	5.11 ug/L	98
9) Acetone	8.30	43	7443	8.02 ug/L	100
10) trans-1,2-Dichloroethene	9.77	96	17588	4.80 ug/L	99
11) methyl-tert-butyl-Ether	9.87	73	37977	4.45 ug/L	99
12) 1,1-Dichloroethane	10.06	63	27950	4.97 ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	26093	6.25 ug/L	98
14) Chloroform	10.98	83	27070	5.09 ug/L	97
15) 2-Butanone	10.60	43	10492	7.68 ug/L	97
17) 1,2-Dichloroethane	11.77	62	18558	5.02 ug/L	97
19) Carbon tetrachloride	12.35	117	16678	4.52 ug/L	94
20) 1,1,1-Trichloroethane	11.89	97	22913	4.98 ug/L	99
21) Benzene	12.39	78	63320	4.79 ug/L	100
22) Trichloroethene	13.14	130	15196	5.28 ug/L	94
23) 1,2-Dichloropropane	13.09	63	16237	4.92 ug/L	93
24) Bromodichloromethane	13.20	83	19858	4.83 ug/L	97
25) cis-1,3-Dichloropropene	13.97	75	26287	4.64 ug/L	98
26) trans-1,3-Dichloropropene	14.49	75	23000	4.72 ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1956.D
Acq On : 14 Dec 2004 13:47
Sample : 5UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 14:19 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.73	97	14718	4.91	ug/L		95
28) Dibromochloromethane	15.41	129	15095	5.04	ug/L		98
29) 1,2-Dibromoethane	15.75	107	16193	4.59	ug/L		98
30) Bromoform	17.53	173	8023	4.56	ug/L		99
33) Toluene	14.97	92	37408	4.94	ug/L		98
34) 4-methyl-2-Pentanone	14.17	43	13297	5.65	ug/L		97
35) Tetrachloroethene	15.94	164	9134	4.78	ug/L		90
36) 2-Hexanone	15.25	43	9259	5.72	ug/L		98
37) Ethyl benzene	17.05	91	66145	4.80	ug/L		100
38) Chlorobenzene	16.82	112	42569	5.01	ug/L		97
39) m&p-Xylenes	17.29	106	56724	9.63	ug/L		96
40) o-Xylene	17.84	106	28074	4.92	ug/L		97
41) Styrene	17.75	104	44793	4.60	ug/L		99
42) Isopropylbenzene	18.34	105	68295	4.61	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	20642	5.52	ug/L		98
45) Naphthalene	23.72	128	35041	4.50	ug/L	#	100

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

Quantitation Report

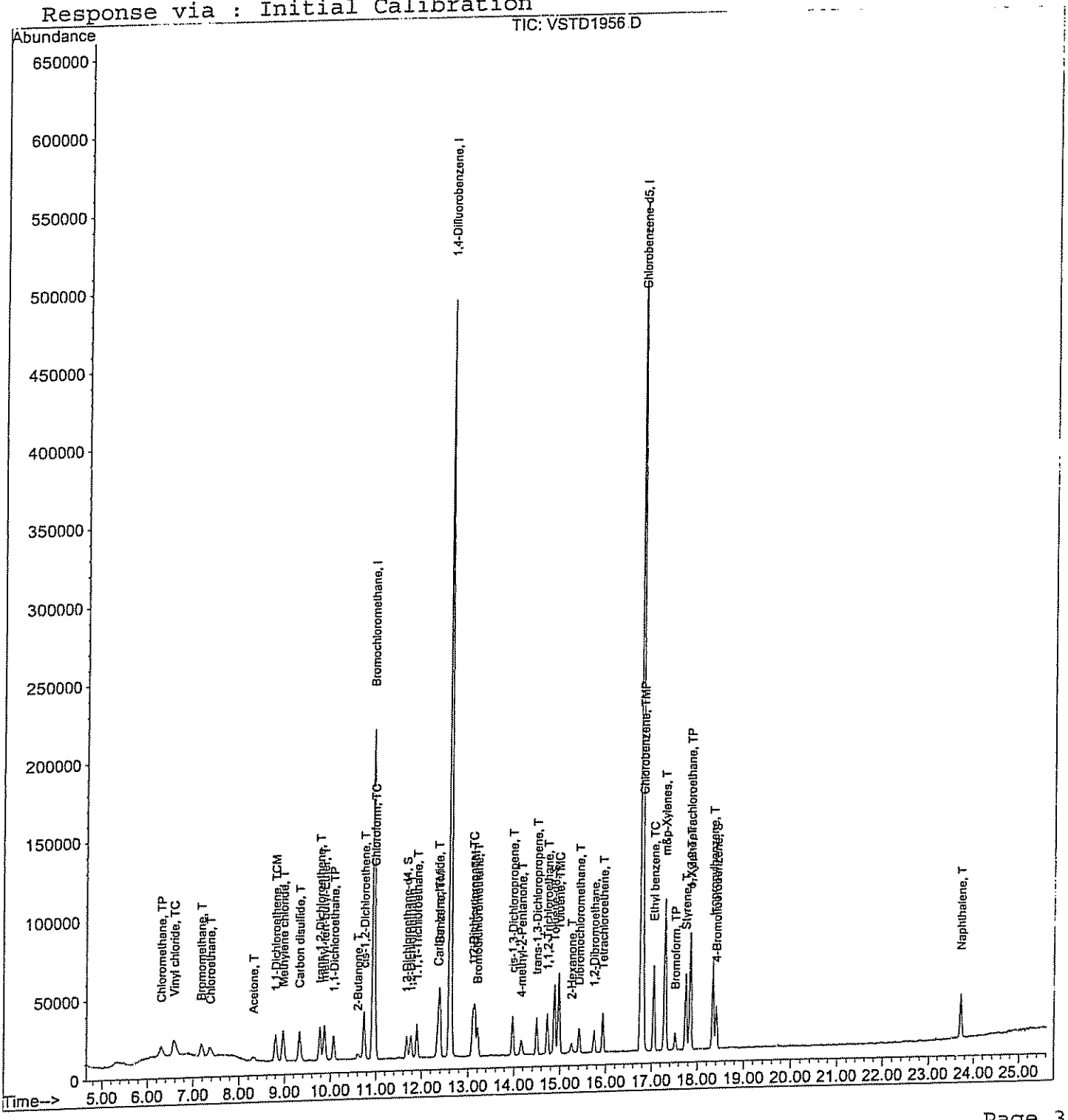
Data File : C:\HPCHEM\1\DATA\VSTD1956.D
Acq On : 14 Dec 2004 13:47
Sample : 5UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 14:19 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\VSTD1955.D
Acq On : 14 Dec 2004 13:14
Sample : 10UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:56 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	10.94	128	92812	50.00 ug/L	0.00
18) 1,4-Difluorobenzene	12.61	114	599508	50.00 ug/L	0.00
31) Chlorobenzene-d5	16.78	117	522884	50.00 ug/L	0.00
System Monitoring Compounds					
16) 1,2-Dichloroethane-d4	11.67	65	32680	11.05 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 22.10%#		
32) Toluene-d8	14.88	98	110380	10.61 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 21.22%#		
43) 4-Bromofluorobenzene	18.41	95	44900	11.35 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 22.70%#		
Target Compounds					Qvalue
2) Chloromethane	6.29	50	45120	10.89 ug/L	99
3) Vinyl chloride	6.57	62	43726	10.84 ug/L	99
4) Bromomethane	7.18	94	27761	11.80 ug/L	93
5) Chloroethane	7.37	64	28486	11.06 ug/L	99
6) 1,1-Dichloroethene	8.80	96	32261	10.29 ug/L	96
7) Carbon disulfide	9.32	76	114781	10.59 ug/L	100
8) Methylene chloride	8.97	84	40386	11.34 ug/L	99
9) Acetone	8.31	43	12587	15.01 ug/L	97
10) trans-1,2-Dichloroethene	9.77	96	37920	10.52 ug/L	96
11) methyl-tert-butyl-Ether	9.87	73	87308	10.38 ug/L	99
12) 1,1-Dichloroethane	10.07	63	59694	10.87 ug/L	99
13) cis-1,2-Dichloroethene	10.74	96	46992	11.71 ug/L	98
14) Chloroform	10.98	83	54341	10.35 ug/L	99
15) 2-Butanone	10.59	43	16379	12.73 ug/L	99
17) 1,2-Dichloroethane	11.77	62	38751	10.71 ug/L	99
19) Carbon tetrachloride	12.34	117	35308	9.99 ug/L	96
20) 1,1,1-Trichloroethane	11.89	97	45641	10.43 ug/L	98
21) Benzene	12.38	78	135217	10.87 ug/L	100
22) Trichloroethene	13.14	130	29566	10.92 ug/L	99
23) 1,2-Dichloropropane	13.10	63	33226	10.65 ug/L	97
24) Bromodichloromethane	13.21	83	41802	10.78 ug/L	99
25) cis-1,3-Dichloropropene	13.96	75	56815	10.60 ug/L	98
26) trans-1,3-Dichloropropene	14.50	75	47604	10.24 ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1955.D
Acq On : 14 Dec 2004 13:14
Sample : 10UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:56 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.72	97	31384	11.18 ug/L	97
28) Dibromochloromethane	15.41	129	29693	10.43 ug/L	98
29) 1,2-Dibromoethane	15.74	107	35406	10.61 ug/L	99
30) Bromoform	17.52	173	17292	10.32 ug/L	96
33) Toluene	14.97	92	78330	10.55 ug/L	98
34) 4-methyl-2-Pentanone	14.15	43	23213	9.93 ug/L	100
35) Tetrachloroethene	15.93	164	18181	9.49 ug/L	96
36) 2-Hexanone	15.23	43	16041	9.99 ug/L	96
37) Ethyl benzene	17.05	91	143194	10.60 ug/L	99
38) Chlorobenzene	16.83	112	89774	10.84 ug/L	98
39) m&p-Xylenes	17.30	106	124241	21.63 ug/L	98
40) o-Xylene	17.85	106	60481	10.87 ug/L	97
41) Styrene	17.75	104	100068	10.47 ug/L	99
42) Isopropylbenzene	18.33	105	151342	10.37 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	41549	11.56 ug/L	99
45) Naphthalene	23.72	128	77918	10.11 ug/L #	97

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

Quantitation Report

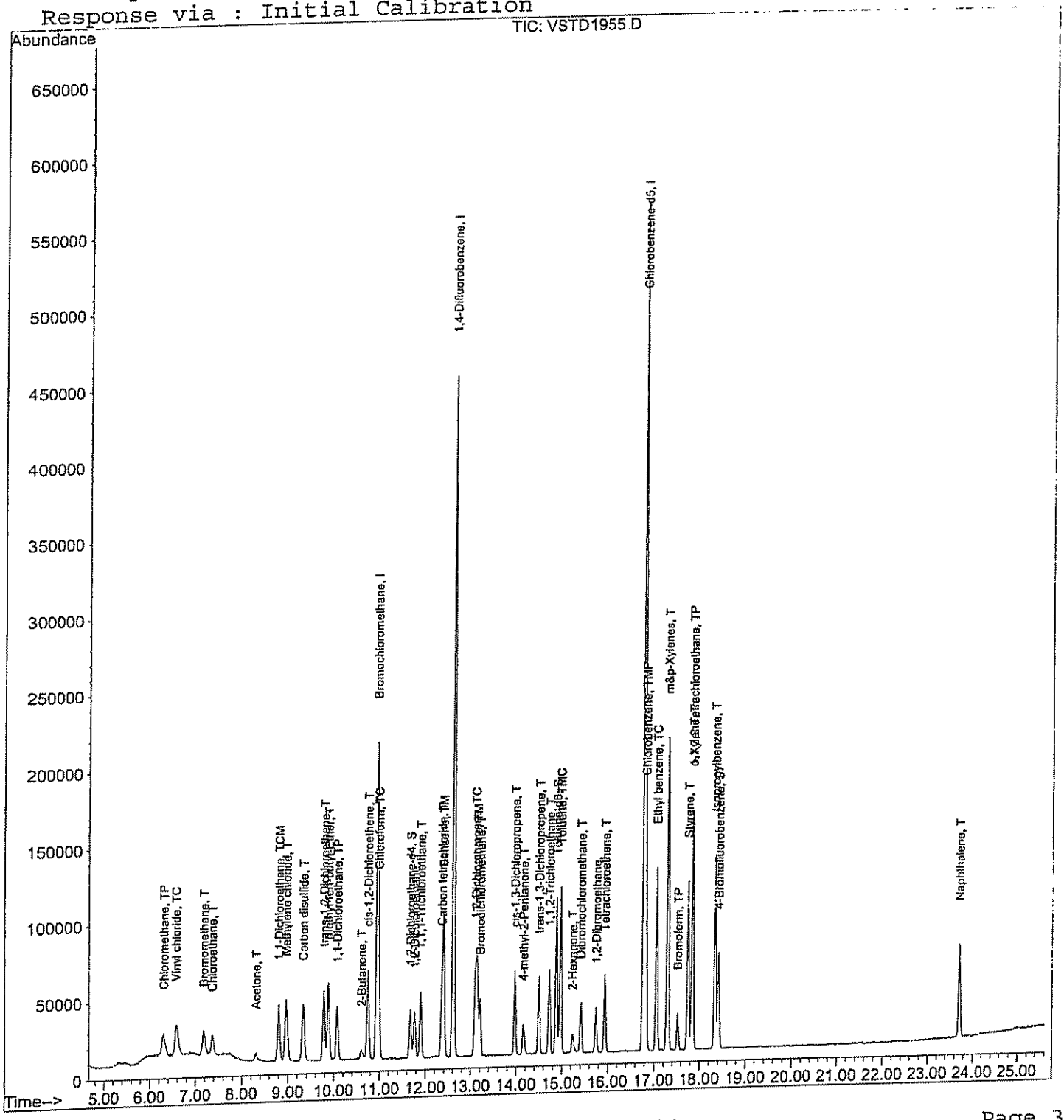
Data File : C:\HPCHEM\1\DATA\VSTD1955.D
Acq On : 14 Dec 2004 13:14
Sample : 10UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:56 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSTD1954.D
Acq On : 14 Dec 2004 12:42
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:33 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	102363	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	665548	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.77	117	548070	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	64526	19.70	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 39.40%#			
32) Toluene-d8	14.87	98	225999	20.97	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 41.94%#			
43) 4-Bromofluorobenzene	18.40	95	86954	21.32	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 42.64%#			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	87465	18.86	ug/L	100
3) Vinyl chloride	6.58	62	86823	19.36	ug/L	99
4) Bromomethane	7.18	94	51514	19.81	ug/L	98
5) Chloroethane	7.36	64	55043	19.17	ug/L	100
6) 1,1-Dichloroethene	8.80	96	67335	19.29	ug/L	99
7) Carbon disulfide	9.32	76	238237	19.90	ug/L	100
8) Methylene chloride	8.95	84	80275	20.60	ug/L	96
9) Acetone	8.29	43	19418	21.36	ug/L	98
10) trans-1,2-Dichloroethene	9.77	96	78561	19.69	ug/L	98
11) methyl-tert-butyl-Ether	9.87	73	183979	19.78	ug/L	99
12) 1,1-Dichloroethane	10.06	63	122357	20.27	ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	91925	21.03	ug/L	99
14) Chloroform	10.98	83	116154	20.07	ug/L	99
15) 2-Butanone	10.58	43	31302	22.85	ug/L	98
17) 1,2-Dichloroethane	11.76	62	81490	20.56	ug/L	99
19) Carbon tetrachloride	12.35	117	76566	19.36	ug/L	99
20) 1,1,1-Trichloroethane	11.89	97	96986	19.96	ug/L	99
21) Benzene	12.39	78	291363	21.48	ug/L	100
22) Trichloroethene	13.14	130	63148	21.36	ug/L	99
23) 1,2-Dichloropropane	13.09	63	70431	20.46	ug/L	99
24) Bromodichloromethane	13.20	83	88879	20.88	ug/L	98
25) cis-1,3-Dichloropropene	13.97	75	116403	19.42	ug/L	100
26) trans-1,3-Dichloropropene	14.49	75	100588	19.33	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1954.D
Acq On : 14 Dec 2004 12:42
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:33 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.73	97	63942	20.70	ug/L		99
28) Dibromochloromethane	15.41	129	63515	20.12	ug/L		98
29) 1,2-Dibromoethane	15.74	107	74321	20.08	ug/L		99
30) Bromoform	17.52	173	36407	19.43	ug/L		100
33) Toluene	14.97	92	164971	21.63	ug/L		100
34) 4-methyl-2-Pentanone	14.14	43	52845	22.16	ug/L		99
35) Tetrachloroethene	15.94	164	39876	19.82	ug/L		96
36) 2-Hexanone	15.23	43	35604	21.57	ug/L		100
37) Ethyl benzene	17.05	91	294078	21.04	ug/L		100
38) Chlorobenzene	16.82	112	178491	20.75	ug/L		100
39) m&p-Xylenes	17.29	106	252210	42.55	ug/L		100
40) o-Xylene	17.84	106	122583	21.39	ug/L		100
41) Styrene	17.75	104	205661	20.71	ug/L		100
42) Isopropylbenzene	18.34	105	311031	20.45	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	86184	24.03	ug/L		100
45) Naphthalene	23.72	128	167880	21.05	ug/L	#	100

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

Quantitation Report

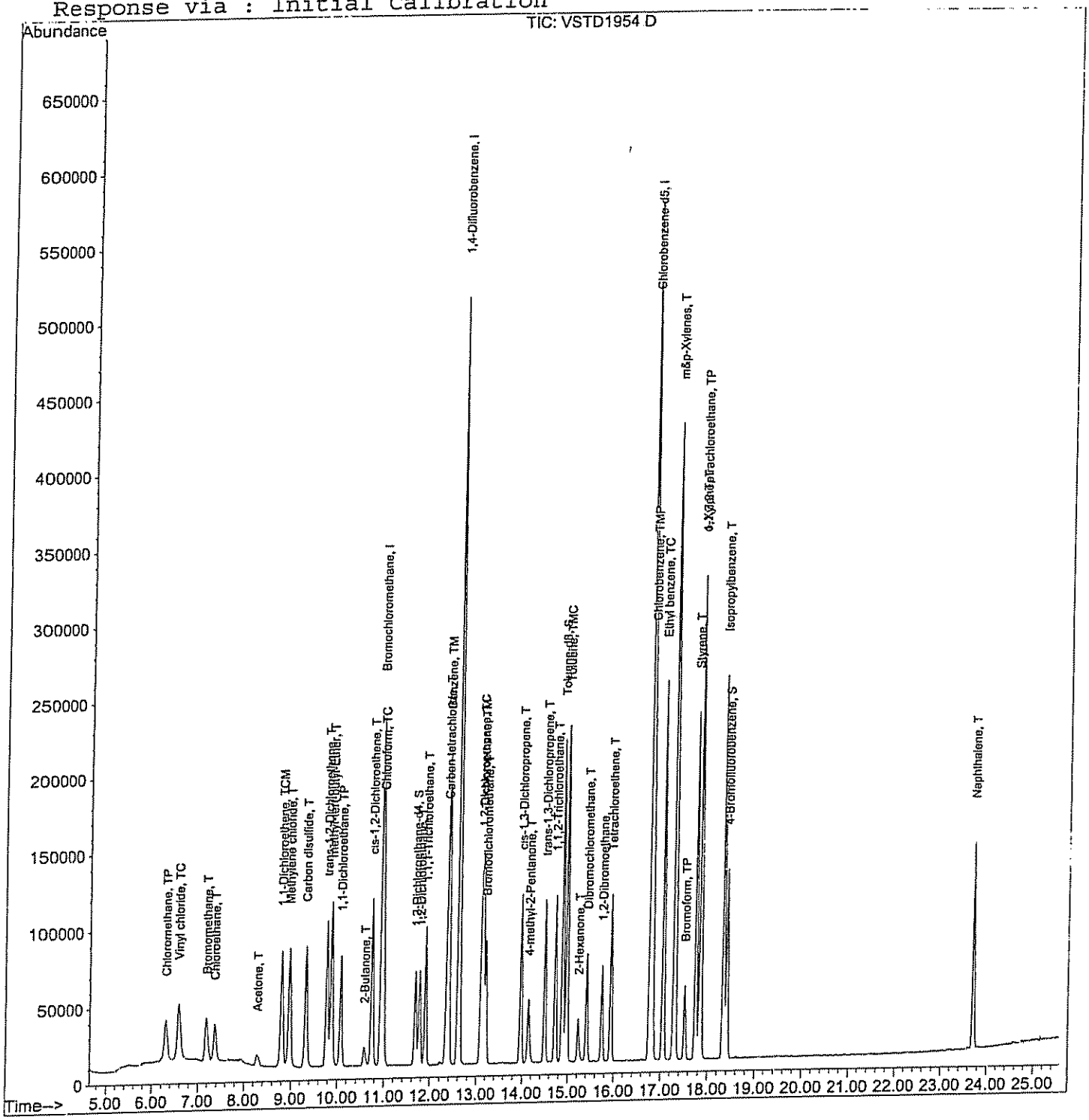
Data File : C:\HPCHEM\1\DATA\VSTD1954.D
Acq On : 14 Dec 2004 12:42
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:33 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

MWB-4

Data File : C:\HPCHEM\1\DATA\VSTD1953.D
Acq On : 14 Dec 2004 12:10
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:25 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:11 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	100234	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	670432	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.78	117	571081	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	159204	49.64	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.28%			
32) Toluene-d8	14.87	98	579453	51.60	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.20%			
43) 4-Bromofluorobenzene	18.40	95	221272	52.06	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.12%			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	225481	49.65	ug/L	100
3) Vinyl chloride	6.57	62	225976	51.47	ug/L	100
4) Bromomethane	7.18	94	129004	50.67	ug/L	100
5) Chloroethane	7.37	64	141065	50.17	ug/L	100
6) 1,1-Dichloroethene	8.80	96	171168	50.09	ug/L	100
7) Carbon disulfide	9.32	76	592695	50.55	ug/L	100
8) Methylene chloride	8.96	84	193528	50.71	ug/L	100
9) Acetone	8.27	43	44087	49.52	ug/L	100
10) trans-1,2-Dichloroethene	9.77	96	197651	50.58	ug/L	100
11) methyl-tert-butyl-Ether	9.87	73	445153	48.87	ug/L	100
12) 1,1-Dichloroethane	10.06	63	296836	50.22	ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	218396	51.03	ug/L	100
14) Chloroform	10.98	83	287546	50.74	ug/L	100
15) 2-Butanone	10.56	43	66991	49.93	ug/L	100
17) 1,2-Dichloroethane	11.77	62	196657	50.67	ug/L	100
19) Carbon tetrachloride	12.35	117	198956	49.93	ug/L	100
20) 1,1,1-Trichloroethane	11.89	97	250510	51.17	ug/L	100
21) Benzene	12.39	78	707412	51.77	ug/L	100
22) Trichloroethene	13.14	130	154328	51.82	ug/L	100
23) 1,2-Dichloropropane	13.09	63	177450	51.16	ug/L	100
24) Bromodichloromethane	13.20	83	220791	51.48	ug/L	100
25) cis-1,3-Dichloropropene	13.97	75	300494	49.77	ug/L	100
26) trans-1,3-Dichloropropene	14.49	75	263121	50.19	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1953.D
Acq On : 14 Dec 2004 12:10
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:25 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:11 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.72	97	157306	50.56 ug/L	100
28) Dibromochloromethane	15.41	129	159522	50.17 ug/L	100
29) 1,2-Dibromoethane	15.74	107	186764	50.08 ug/L	100
30) Bromoform	17.52	173	94138	49.87 ug/L	100
33) Toluene	14.97	92	414957	52.21 ug/L	100
34) 4-methyl-2-Pentanone	14.13	43	125236	50.39 ug/L	100
35) Tetrachloroethene	15.94	164	105007	50.09 ug/L	100
36) 2-Hexanone	15.22	43	84589	49.19 ug/L	100
37) Ethyl benzene	17.05	91	745211	51.16 ug/L	100
38) Chlorobenzene	16.82	112	452833	50.53 ug/L	100
39) m&p-Xylenes	17.29	106	635133	102.84 ug/L	100
40) o-Xylene	17.84	106	311620	52.18 ug/L	100
41) Styrene	17.75	104	540259	52.20 ug/L	100
42) Isopropylbenzene	18.33	105	827434	52.21 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	198513	53.13 ug/L	100
45) Naphthalene	23.72	128	413569	49.76 ug/L #	100

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

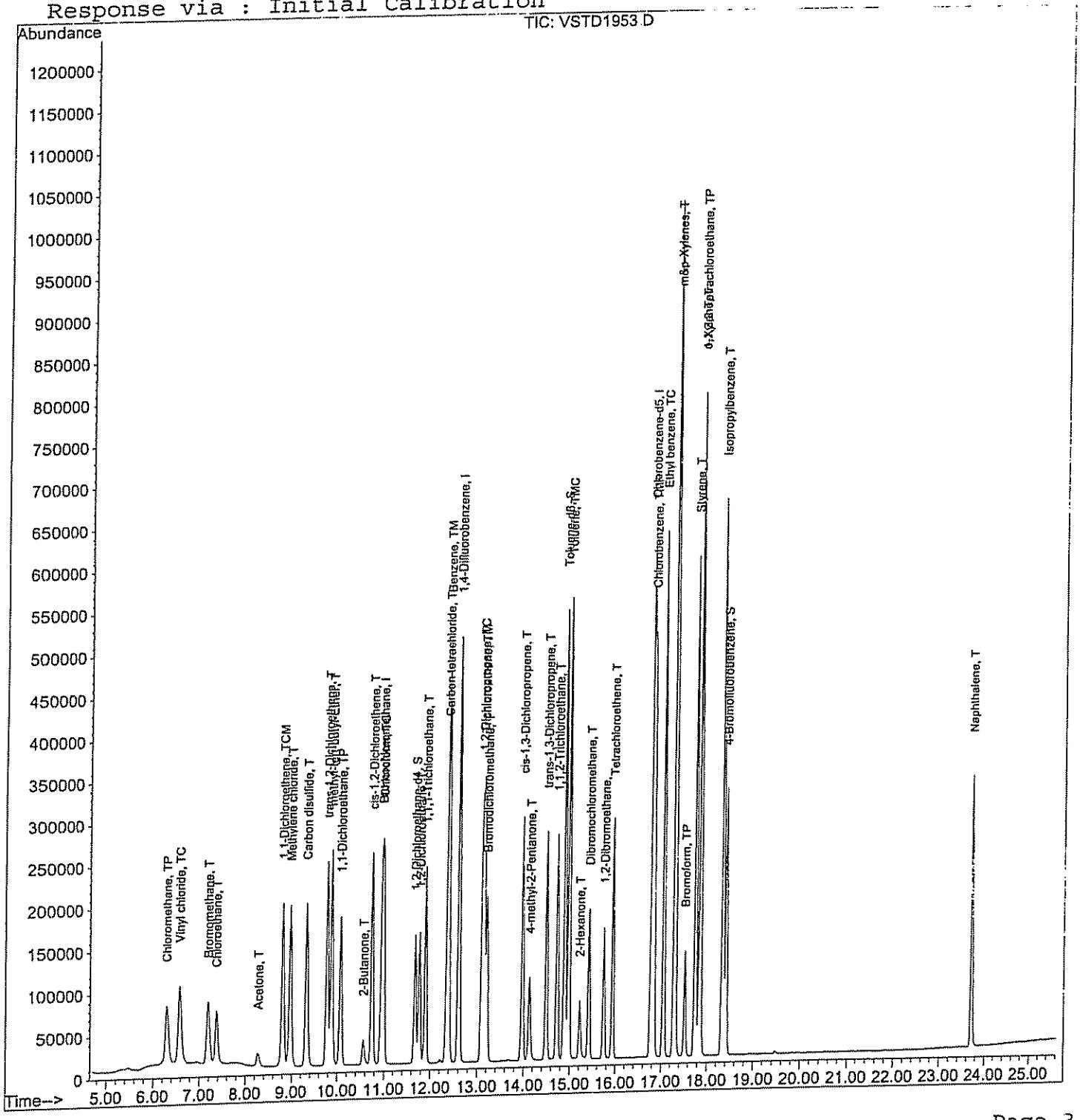
Data File : C:\HPCHEM\1\DATA\VSTD1953.D
Acq On : 14 Dec 2004 12:10
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:25 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSTD1952.D
Acq On : 14 Dec 2004 11:37
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:23:59 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.93	128	100304	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.61	114	671931	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.78	117	579344	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	322141	100.55	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 201.10%#			
32) Toluene-d8	14.88	98	1166673	103.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 207.32%#			
43) 4-Bromofluorobenzene	18.41	95	425114	97.91	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 195.82%#			
Target Compounds						Qvalue
2) Chloromethane	6.29	50	465240	103.62	ug/L	100
3) Vinyl chloride	6.57	62	446678	102.53	ug/L	100
4) Bromomethane	7.17	94	259854	103.01	ug/L	96
5) Chloroethane	7.36	64	283837	101.31	ug/L	100
6) 1,1-Dichloroethene	8.80	96	345547	101.58	ug/L	99
7) Carbon disulfide	9.32	76	1188538	101.96	ug/L	100
8) Methylene chloride	8.96	84	389477	102.99	ug/L	100
9) Acetone	8.26	43	93878	108.27	ug/L	100
10) trans-1,2-Dichloroethene	9.77	96	394686	101.41	ug/L	98
11) methyl-tert-butyl-Ether	9.86	73	941708	105.07	ug/L	100
12) 1,1-Dichloroethane	10.07	63	598880	101.90	ug/L	100
13) cis-1,2-Dichloroethene	10.74	96	433749	101.94	ug/L	99
14) Chloroform	10.98	83	567901	100.22	ug/L	99
15) 2-Butanone	10.54	43	138071	104.32	ug/L	98
17) 1,2-Dichloroethane	11.76	62	394025	102.18	ug/L	99
19) Carbon tetrachloride	12.34	117	406137	102.58	ug/L	100
20) 1,1,1-Trichloroethane	11.90	97	497099	101.99	ug/L	100
21) Benzene	12.38	78	1392179	102.51	ug/L	100
22) Trichloroethene	13.14	130	307436	104.56	ug/L	100
23) 1,2-Dichloropropane	13.10	63	356493	103.88	ug/L	98
24) Bromodichloromethane	13.21	83	439524	103.42	ug/L	99
25) cis-1,3-Dichloropropene	13.96	75	625193	105.05	ug/L	99
26) trans-1,3-Dichloropropene	14.49	75	543862	105.37	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1952.D
Acq On : 14 Dec 2004 11:37
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:23:59 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.72	97	323926	105.95 ug/L	99
28) Dibromochloromethane	15.41	129	326329	103.64 ug/L	100
29) 1,2-Dibromoethane	15.74	107	385986	104.99 ug/L	100
30) Bromoform	17.52	173	187779	98.89 ug/L	99
33) Toluene	14.97	92	822559	103.06 ug/L	100
34) 4-methyl-2-Pentanone	14.09	43	256678	102.73 ug/L	99
35) Tetrachloroethene	15.93	164	218654	104.28 ug/L	97
36) 2-Hexanone	15.19	43	181640	106.31 ug/L	99
37) Ethyl benzene	17.05	91	1503132	102.60 ug/L	100
38) Chlorobenzene	16.83	112	927740	103.11 ug/L	99
39) m&p-Xylenes	17.29	106	1259971	201.64 ug/L	99
40) o-Xylene	17.85	106	605737	99.98 ug/L	99
41) Styrene	17.75	104	1045003	99.30 ug/L	100
42) Isopropylbenzene	18.33	105	1602668	99.54 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.84	83	384241	102.07 ug/L	100
45) Naphthalene	23.71	128	896317	109.77 ug/L #	100

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

Quantitation Report

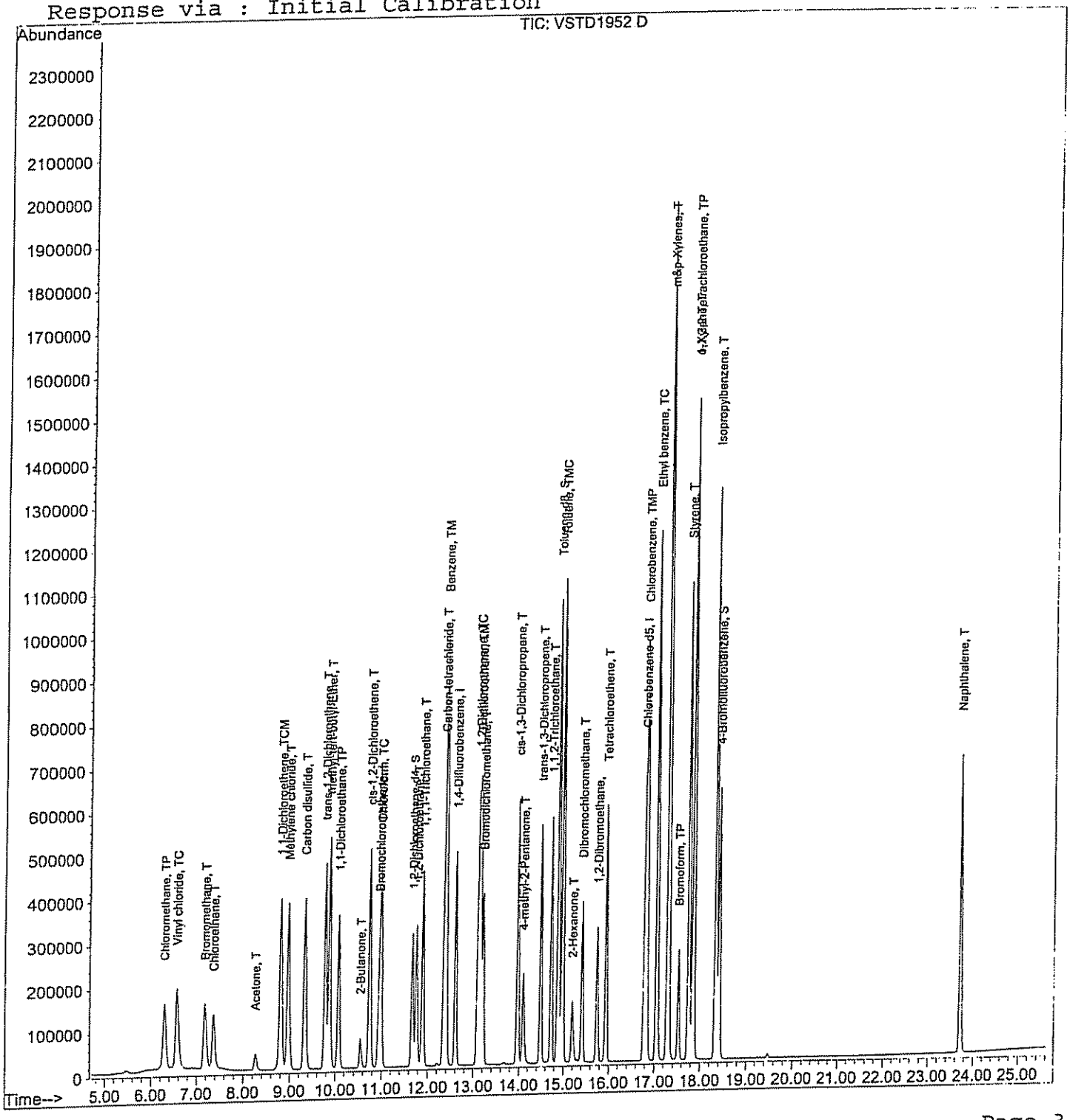
Data File : C:\HPCHEM\1\DATA\VSTD1952.D
Acq On : 14 Dec 2004 11:37
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\VSTD1951.D
Acq On : 14 Dec 2004 10:54
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:23:59 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	98236	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	681080	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.78	117	591675	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	630917	202.18	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 404.36%#			
32) Toluene-d8	14.87	98	2196150	182.91	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 365.82%#			
43) 4-Bromofluorobenzene	18.40	95	856705	186.85	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 373.70%#			
Target Compounds						Qvalue
2) Chloromethane	6.29	50	875044	197.99	ug/L	100
3) Vinyl chloride	6.55	62	820873	185.32	ug/L	99
4) Bromomethane	7.17	94	482541	190.83	ug/L	98
5) Chloroethane	7.36	64	544517	196.93	ug/L	99
6) 1,1-Dichloroethene	8.80	96	661625	197.20	ug/L	99
7) Carbon disulfide	9.32	76	2243049	193.07	ug/L	100
8) Methylene chloride	8.95	84	722808	190.54	ug/L	99
9) Acetone	8.25	43	166832	193.06	ug/L	100
10) trans-1,2-Dichloroethene	9.77	96	749797	193.53	ug/L	98
11) methyl-tert-butyl-Ether	9.87	73	1766186	202.41	ug/L	100
12) 1,1-Dichloroethane	10.06	63	1138750	195.72	ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	810715	189.38	ug/L	99
14) Chloroform	10.98	83	1092565	193.84	ug/L	100
15) 2-Butanone	10.54	43	255882	194.87	ug/L	99
17) 1,2-Dichloroethane	11.76	62	740217	192.15	ug/L	99
19) Carbon tetrachloride	12.35	117	796782	197.11	ug/L	100
20) 1,1,1-Trichloroethane	11.89	97	958176	188.26	ug/L	100
21) Benzene	12.39	78	2631860	183.11	ug/L	100
22) Trichloroethene	13.14	130	565049	180.21	ug/L	99
23) 1,2-Dichloropropane	13.09	63	670375	185.94	ug/L	99
24) Bromodichloromethane	13.20	83	825921	184.11	ug/L	99
25) cis-1,3-Dichloropropene	13.96	75	1191956	195.23	ug/L	99
26) trans-1,3-Dichloropropene	14.49	75	1023496	191.45	ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1951.D
Acq On : 14 Dec 2004 10:54
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:23:59 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.73	97	600400	187.85 ug/L	100
28) Dibromochloromethane	15.41	129	628429	193.89 ug/L	99
29) 1,2-Dibromoethane	15.74	107	731644	192.81 ug/L	100
30) Bromoform	17.53	173	387343	202.52 ug/L	99
33) Toluene	14.96	92	1540897	179.21 ug/L	99
34) 4-methyl-2-Pentanone	14.08	43	501704	193.33 ug/L	99
35) Tetrachloroethene	15.94	164	421404	193.67 ug/L	98
36) 2-Hexanone	15.17	43	347452	198.23 ug/L	99
37) Ethyl benzene	17.05	91	2896721	187.59 ug/L	100
38) Chlorobenzene	16.82	112	1799100	191.74 ug/L	98
39) m&p-Xylenes	17.29	106	2473018	375.82 ug/L	98
40) o-Xylene	17.84	106	1183656	183.31 ug/L	97
41) Styrene	17.75	104	2060284	184.04 ug/L	99
42) Isopropylbenzene	18.34	105	3148469	183.63 ug/L #	92
44) 1,1,2,2-Tetrachloroethane	17.84	83	715187	173.87 ug/L	100
45) Naphthalene	23.71	128	1621625	189.23 ug/L #	100

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

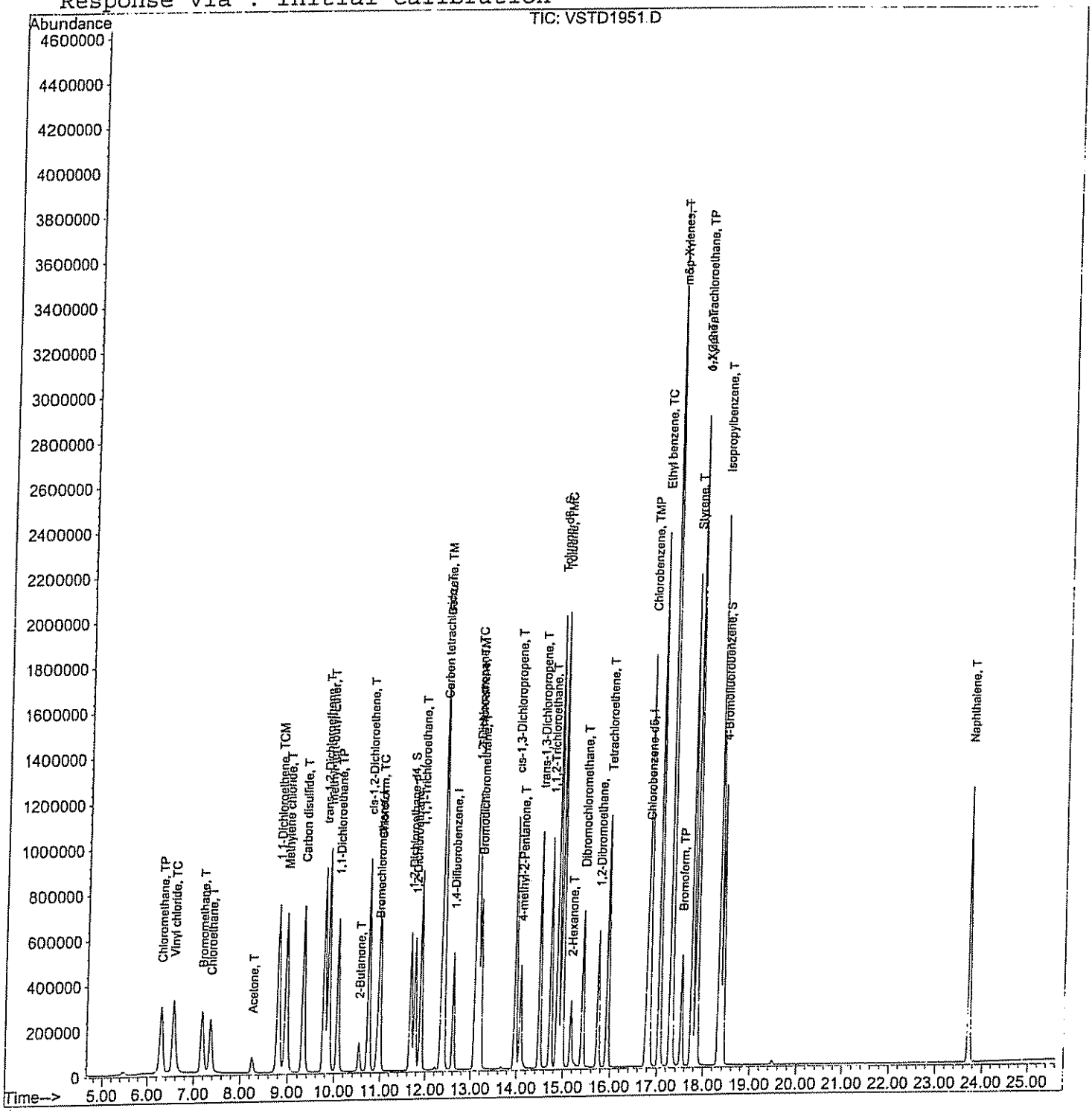
Data File : C:\HPCHEM\1\DATA\VSTD1951.D
Acq On : 14 Dec 2004 10:54
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 13:24 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

MWB-4

Data File : C:\HPCHEM\1\DATA\VBLK1443.D
Acq On : 14 Dec 2004 15:14
Sample : WATER METHOD BLK
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:45 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.94	128	90073	50.00	ug/L		0.00
18) 1,4-Difluorobenzene	12.60	114	596587	50.00	ug/L		0.00
31) Chlorobenzene-d5	16.77	117	492765	50.00	ug/L		0.00
System Monitoring Compounds							
16) 1,2-Dichloroethane-d4	11.67	65	137756	47.50	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.00%				
32) Toluene-d8	14.87	98	501004	51.06	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.12%				
43) 4-Bromofluorobenzene	18.40	95	195431	51.41	ug/L		0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.82%				
Target Compounds							Qvalue
2) Chloromethane	6.31	50	199	0.05	ug/L	#	85
4) Bromomethane	7.19	94	461	0.19	ug/L		89
6) 1,1-Dichloroethene	8.81	96	349	0.11	ug/L	#	51
7) Carbon disulfide	9.33	76	1366	0.13	ug/L		100
8) Methylene chloride	8.96	84	1138	0.32	ug/L	#	79
9) Acetone	8.27	43	1451	1.62	ug/L		98
13) cis-1,2-Dichloroethene	10.74	96	6011	1.43	ug/L		98
15) 2-Butanone	10.60	43	3793	2.88	ug/L		100
20) 1,1,1-Trichloroethane	11.89	97	372	0.08	ug/L	#	62
21) Benzene	12.39	78	643	0.05	ug/L		89
22) Trichloroethene	13.14	130	2286	0.83	ug/L		87
27) 1,1,2-Trichloroethane	14.88	97	14783	~~5.19 ug/L~~		#	53
33) Toluene	14.96	92	901	0.13	ug/L		90
37) Ethyl benzene	17.29	91	448	0.04	ug/L	#	84
38) Chlorobenzene	16.82	112	1014	0.13	ug/L	#	66
45) Naphthalene	23.73	128	785	0.11	ug/L	#	97

A 12/16/04

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

Quantitation Report

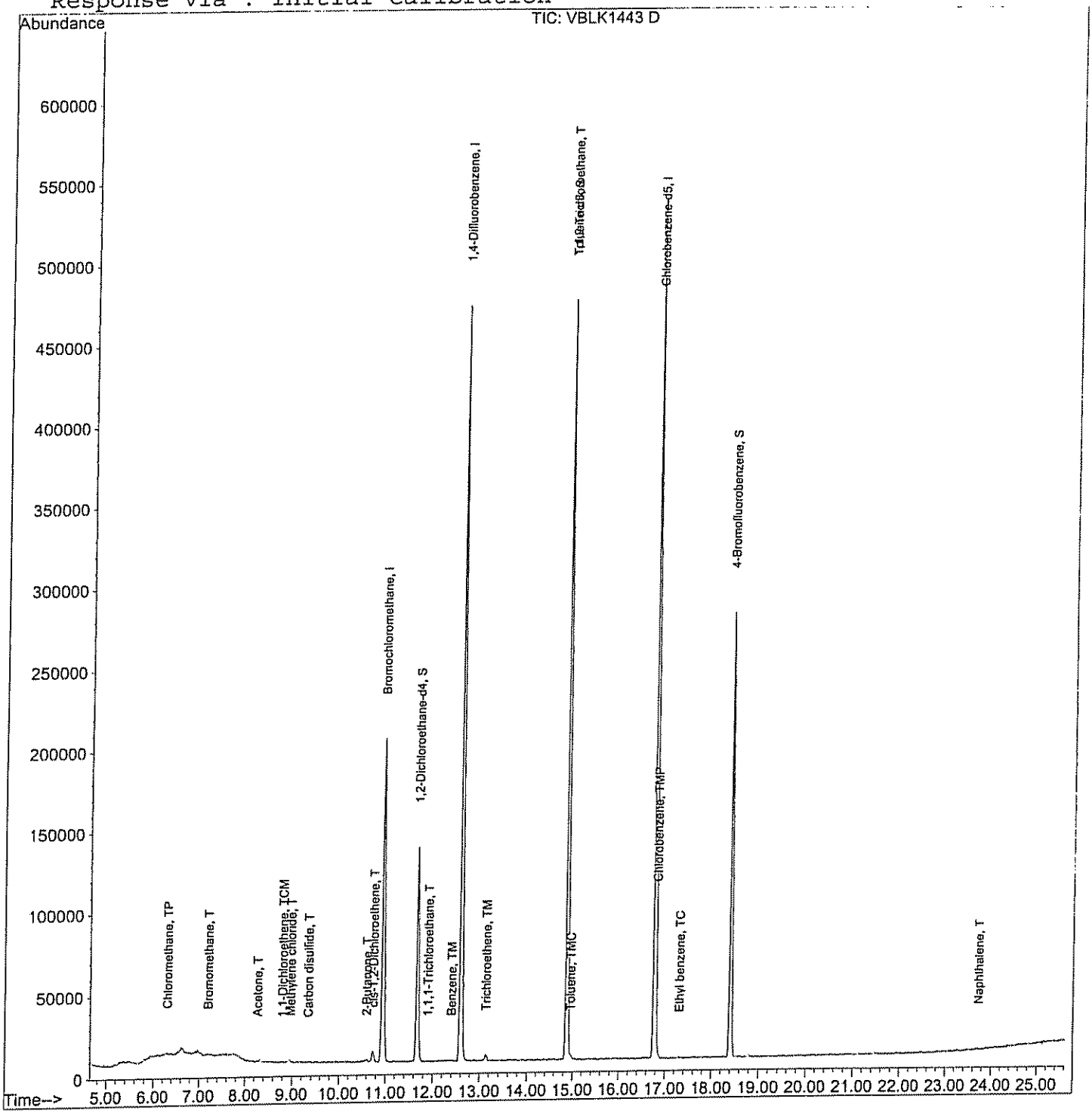
Data File : C:\HPCHEM\1\DATA\VBLK1443.D
Acq On : 14 Dec 2004 15:14
Sample : WATER METHOD BLK
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:45 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



LCS Blank Summary Report

Data File : C:\HPCHEM\1\DATA\LCSW1426.D
Acq On : 14 Dec 2004 14:41
Sample : 50UG/L TCL LCS
Misc : WATER
Matrix : WATER
Vial: 1
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Multiple Level Calibration

		Compound Name	Conc	Added	Recv(%)	QC Range	Q
6)	T	1,1-Dichloroethene	32.21	50.00	64.42	54 to 121%	[ ]
21)	T	Benzene	46.28	50.00	92.55	80 to 118%	[ ]
22)	T	Trichloroethene	41.52	50.00	83.04	67 to 118%	[ ]
33)	T	Toluene	46.36	50.00	92.72	73 to 124%	[ ]
38)	T	Chlorobenzene	46.20	50.00	92.40	80 to 117%	[ ]

* = out of control limits
Tue Dec 14 15:44:30 2004

Data File : C:\HPCHEM\1\DATA\LCSW1426.D
Acq On : 14 Dec 2004 14:41
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 1
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:32 2004
Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1
IS QA File : File name for IS QA unknown

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane	10.94	128	94094	50.00	ug/L	0.00 NA%
18) 1,4-Difluorobenzene	12.60	114	613258	50.00	ug/L	0.00 NA%
31) Chlorobenzene-d5	16.78	117	524670	50.00	ug/L	0.00 NA%
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	141324	46.64	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 93.28%			
32) Toluene-d8	14.87	98	520305	49.80	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.60%			
43) 4-Bromofluorobenzene	18.40	95	204398	50.50	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.00%			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	314	0.07	ug/L #	85
3) Vinyl chloride	6.55	62	424	0.10	ug/L #	71
4) Bromomethane	7.19	94	1137	0.45	ug/L	95
5) Chloroethane	7.34	64	96	0.04	ug/L	90
6) 1,1-Dichloroethene	8.80	96	102835	32.21	ug/L	97
7) Carbon disulfide	9.32	76	5470	0.49	ug/L	100
8) Methylene chloride	8.95	84	1354	0.36	ug/L #	77
9) Acetone	8.25	43	4233	4.53	ug/L	94
10) trans-1,2-Dichloroethene	9.77	96	771	0.21	ug/L #	71
12) 1,1-Dichloroethane	10.04	63	116	0.02	ug/L #	84
13) cis-1,2-Dichloroethene	10.73	96	13476	3.07	ug/L	99
15) 2-Butanone	10.56	43	4858	3.53	ug/L	97
20) 1,1,1-Trichloroethane	11.90	97	705	0.16	ug/L #	62
21) Benzene	12.38	78	595155	46.28	ug/L	100
22) Trichloroethene	13.14	130	118237	41.52	ug/L	97
24) Bromodichloromethane	13.18	83	97	0.02	ug/L #	68
26) trans-1,3-Dichloropropene	14.49	75	342	0.07	ug/L #	78
27) 1,1,2-Trichloroethane	14.88	97	15487	5.29	ug/L #	53

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

Data File : C:\HPCHEM\1\DATA\LCSW1426.D
Acq On : 14 Dec 2004 14:41
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 1
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:32 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
29) 1,2-Dibromoethane	15.74	107	195	0.06 ug/L	97
33) Toluene	14.97	92	348529	46.36 ug/L	100
35) Tetrachloroethene	15.94	164	196	0.10 ug/L #	37
37) Ethyl benzene	17.07	91	1187	0.09 ug/L	97
38) Chlorobenzene	16.82	112	390541	46.20 ug/L	99
39) m&p-Xylenes	17.30	106	974	0.17 ug/L #	69
40) o-Xylene	17.86	106	319	0.06 ug/L #	72
41) Styrene	17.76	104	823	0.09 ug/L	93
42) Isopropylbenzene	18.34	105	965	0.07 ug/L #	92
45) Naphthalene	23.71	128	3129	0.41 ug/L #	97

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

Quantitation Report

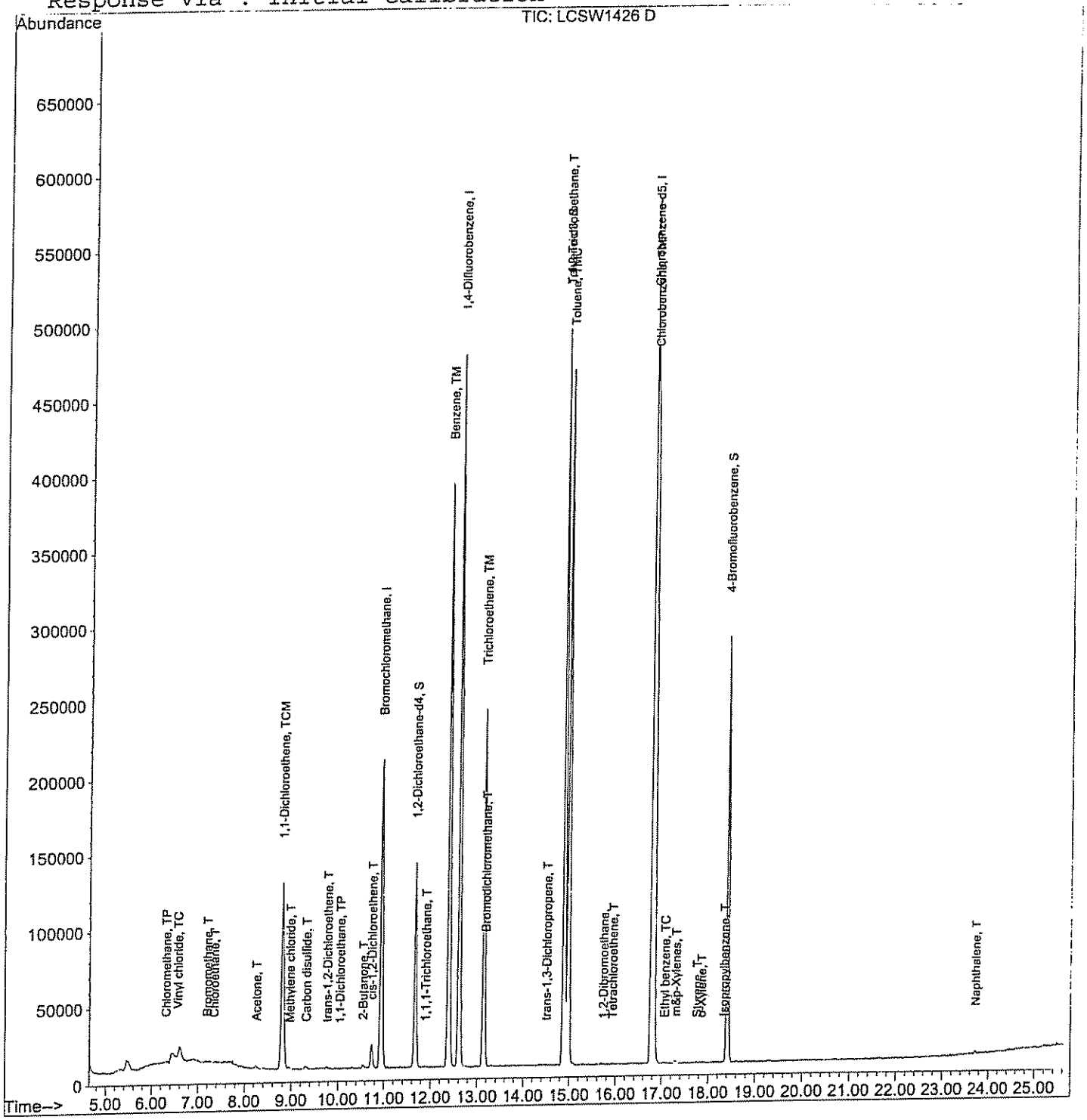
Data File : C:\HPCHEM\1\DATA\LCSW1426.D
Acq On : 14 Dec 2004 14:41
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 1
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 14 15:32 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSA13121.D
Acq On : 14 Dec 2004 17:55
Sample : P0412041-01A
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:25 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.94	128	77612	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	563173	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.77	117	499340	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.67	65	120095	48.05	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.10%			
32) Toluene-d8	14.87	98	491105	49.39	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.78%			
43) 4-Bromofluorobenzene	18.39	95	196607	51.04	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.08%			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	1741	0.50	ug/L	90
3) Vinyl chloride	6.56	62	1137492	334.96	ug/L	100
4) Bromomethane	7.01	94	417	0.20	ug/L	83
6) 1,1-Dichloroethene	8.80	96	3267755	1240.93	ug/L	98
7) Carbon disulfide	9.30	76	3585	0.39	ug/L	100
8) Methylene chloride	8.95	84	1219258	397.30	ug/L	98
9) Acetone	8.28	43	14819	19.21	ug/L	89
10) trans-1,2-Dichloroethene	9.76	96	1261988	417.22	ug/L	98
12) 1,1-Dichloroethane	10.06	63	3182992	681.97	ug/L	100
13) cis-1,2-Dichloroethene	10.73	96	28691564m	7936.34	ug/L	96
14) Chloroform	10.98	83	69131	15.59	ug/L	99
15) 2-Butanone	10.61	43	5908	5.21	ug/L	89
17) 1,2-Dichloroethane	11.76	62	303861	98.92	ug/L	99
20) 1,1,1-Trichloroethane	11.88	97	6783713	1637.73	ug/L	99
21) Benzene	12.38	78	393738	33.34	ug/L	100
22) Trichloroethene	13.10	130	2230303	852.84	ug/L	94
23) 1,2-Dichloropropane	13.10	63	13151	4.44	ug/L #	1
24) Bromodichloromethane	13.10	83	41753	11.35	ug/L #	1
27) 1,1,2-Trichloroethane	14.72	97	65716m	24.42	ug/L	99
33) Toluene	14.96	92	10142338	1417.57	ug/L	96
34) 4-methyl-2-Pentanone	14.14	43	31234	14.01	ug/L	99
35) Tetrachloroethene	15.93	164	70198	39.07	ug/L	95
36) 2-Hexanone	15.14	43	8520	5.56	ug/L	86

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

* See DF 100
HS 12/29/04

Data File : C:\HPCHEM\1\DATA\VSA13121.D
Acq On : 14 Dec 2004 17:55
Sample : P0412041-01A
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:25 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) Ethyl benzene	17.04	91	1470304	113.38 ug/L	99
38) Chlorobenzene	16.81	112	24099	3.00 ug/L	96
39) m&p-Xylenes	17.27	106	1242588	224.23 ug/L	98
40) o-Xylene	17.83	106	655798	121.66 ug/L	97
41) Styrene	17.75	104	8053m	0.89 ug/L	96
42) Isopropylbenzene	18.33	105	203616	14.70 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.83	83	3050	0.85 ug/L #	1
45) Naphthalene	23.71	128	184595	25.45 ug/L #	100

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

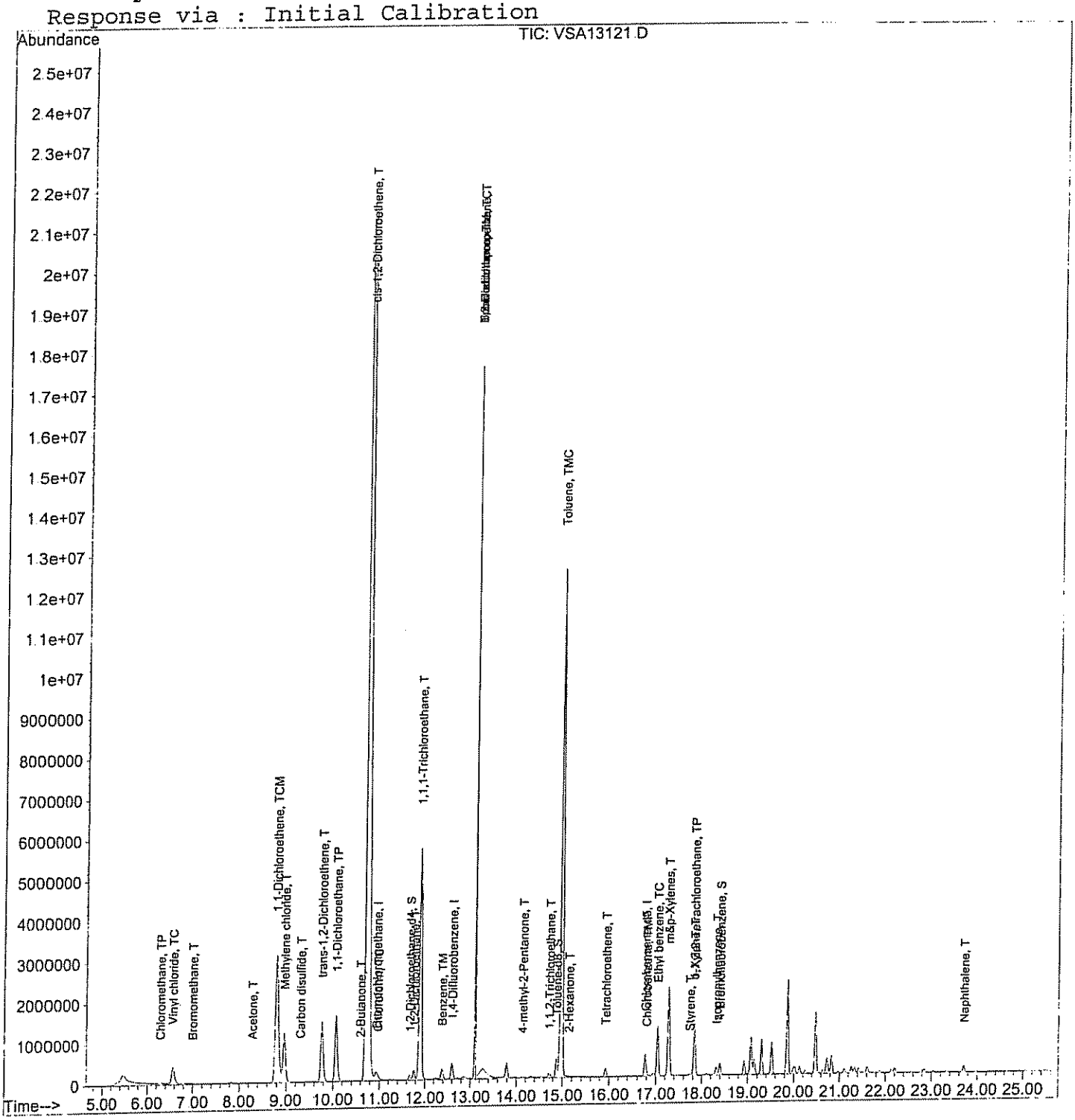
Data File : C:\HPCHEM\1\DATA\VSA13121.D
Acq On : 14 Dec 2004 17:55
Sample : P0412041-01A
Misc : WATER

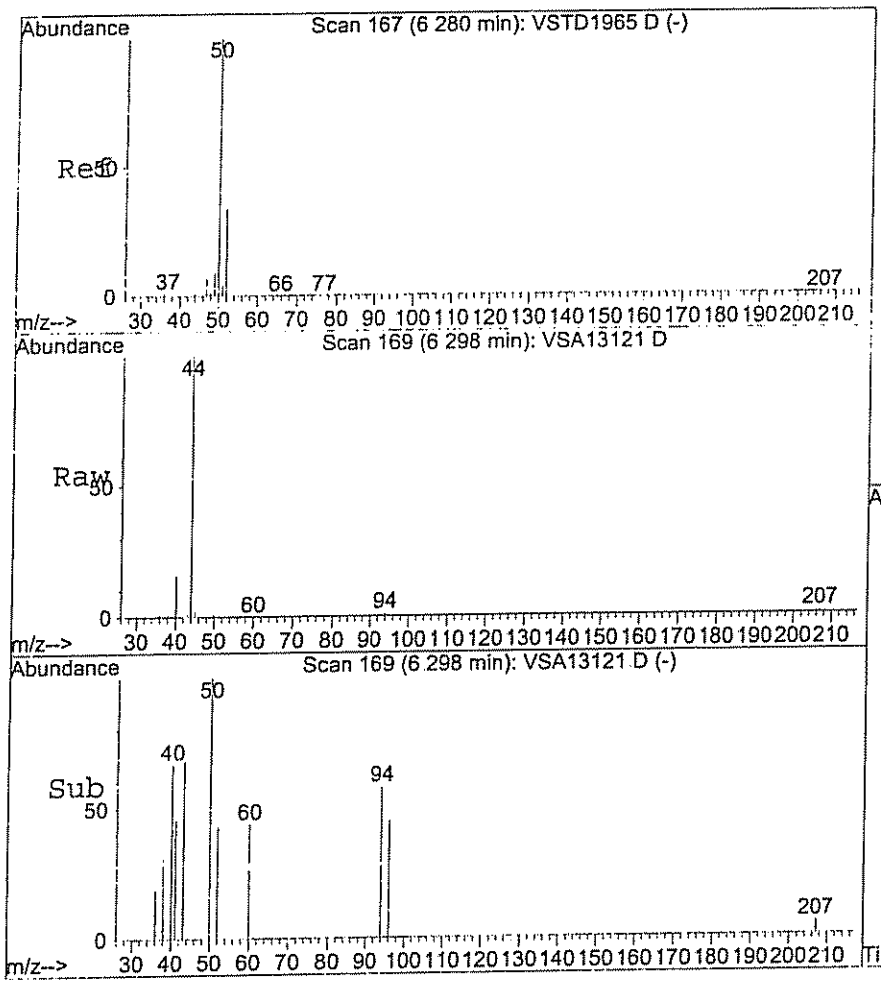
Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 9:25 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration

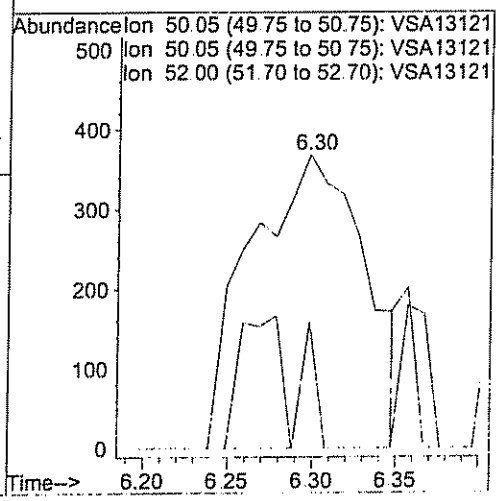


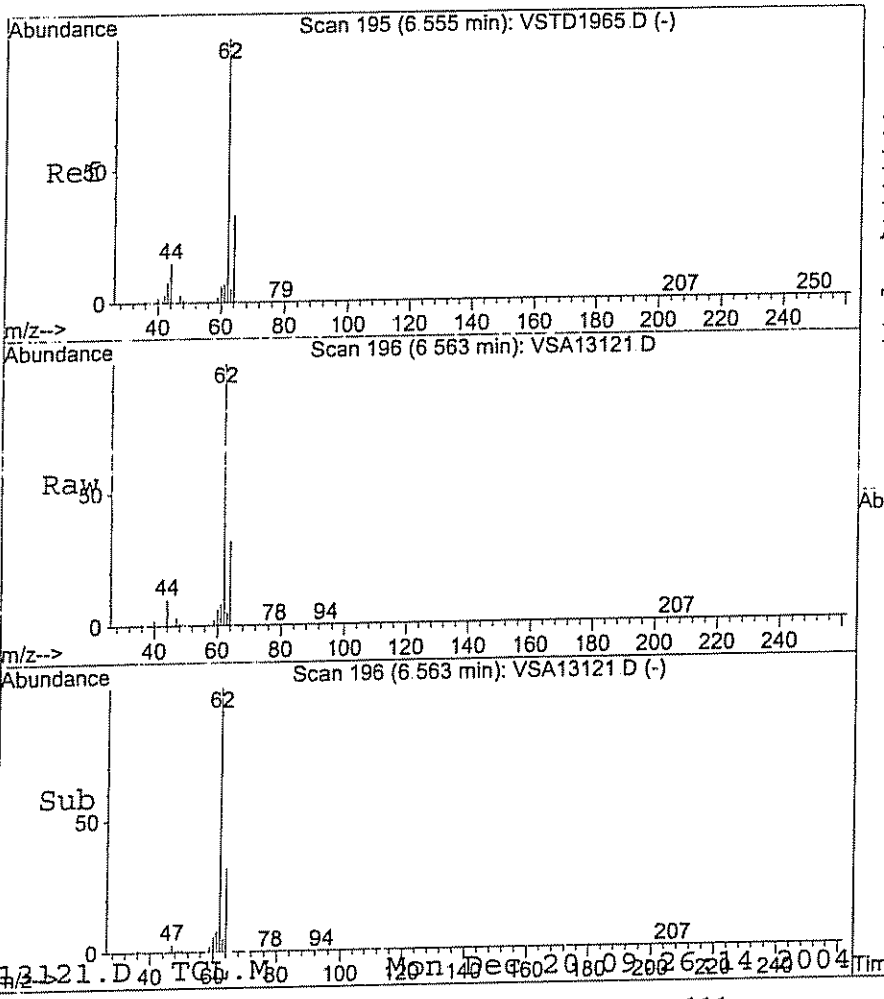


#2
Chloromethane
Concen: 0.50 ug/L
RT: 6.30 min Scan# 169
Delta R.T. 0.00 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 50 Resp: 1741

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	56.2	3.5	63.5

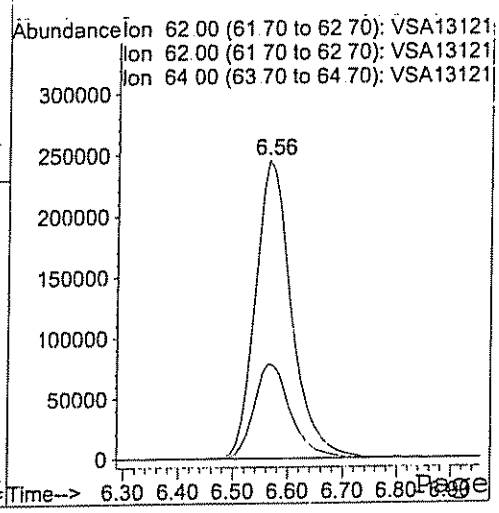


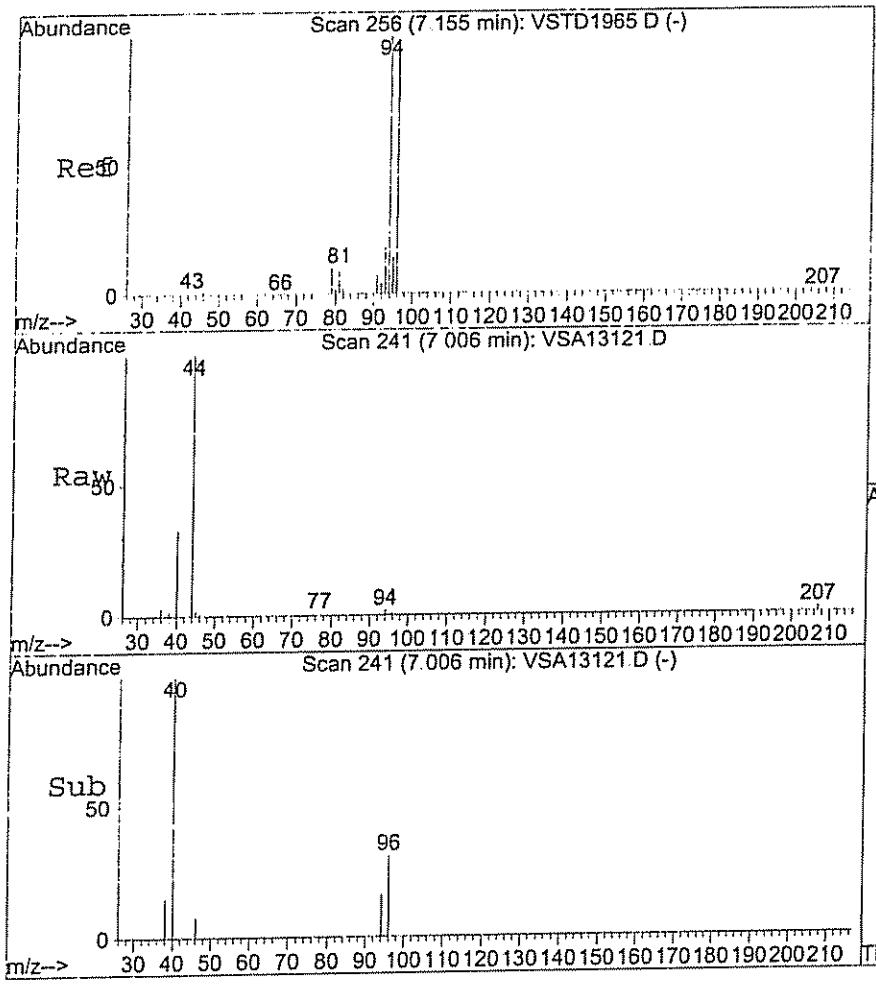


#3
Vinyl chloride
Concen: 334.96 ug/L
RT: 6.56 min Scan# 196
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 62 Resp: 1137492

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	31.9	2.0	62.0

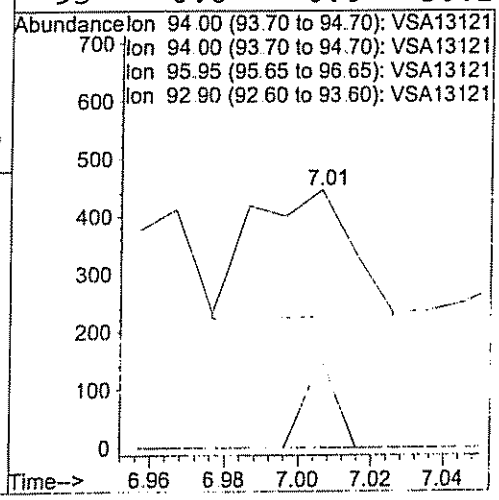


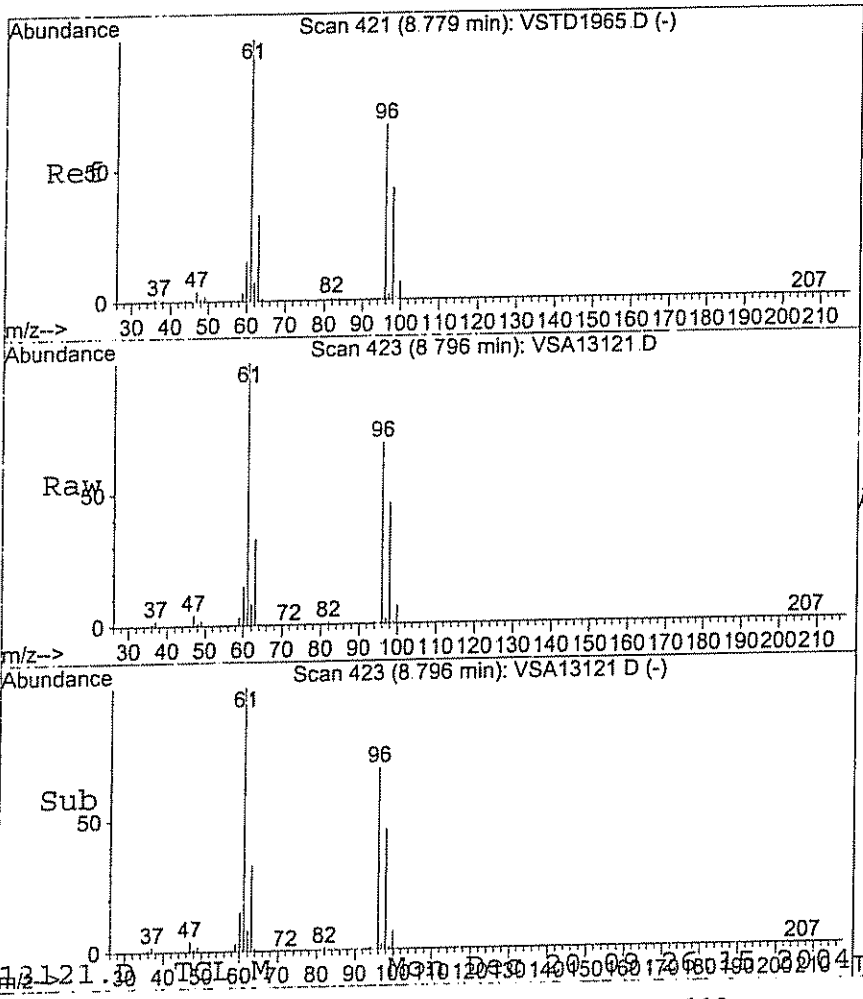


#4
Bromomethane
Concen: 0.20 ug/L
RT: 7.01 min Scan# 241
Delta R.T. -0.17 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 94 Resp: 417

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	71.8	70.5	130.5
93	0.0	0.0	50.2

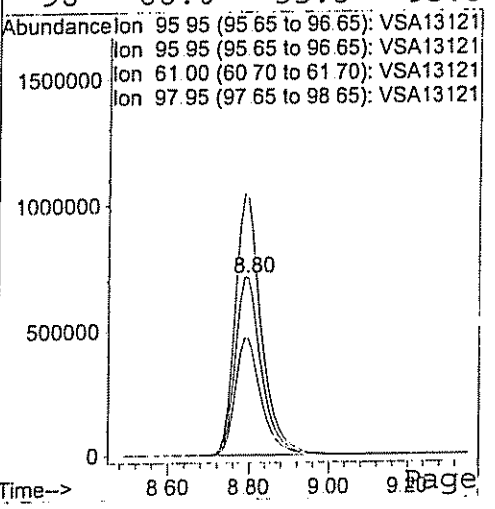


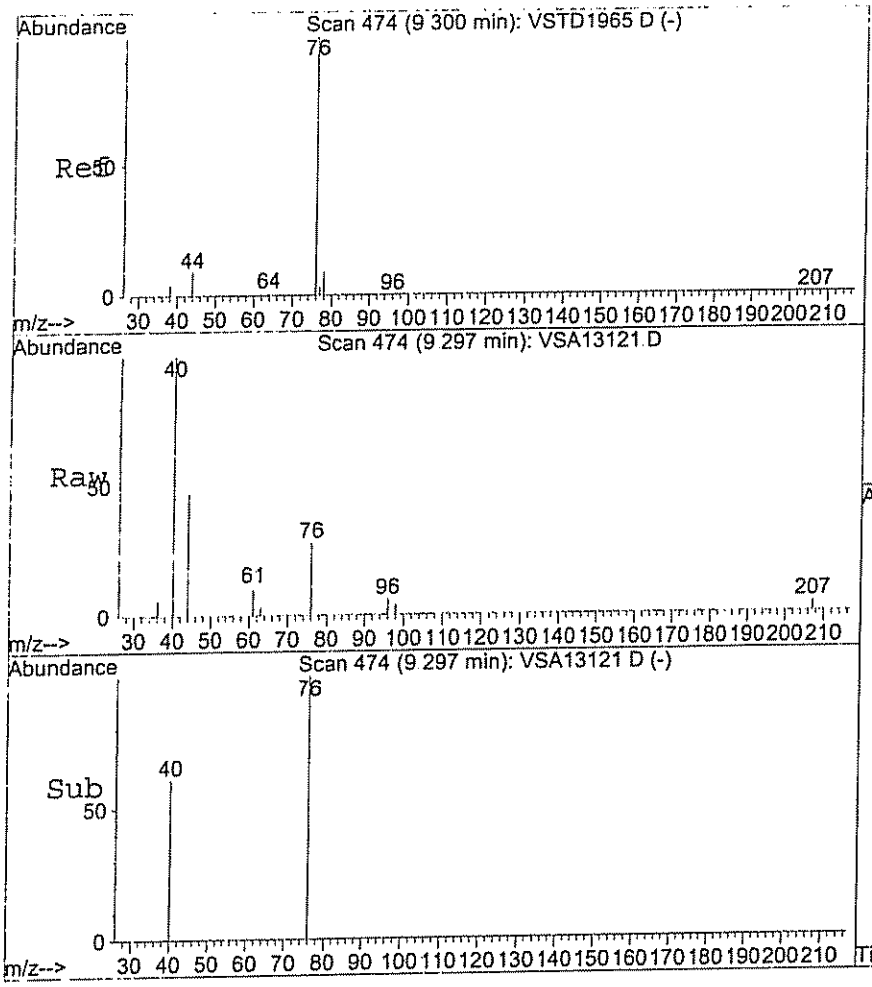


#6
1,1-Dichloroethene
Concen: 1240.93 ug/L
RT: 8.80 min Scan# 423
Delta R.T. -0.00 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 96 Resp: 3267755

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	144.5	108.4	168.4
98	66.0	35.8	95.8

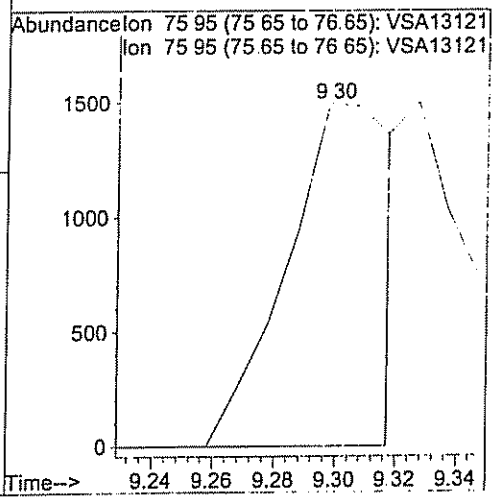


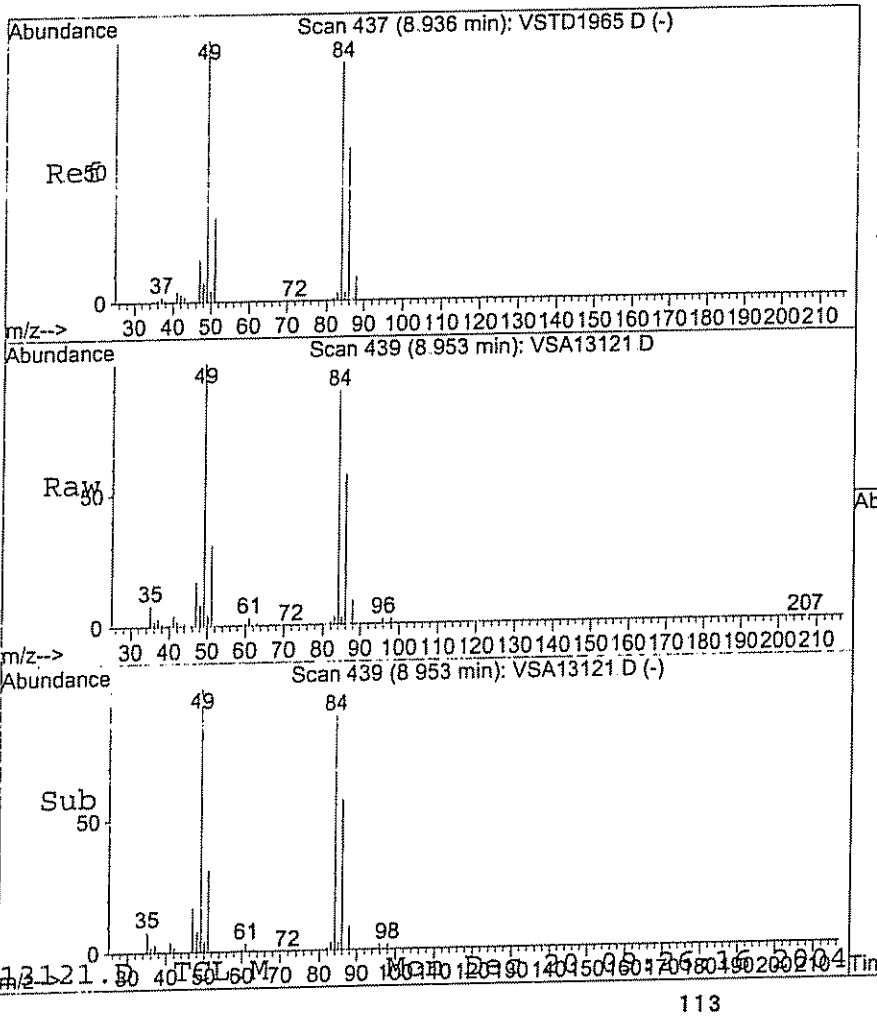


#7
Carbon disulfide
Concen: 0.39 ug/L
RT: 9.30 min Scan# 474
Delta R.T. -0.02 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 76 Resp: 3585

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

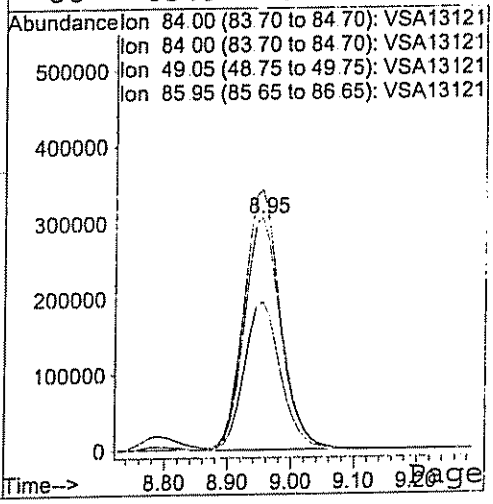


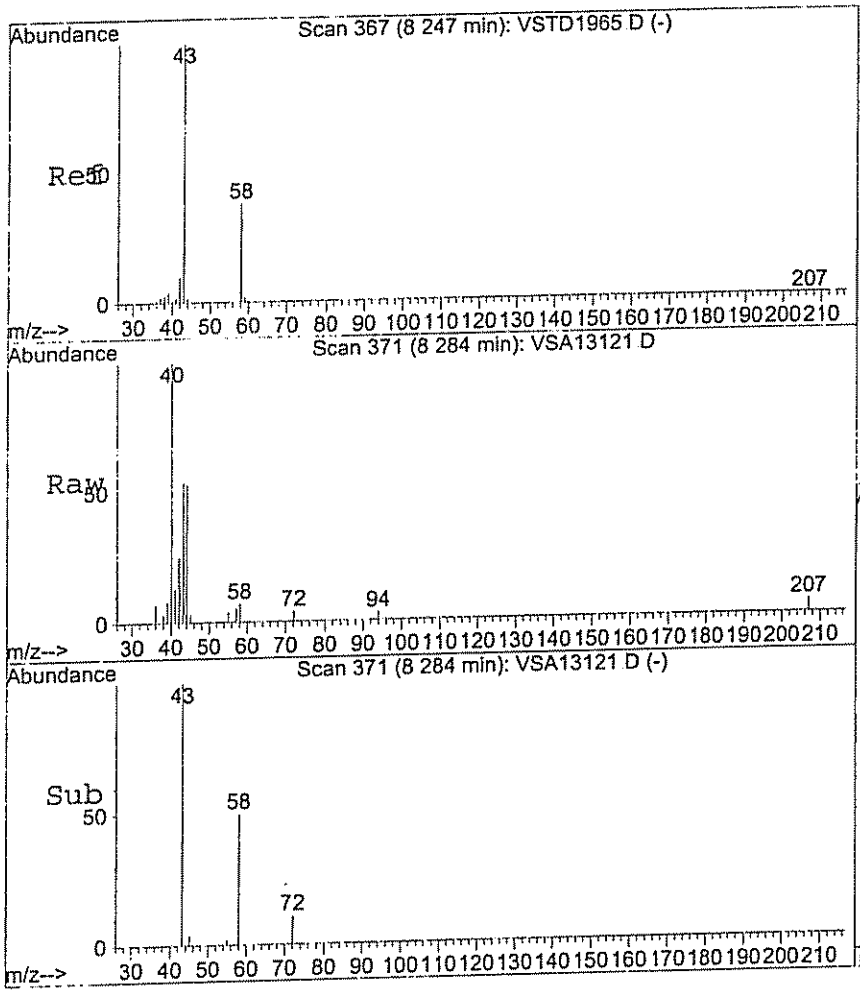


#8
Methylene chloride
Concen: 397.30 ug/L
RT: 8.95 min Scan# 439
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 84 Resp: 1219258

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	111.9	76.9	136.9
86	63.9	34.8	94.8

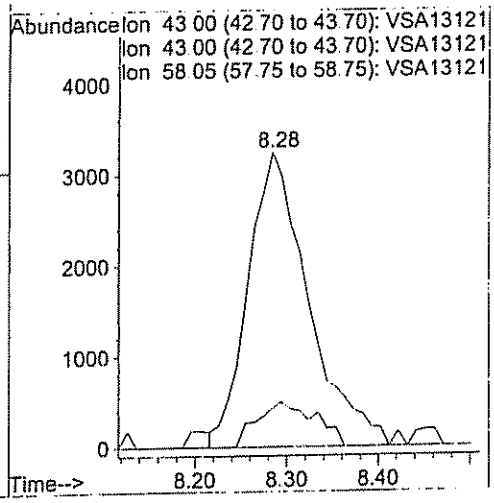


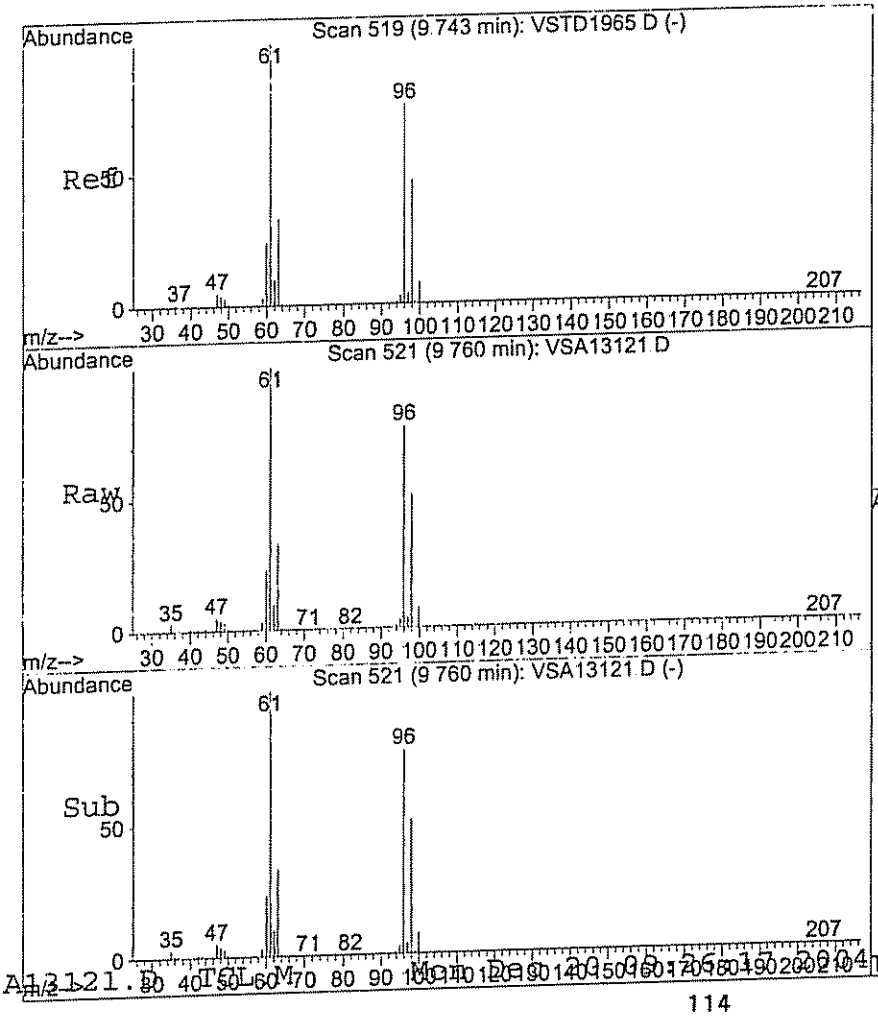


#9
Acetone
Concen: 19.21 ug/L
RT: 8.28 min Scan# 371
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 43 Resp: 14819

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	13.4	6.8	66.8

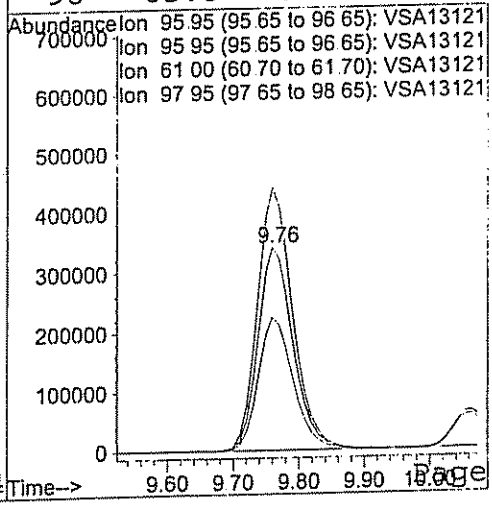


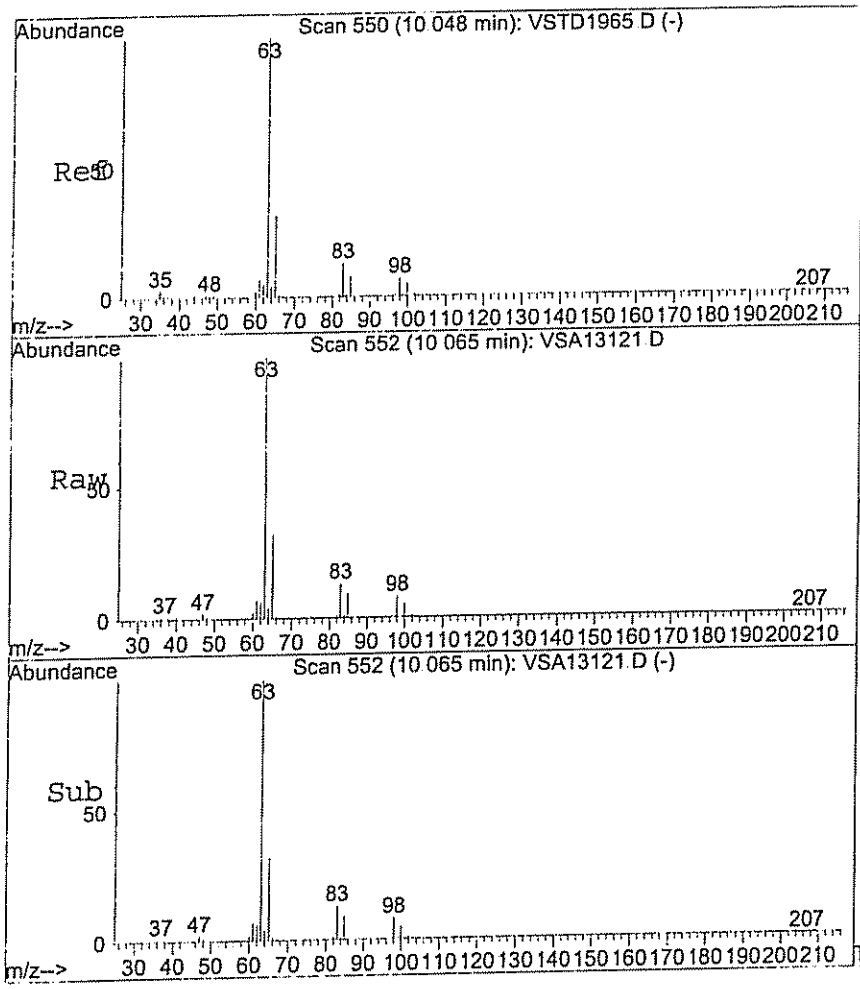


#10
trans-1,2-Dichloroethene
Concen: 417.22 ug/L
RT: 9.76 min Scan# 521
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 96 Resp: 1261988

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	129.5	93.5	153.5
98	65.8	36.4	96.4

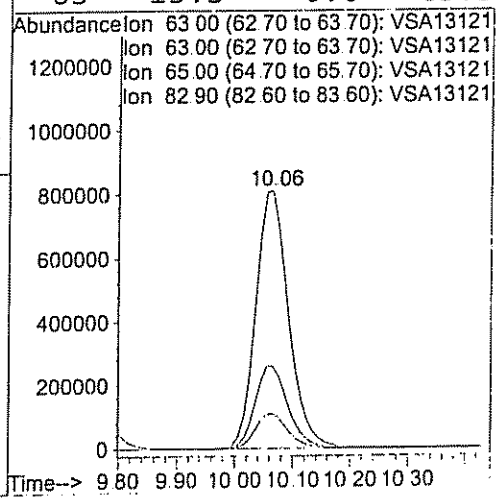


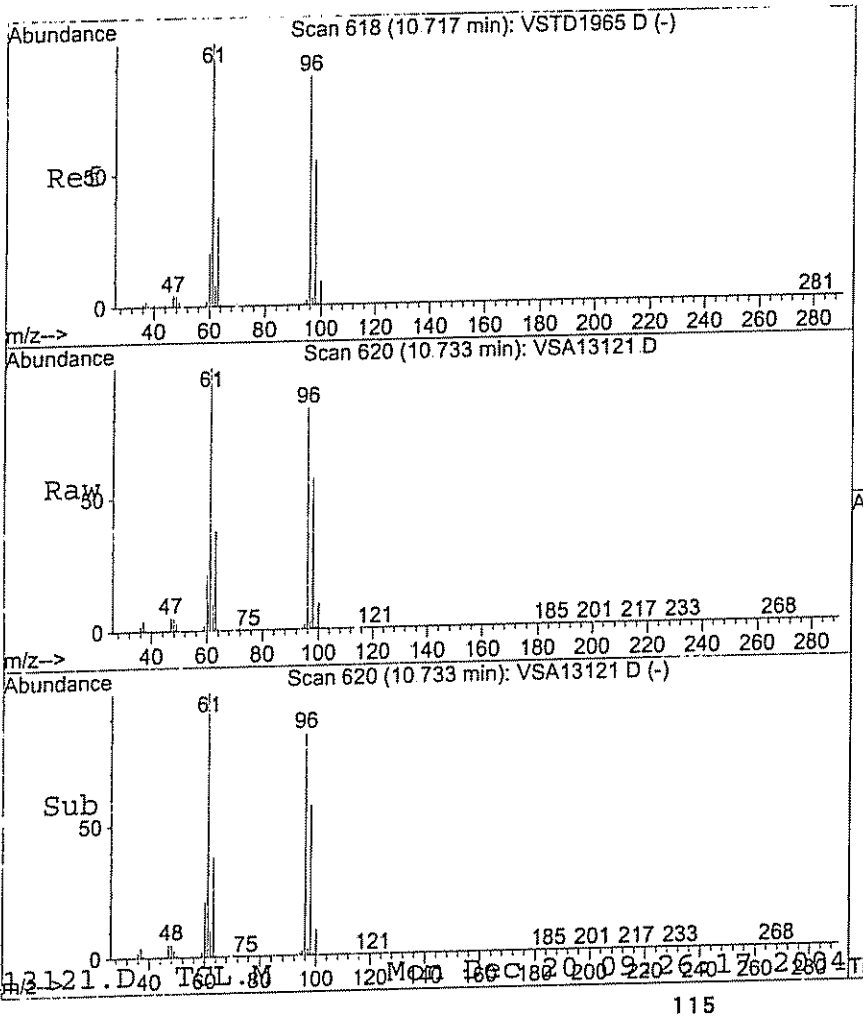


#12
1,1-Dichloroethane
Concen: 681.97 ug/L
RT: 10.06 min Scan# 552
Delta R.T. -0.00 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 63 Resp: 3182992

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	32.0	2.8	62.8
83	13.5	0.0	43.5

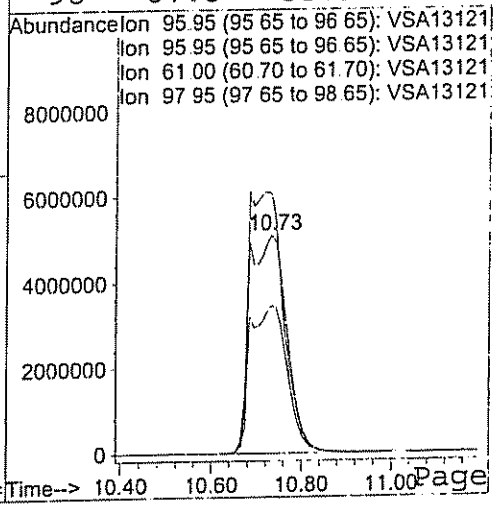


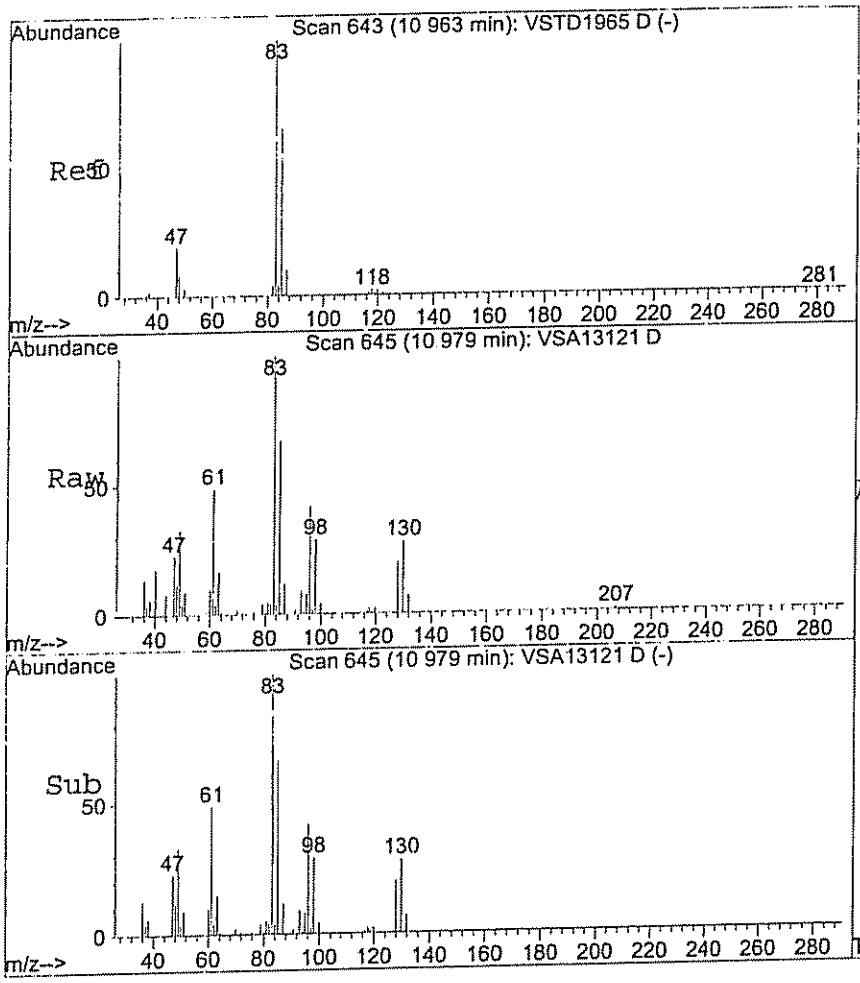


#13
cis-1,2-Dichloroethene
Concen: 7936.34 ug/L m
RT: 10.73 min Scan# 620
Delta R.T. -0.00 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 96 Resp: 28691564

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	118.7	81.4	141.4
98	67.8	35.9	95.9

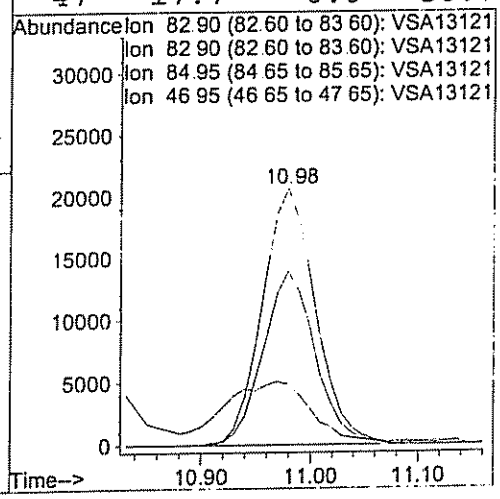


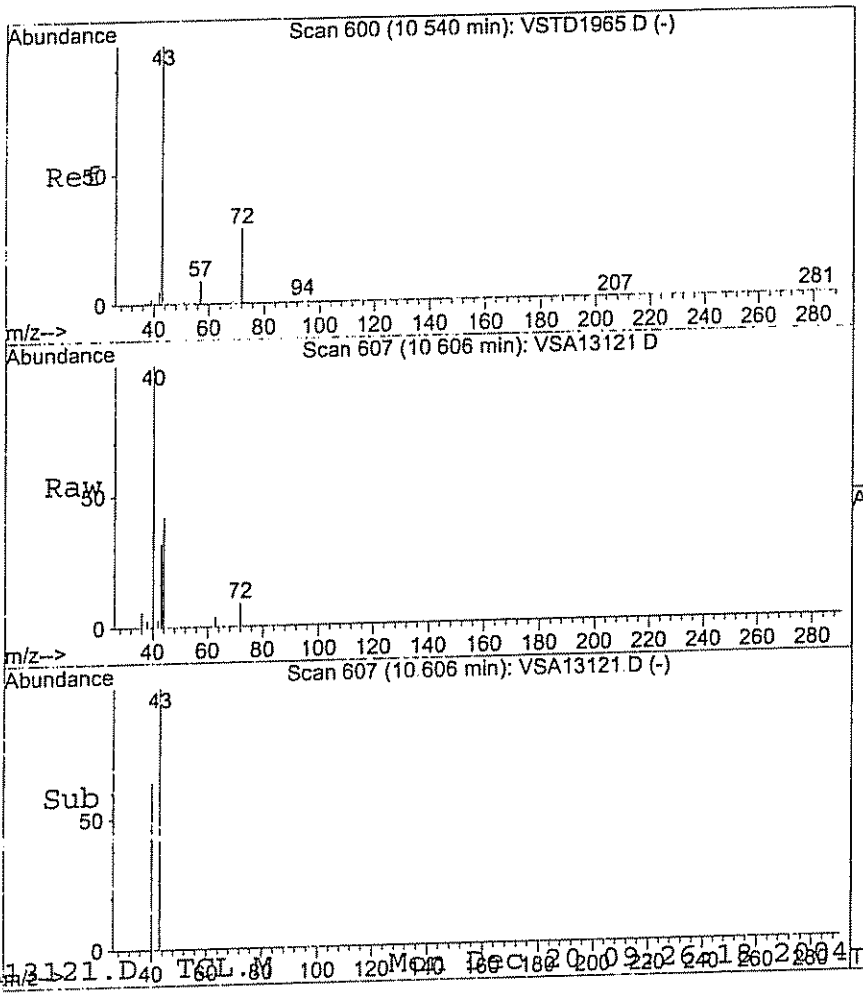


#14
Chloroform
Concen: 15.59 ug/L
RT: 10.98 min Scan# 645
Delta R.T. -0.00 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 83 Resp: 69131

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	66.9	35.2	95.2
47	17.7	0.0	50.7

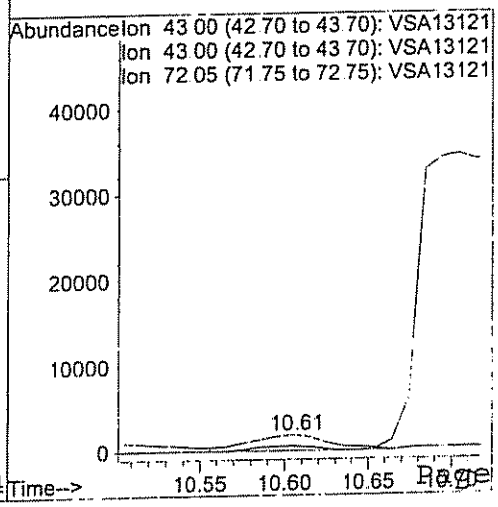


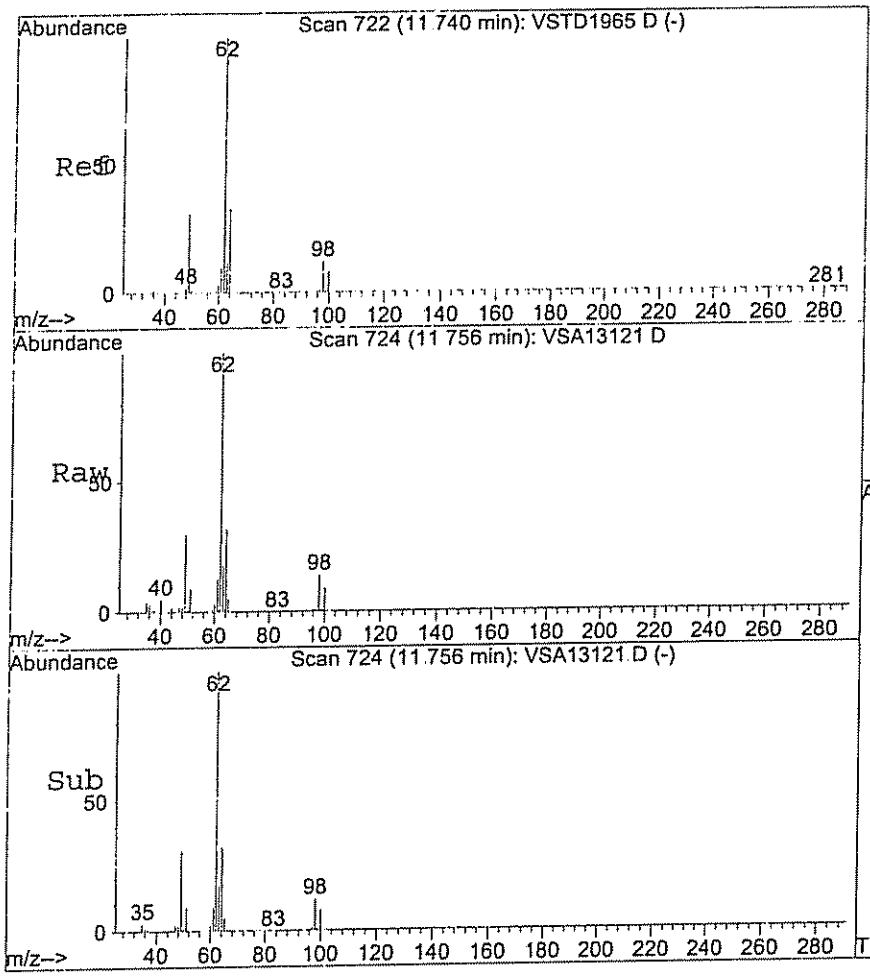


#15
2-Butanone
Concen: 5.21 ug/L
RT: 10.61 min Scan# 607
Delta R.T. 0.03 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 43 Resp: 5908

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	57.1

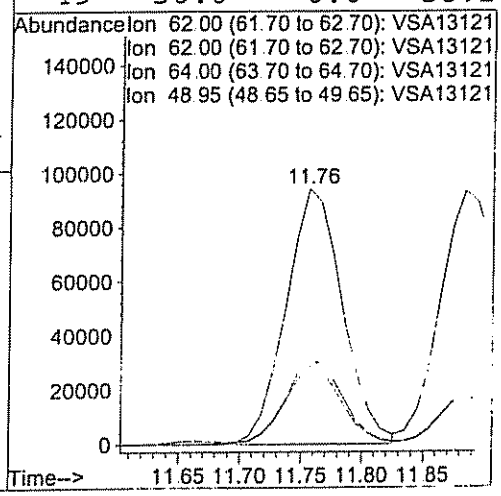


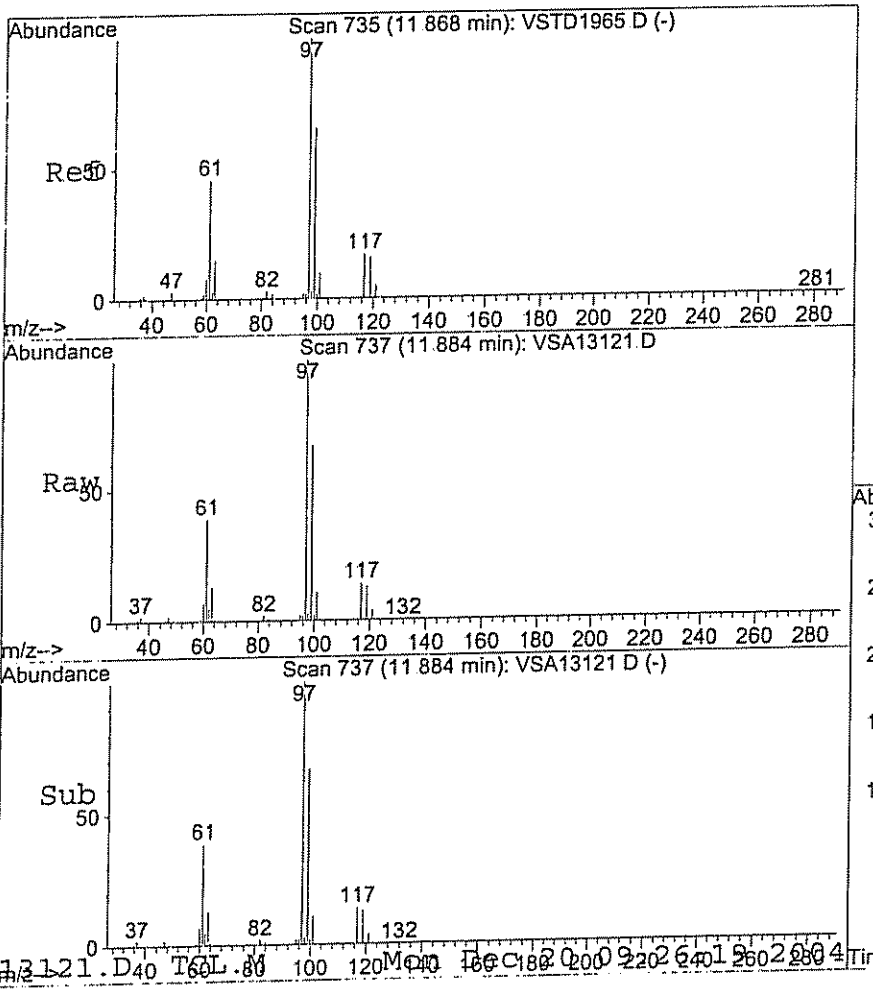


#17
1,2-Dichloroethane
Concen: 98.92 ug/L
RT: 11.76 min Scan# 724
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 62 Resp: 303861

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	32.1	2.3	62.3
49	30.0	0.0	58.2

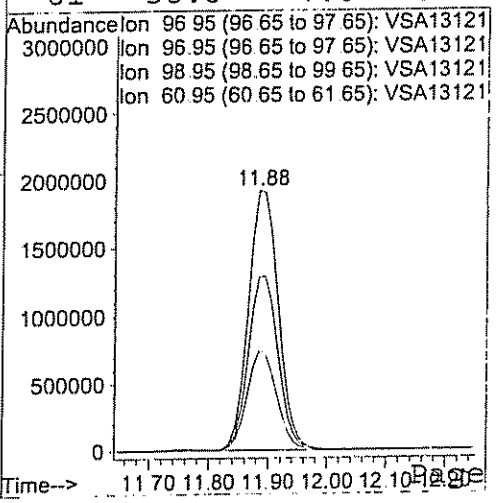


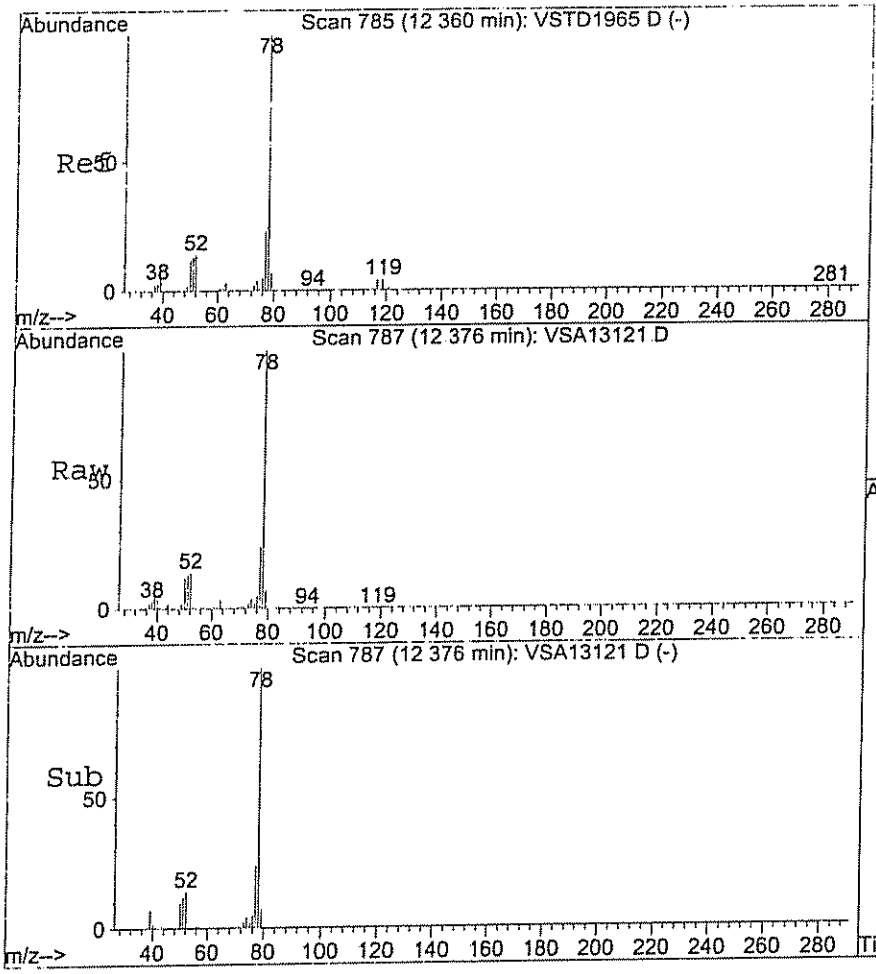


#20
1,1,1-Trichloroethane
Concen: 1637.73 ug/L
RT: 11.88 min Scan# 737
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 97 Resp: 6783713

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	66.9	36.4	96.4
61	38.6	7.0	67.0

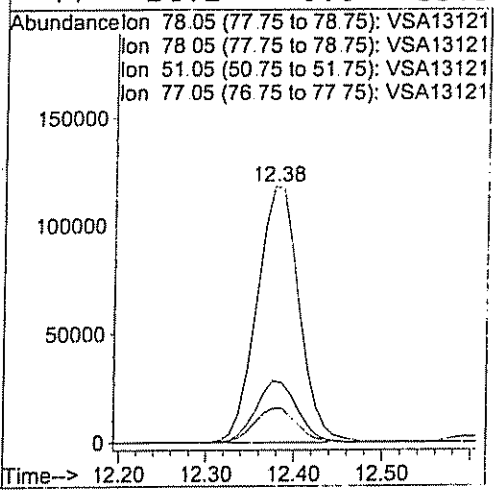


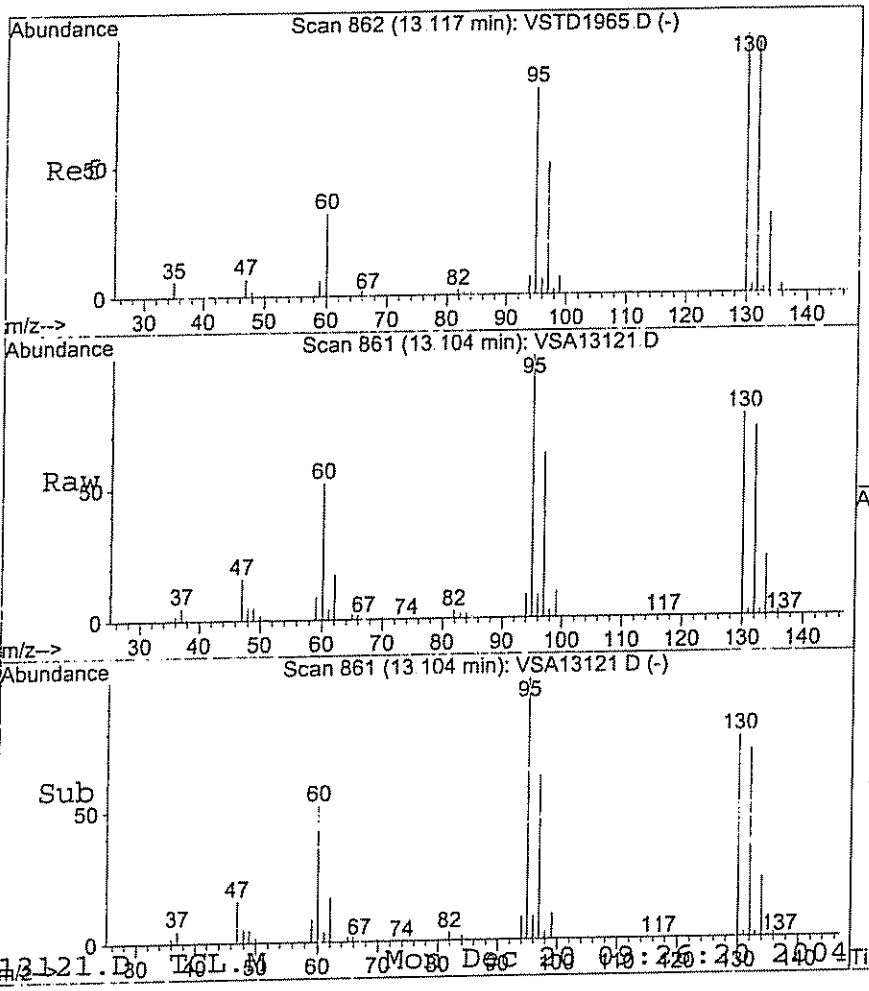


#21
Benzene
Concen: 33.34 ug/L
RT: 12.38 min Scan# 787
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 78 Resp: 393738

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	13.2	0.0	42.7
77	24.1	0.0	53.3

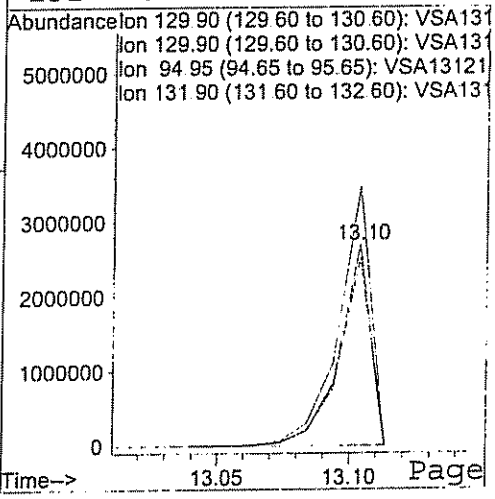


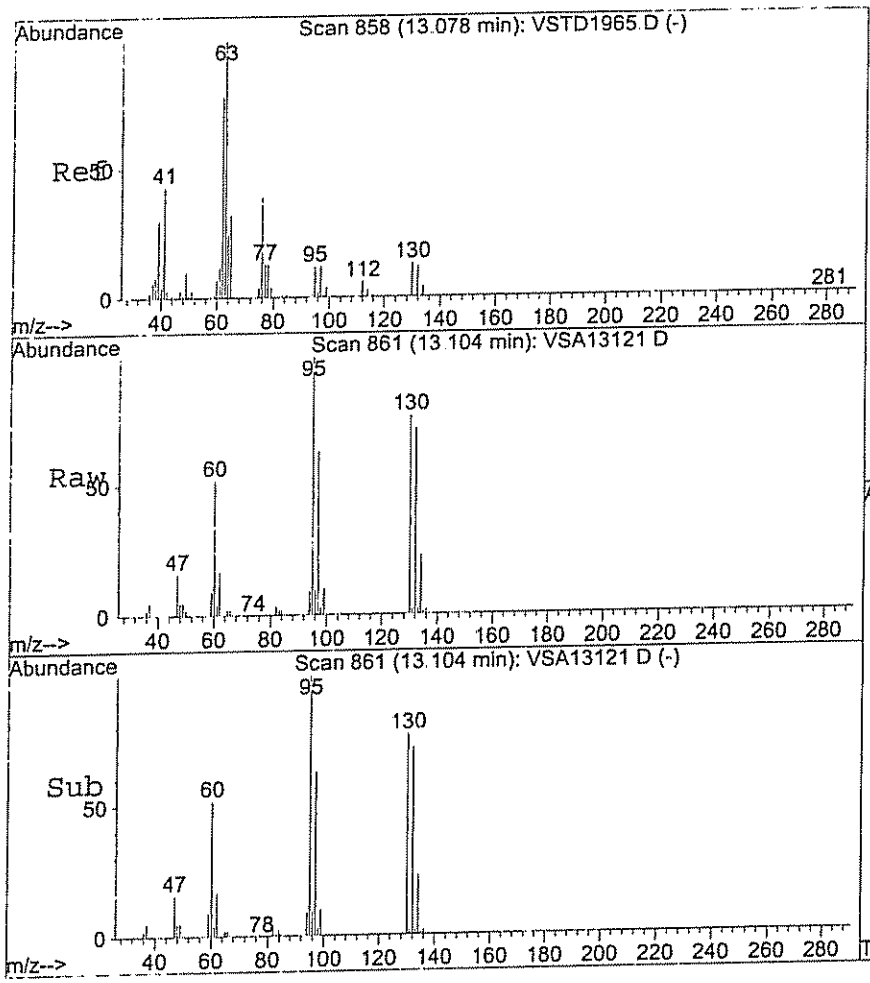


#22
Trichloroethene
Concen: 852.84 ug/L
RT: 13.10 min Scan# 861
Delta R.T. -0.04 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion:130 Resp: 2230303

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	129.3	84.6	144.6
132	93.4	67.2	127.2

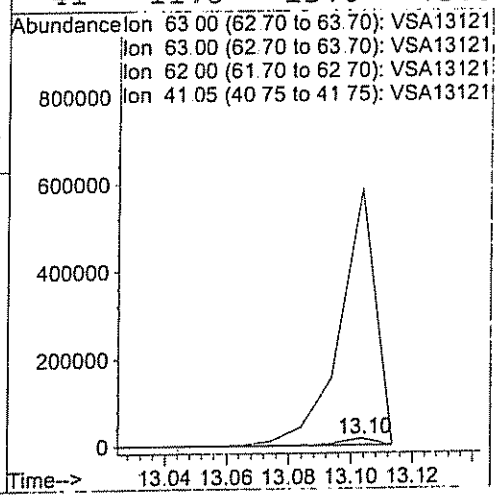


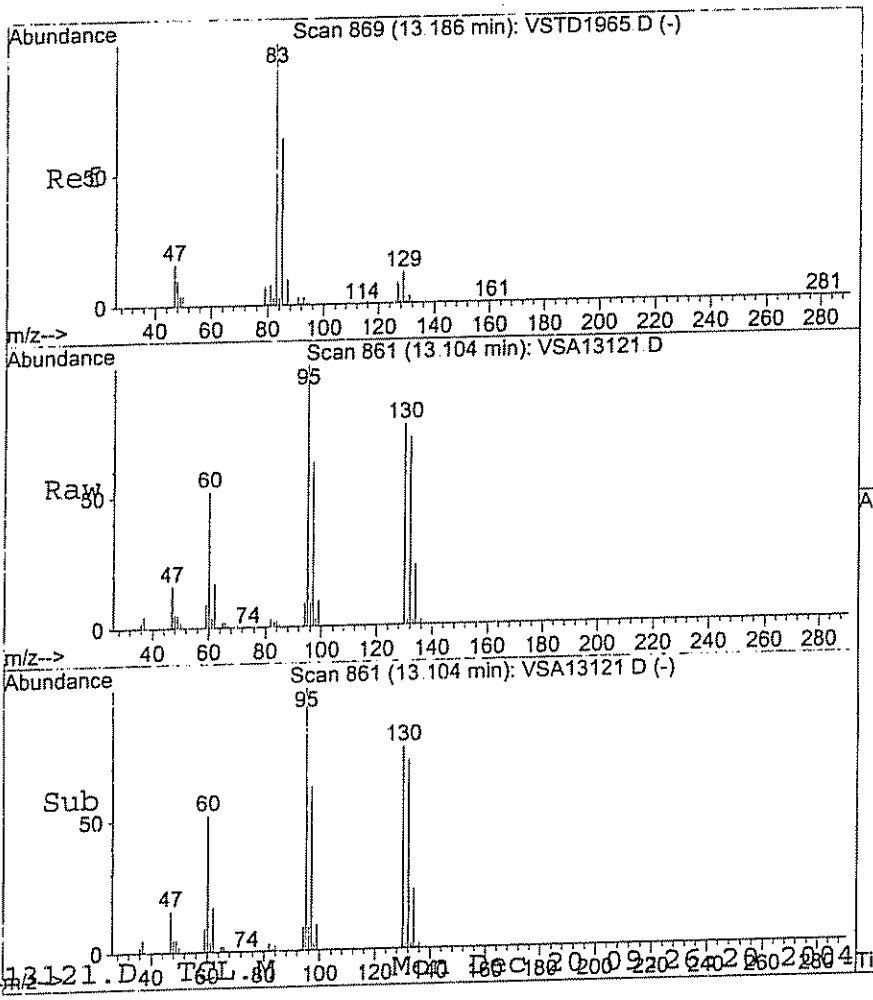


#23
1,2-Dichloropropane
Concen: 4.44 ug/L
RT: 13.10 min Scan# 861
Delta R.T. 0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 63 Resp: 13151

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
62	3715.0	44.6	104.6#
41	11.6	15.0	75.0#

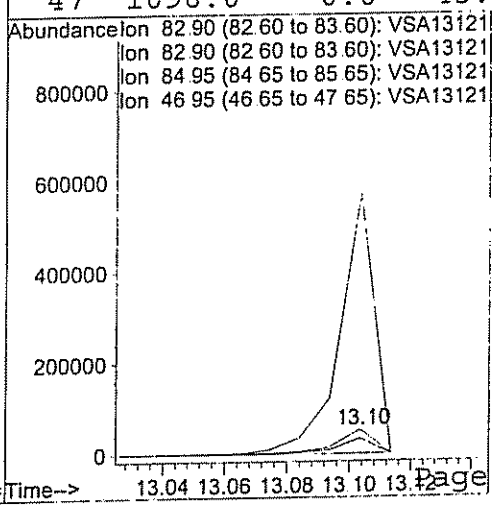


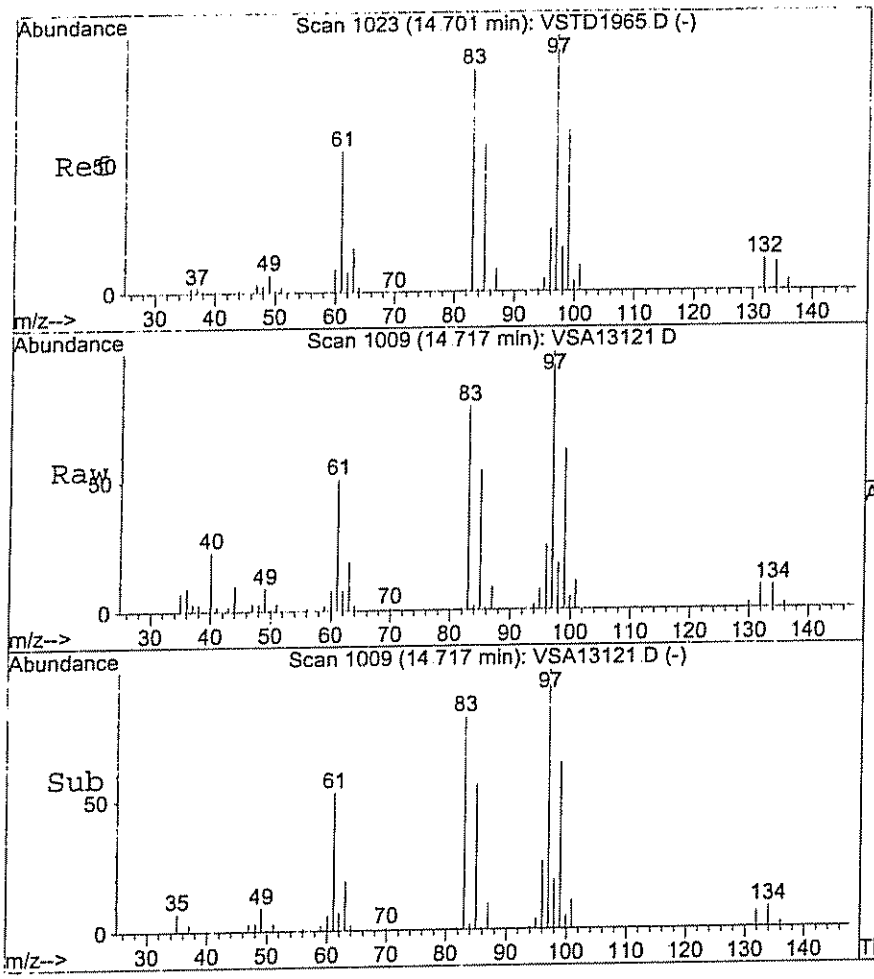


#24
Bromodichloromethane
Concen: 11.35 ug/L
RT: 13.10 min Scan# 861
Delta R.T. -0.10 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 83 Resp: 41753

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	63.1	33.5	93.5
47	1096.0	0.0	45.4#

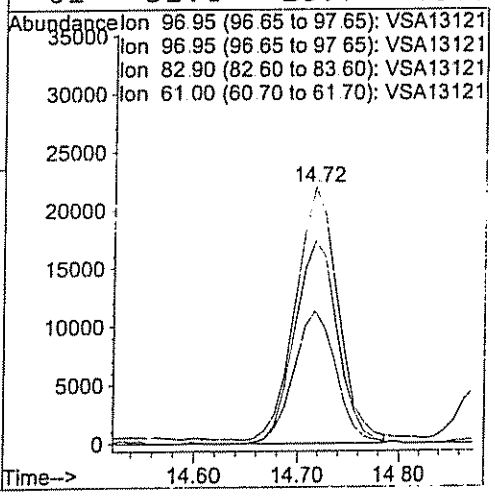


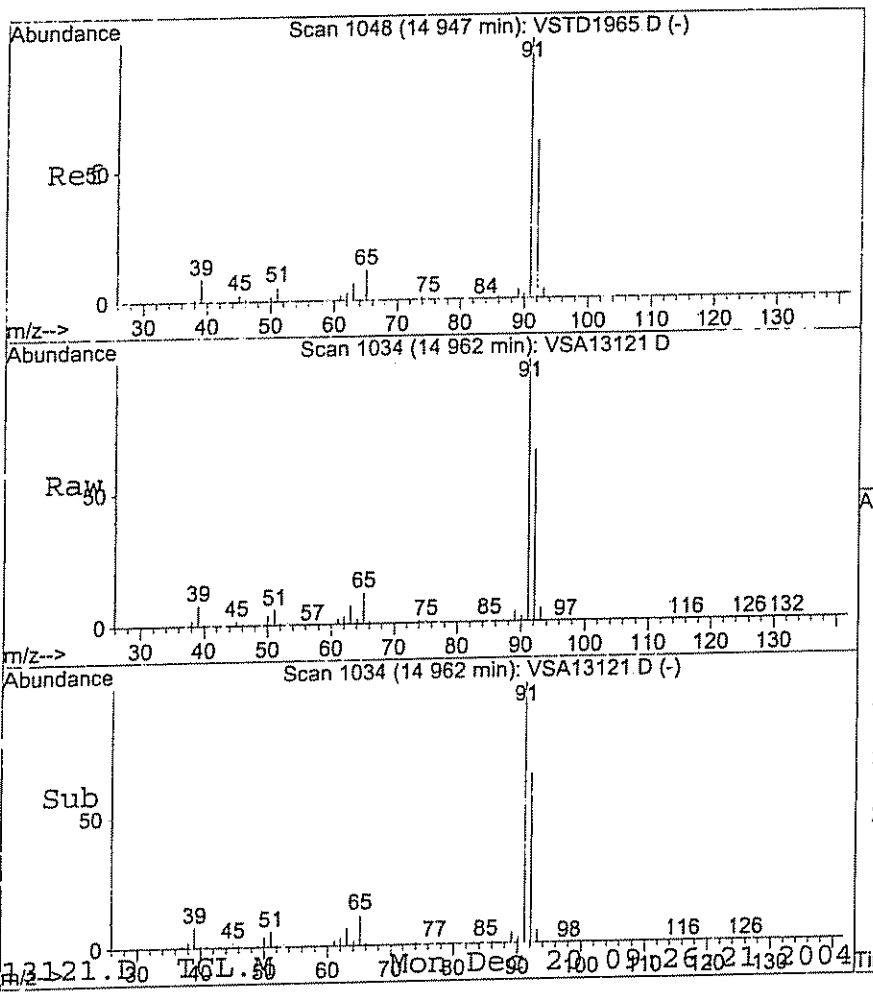


#27
1,1,2-Trichloroethane
Concen: 24.42 ug/L m
RT: 14.72 min Scan# 1009
Delta R.T. -0.00 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 97 Resp: 65716

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	78.8	50.2	110.2
61	51.4	18.7	78.7

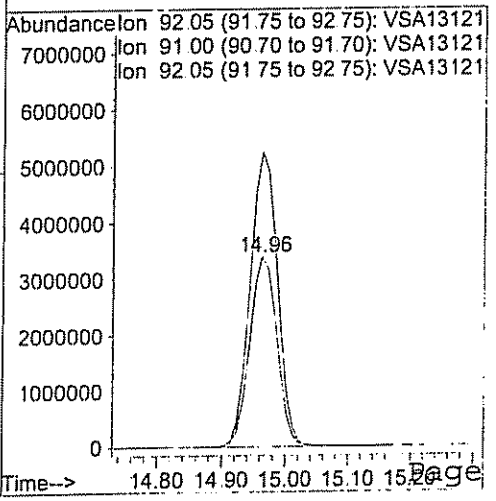


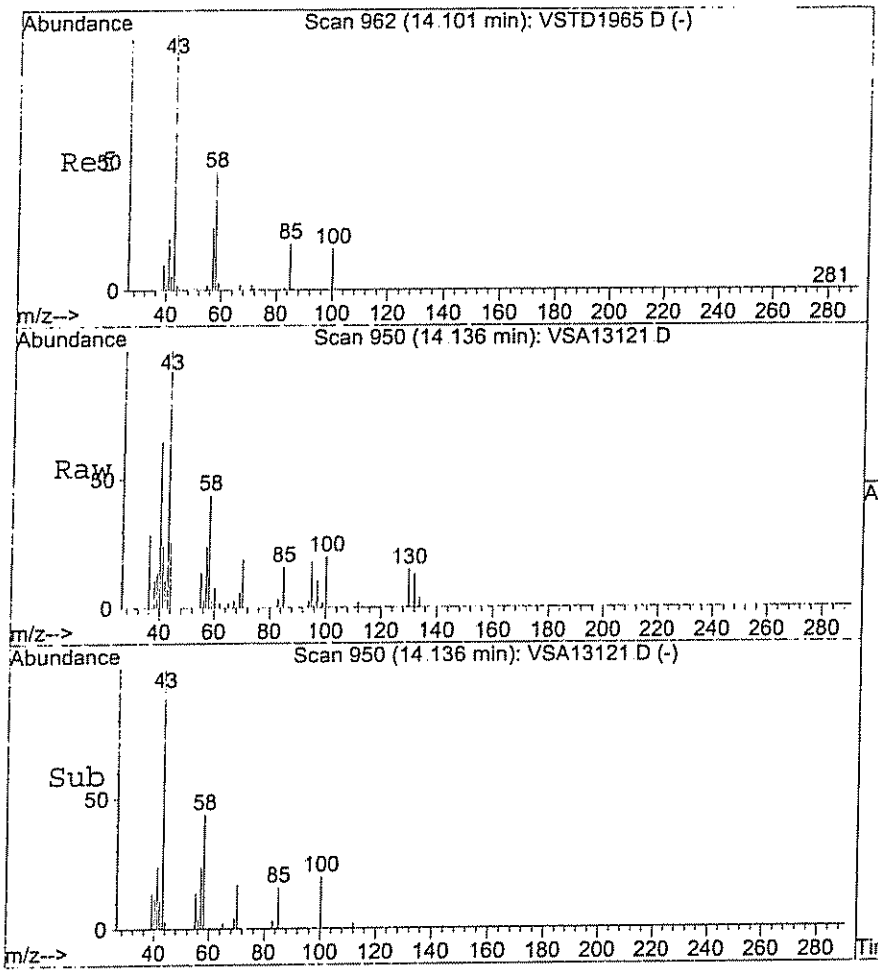


#33
Toluene
Concen: 1417.57 ug/L
RT: 14.96 min Scan# 1034
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 92 Resp:10142338

Ion	Ratio	Lower	Upper
92	100		
91	154.5	132.3	192.3
92	100.0	70.0	130.0

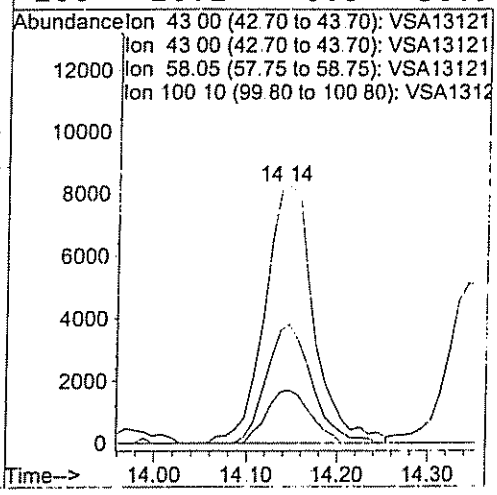


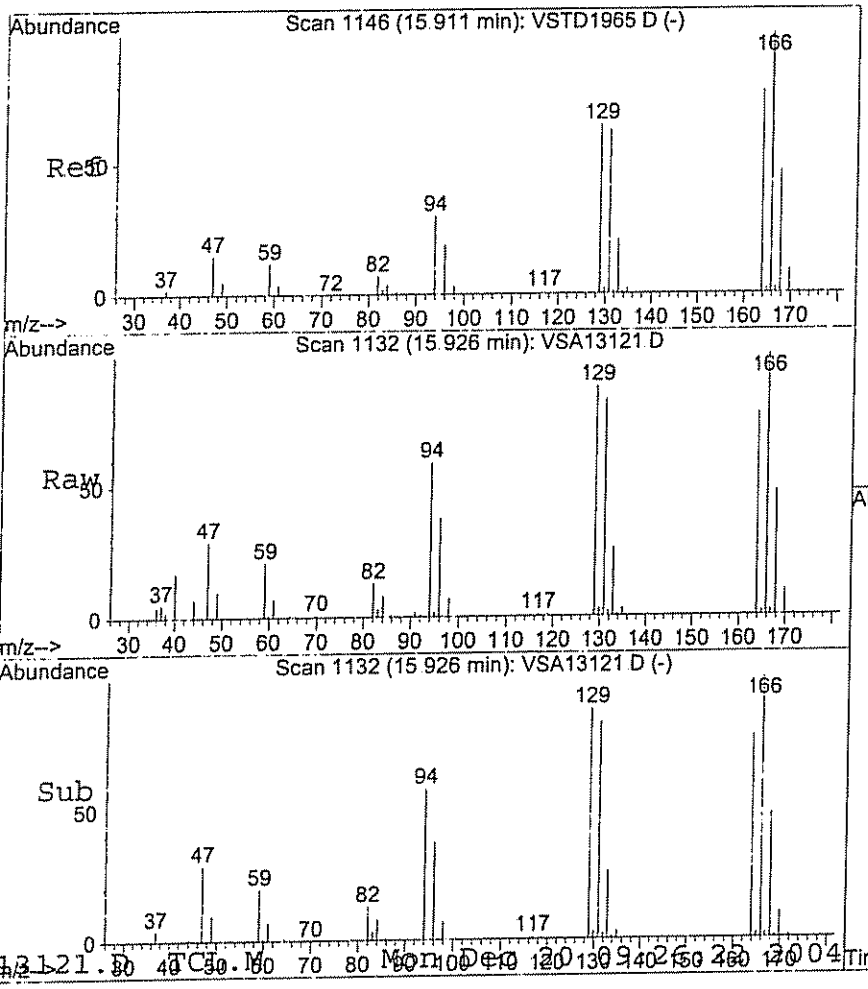


#34
4-methyl-2-Pentanone
Concen: 14.01 ug/L
RT: 14.14 min Scan# 950
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 43 Resp: 31234

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	44.5	15.5	75.5
100	20.1	0.0	50.9

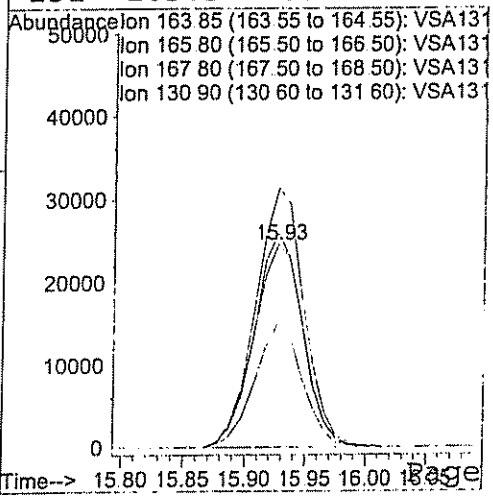


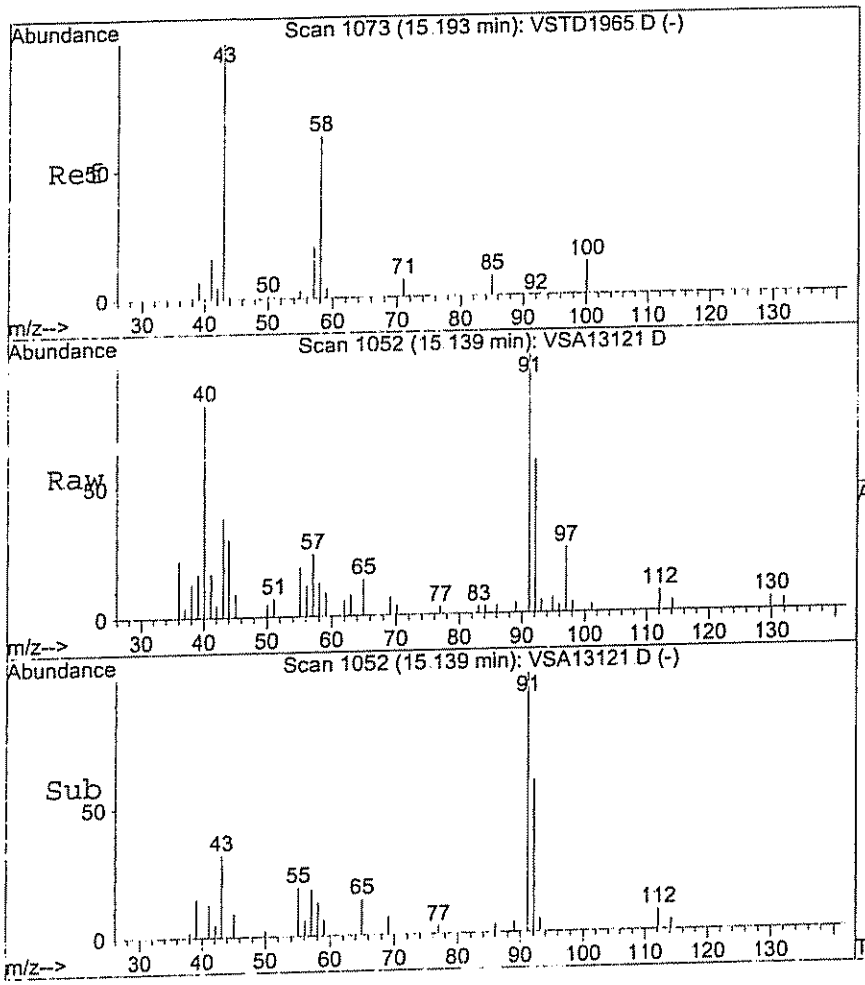


#35
Tetrachloroethene
Concen: 39.07 ug/L
RT: 15.93 min Scan# 1132
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion:164 Resp: 70198

Ion	Ratio	Lower	Upper
164	100		
166	127.5	100.8	160.8
168	61.4	30.1	90.1
131	105.5	66.1	126.1

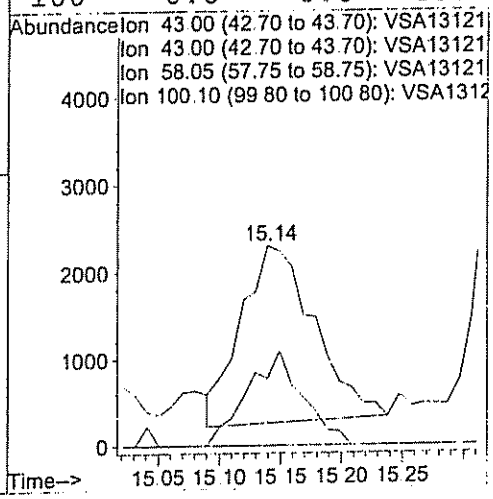


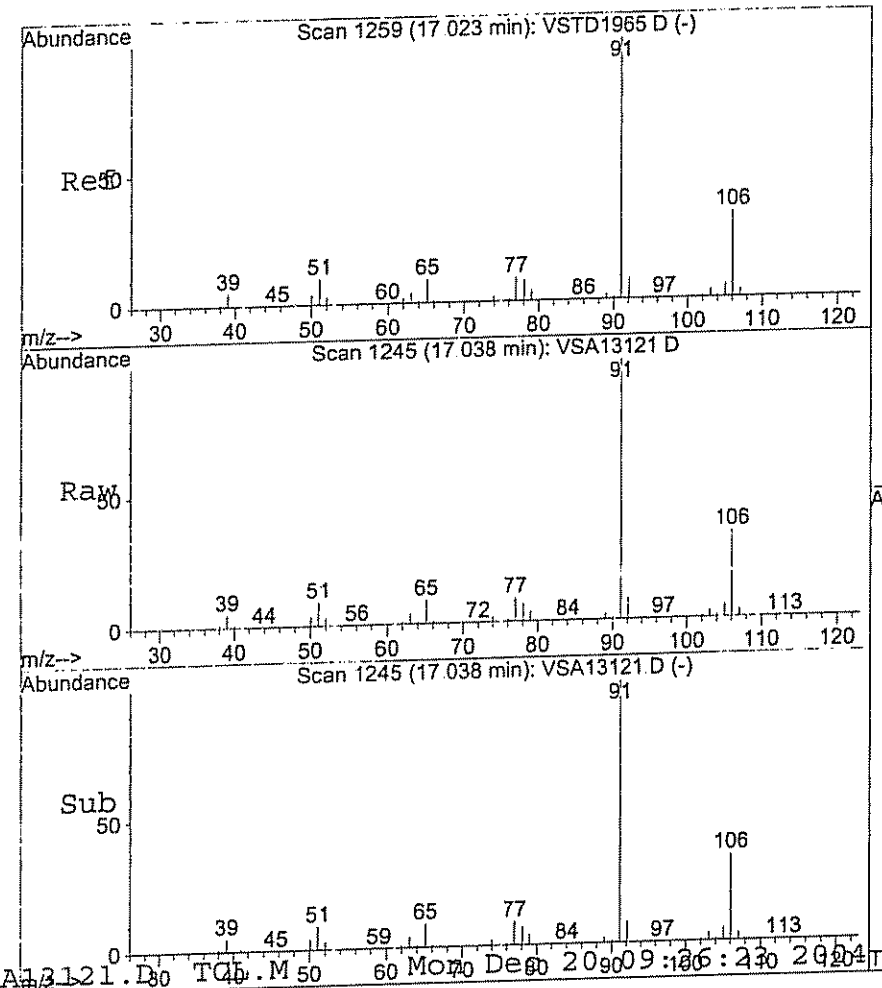


#36
2-Hexanone
Concen: 5.56 ug/L
RT: 15.14 min Scan# 1052
Delta R.T. -0.09 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 43 Resp: 8520

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	41.8	34.3	94.3
100	0.0	0.0	46.8

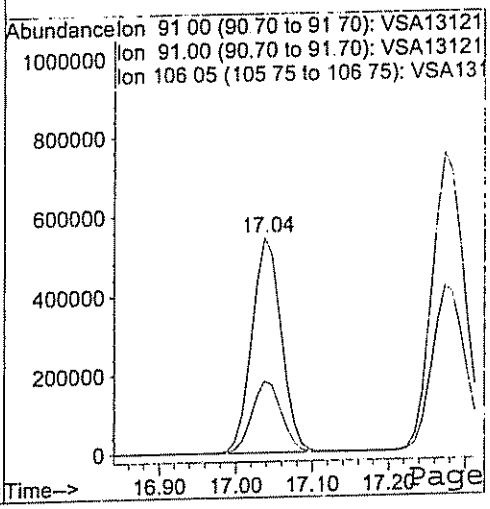


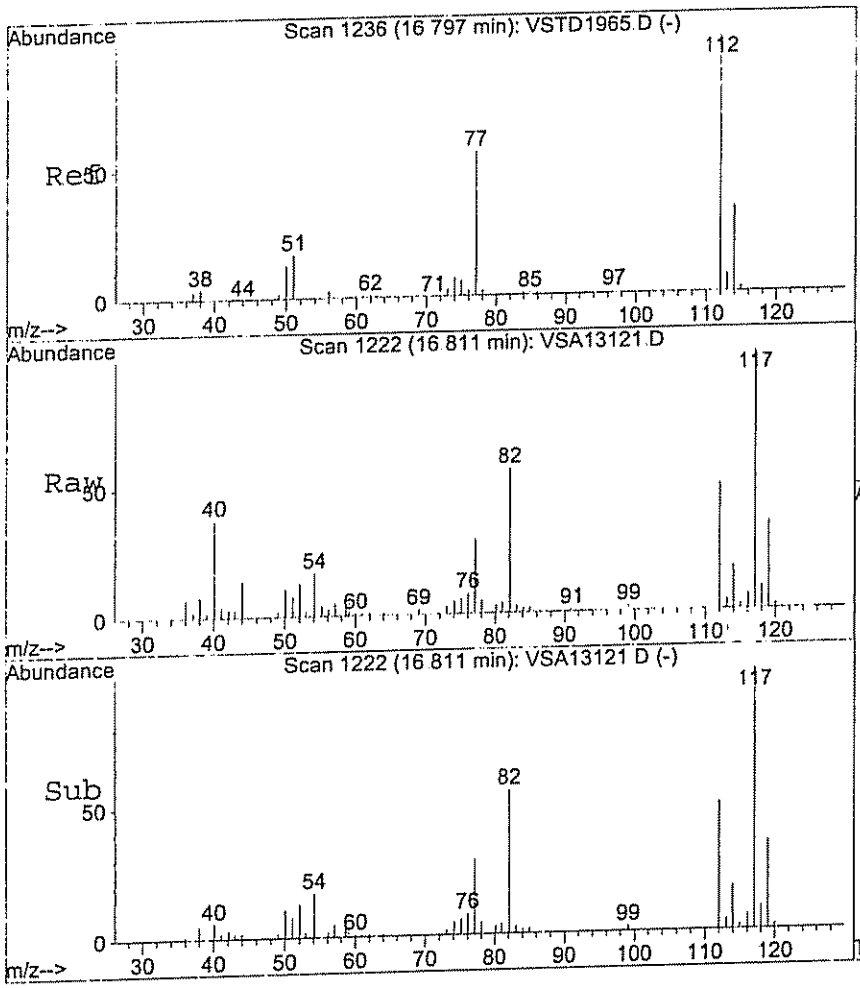


#37
Ethyl benzene
Concen: 113.38 ug/L
RT: 17.04 min Scan# 1245
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 91 Resp: 1470304

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	33.5	4.8	64.8

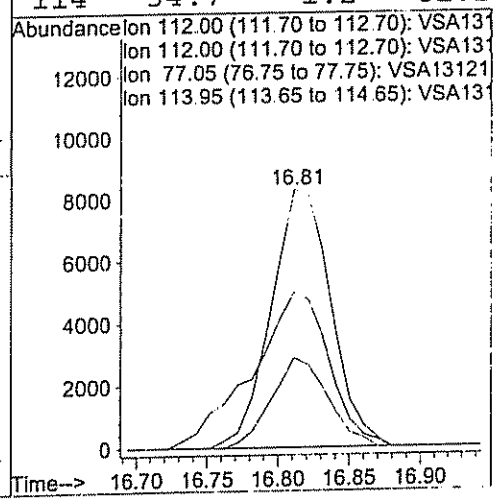


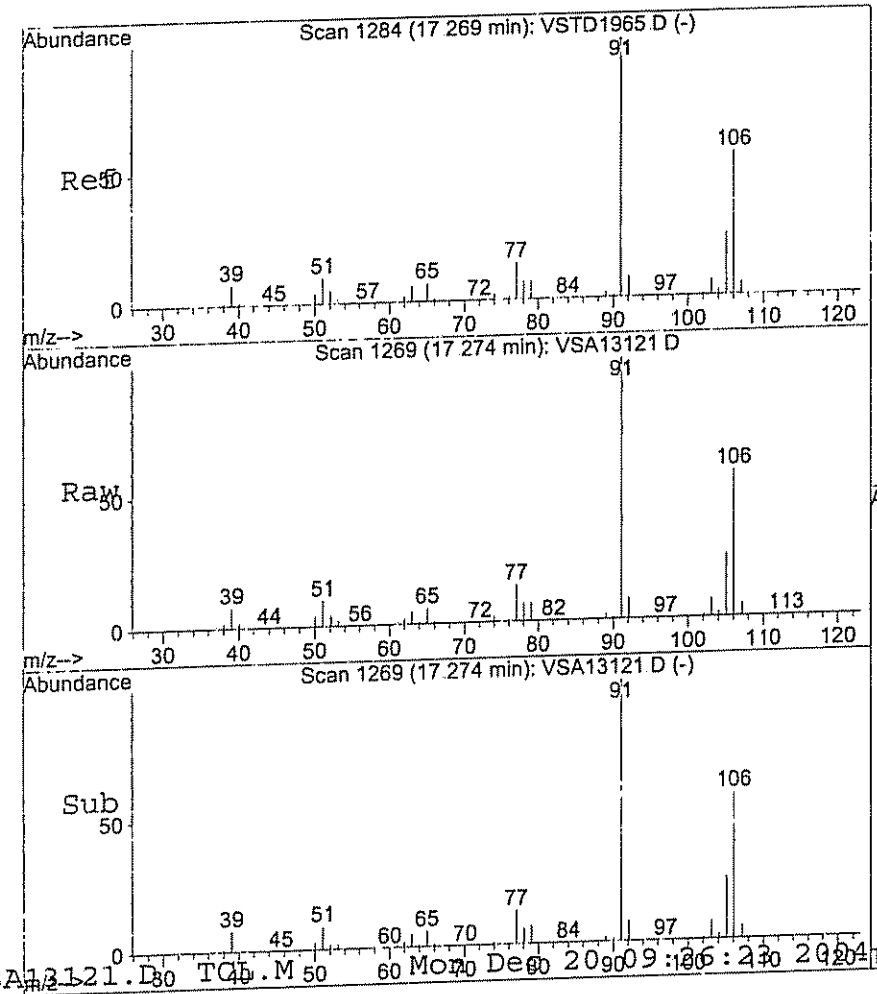


#38
Chlorobenzene
Concen: 3.00 ug/L
RT: 16.81 min Scan# 1222
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion:112 Resp: 24099

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	53.1	29.8	89.8
114	34.7	1.2	61.2

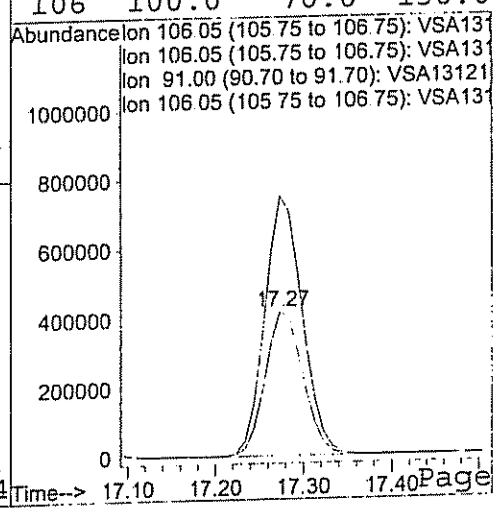


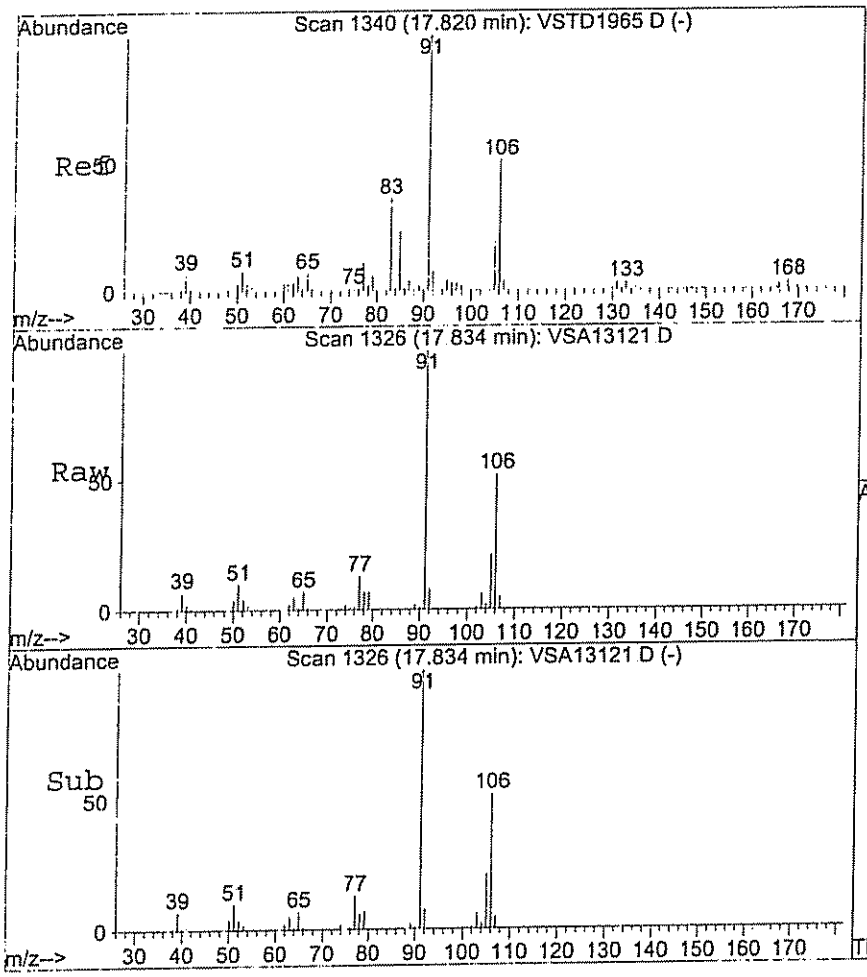


#39
m&p-Xylenes
Concen: 224.23 ug/L
RT: 17.27 min Scan# 1269
Delta R.T. -0.02 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion:106 Resp: 1242588

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	179.3	144.3	204.3
106	100.0	70.0	130.0

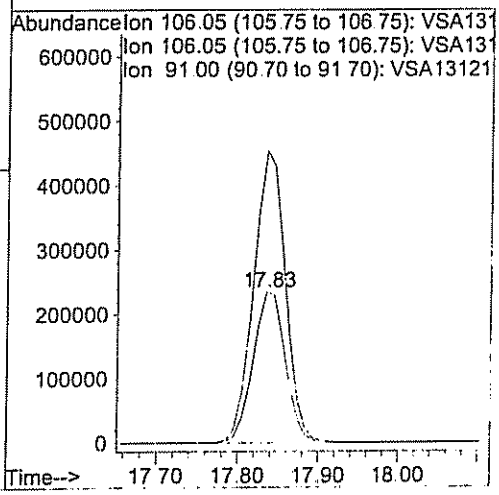


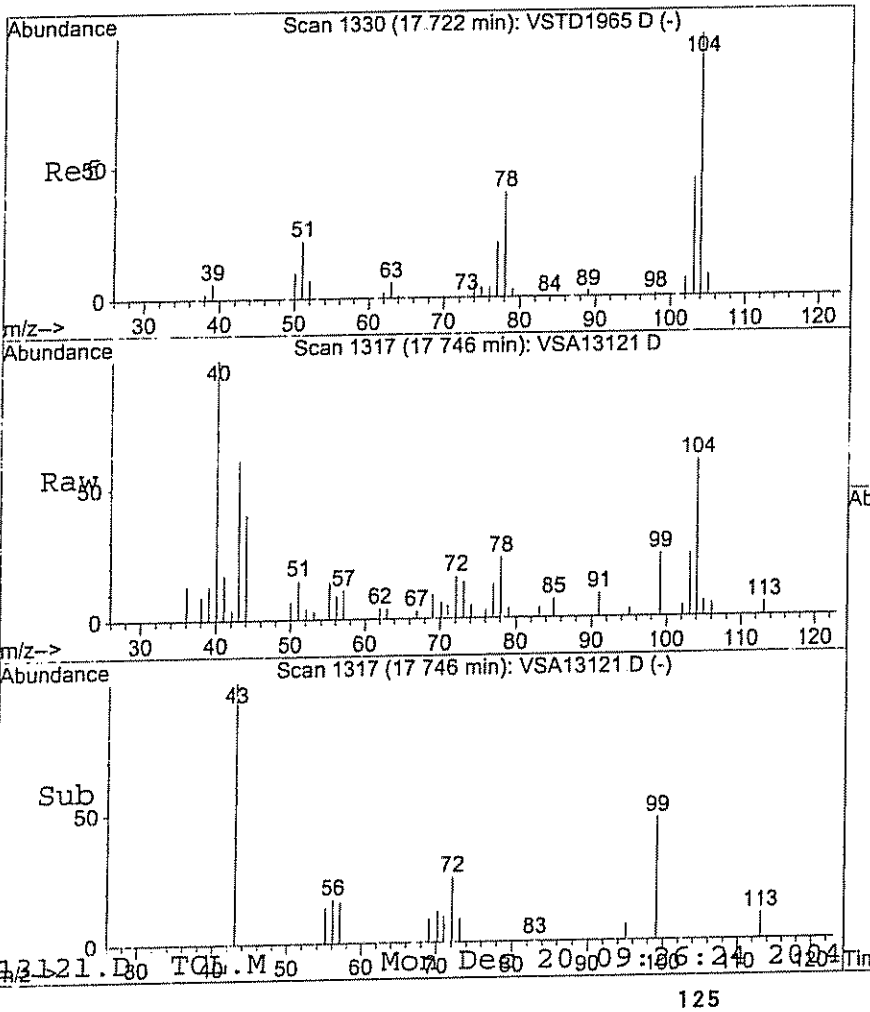


#40
o-Xylene
Concen: 121.66 ug/L
RT: 17.83 min Scan# 1326
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion:106 Resp: 655798

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	193.1	157.0	217.0

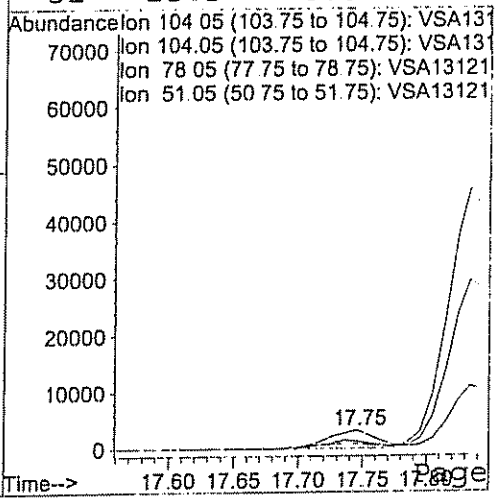


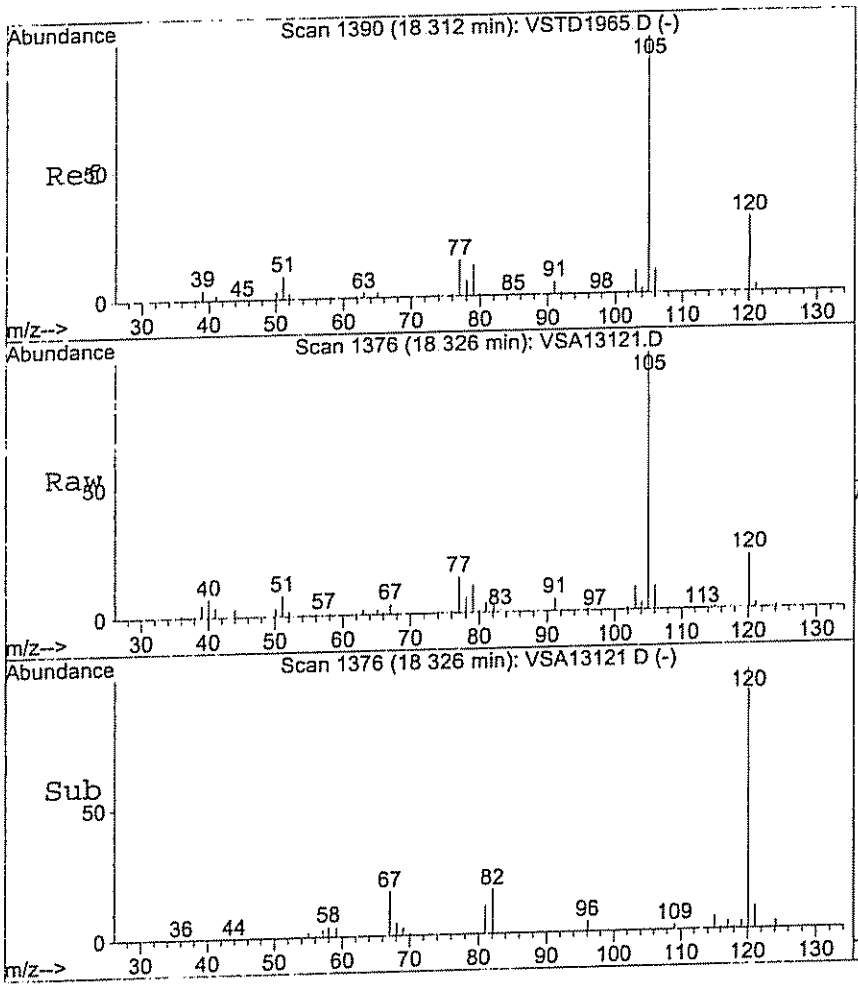


#41
Styrene
Concen: 0.89 ug/L m
RT: 17.75 min Scan# 1317
Delta R.T. -0.00 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion:104 Resp: 8053

Ion	Ratio	Lower	Upper
104	100		
104	100.0	70.0	130.0
78	38.4	6.9	66.9
51	25.3	0.0	47.4

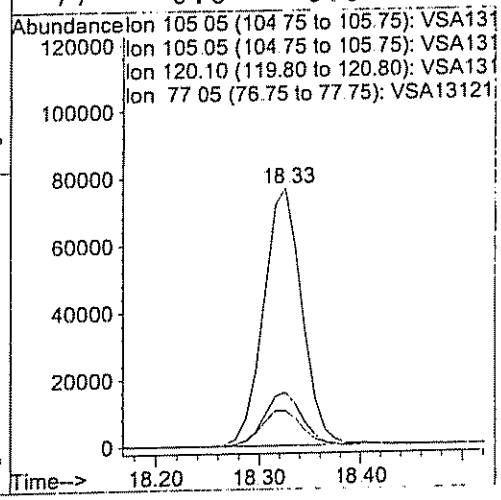


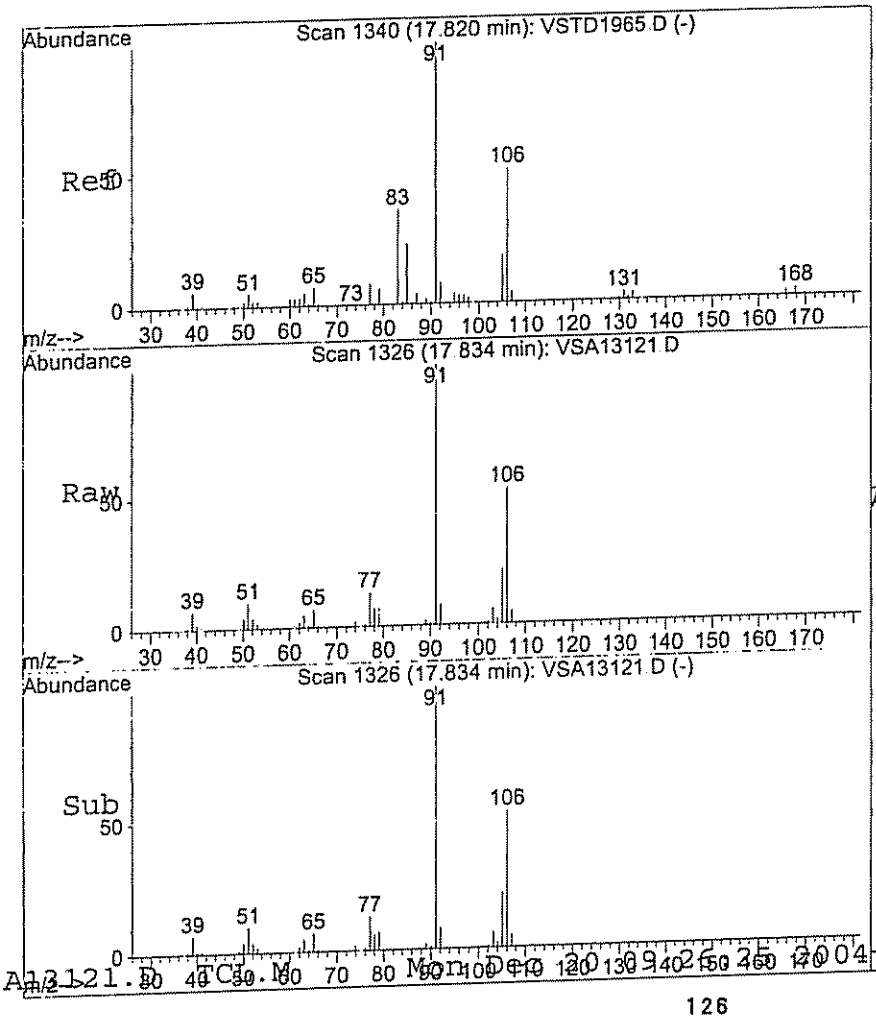


#42
Isopropylbenzene
Concen: 14.70 ug/L
RT: 18.33 min Scan# 1376
Delta R.T. -0.00 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion:105 Resp: 203616

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	20.4	0.0	51.3
77	0.0	0.0	30.0

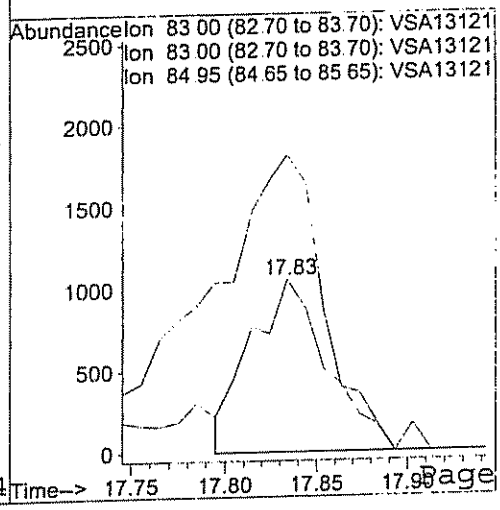


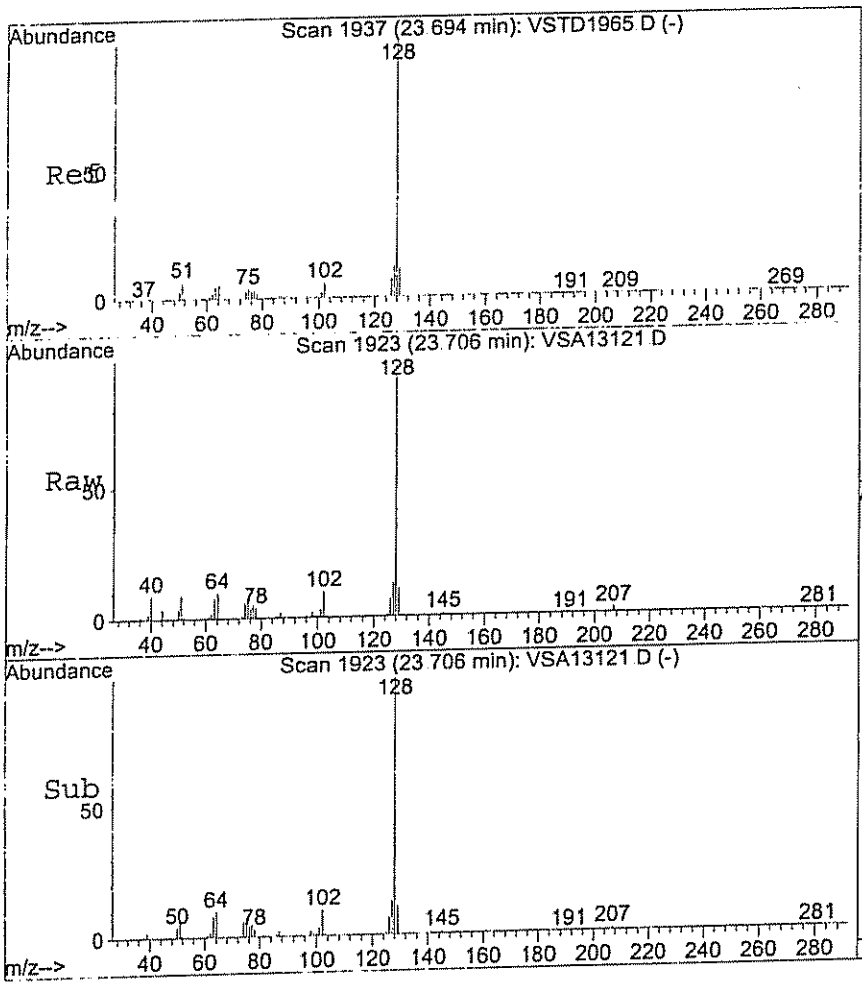


#44
1,1,2,2-Tetrachloroethane
Concen: 0.85 ug/L
RT: 17.83 min Scan# 1326
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion: 83 Resp: 3050

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	270.1	34.4	94.4#

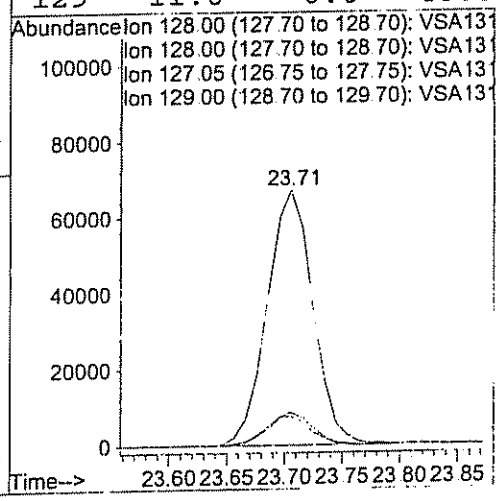




#45
Naphthalene
Concen: 25.45 ug/L
RT: 23.71 min Scan# 1923
Delta R.T. -0.01 min
Lab File: VSA13121.D
Acq: 14 Dec 2004 17:55

Tgt Ion:128 Resp: 184595

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	11.0	0.0	40.8



Non Target Peak Search Report

Data File : C:\HPCHEM\1\DATA\VSA13121.D
Acq On : 14 Dec 2004 17:55
Sample : P0412041-01A
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Library : C:\DATABASE\NIST129K.L

****

Peak Number 1 Carbon dioxide $$ Carbon oxide Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.47	6.95 ug/L	3770740	Bromochloromethane	10.94

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide $$ Carbon oxide (CO2	44	CO2	000124-38-9	4
2	Carbon dioxide	44	CO2	000124-38-9	4
3	Nitrous Oxide $$ Nitrogen oxide (N2	44	N2O	010024-97-2	3
4	Nitrous Oxide	44	N2O	010024-97-2	3
5	Nitrous Oxide	44	N2O	010024-97-2	3

****

Peak Number 2 Trichloroethylene $$ Ethene, t Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.28	7.98 ug/L	2319370	1,4-Difluorobenzene	12.60

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trichloroethylene $$ Ethene, trichl	130	C2HCl3	000079-01-6	98
2	Trichloroethylene	130	C2HCl3	000079-01-6	98
3	Trichloroethylene	130	C2HCl3	000079-01-6	96
4	Pyridine, 1-oxide $$ Pyridine oxide	95	C5H5NO	000694-59-7	10
5	Benzene, 1-chloro-2-fluoro-	130	C6H4ClF	000348-51-6	9

****

Peak Number 3 Benzene, 1-ethyl-2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.06	36.76 ug/L	2425650	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-2-methyl- $$ Tolue	120	C9H12	000611-14-3	95
5	Benzene, 1-ethyl-4-methyl- $$ Tolue	120	C9H12	000622-96-8	94

****
Peak Number 4 Benzene, 1,3,5-trimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.30	33.87 ug/L	2234730	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	93
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
4	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	91
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91

****
Peak Number 5 Benzene, 1-ethyl-4-methyl- $$ Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.52	30.88 ug/L	2037770	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-4-methyl- $$ Tolue	120	C9H12	000622-96-8	94
2	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
4	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	91
5	Benzene, 1-ethyl-3-methyl- $$ Tolue	120	C9H12	000620-14-4	91

****
Peak Number 6 Benzene, 1,2,4-trimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.86	93.75 ug/L	6185550	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	93
2	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	93
4	Benzene, 1,2,3-trimethyl- $$ Hemime	120	C9H12	000526-73-8	93
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91

****
Peak Number 7 Benzene, 1,3,5-trimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.47	63.58 ug/L	4194780	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93

2	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8 90 MWB-4
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8 90
4	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6 90
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4 90

VSA13121.D TCL.M Mon Dec 20 09:26:57 2004

Quantitation Report (QT Reviewed)

MWB-4

Data File : C:\HPCHEM\1\DATA\VSA13120.D
Acq On : 14 Dec 2004 17:23
Sample : P0412041-02A
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 15 14:56 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	10.94	128	79492	50.00 ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	552478	50.00 ug/L	0.00
31) Chlorobenzene-d5	16.77	117	485062	50.00 ug/L	0.00
System Monitoring Compounds					
16) 1,2-Dichloroethane-d4	11.67	65	133602	52.19 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.38%		
32) Toluene-d8	14.87	98	479756	49.67 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.34%		
43) 4-Bromofluorobenzene	18.40	95	188020	50.25 ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.50%		

Target Compounds					Qvalue
2) Chloromethane	6.30	50	727	0.20 ug/L #	85
3) Vinyl chloride	6.56	62	608686	175.00 ug/L	100
4) Bromomethane	7.28	94	380	0.18 ug/L	88
6) 1,1-Dichloroethene	8.78	96	4838446	1793.94 ug/L	98
7) Carbon disulfide	9.31	76	6952	0.74 ug/L	100
8) Methylene chloride	8.95	84	2617417	832.72 ug/L	100
9) Acetone	8.28	43	13058	16.53 ug/L	88
10) trans-1,2-Dichloroethene	9.76	96	237395	76.63 ug/L	95
11) methyl-tert-butyl-Ether	9.86	73	1601	0.22 ug/L #	88
12) 1,1-Dichloroethane	10.05	63	3008356	629.31 ug/L	100
13) cis-1,2-Dichloroethene	10.72	96	16287132	4398.62 ug/L	99
14) Chloroform	10.98	83	86231	18.98 ug/L	100
15) 2-Butanone	10.51	43	6050	5.21 ug/L	89
17) 1,2-Dichloroethane	11.76	62	1088291	345.92 ug/L	99
20) 1,1,1-Trichloroethane	11.89	97	8656430	2130.29 ug/L	99
21) Benzene	12.38	78	264419	22.82 ug/L	99
22) Trichloroethene	13.10	130	2326304	906.77 ug/L	93
23) 1,2-Dichloropropane	13.10	63	13824	4.76 ug/L #	1
24) Bromodichloromethane	13.28	83	12432	3.45 ug/L #	1
27) 1,1,2-Trichloroethane	14.72	97	106090	40.19 ug/L	99
33) Toluene	14.96	92	3238865	466.01 ug/L	98
34) 4-methyl-2-Pentanone	14.16	43	9906	4.58 ug/L	99
35) Tetrachloroethene	15.93	164	248938	142.61 ug/L	94

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

VSA13120.D TCL.M Wed Dec 15 14:57:46 2004 * See DF 100 Page 1

HJ 12/29/04

Data File : C:\HPCHEM\1\DATA\VSA13120.D
Acq On : 14 Dec 2004 17:23
Sample : P0412041-02A
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 15 14:56 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
36) 2-Hexanone	15.15	43	10577	7.10	ug/L		84
37) Ethyl benzene	17.04	91	1662399	131.96	ug/L		99
38) Chlorobenzene	16.82	112	32013	4.10	ug/L		96
39) m&p-Xylenes	17.28	106	1708694	317.42	ug/L		99
40) o-Xylene	17.84	106	628500	120.03	ug/L		99
41) Styrene	17.75	104	7666	0.87	ug/L		98
42) Isopropylbenzene	18.33	105	151492	11.26	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.83	83	26315	7.52	ug/L		94
45) Naphthalene	23.71	128	169277	24.02	ug/L	#	100

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

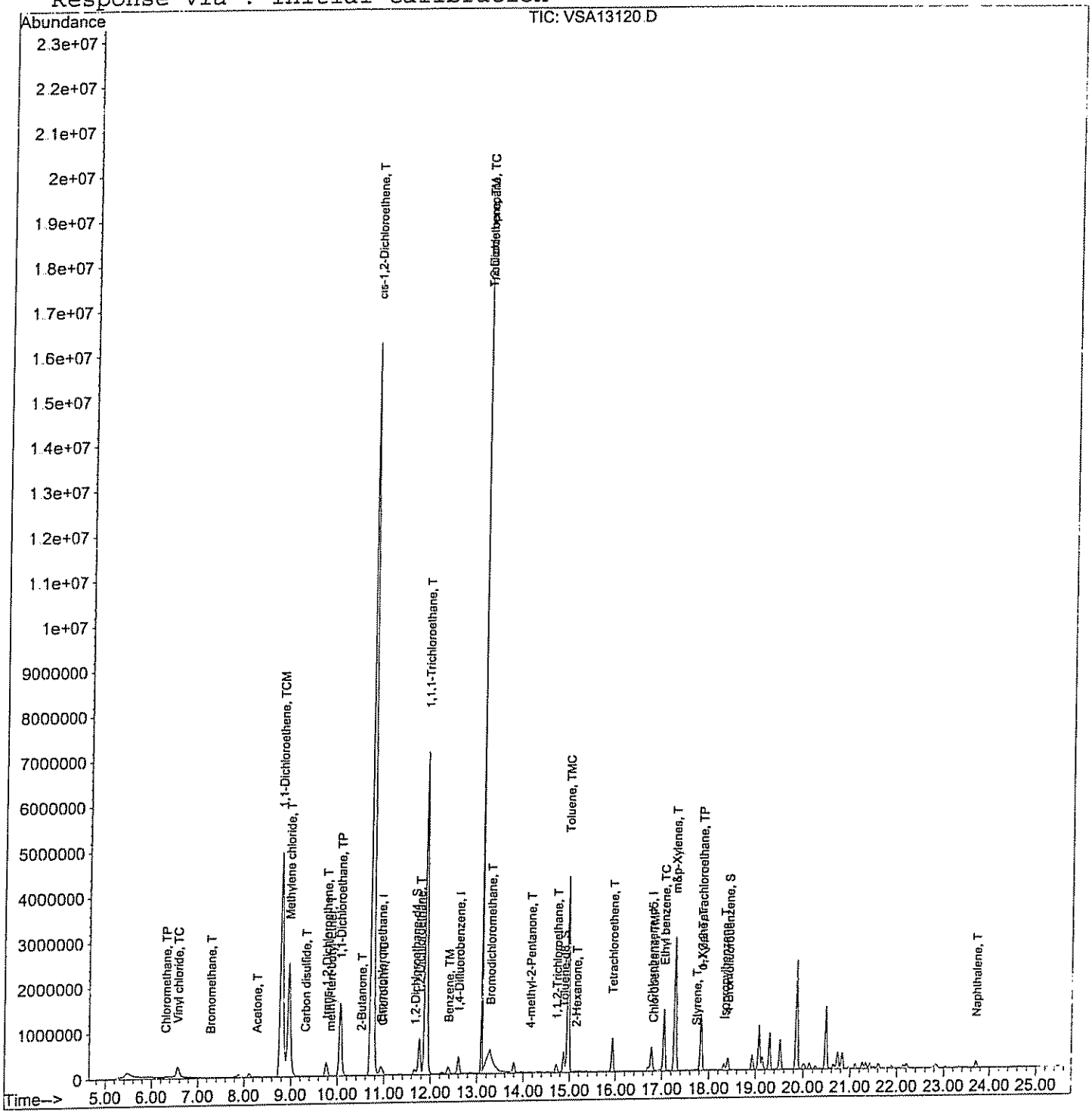
Data File : C:\HPCHEM\1\DATA\VSA13120.D
Acq On : 14 Dec 2004 17:23
Sample : P0412041-02A
Misc : WATER

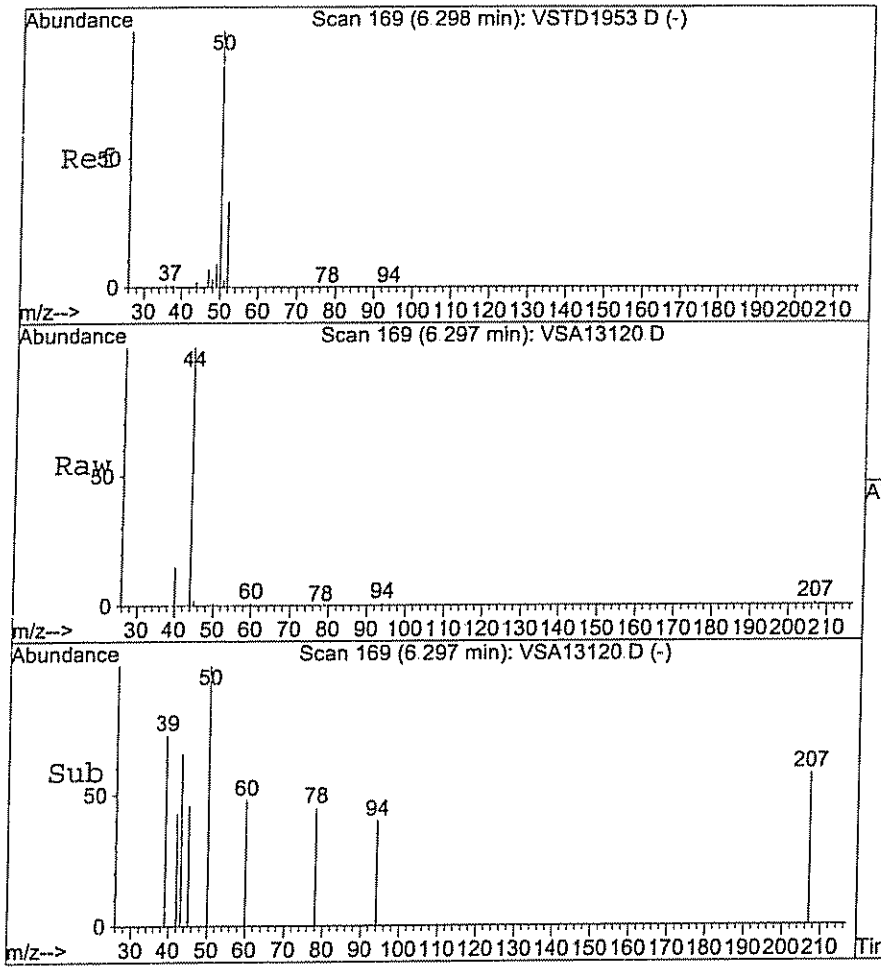
Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 15 14:56 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration

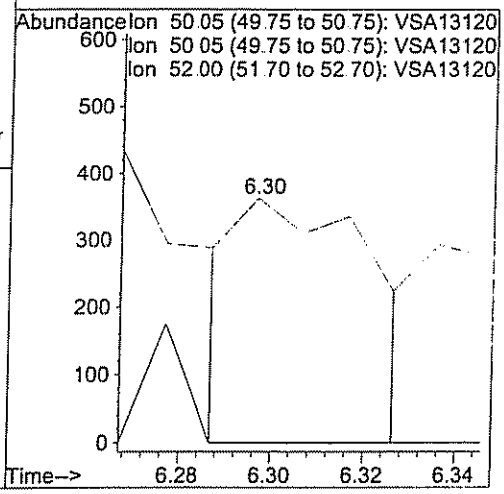


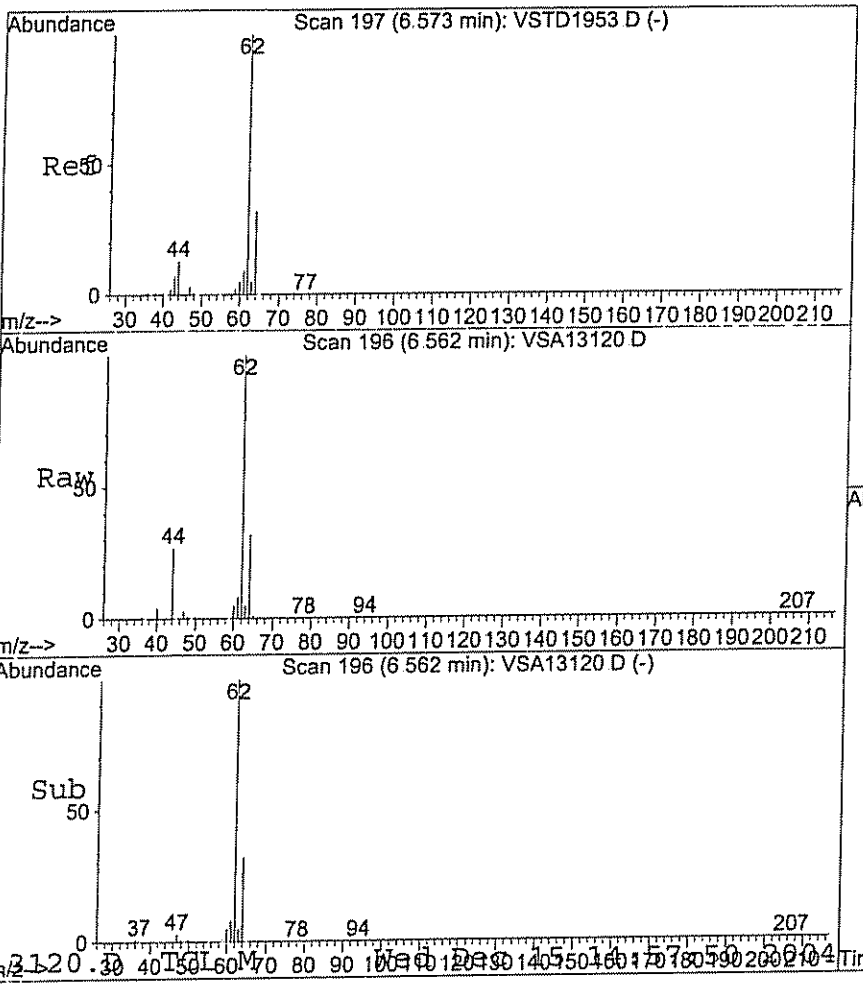


#2
Chloromethane
Concen: 0.20 ug/L
RT: 6.30 min Scan# 169
Delta R.T. -0.00 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 50 Resp: 727

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.5	63.5#

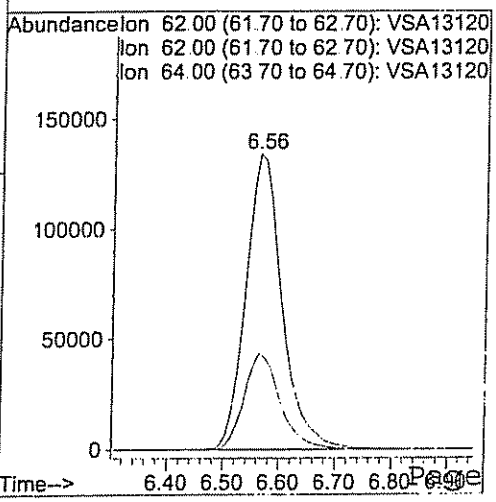


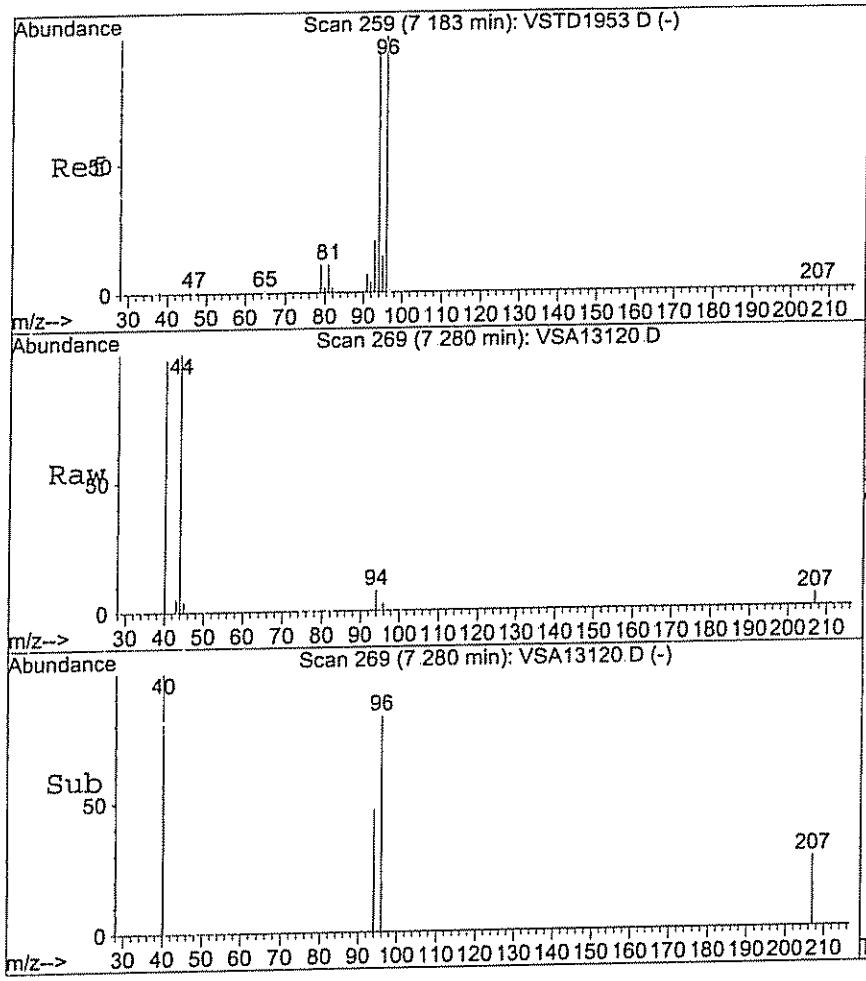


#3
Vinyl chloride
Concen: 175.00 ug/L
RT: 6.56 min Scan# 196
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 62 Resp: 608686

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	32.4	2.0	62.0

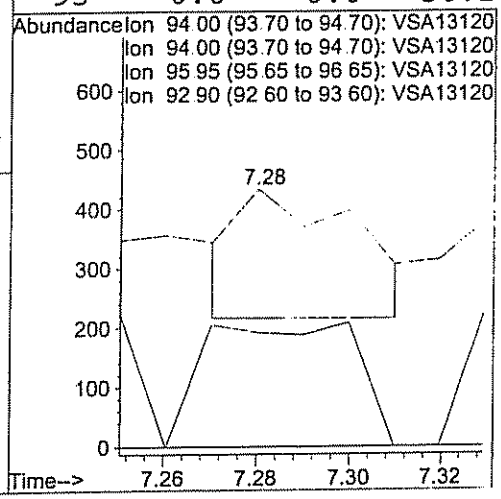


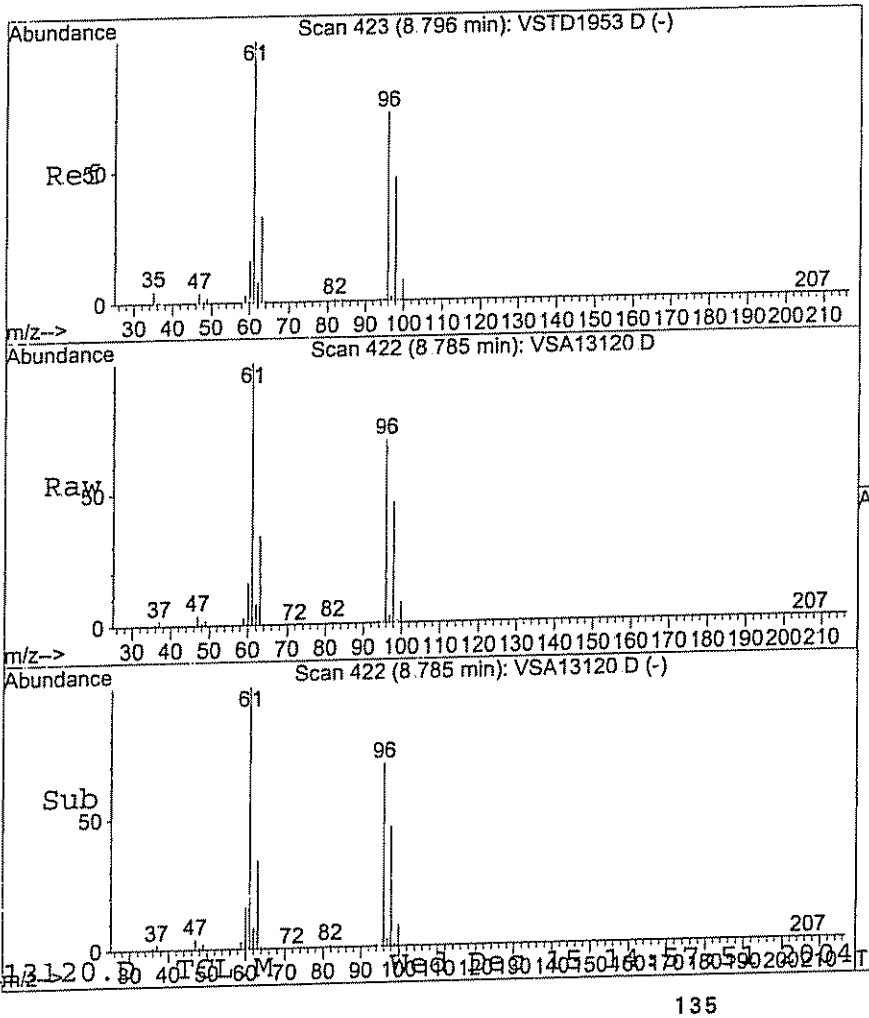


#4
Bromomethane
Concen: 0.18 ug/L
RT: 7.28 min Scan# 269
Delta R.T. 0.10 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 94 Resp: 380

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	82.1	70.5	130.5
93	0.0	0.0	50.2

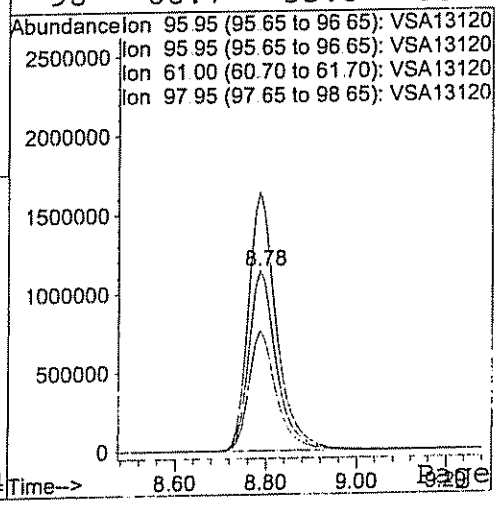


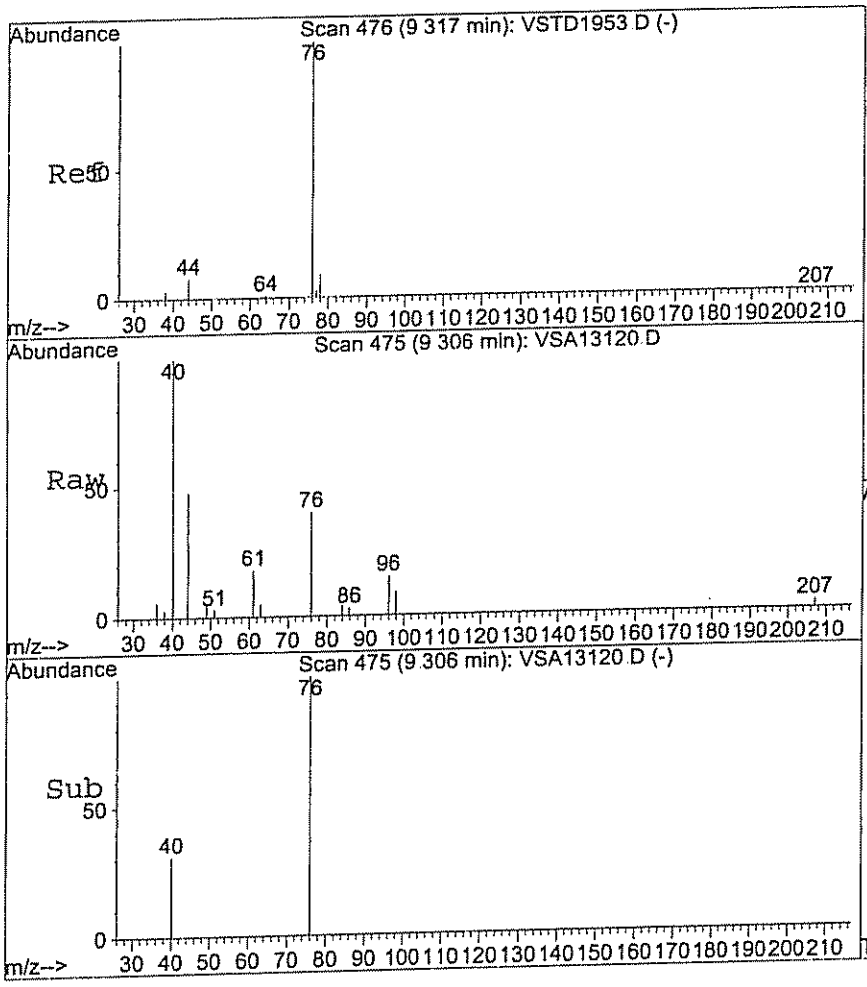


#6
1,1-Dichloroethene
Concen: 1793.94 ug/L
RT: 8.78 min Scan# 422
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 96 Resp: 4838446

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	143.7	108.4	168.4
98	66.7	35.8	95.8

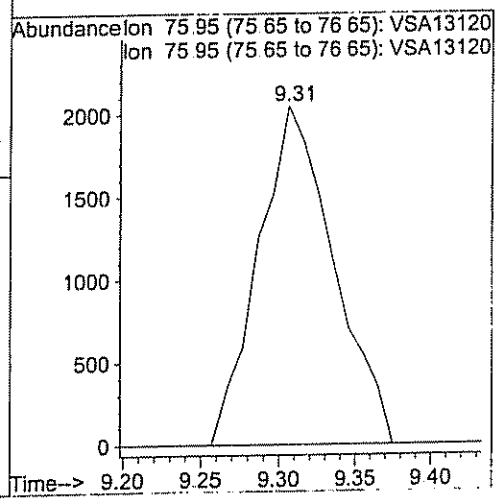


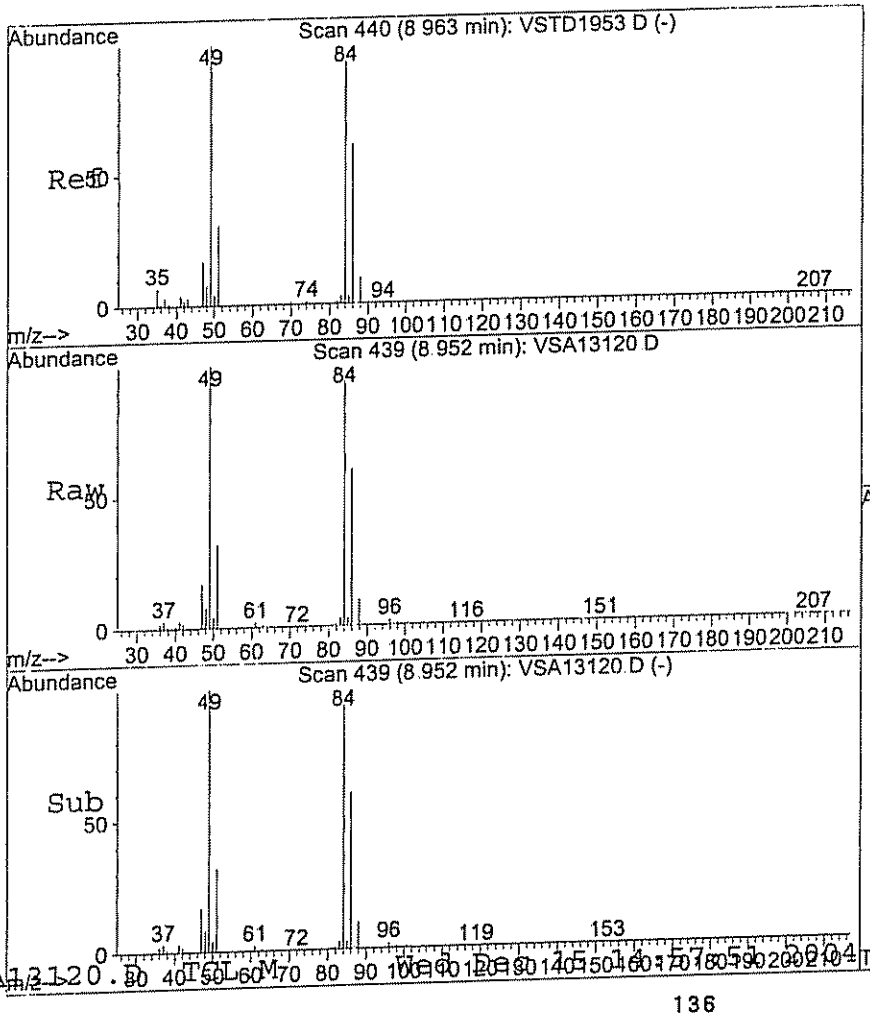


#7
Carbon disulfide
Concen: 0.74 ug/L
RT: 9.31 min Scan# 475
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 76 Resp: 6952

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

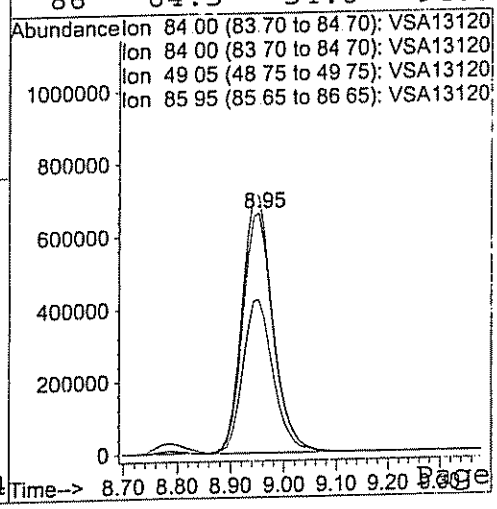


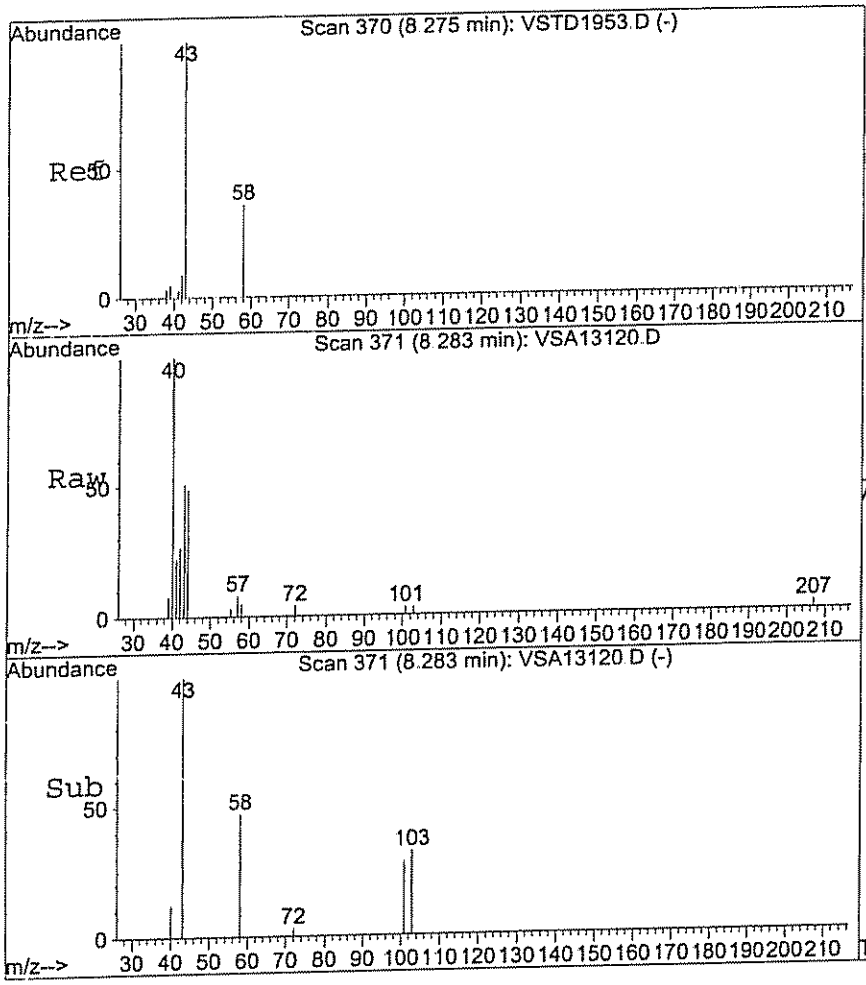


#8
Methylene chloride
Concen: 832.72 ug/L
RT: 8.95 min Scan# 439
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 84 Resp: 2617417

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	106.5	76.9	136.9
86	64.3	34.8	94.8

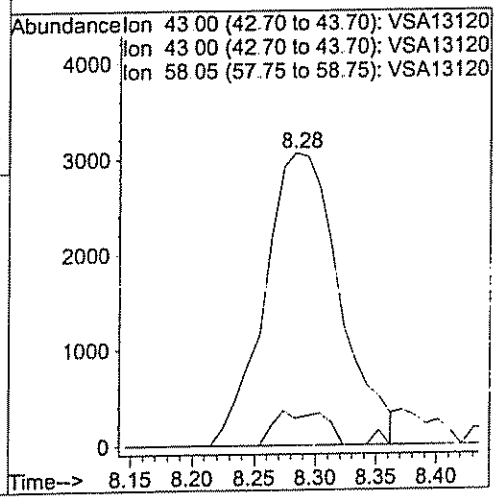


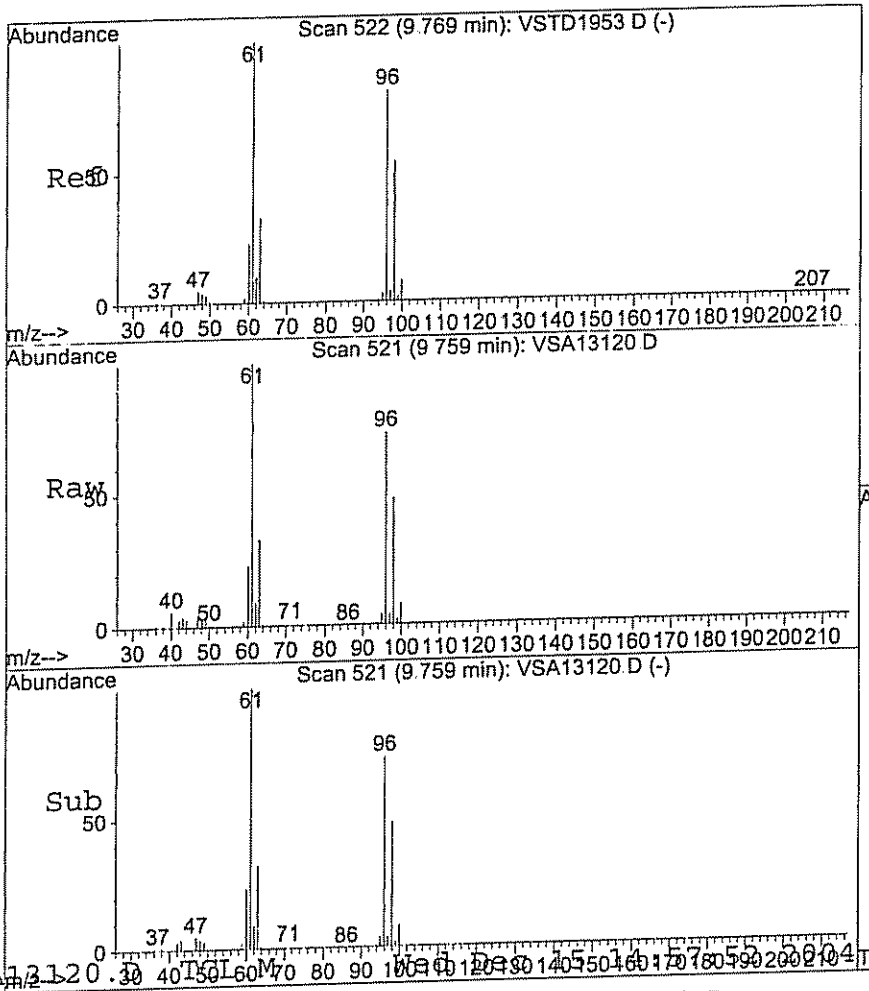


#9
Acetone
Concen: 16.53 ug/L
RT: 8.28 min Scan# 371
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 43 Resp: 13058

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	9.7	6.8	66.8

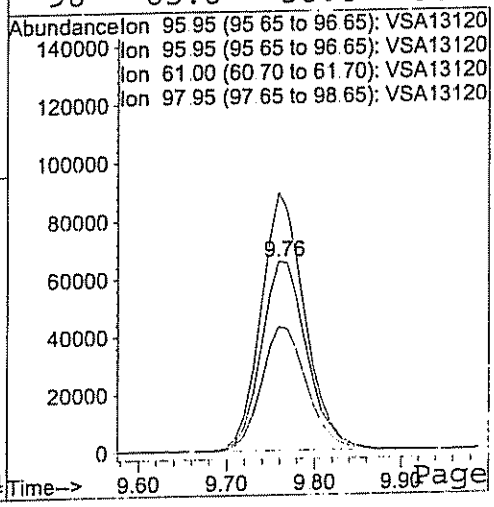


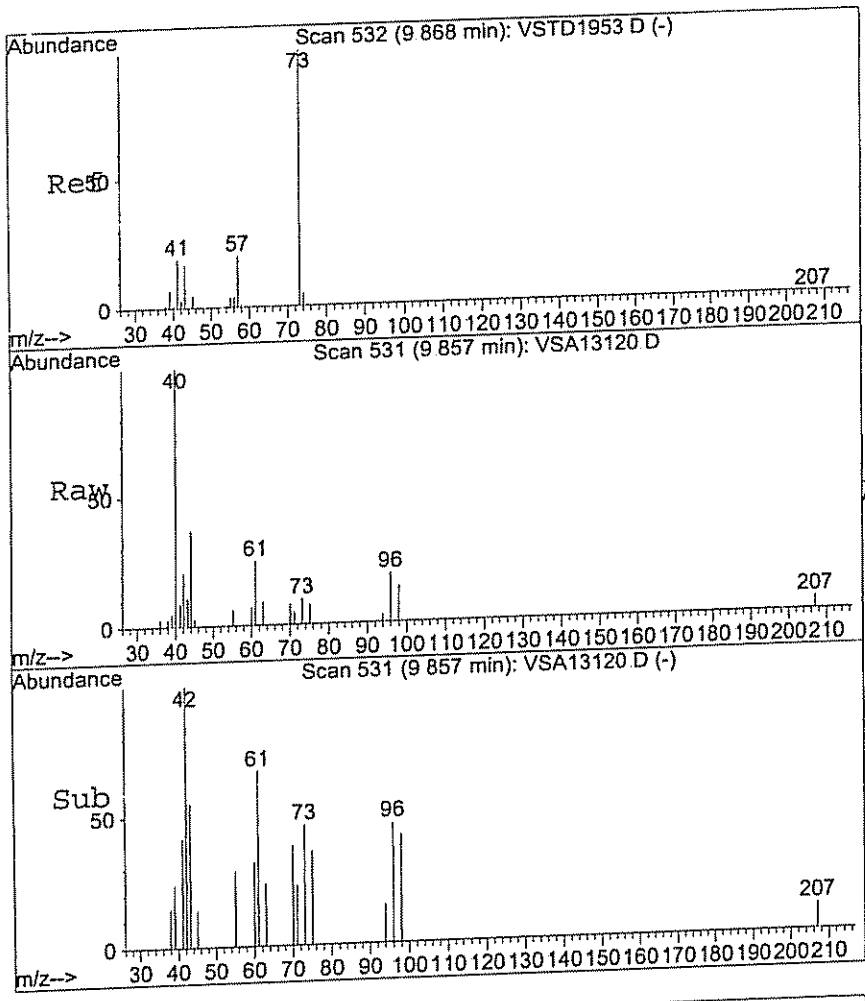


#10
trans-1,2-Dichloroethene
Concen: 76.63 ug/L
RT: 9.76 min Scan# 521
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 96 Resp: 237395

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	136.0	93.5	153.5
98	65.6	36.4	96.4

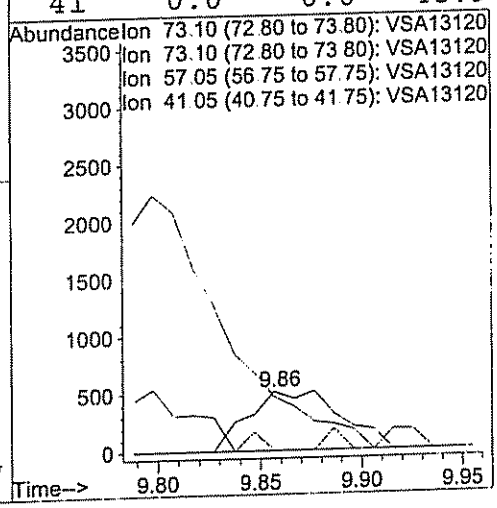


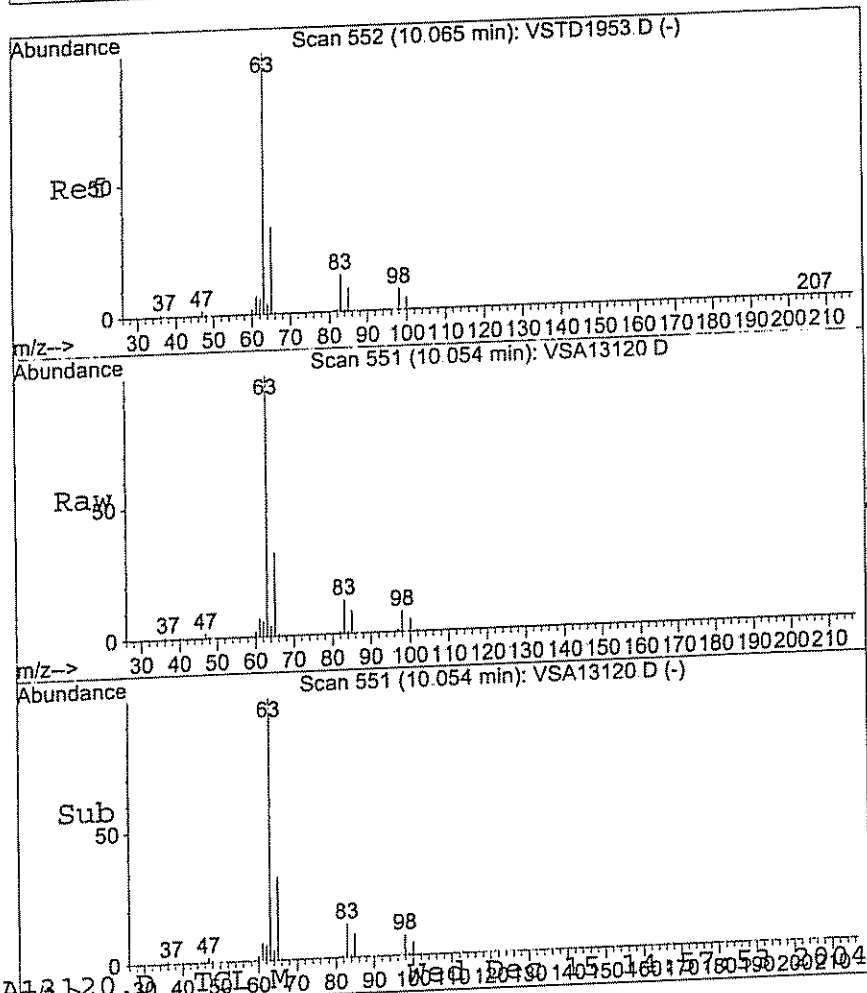


#11
methyl-tert-butyl-Ether
Concen: 0.22 ug/L
RT: 9.86 min Scan# 531
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 73 Resp: 1601

Ion	Ratio	Lower	Upper
73	100		
73	100.0	70.0	130.0
57	0.0	0.0	49.9
41	0.0	0.0	48.9

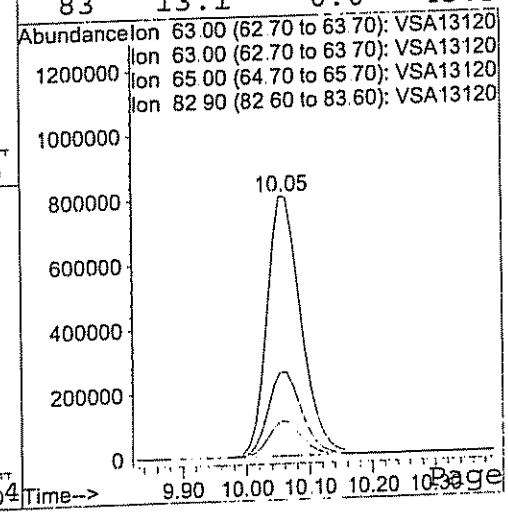


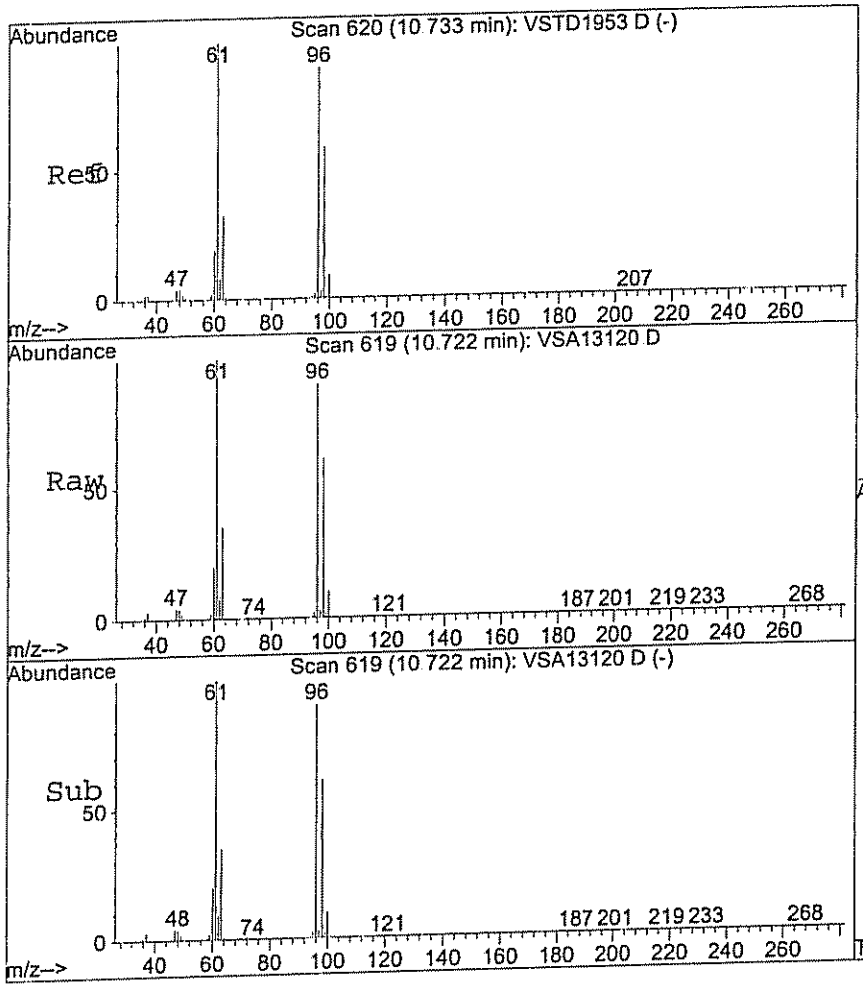


#12
1,1-Dichloroethane
Concen: 629.31 ug/L
RT: 10.05 min Scan# 551
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 63 Resp: 3008356

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	32.1	2.8	62.8
83	13.1	0.0	43.5

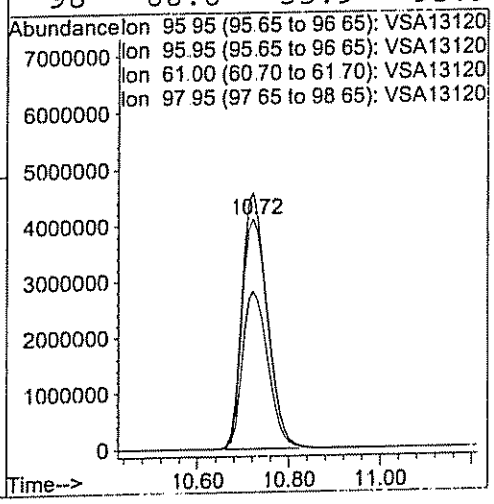


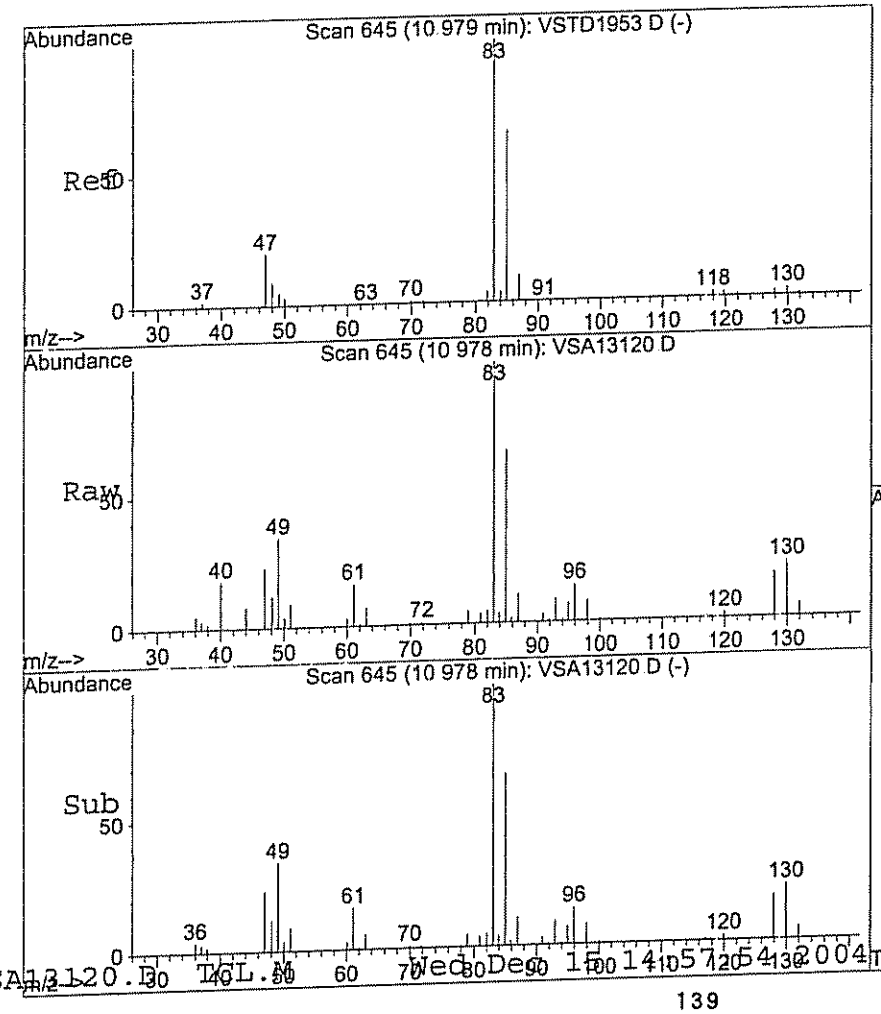


#13
cis-1,2-Dichloroethene
Concen: 4398.62 ug/L
RT: 10.72 min Scan# 619
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 96 Resp:16287132

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	111.5	81.4	141.4
98	68.6	35.9	95.9

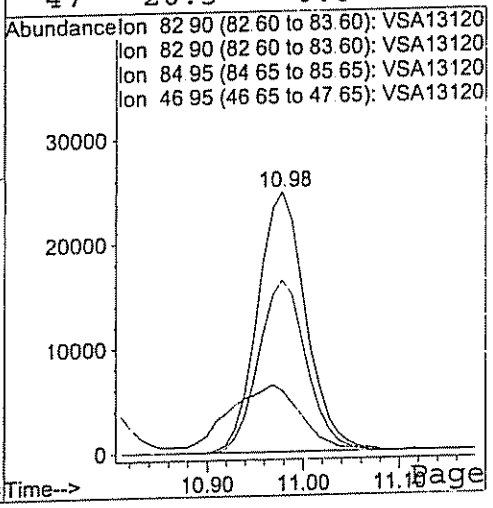


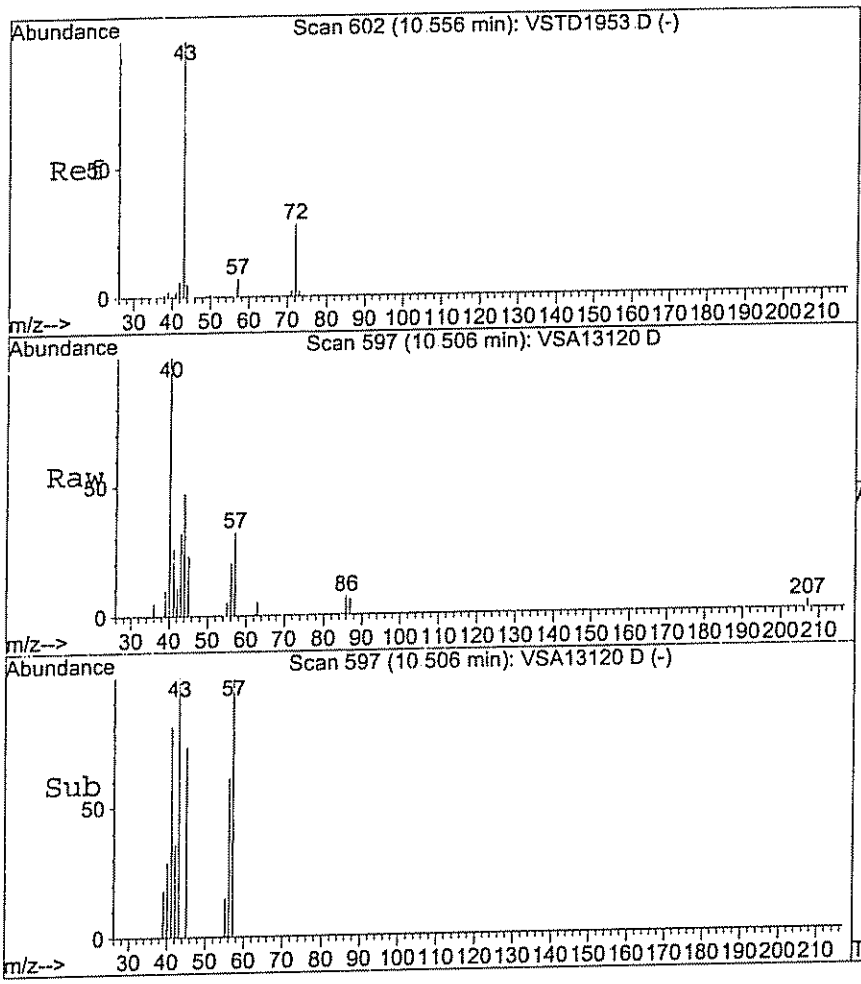


#14
Chloroform
Concen: 18.98 ug/L
RT: 10.98 min Scan# 645
Delta R.T. -0.00 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 83 Resp: 86231

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	65.9	35.2	95.2
47	20.3	0.0	50.7

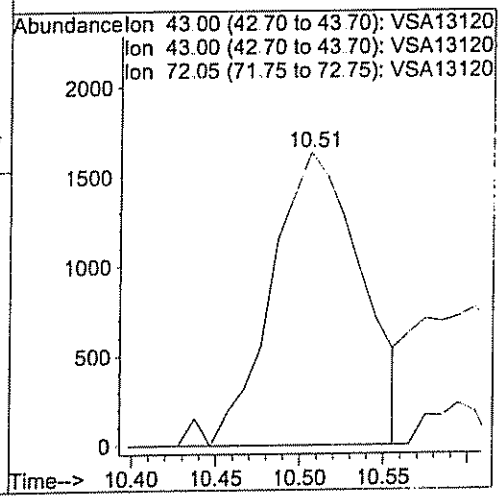


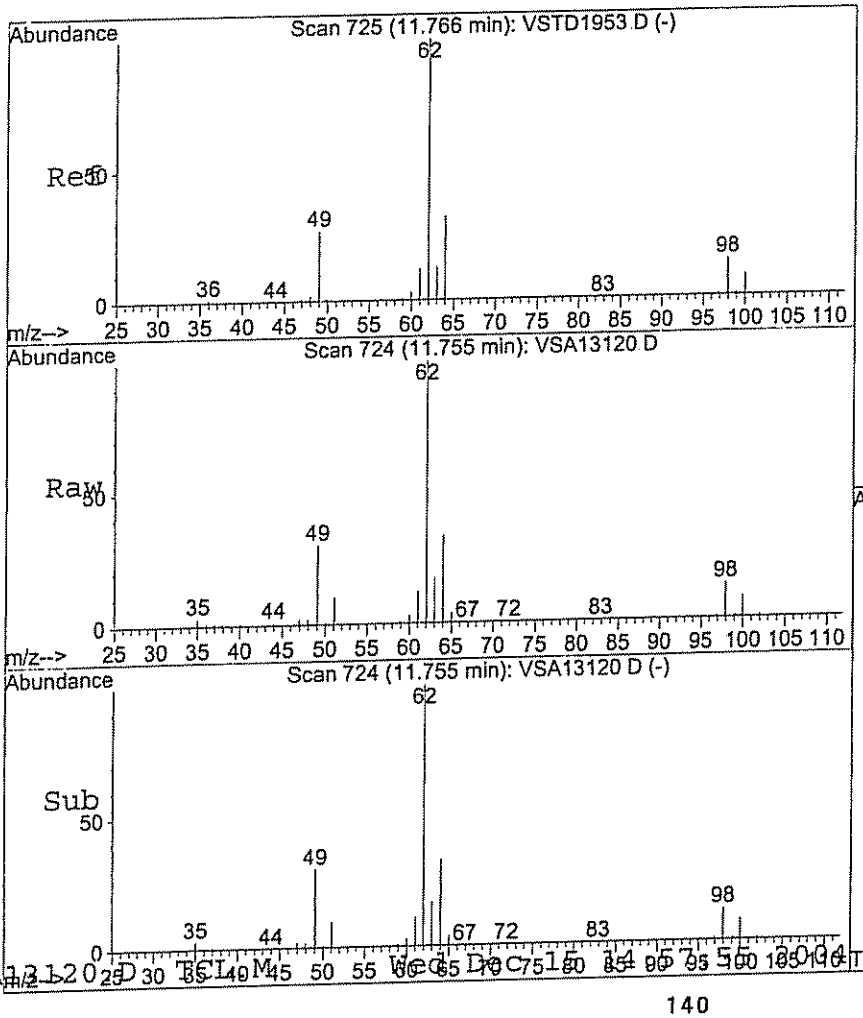


#15
2-Butanone
Concen: 5.21 ug/L
RT: 10.51 min Scan# 597
Delta R.T. -0.07 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 43 Resp: 6050

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	57.1

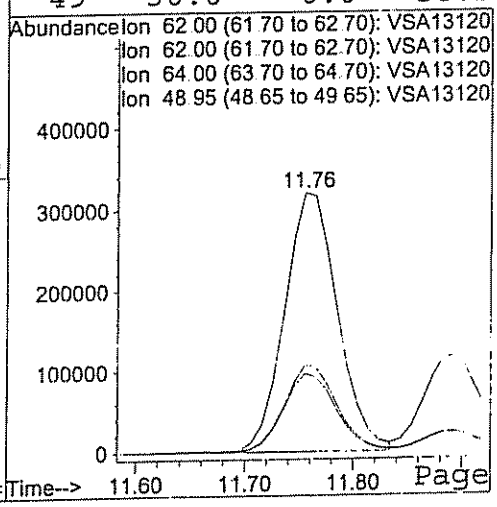


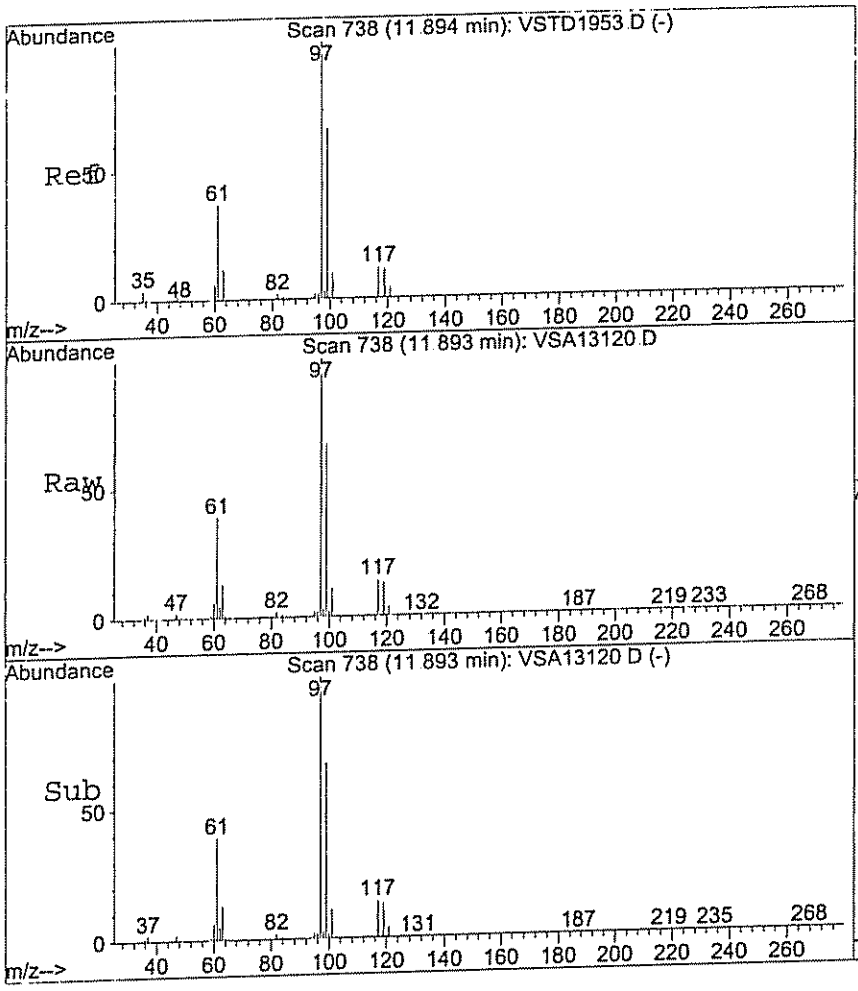


#17
1,2-Dichloroethane
Concen: 345.92 ug/L
RT: 11.76 min Scan# 724
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 62 Resp: 1088291

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	33.4	2.3	62.3
49	30.0	0.0	58.2

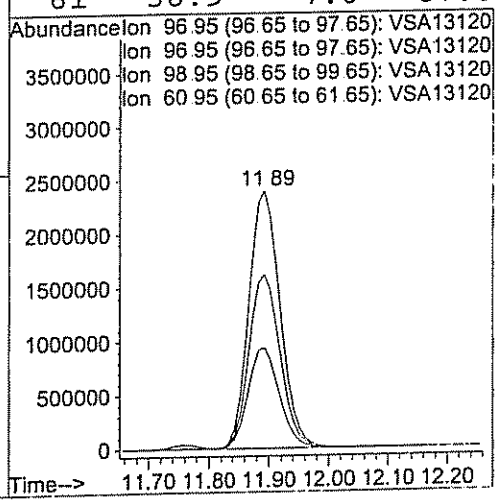


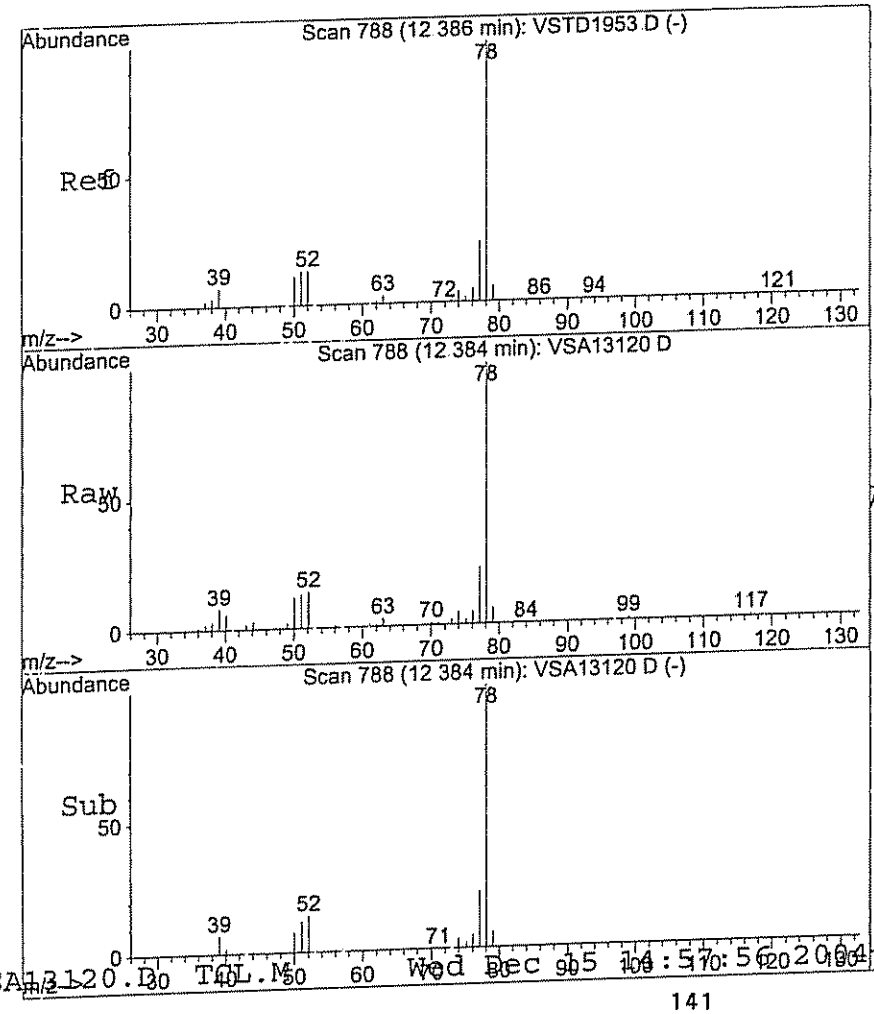


#20
1,1,1-Trichloroethane
Concen: 2130.29 ug/L
RT: 11.89 min Scan# 738
Delta R.T. -0.00 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 97 Resp: 8656430

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	67.4	36.4	96.4
61	38.9	7.0	67.0

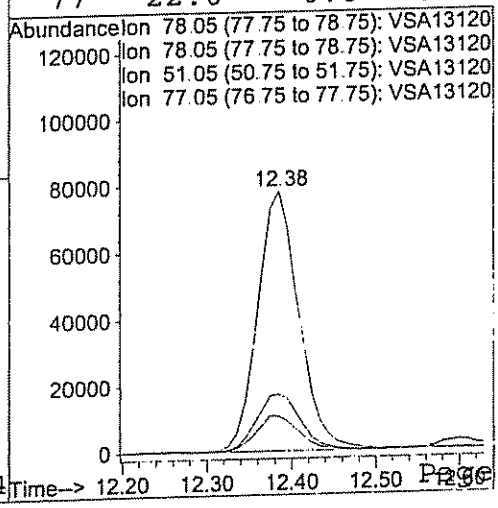


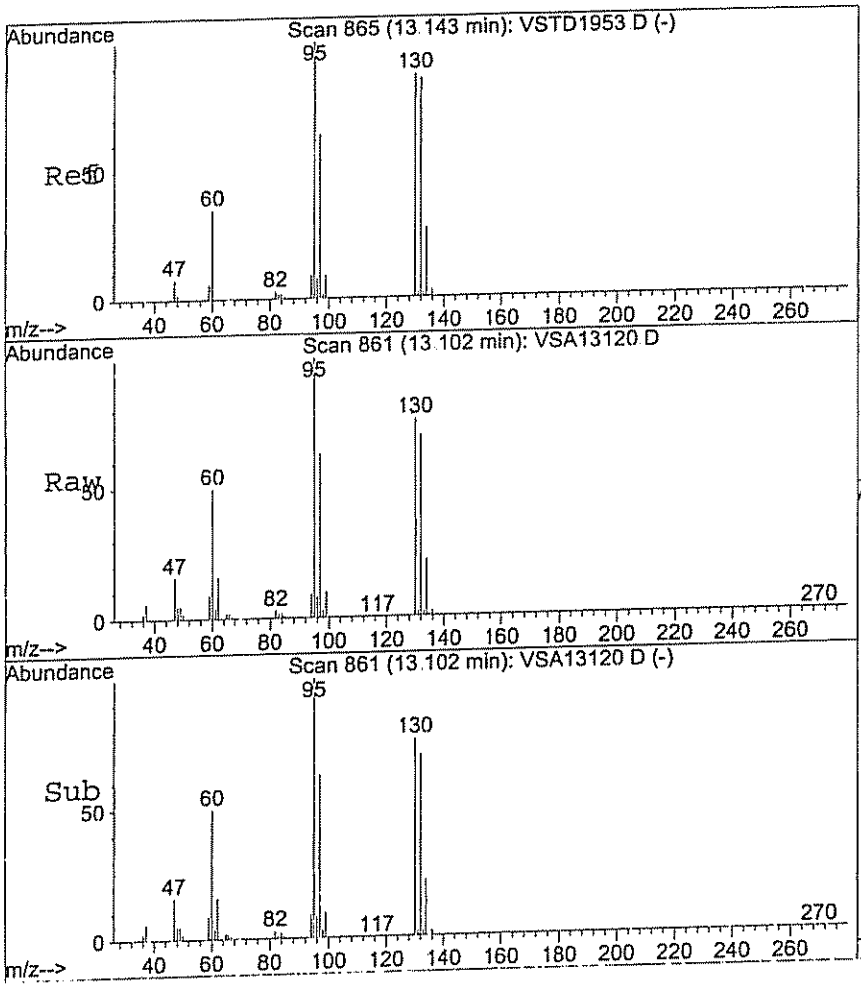


#21
Benzene
Concen: 22.82 ug/L
RT: 12.38 min Scan# 788
Delta R.T. -0.00 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 78 Resp: 264419

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	13.4	0.0	42.7
77	22.0	0.0	53.3

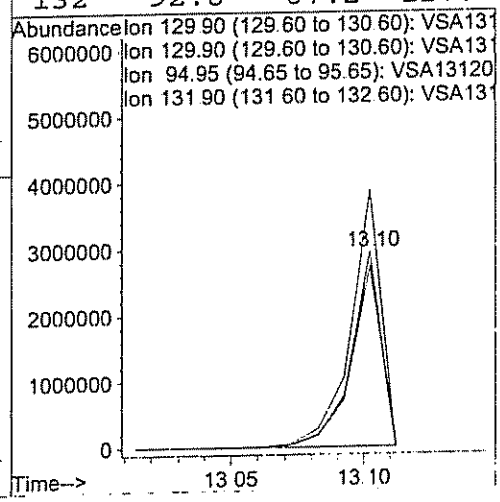


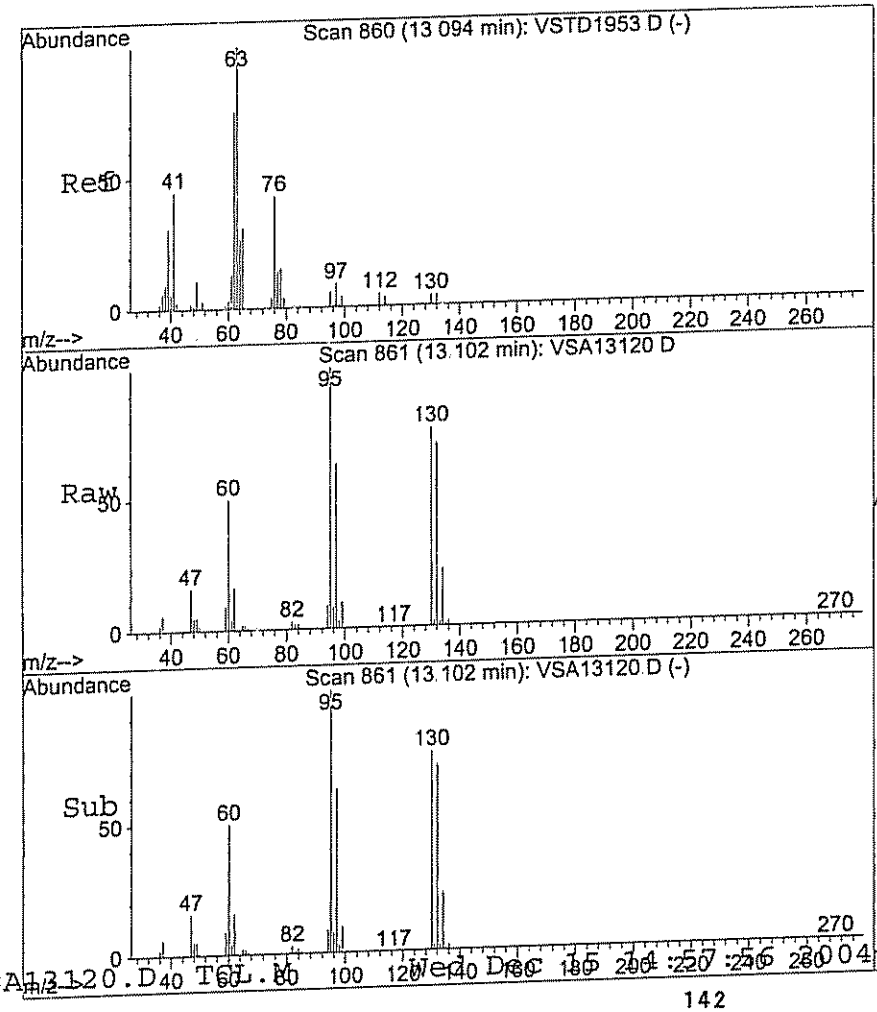


#22
Trichloroethene
Concen: 906.77 ug/L
RT: 13.10 min Scan# 861
Delta R.T. -0.04 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion:130 Resp: 2326304

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	131.6	84.6	144.6
132	92.8	67.2	127.2

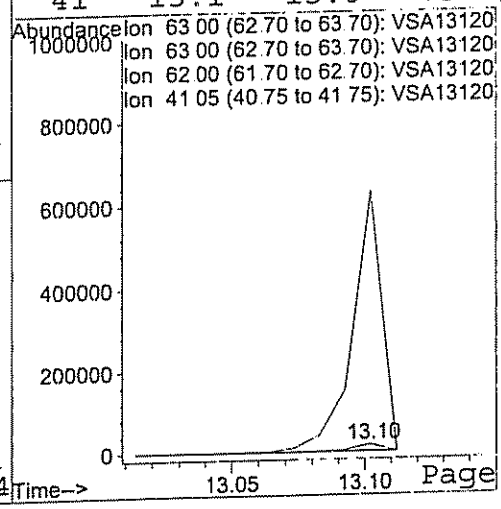


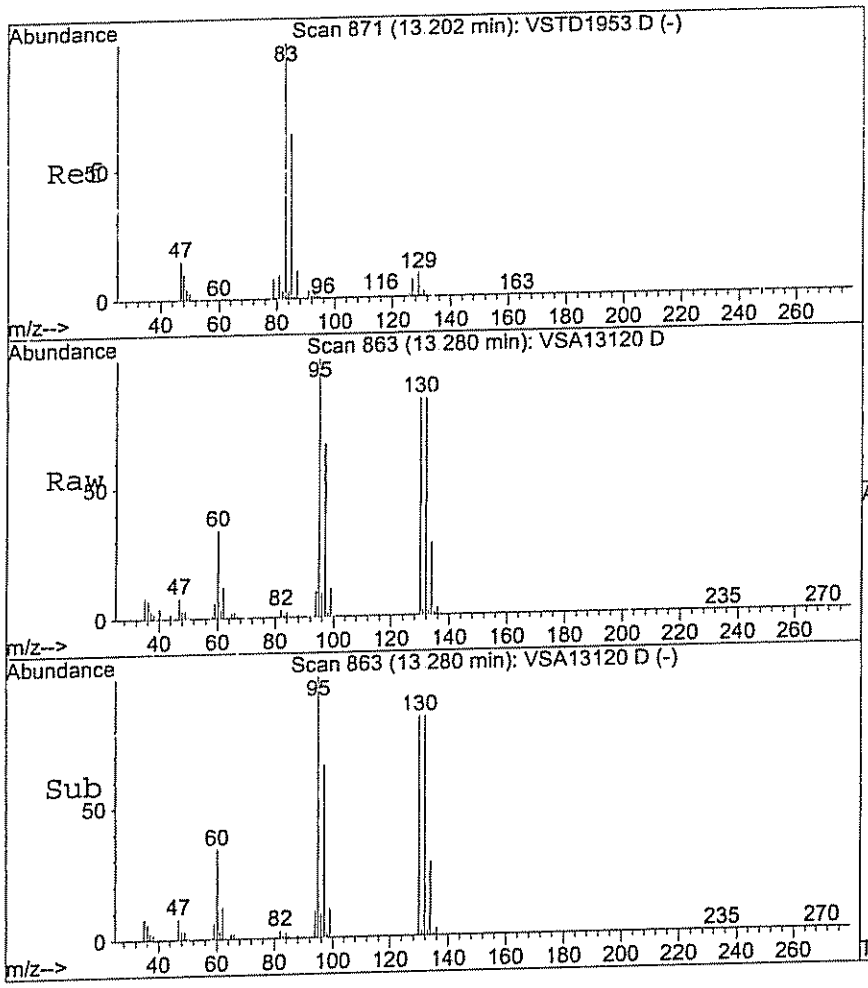


#23
1,2-Dichloropropane
Concen: 4.76 ug/L
RT: 13.10 min Scan# 861
Delta R.T. 0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 63 Resp: 13824

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
62	3690.0	44.6	104.6#
41	13.1	15.0	75.0#

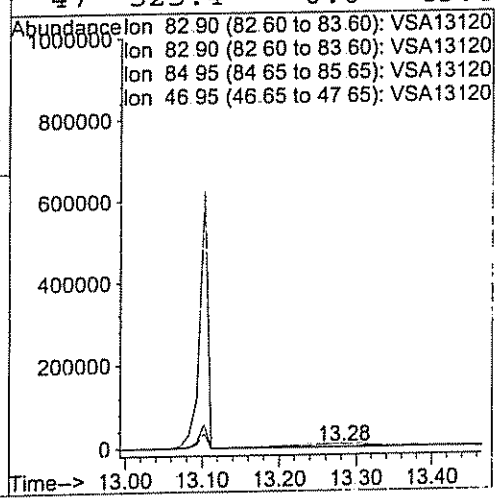


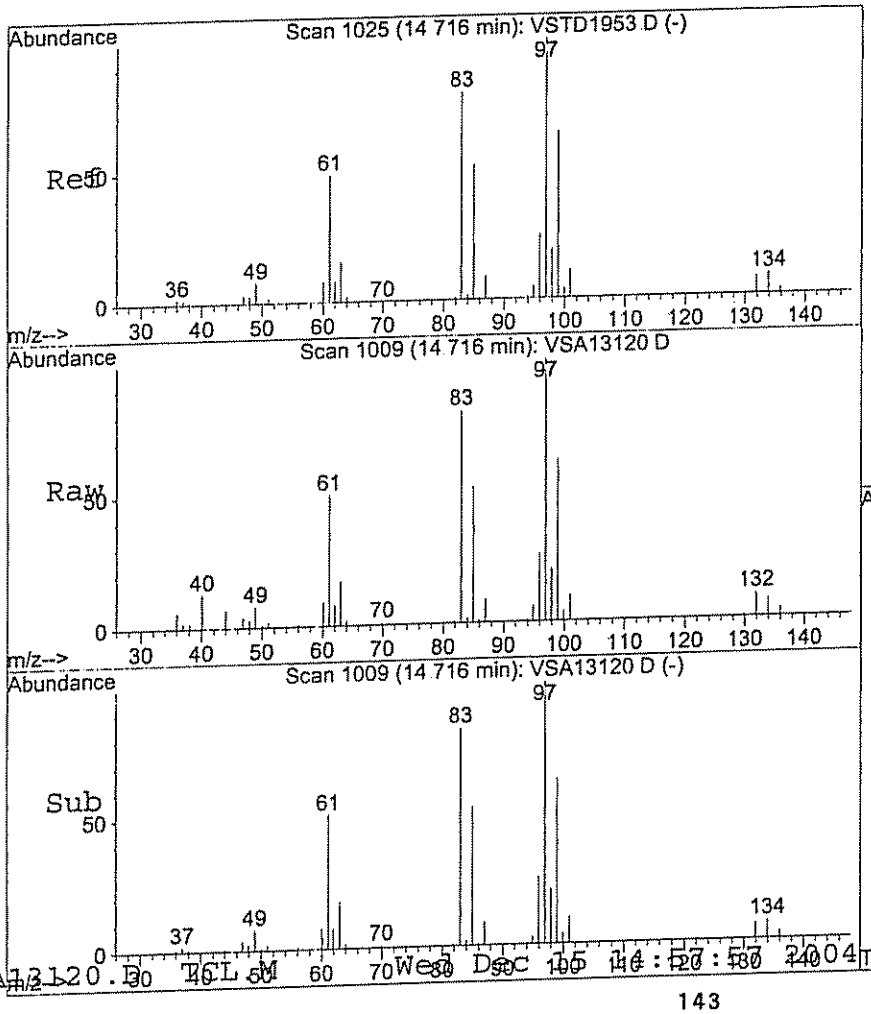


#24
Bromodichloromethane
Concen: 3.45 ug/L
RT: 13.28 min Scan# 863
Delta R.T. 0.08 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 83 Resp: 12432

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	66.2	33.5	93.5
47	525.4	0.0	45.4#

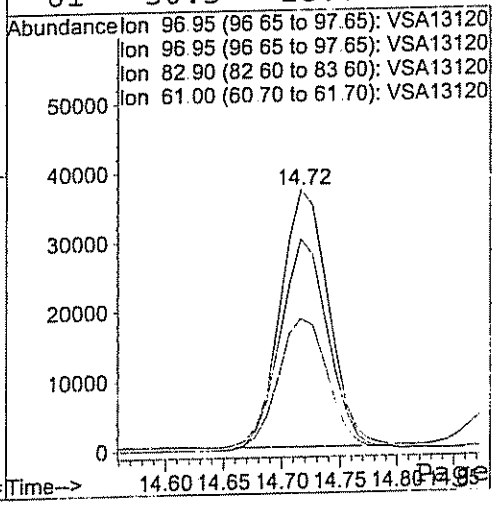


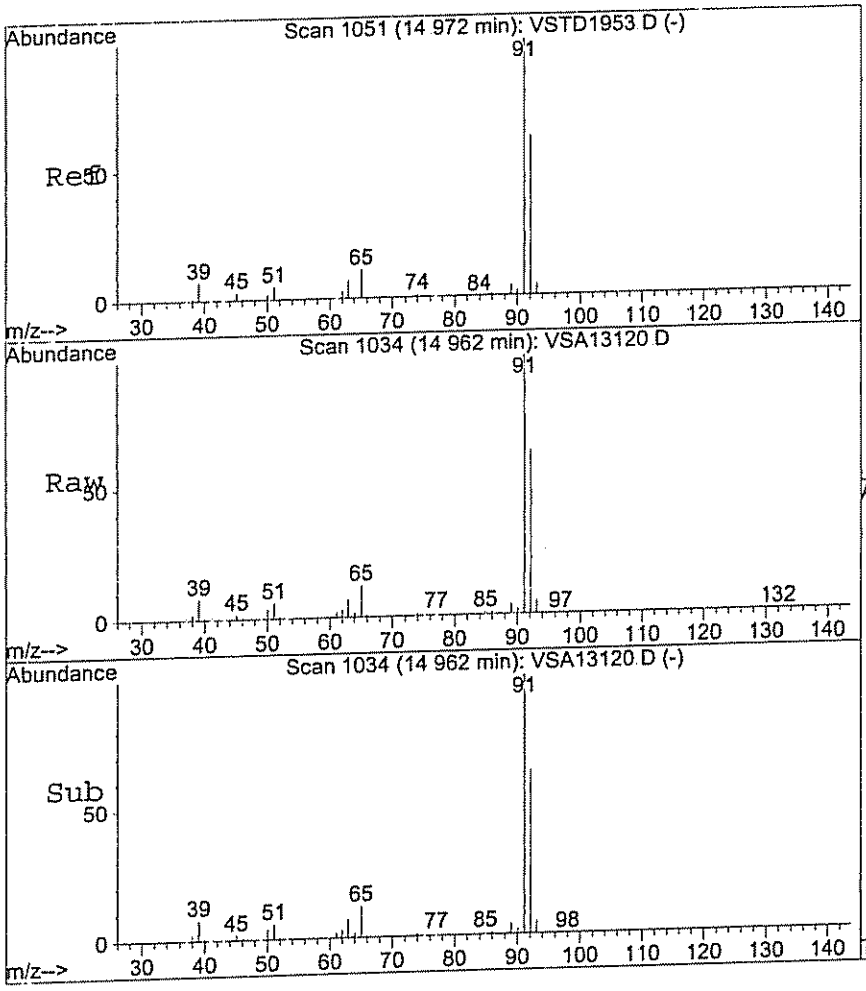


#27
1,1,2-Trichloroethane
Concen: 40.19 ug/L
RT: 14.72 min Scan# 1009
Delta R.T. -0.00 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 97 Resp: 106090

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	81.6	50.2	110.2
61	50.5	18.7	78.7

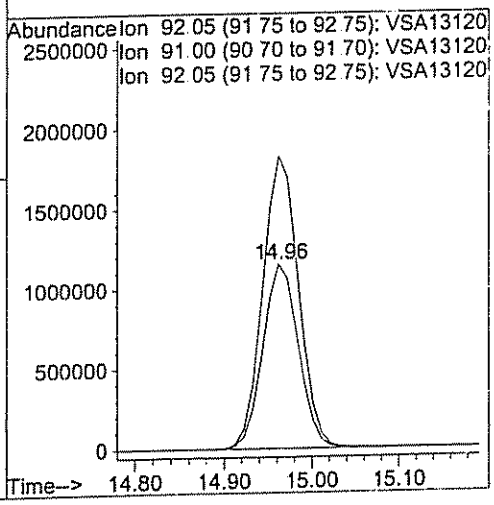


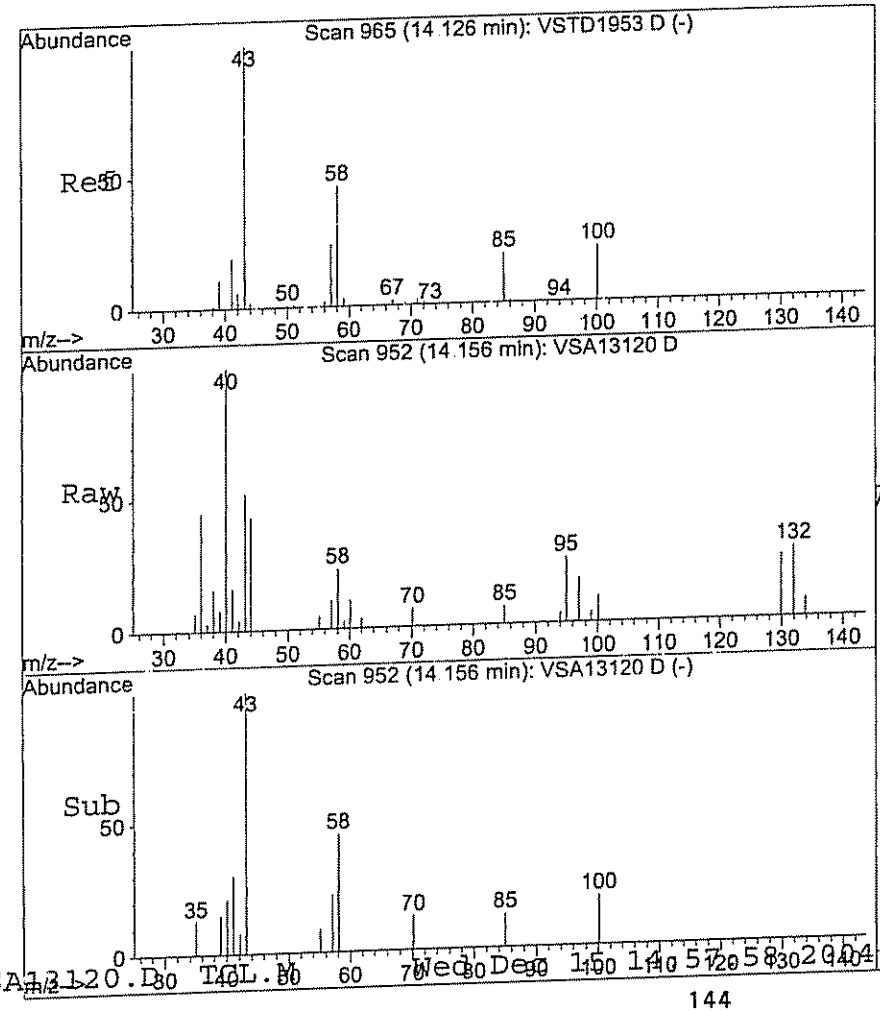


#33
Toluene
Concen: 466.01 ug/L
RT: 14.96 min Scan# 1034
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 92 Resp: 3238865

Ion	Ratio	Lower	Upper
92	100		
91	158.8	132.3	192.3
92	100.0	70.0	130.0

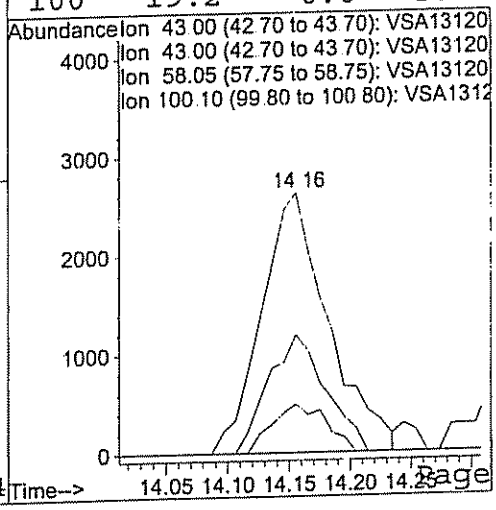


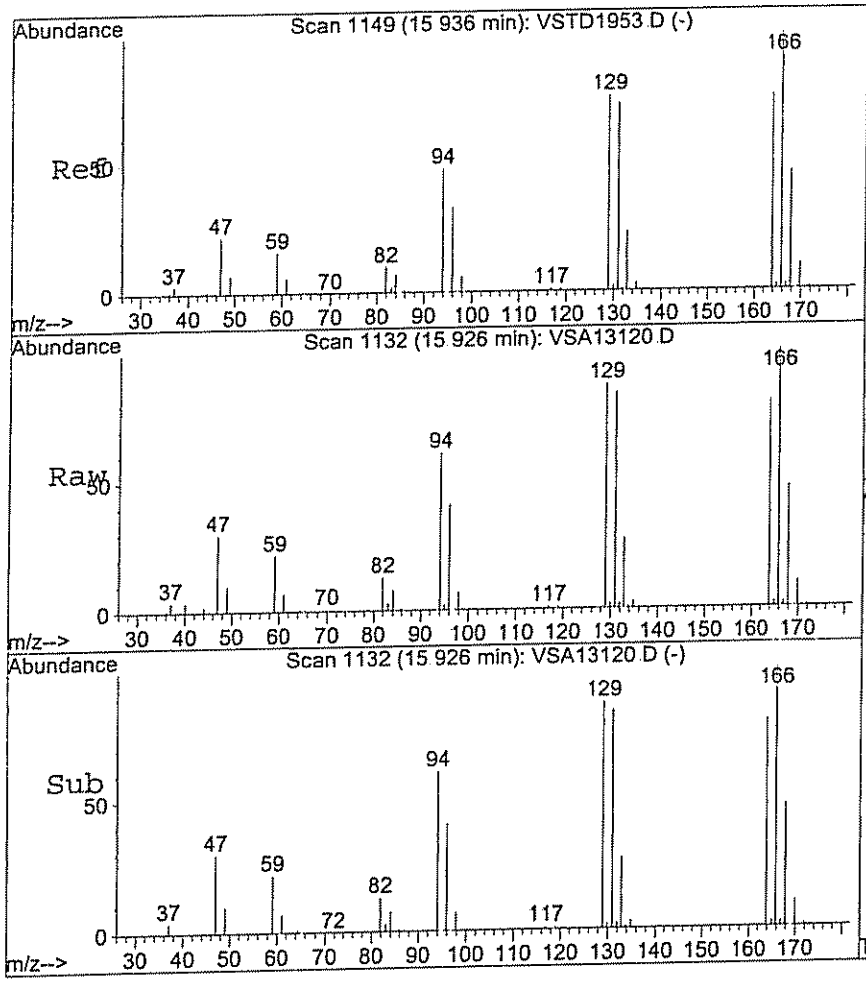


#34
4-methyl-2-Pentanone
Concen: 4.58 ug/L
RT: 14.16 min Scan# 952
Delta R.T. 0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 43 Resp: 9906

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	46.9	15.5	75.5
100	19.2	0.0	50.9

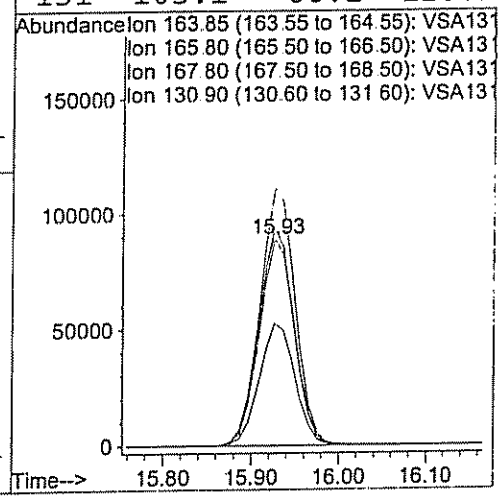


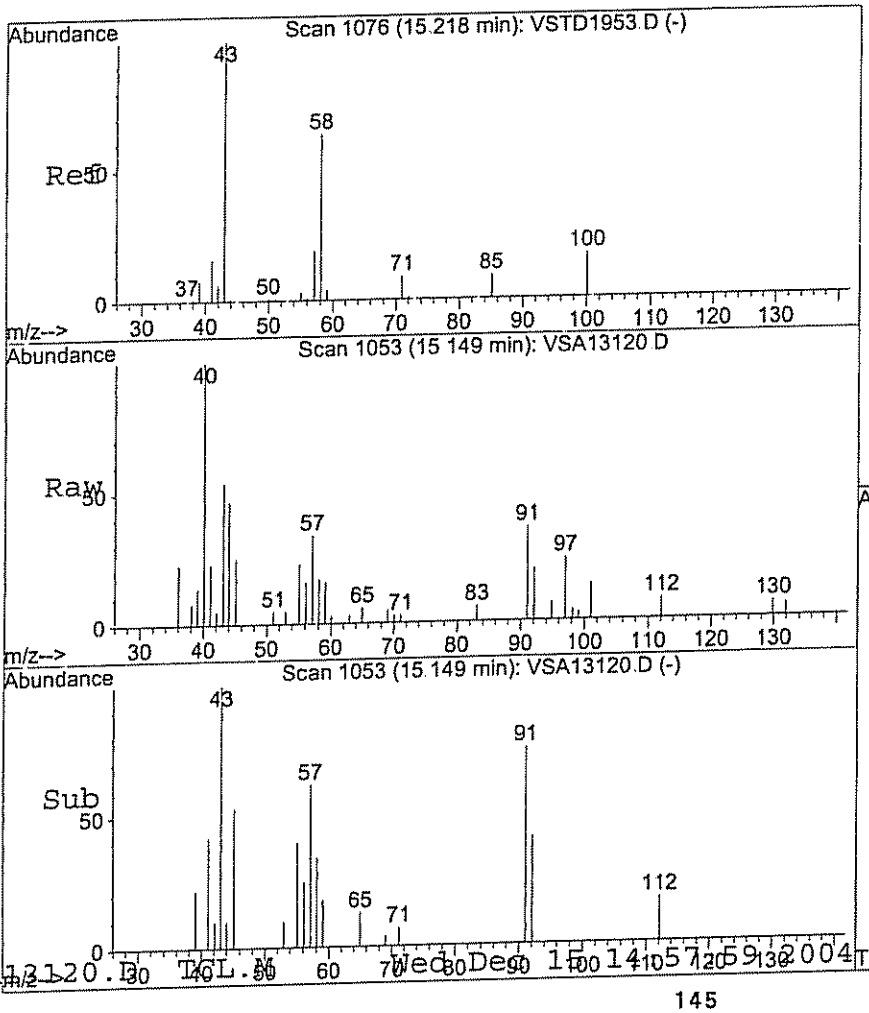


#35
Tetrachloroethene
Concen: 142.61 ug/L
RT: 15.93 min Scan# 1132
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion:164 Resp: 248938

Ion	Ratio	Lower	Upper
164	100		
166	124.3	100.8	160.8
168	58.8	30.1	90.1
131	105.1	66.1	126.1

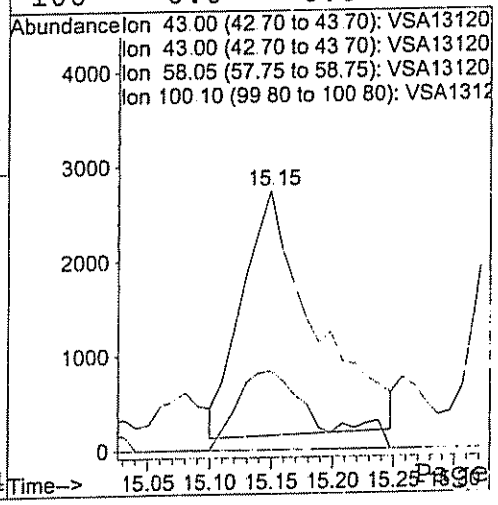


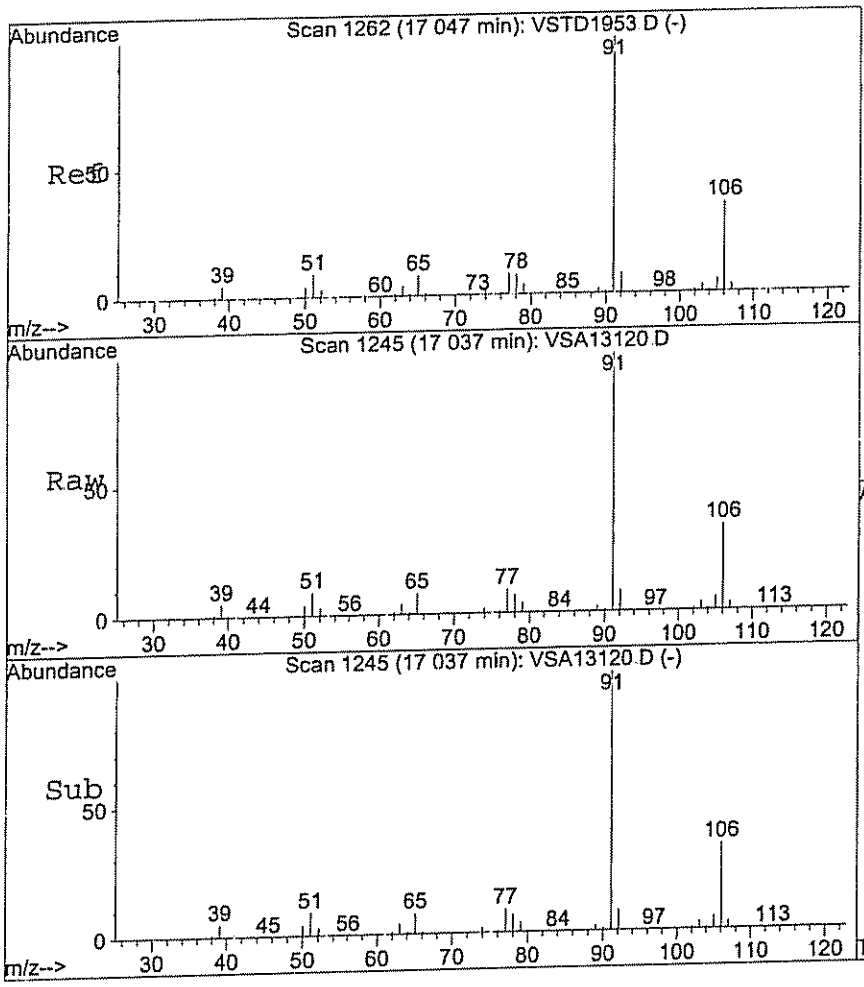


#36
2-Hexanone
Concen: 7.10 ug/L
RT: 15.15 min Scan# 1053
Delta R.T. -0.08 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 43 Resp: 10577

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	37.6	34.3	94.3
100	0.0	0.0	46.8

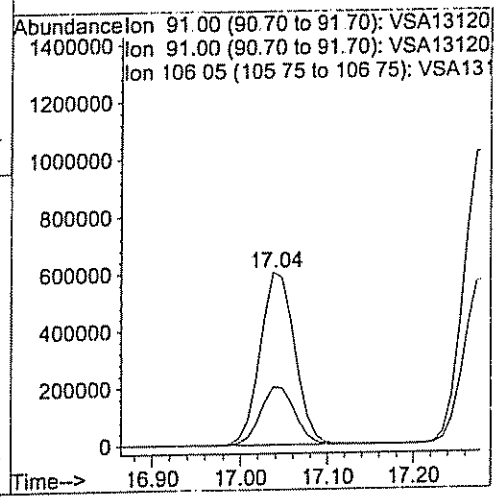


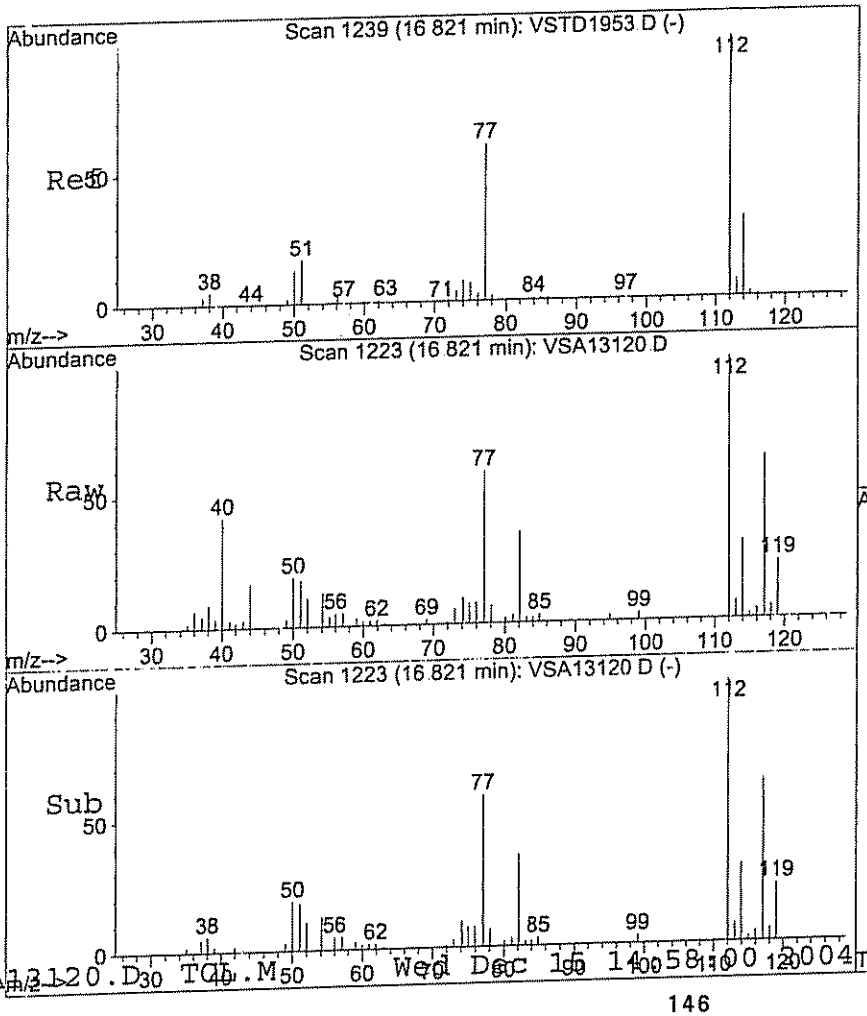


#37
Ethyl benzene
Concen: 131.96 ug/L
RT: 17.04 min Scan# 1245
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 91 Resp: 1662399

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	33.4	4.8	64.8

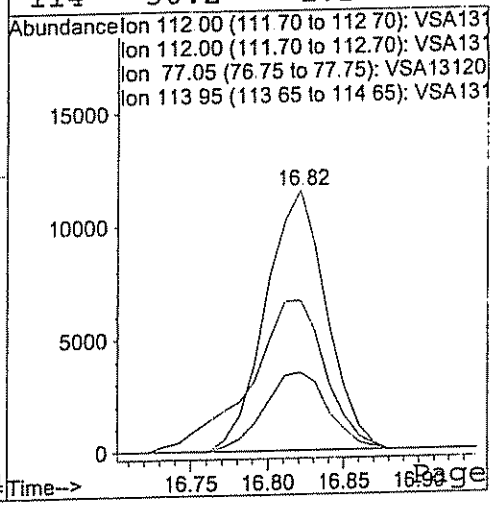


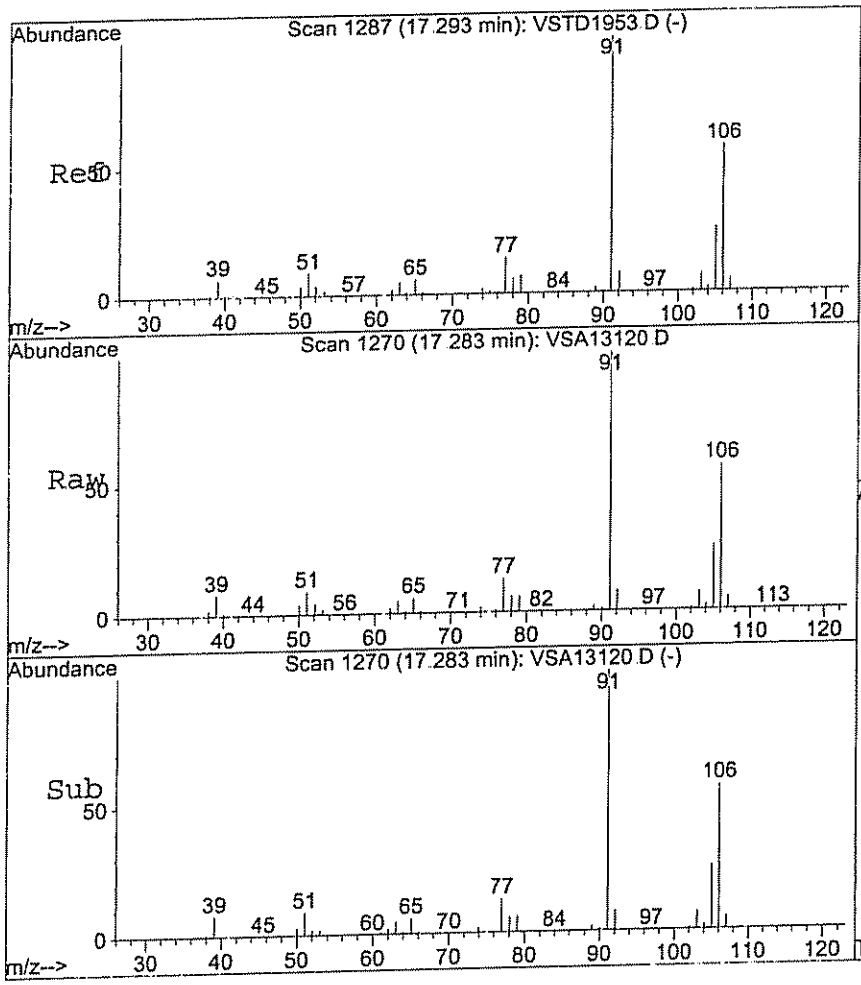


#38
Chlorobenzene
Concen: 4.10 ug/L
RT: 16.82 min Scan# 1223
Delta R.T. -0.00 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion:112 Resp: 32013

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	52.0	29.8	89.8
114	30.2	1.2	61.2

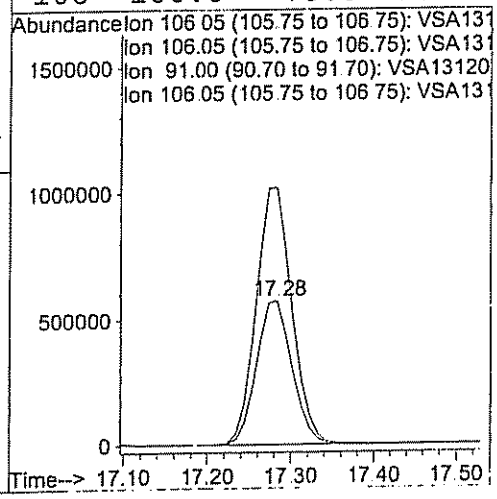


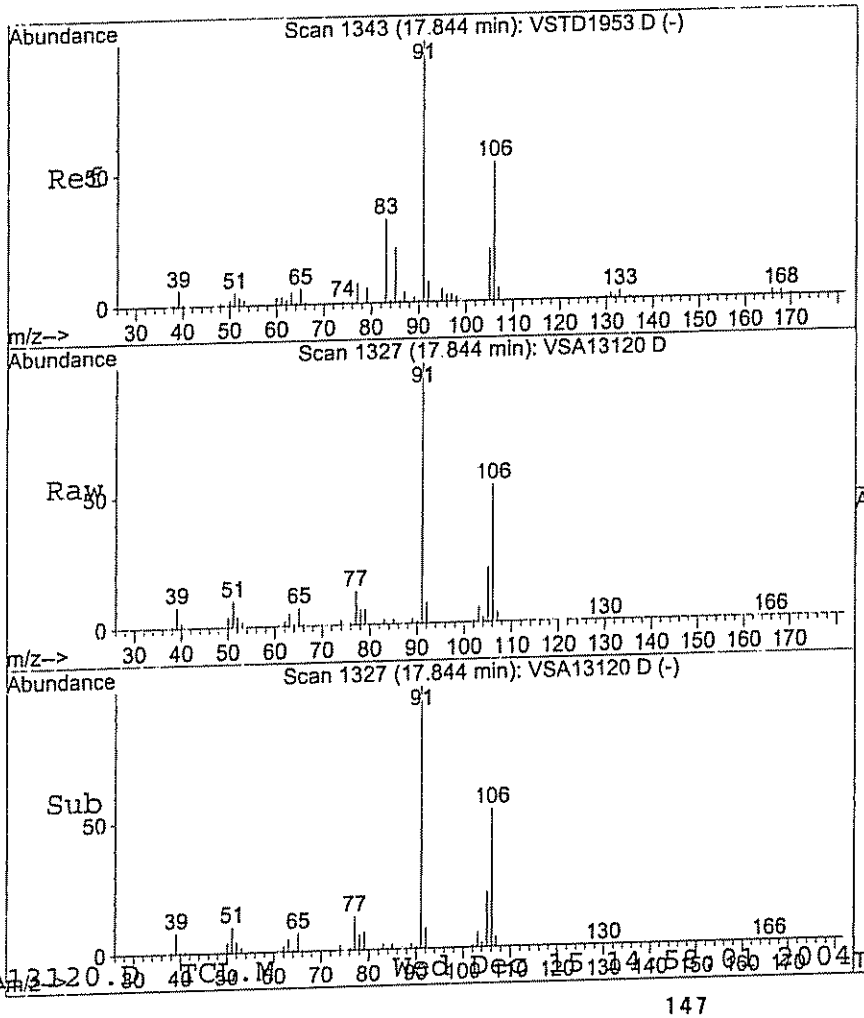


#39
m&p-Xylenes
Concen: 317.42 ug/L
RT: 17.28 min Scan# 1270
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion:106 Resp: 1708694

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	177.6	144.3	204.3
106	100.0	70.0	130.0

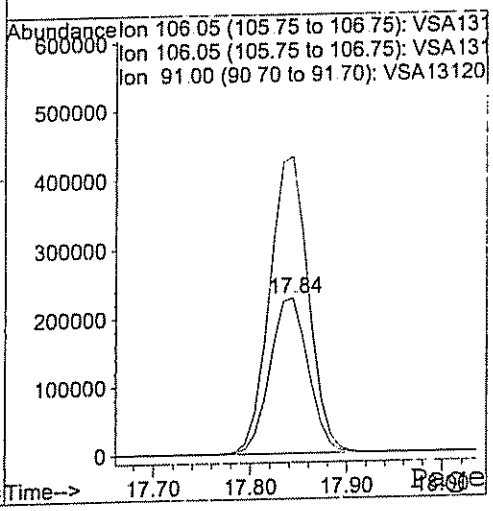


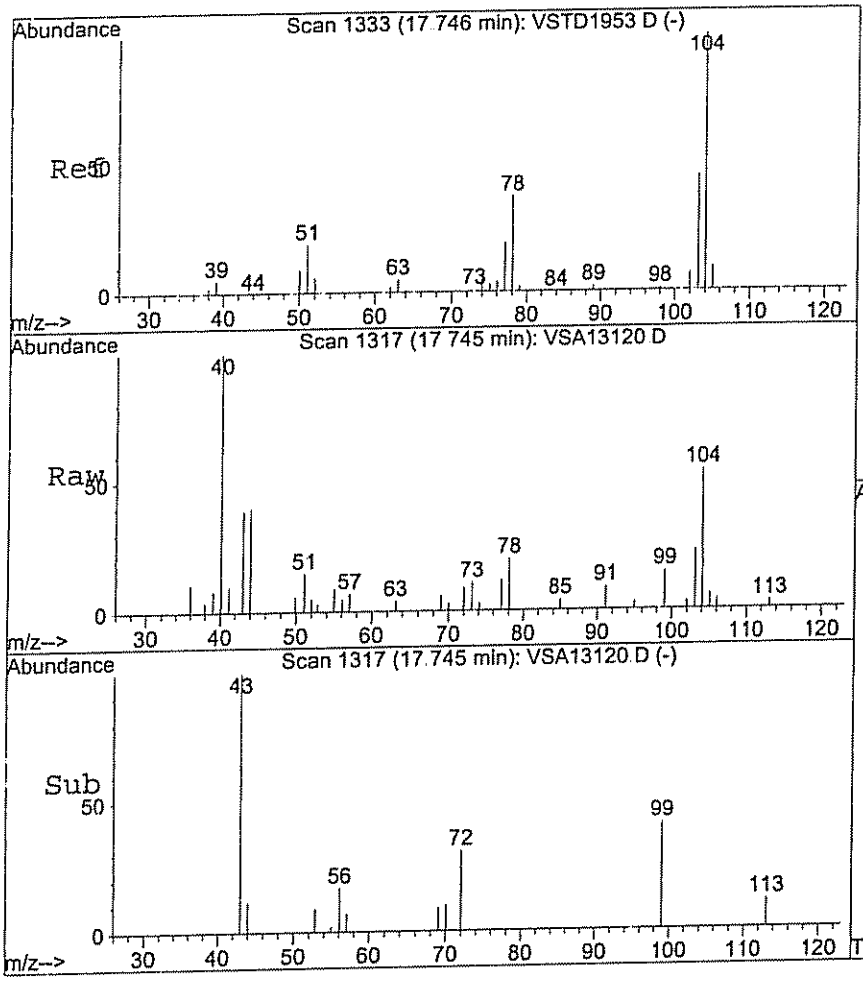


#40
o-Xylene
Concen: 120.03 ug/L
RT: 17.84 min Scan# 1327
Delta R.T. -0.00 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion:106 Resp: 628500

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	189.5	157.0	217.0

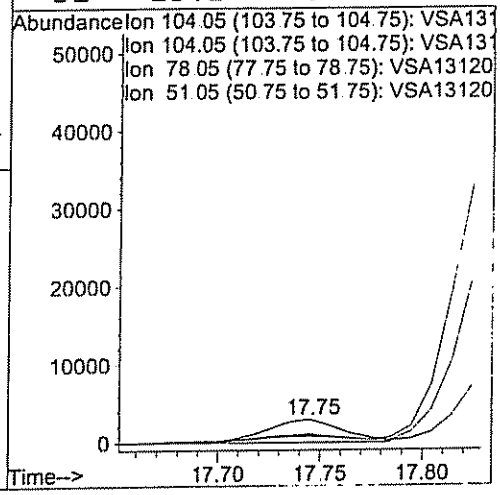


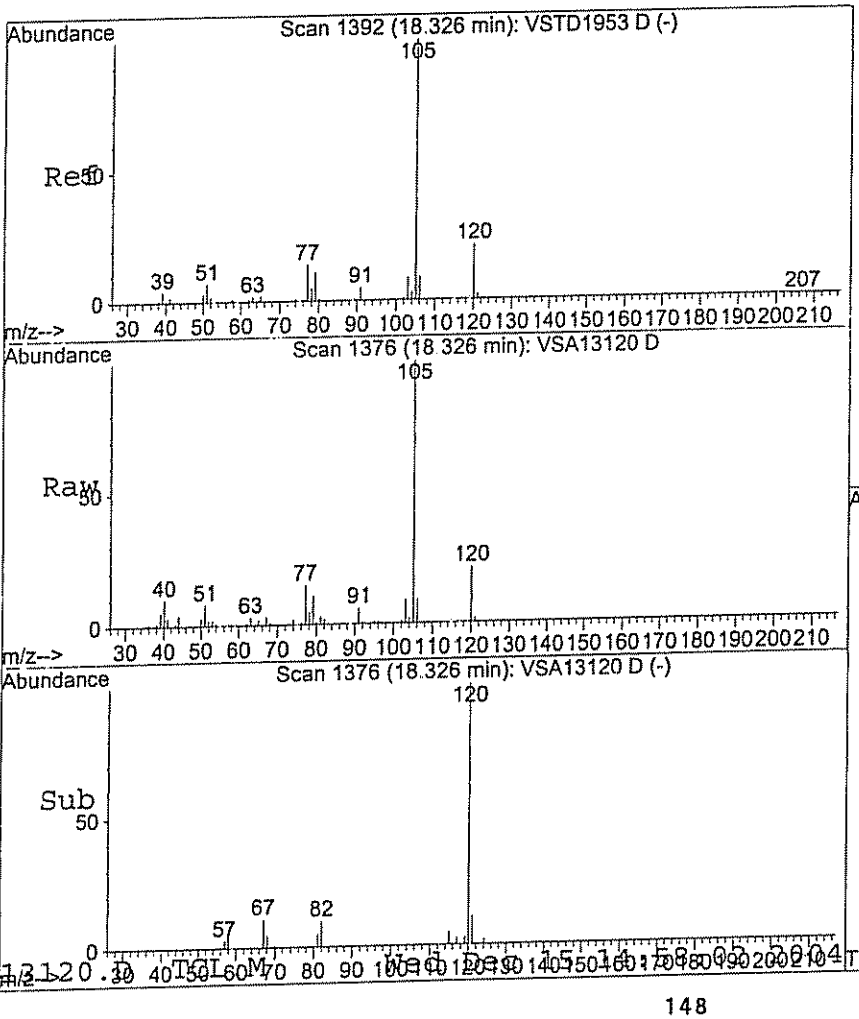


#41
Styrene
Concen: 0.87 ug/L
RT: 17.75 min Scan# 1317
Delta R.T. -0.00 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion:104 Resp: 7666

Ion	Ratio	Lower	Upper
104	100		
104	100.0	70.0	130.0
78	34.4	6.9	66.9
51	13.2	0.0	47.4

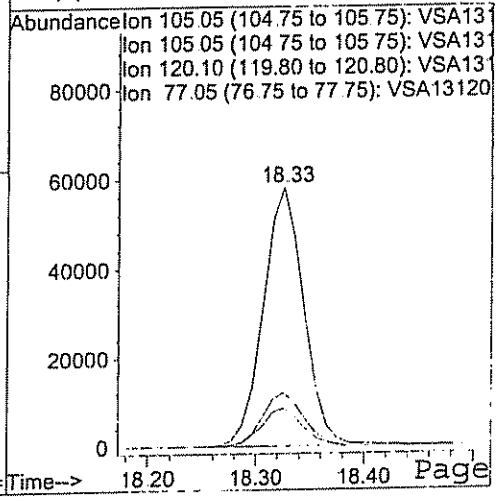


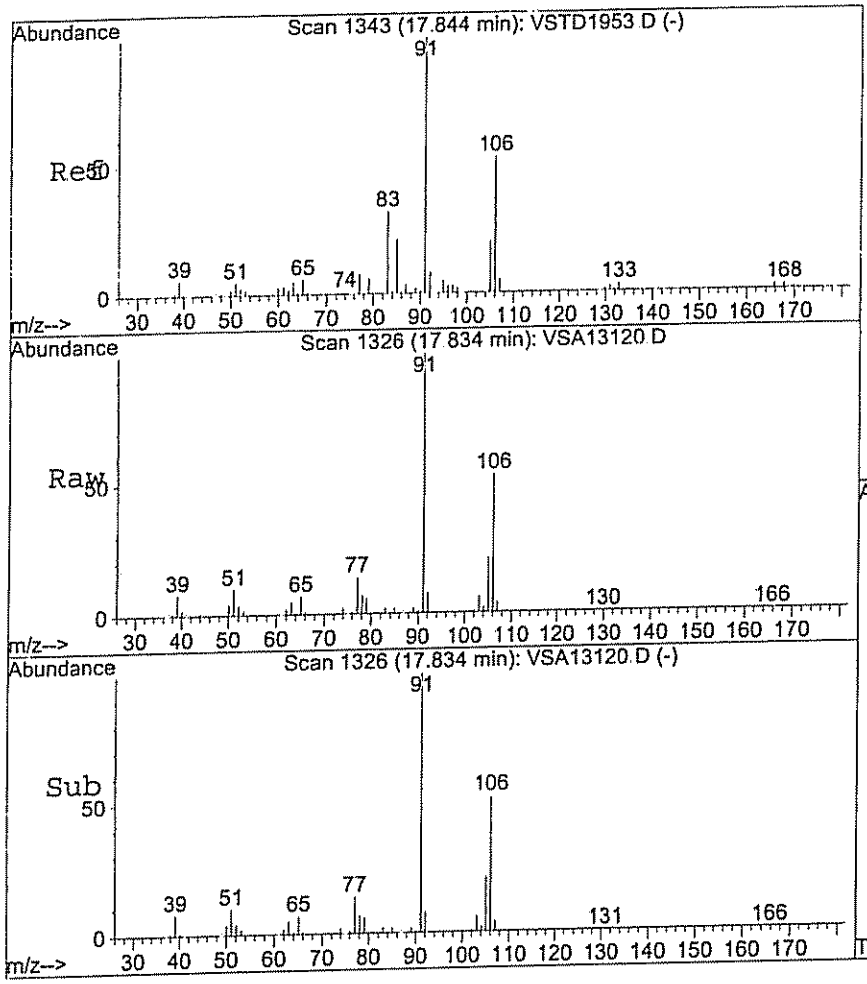


#42
Isopropylbenzene
Concen: 11.26 ug/L
RT: 18.33 min Scan# 1376
Delta R.T. -0.00 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion:105 Resp: 151492

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	20.7	0.0	51.3
77	0.0	0.0	30.0

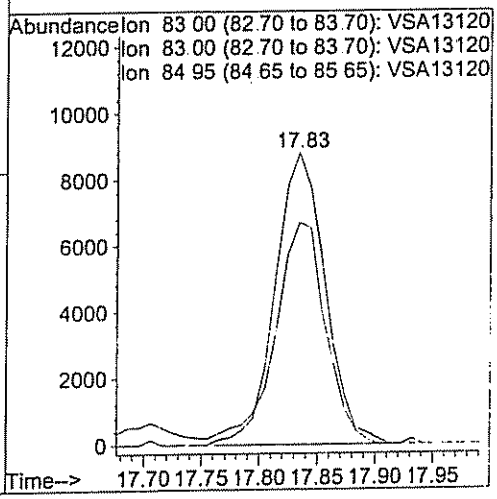


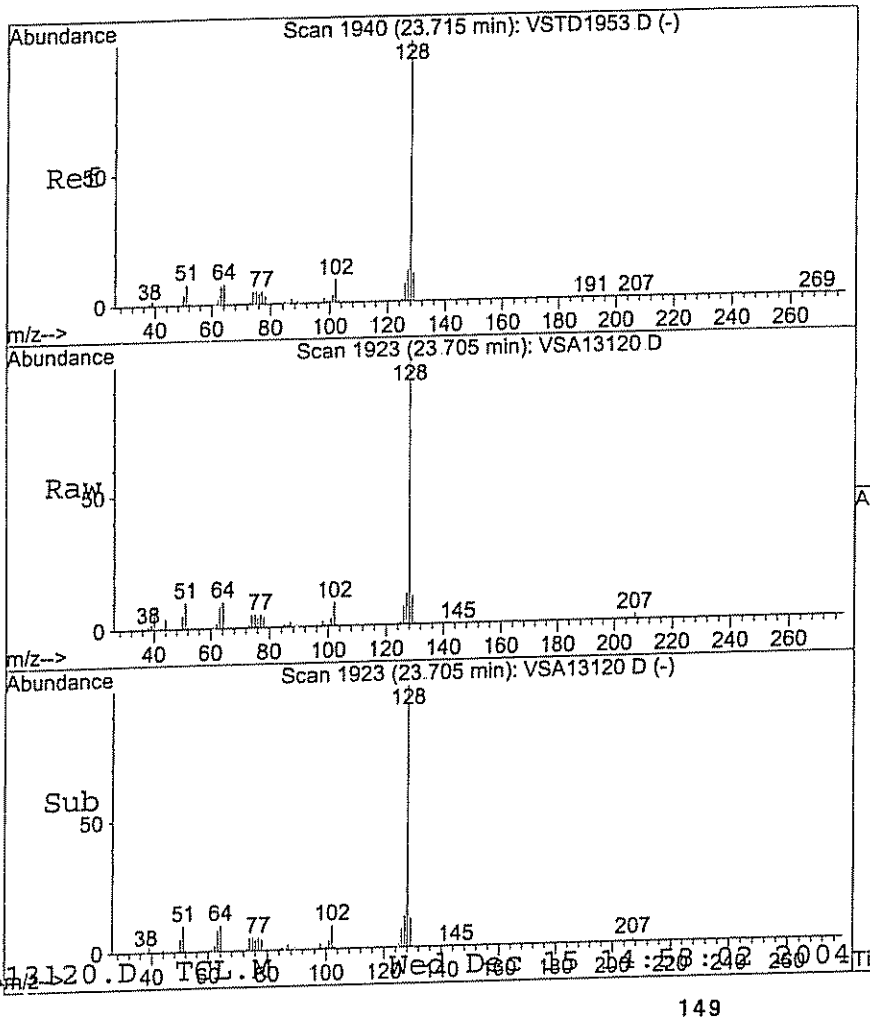


#44
1,1,2,2-Tetrachloroethane
Concen: 7.52 ug/L
RT: 17.83 min Scan# 1326
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion: 83 Resp: 26315

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	77.4	34.4	94.4

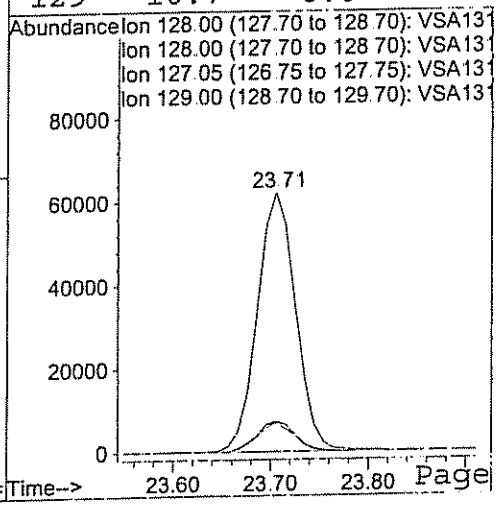




#45
Naphthalene
Concen: 24.02 ug/L
RT: 23.71 min Scan# 1923
Delta R.T. -0.01 min
Lab File: VSA13120.D
Acq: 14 Dec 2004 17:23

Tgt Ion:128 Resp: 169277

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	10.7	0.0	40.8



Non Target Peak Search Report

Data File : C:\HPCHEM\1\DATA\VSA13120.D
Acq On : 14 Dec 2004 17:23
Sample : P0412041-02A
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Library : C:\DATABASE\NIST129K.L

****

Peak Number 1 Benzene, 1,3,5-trimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.86	83.77 ug/L	6246420	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	93
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
4	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	91

****

Peak Number 2 Benzene, 1,3,5-trimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.48	50.50 ug/L	3765380	Chlorobenzene-d5	16.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93
2	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	90
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	90
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	90
5	Benzene, 1-ethyl-3-methyl- $$ Tolue	120	C9H12	000620-14-4	90

VSA13120.D TCL.M Wed Dec 15 14:58:31 2004

Quantitation Report (Not Reviewed) **MWB-4**

Data File : C:\HPCHEM\1\DATA\VSA13117.D
Acq On : 14 Dec 2004 15:46
Sample : P0412041-03A
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 15 14:50 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.93	128	86077	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.60	114	574059	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.78	117	484210	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.66	65	133967	48.33	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.66%			
32) Toluene-d8	14.87	98	494306	51.26	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.52%			
43) 4-Bromofluorobenzene	18.41	95	188621	50.50	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.00%			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	218	0.06	ug/L #	85
4) Bromomethane	7.18	94	945	0.41	ug/L #	53
7) Carbon disulfide	9.31	76	1132	0.11	ug/L	100
8) Methylene chloride	8.96	84	941	0.28	ug/L	87
9) Acetone	8.29	43	1429	1.67	ug/L	94
13) cis-1,2-Dichloroethene	10.73	96	5510	1.37	ug/L	96
20) 1,1,1-Trichloroethane	11.89	97	456	0.11	ug/L #	81
21) Benzene	12.39	78	125	0.01	ug/L	89
22) Trichloroethene	13.13	130	1808	0.68	ug/L	96
27) 1,1,2-Trichloroethane	14.88	97	14454	~~5.27 ug~~/L #		54
33) Toluene	14.96	92	6191	0.89	ug/L	91
37) Ethyl benzene	17.28	91	301	0.02	ug/L #	84
45) Naphthalene	23.71	128	258	0.04	ug/L #	97

12/16/04

(#) = qualifier out of range (m) = manual integration
VSA13117.D TCL.M Wed Dec 15 14:52:29 2004 Page 1

Quantitation Report

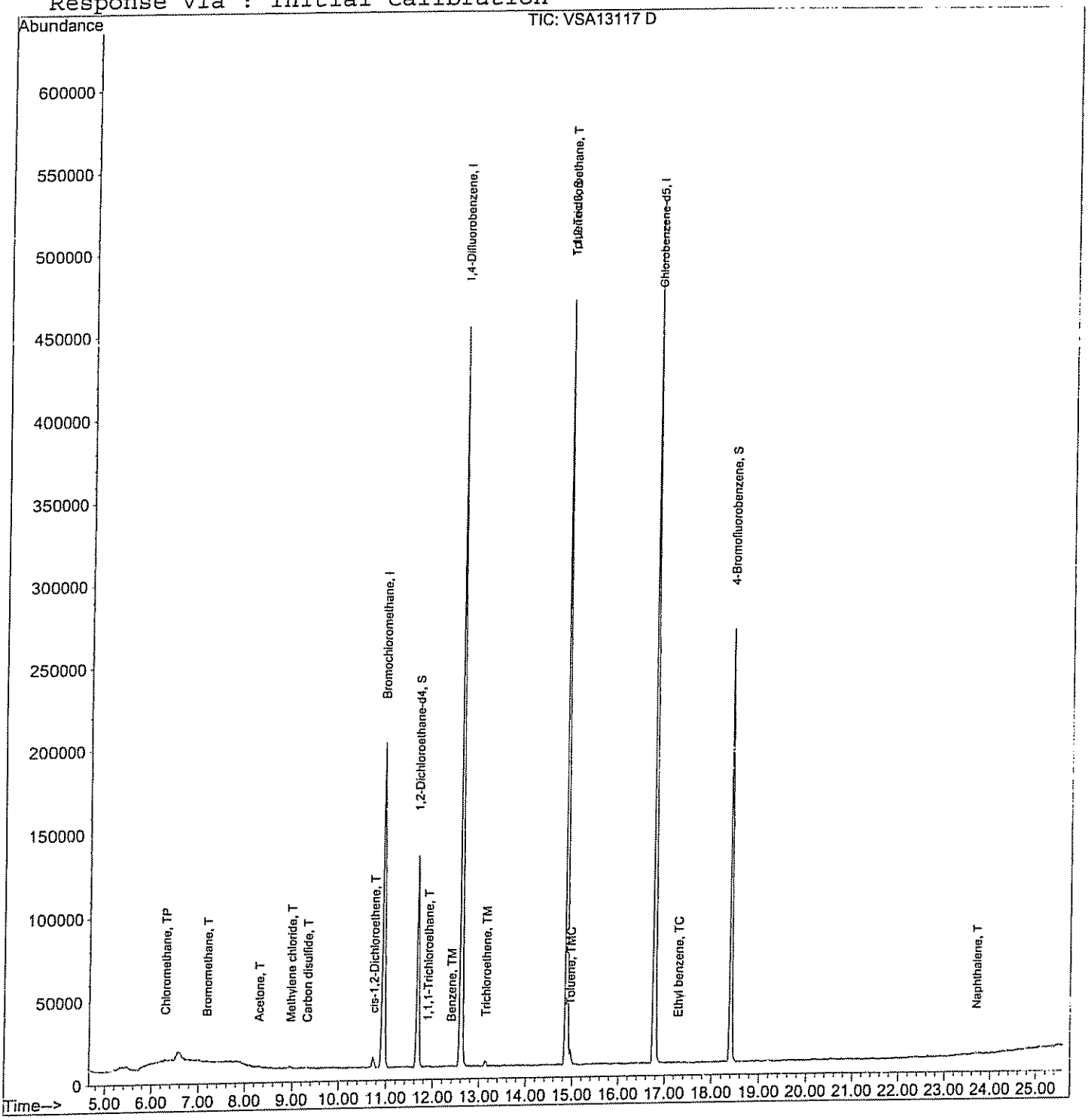
Data File : C:\HPCHEM\1\DATA\VSA13117.D
Acq On : 14 Dec 2004 15:46
Sample : P0412041-03A
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 15 14:50 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Initial Calibration



Non Target Peak Search Report

MWB-4

Data File : C:\HPCHEM\1\DATA\VSA13117.D
Acq On : 14 Dec 2004 15:46
Sample : P0412041-03A
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Library : C:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
VSA13117.D TCL.M Wed Dec 15 14:54:10 2004

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\BF122104.D
Tune Time : 21 Dec 2004 10:39

Daily Calibration File : C:\HPCHEM\1\DATA\VSTD1965.D

						193087	988291	929660
File	Sample	Surrogate Recovery %				Internal Standard Responses		
LCSW1432.D	50UG/L TCL LCS	108	105	105		168881	895260	845064
VBLK1450.D	WATER METHOD BLK	107	104	101		167295	907742	848570
VCAL1456.D	50UG/L TCL/PAUST/DCB CCAL	109	103	101		166530	894040	851307
VSA13189.D	P0412041-01A DF100	113	104	103		160586	882397	823240
VSA13190.D	P0412041-02A DF100	114	104	102		160521	883065	818788
VSA13191.D	P0412024-01A DF100	115	107	104		158941	892145	807430
VSA13192.D	P0412024-02A DF100	114	106	101		159272	884134	812319
VSA13193.D	P0412024-03A DF500	117	107	101		155031	872620	804831
VSA13194.D	P0412077-02A DF500	114	105	100		158745	868000	800606
VSA13195.D	P0412077-03A DF500	113	104	100		155851	845757	790998

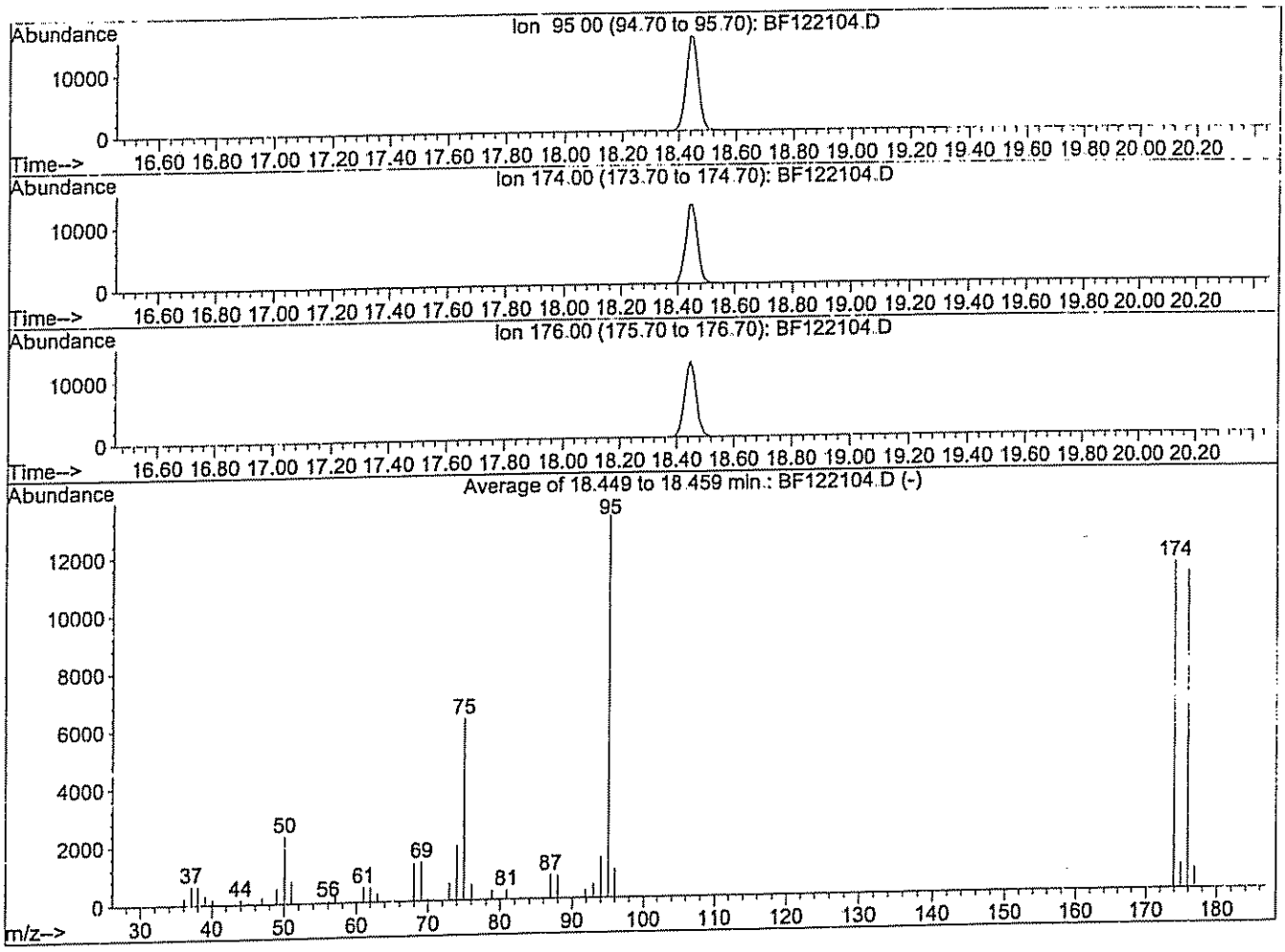
t - fails 12hr time check * - fails criteria

Created: Tue Dec 28 09:40:41 2004 GC
MS Ins

Data File : C:\HPCHEM\1\DATA\BF122104.D
Acq On : 21 Dec 2004 10:39
Sample : 50NG BFB TUNING STD
Misc : WATER

Vial: 1
Operator: hfg system
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

Method : C:\HPCHEM\1\METHODS\BFB.M (Chemstation Integrator)
Title :



Spectrum Information: Average of 18.449 to 18.459 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	2314	PASS
75	95	30	60	47.3	6274	PASS
95	95	100	100	100.0	13270	PASS
96	95	5	9	7.6	1006	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	85.9	11398	PASS
175	174	5	9	7.5	860	PASS
176	174	95	101	97.2	11082	PASS
177	176	5	9	6.3	702	PASS

BF122104.D BFB.M Tue Dec 21 11:46:12 2004

verage of 18.449 to 18.459 min.: BF122104.D
50NG BFB TUNING STD

odified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	250	56.05	87	74.95	6274	96.00	1006
37.05	655	56.95	347	76.05	522	173.95	11398
37.95	625	61.00	515	78.90	321	174.90	860
39.05	313	62.00	510	79.80	81	175.90	11082
40.05	176	63.00	320	80.90	327	176.90	702
44.00	166	65.10	76	86.95	818		
45.00	90	67.95	1297	87.95	798		
46.95	224	69.05	1342	91.90	300		
48.95	532	69.95	83	93.00	471		
50.05	2314	73.00	598	94.00	1427		
51.05	781	74.00	1905	95.05	13270		

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:48:41 2004
Response via : Initial Calibration

Calibration Files
5 =VSTD1968.D 10 =VSTD1967.D 20 =VSTD1966.D
50 =VSTD1965.D 100 =VSTD1964.D 200 =VSTD1963.D

		Compound	5	10	20	50	100	200	Avg	%RSD
			ISTD							
1)	I	Bromochloromethane								
2)	TP	Chloromethane	1.372	1.406	1.428	1.541	1.548	1.458	1.459	4.93
3)	TC	Vinyl chloride	1.357	1.470	1.459	1.547	1.496	1.410	1.456	4.56
4)	T	Bromomethane	0.907	0.947	0.874	0.928	0.935	0.855	0.908	4.00
5)	T	Chloroethane	0.941	0.998	0.979	1.034	1.017	0.991	0.993	3.22
6)	TCM	1,1-Dichloroethene	1.109	1.160	1.091	1.116	1.112	1.115	1.117	2.05
7)	T	Carbon disulfide	3.973	4.317	4.010	4.085	4.060	4.026	4.078	3.02
8)	T	Methylene chloride	1.439	1.649	1.349	1.377	1.373	1.308	1.416	8.62
9)	T	Acetone		0.473	0.435	0.339	0.344	0.331	0.384	16.98
10)	T	trans-1,2-Dichloroe	1.373	1.471	1.284	1.322	1.307	1.295	1.342	5.24
11)	T	methyl-tert-butyl-E	3.035	3.361	3.121	3.100	3.148	3.070	3.139	3.68
12)	TP	1,1-Dichloroethane	2.246	2.510	2.176	2.186	2.188	2.125	2.238	6.18
13)	T	cis-1,2-Dichloroeth	1.803	1.811	1.503	1.430	1.412	1.377	1.556	12.79
14)	TC	Chloroform	2.001	2.273	1.932	1.916	1.945	1.917	1.997	6.94
15)	T	2-Butanone		0.715	0.644	0.555	0.561	0.525	0.600	12.98
16)	S	1,2-Dichloroethane-	1.317	1.258	1.214	1.197	1.188	1.179	1.225	4.31
17)	T	1,2-Dichloroethane	1.416	1.566	1.395	1.367	1.368	1.339	1.409	5.79
			ISTD							
18)	I	1,4-Difluorobenzene								
19)	T	Carbon tetrachlorid	0.231	0.251	0.244	0.243	0.243	0.244	0.243	2.63
20)	T	1,1,1-Trichloroetha	0.285	0.310	0.285	0.283	0.279	0.276	0.286	4.25
21)	TM	Benzene	0.995	1.143	0.992	0.983	0.964	0.909	0.998	7.84
22)	TM	Trichloroethene	0.391	0.365	0.344	0.295	0.282	0.275	0.325	14.79
23)	TC	1,2-Dichloropropane	0.253	0.293	0.250	0.253	0.251	0.241	0.257	7.18
24)	T	Bromodichloromethan	0.289	0.336	0.281	0.286	0.288	0.274	0.292	7.60
25)	T	cis-1,3-Dichloropro	0.389	0.459	0.415	0.418	0.420	0.400	0.417	5.71
26)	T	trans-1,3-Dichlorop	0.329	0.367	0.357	0.348	0.354	0.338	0.349	3.90
27)	T	1,1,2-Trichloroetha	0.201	0.228	0.217	0.204	0.202	0.192	0.207	6.13
28)	T	Dibromochloromethan	0.260	0.287	0.266	0.262	0.263	0.251	0.265	4.52
29)		1,2-Dibromoethane	0.229	0.254	0.239	0.236	0.239	0.224	0.237	4.32
30)	TP	Bromoform	0.175	0.186	0.186	0.179	0.185	0.178	0.181	2.71
			ISTD							
31)	I	Chlorobenzene-d5								
32)	S	Toluene-d8	0.834	0.841	0.839	0.819	0.797	0.762	0.816	3.79
33)	TMC	Toluene	0.605	0.691	0.605	0.579	0.570	0.549	0.600	8.27
34)	T	4-methyl-2-Pentanon		0.217	0.219	0.208	0.215	0.202	0.212	3.39
35)	T	Tetrachloroethene	0.222	0.242	0.222	0.223	0.223	0.221	0.226	3.62
36)	T	2-Hexanone		0.142	0.151	0.144	0.147	0.142	0.145	2.57
37)	TC	Ethyl benzene	1.056	1.210	1.113	1.082	1.082	1.016	1.093	6.01
38)	TMP	Chlorobenzene	0.726	0.829	0.724	0.703	0.707	0.671	0.727	7.42
39)	T	m&p-Xylenes	0.441	0.502	0.448	0.438	0.425	0.401	0.442	7.56
40)	T	o-Xylene	0.430	0.494	0.436	0.414	0.415	0.390	0.430	8.19
41)	T	Styrene	0.662	0.807	0.722	0.718	0.718	0.678	0.718	7.02
42)	T	Isopropylbenzene	1.012	1.185	1.091	1.072	1.065	1.008	1.072	6.03
43)	S	4-Bromofluorobenzen	0.336	0.323	0.311	0.305	0.295	0.286	0.309	5.99

44	TP	1,1,2,2-Tetrachloro	0.334	0.337	0.335	0.294	0.290	0.258	0.308	10.57
45)	T	Naphthalene	0.886	0.961	0.956	0.899	0.896	0.763	0.893	8.02

MWB-4

(#) = Out of Range

TCL.M Mon Dec 20 08:48:47 2004

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\VSTD1968.D
Acq On : 15 Dec 2004 16:37
Sample : 5UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.91	128	193100	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	1015128	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.76	117	916078	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	25428	5.45	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 10.90%#			
32) Toluene-d8	14.86	98	76424	5.14	ug/L	0.01
Spiked Amount 50.000	Range 70 - 130		Recovery = 10.28%#			
43) 4-Bromofluorobenzene	18.38	95	30824	5.54	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 11.08%#			
Target Compounds						Qvalue
2) Chloromethane	6.27	50	26502	4.65	ug/L	99
3) Vinyl chloride	6.56	62	26202	4.60	ug/L	99
4) Bromomethane	7.16	94	17519	5.00	ug/L	99
5) Chloroethane	7.34	64	18176	4.69	ug/L	99
6) 1,1-Dichloroethene	8.77	96	21412	4.96	ug/L	99
7) Carbon disulfide	9.30	76	76718	4.85	ug/L	100
8) Methylene chloride	8.94	84	27791	5.10	ug/L	94
9) Acetone	8.29	43	12793	8.62	ug/L	99
10) trans-1,2-Dichloroethene	9.74	96	26504	5.14	ug/L	99
11) methyl-tert-butyl-Ether	9.85	73	58613	4.80	ug/L	99
12) 1,1-Dichloroethane	10.05	63	43371	5.02	ug/L	99
13) cis-1,2-Dichloroethene	10.72	96	34818	5.98	ug/L	96
14) Chloroform	10.96	83	38646	5.01	ug/L	97
15) 2-Butanone	10.58	43	16694	7.20	ug/L	98
17) 1,2-Dichloroethane	11.75	62	27348	5.03	ug/L	98
19) Carbon tetrachloride	12.32	117	23476	4.72	ug/L	98
20) 1,1,1-Trichloroethane	11.87	97	28972	4.98	ug/L	99
21) Benzene	12.36	78	101009	4.98	ug/L	99
22) Trichloroethene	13.12	130	39683m	6.12	ug/L	98
23) 1,2-Dichloropropane	13.08	63	25646	4.90	ug/L	97
24) Bromodichloromethane	13.19	83	29380	4.94	ug/L	99
25) cis-1,3-Dichloropropene	13.94	75	39478	4.60	ug/L	99
26) trans-1,3-Dichloropropene	14.48	75	33381	4.66	ug/L	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\VSTD1968.D
Acq On : 15 Dec 2004 16:37
Sample : 5UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.70	97	20398	4.82 ug/L	96
28) Dibromochloromethane	15.39	129	26389	4.89 ug/L	100
29) 1,2-Dibromoethane	15.73	107	23273	4.81 ug/L	98
30) Bromoform	17.51	173	17755	4.79 ug/L	96
33) Toluene	14.95	92	55467	5.06 ug/L	97
34) 4-methyl-2-Pentanone	14.14	43	17756	4.57 ug/L	99
35) Tetrachloroethene	15.91	164	20323	4.90 ug/L	95
36) 2-Hexanone	15.22	43	12193	4.58 ug/L	99
37) Ethyl benzene	17.03	91	96701	4.79 ug/L	100
38) Chlorobenzene	16.80	112	66492	4.99 ug/L	99
39) m&p-Xylenes	17.28	106	80865	9.97 ug/L	99
40) o-Xylene	17.83	106	39393	5.00 ug/L	99
41) Styrene	17.73	104	60688	4.55 ug/L	99
42) Isopropylbenzene	18.31	105	92749	4.67 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	30616	5.52 ug/L	100
45) Naphthalene	23.69	128	81150	4.95 ug/L	100

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

Quantitation Report

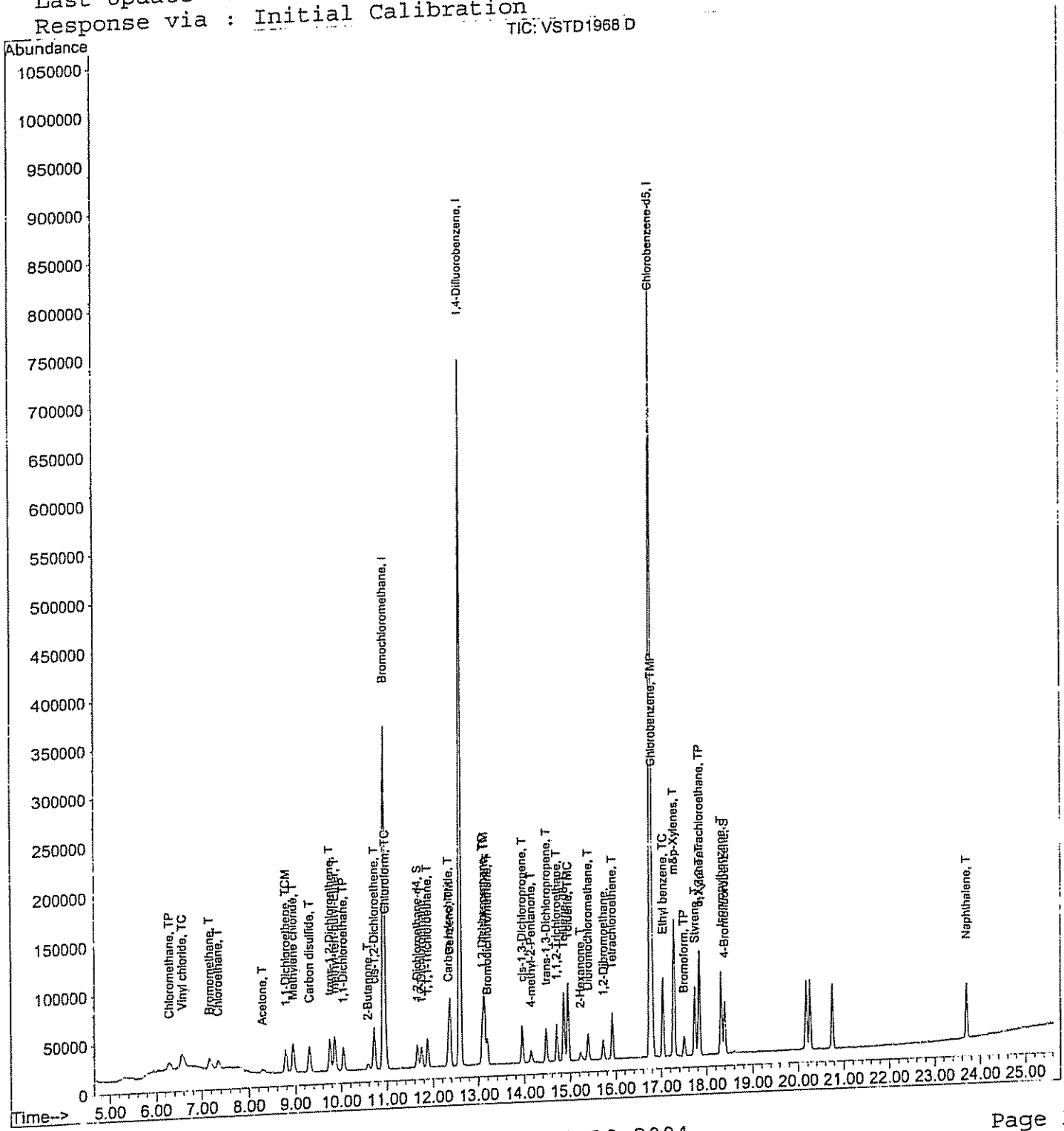
Data File : C:\HPCHEM\1\DATA\VSTD1968.D
Acq On : 15 Dec 2004 16:37
Sample : 5UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 7
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\VSTD1967.D
Acq On : 15 Dec 2004 16:05
Sample : 10UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.91	128	196714	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	1006711	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.76	117	930168	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	49493	10.53	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 21.06%#			
32) Toluene-d8	14.85	98	156494	10.46	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 20.92%#			
43) 4-Bromofluorobenzene	18.39	95	60045	10.79	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 21.58%#			
Target Compounds						Qvalue
2) Chloromethane	6.28	50	55304	9.41	ug/L	100
3) Vinyl chloride	6.55	62	57817	9.94	ug/L	99
4) Bromomethane	7.16	94	37246	10.54	ug/L	94
5) Chloroethane	7.34	64	39249	9.93	ug/L	98
6) 1,1-Dichloroethene	8.78	96	45632	10.46	ug/L	97
7) Carbon disulfide	9.30	76	169831	10.67	ug/L	100
8) Methylene chloride	8.94	84	64890	12.20	ug/L	97
9) Acetone	8.28	43	18624	13.08	ug/L	100
10) trans-1,2-Dichloroethene	9.75	96	57866	11.30	ug/L	98
11) methyl-tert-butyl-Ether	9.85	73	132224	10.81	ug/L	99
12) 1,1-Dichloroethane	10.05	63	98736	11.57	ug/L	100
13) cis-1,2-Dichloroethene	10.72	96	71269	12.66	ug/L	97
14) Chloroform	10.96	83	89422	11.79	ug/L	99
15) 2-Butanone	10.56	43	28135	12.51	ug/L	99
17) 1,2-Dichloroethane	11.74	62	61613	11.45	ug/L	100
19) Carbon tetrachloride	12.32	117	50541	10.30	ug/L	98
20) 1,1,1-Trichloroethane	11.88	97	62446	11.05	ug/L	98
21) Benzene	12.36	78	230233	11.89	ug/L	100
22) Trichloroethene	13.12	130	73513m	12.21	ug/L	99
23) 1,2-Dichloropropane	13.08	63	59052	11.79	ug/L	100
24) Bromodichloromethane	13.19	83	67730	11.92	ug/L	99
25) cis-1,3-Dichloropropene	13.94	75	92390	11.10	ug/L	100
26) trans-1,3-Dichloropropene	14.46	75	73856	10.51	ug/L	98

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

Data File : C:\HPCHEM\1\DATA\VSTD1967.D
Acq On : 15 Dec 2004 16:05
Sample : 10UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.70	97	45827	11.16	ug/L		99
28) Dibromochloromethane	15.39	129	57795	11.02	ug/L		99
29) 1,2-Dibromoethane	15.71	107	51160	10.83	ug/L		99
30) Bromoform	17.50	173	37448	10.22	ug/L		99
33) Toluene	14.95	92	128525	12.00	ug/L		99
34) 4-methyl-2-Pentanone	14.12	43	40281	10.27	ug/L		99
35) Tetrachloroethene	15.91	164	45040	10.89	ug/L		92
36) 2-Hexanone	15.21	43	26423	9.73	ug/L		99
37) Ethyl benzene	17.02	91	225089	11.27	ug/L		100
38) Chlorobenzene	16.80	112	154231	11.82	ug/L		100
39) m&p-Xylenes	17.27	106	186757	23.46	ug/L		99
40) o-Xylene	17.83	106	91895	11.94	ug/L		98
41) Styrene	17.72	104	150198	11.39	ug/L		99
42) Isopropylbenzene	18.31	105	220497	11.19	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	62672	11.46	ug/L		100
45) Naphthalene	23.69	128	178704	10.94	ug/L	#	100

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

Quantitation Report

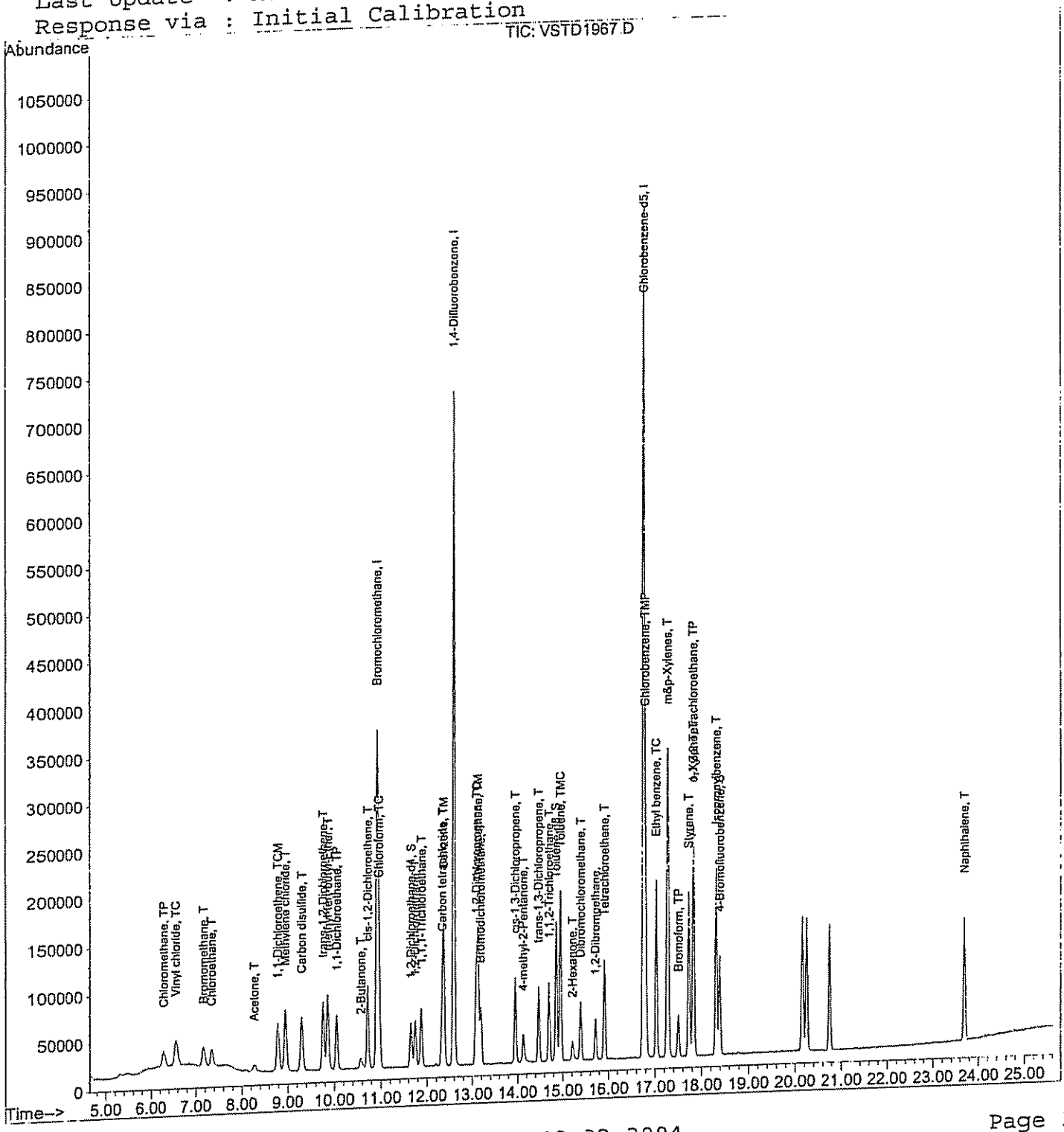
Data File : C:\HPCHEM\1\DATA\VSTD1967.D
Acq On : 15 Dec 2004 16:05
Sample : 10UG/L TCL/PAUST/DCB/2-CEVE ICAL
Misc : WATER

Vial: 6
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:48 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSTD1966.D
Acq On : 15 Dec 2004 15:33
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:44 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.92	128	197262	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	1007114	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.75	117	925104	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	95761	20.43	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 40.86%#			
32) Toluene-d8	14.85	98	310560	21.17	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 42.34%#			
43) 4-Bromofluorobenzene	18.39	95	115129	21.09	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 42.18%#			
Target Compounds						Qvalue
2) Chloromethane	6.27	50	112670	18.85	ug/L	99
3) Vinyl chloride	6.55	62	115154	19.67	ug/L	99
4) Bromomethane	7.16	94	68950	19.28	ug/L	99
5) Chloroethane	7.34	64	77231	19.31	ug/L	98
6) 1,1-Dichloroethene	8.77	96	86079	19.58	ug/L	98
7) Carbon disulfide	9.30	76	316426	19.77	ug/L	100
8) Methylene chloride	8.94	84	106422	19.94	ug/L	97
9) Acetone	8.27	43	34293	25.73	ug/L	98
10) trans-1,2-Dichloroethene	9.75	96	101299	19.63	ug/L	98
11) methyl-tert-butyl-Ether	9.85	73	246285	20.10	ug/L	99
12) 1,1-Dichloroethane	10.04	63	171696	20.09	ug/L	100
13) cis-1,2-Dichloroethene	10.71	96	118596	21.38	ug/L	97
14) Chloroform	10.96	83	152432	20.06	ug/L	99
15) 2-Butanone	10.54	43	50824	23.54	ug/L	99
17) 1,2-Dichloroethane	11.73	62	110040	20.54	ug/L	99
19) Carbon tetrachloride	12.32	117	98390	20.07	ug/L	98
20) 1,1,1-Trichloroethane	11.87	97	114830	20.41	ug/L	99
21) Benzene	12.36	78	399818	20.85	ug/L	100
22) Trichloroethene	13.11	130	138753	24.25	ug/L	99
23) 1,2-Dichloropropane	13.07	63	100893	20.18	ug/L	99
24) Bromodichloromethane	13.18	83	113076	19.85	ug/L	99
25) cis-1,3-Dichloropropene	13.95	75	167008	20.09	ug/L	99
26) trans-1,3-Dichloropropene	14.47	75	143825	20.60	ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1966.D
Acq On : 15 Dec 2004 15:33
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:44 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
27) 1,1,2-Trichloroethane	14.70	97	87402	21.74 ug/L		98
28) Dibromochloromethane	15.38	129	107258	20.59 ug/L		99
29) 1,2-Dibromoethane	15.72	107	96462	20.55 ug/L		99
30) Bromoform	17.50	173	75107	20.67 ug/L		100
33) Toluene	14.95	92	223884	21.39 ug/L		100
34) 4-methyl-2-Pentanone	14.13	43	81145	21.09 ug/L		99
35) Tetrachloroethene	15.92	164	82277	20.00 ug/L		97
36) 2-Hexanone	15.21	43	55722	20.85 ug/L		98
37) Ethyl benzene	17.03	91	412016	21.00 ug/L		100
38) Chlorobenzene	16.80	112	267890	20.87 ug/L		99
39) m&p-Xylenes	17.27	106	331286	42.50 ug/L		99
40) o-Xylene	17.82	106	161432	21.47 ug/L		99
41) Styrene	17.73	104	267148	20.49 ug/L		99
42) Isopropylbenzene	18.31	105	403712	20.82 ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	123851	23.86 ug/L		99
45) Naphthalene	23.70	128	353883	22.44 ug/L	#	97

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

Quantitation Report

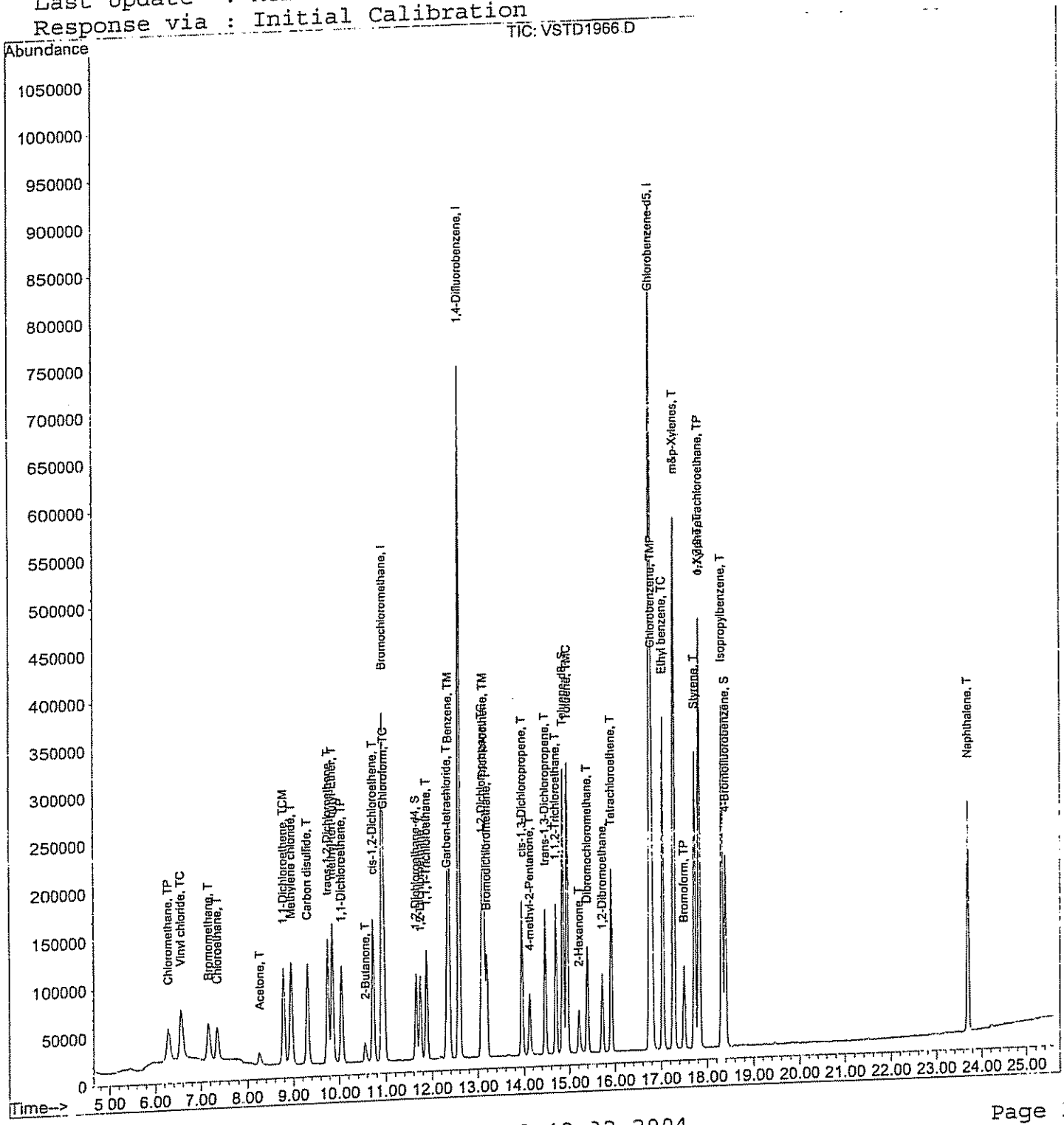
Data File : C:\HPCHEM\1\DATA\VSTD1966.D
Acq On : 15 Dec 2004 15:33
Sample : 20UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 5
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:44 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\VSTD1965.D
Acq On : 15 Dec 2004 14:57
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:43 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:03 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.91	128	193087	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	988291	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.76	117	929660	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	231066	50.37	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.74%			
32) Toluene-d8	14.85	98	761579	51.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.32%			
43) 4-Bromofluorobenzene	18.39	95	283199	51.63	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.26%			
Target Compounds						Qvalue
2) Chloromethane	6.28	50	297514	50.84	ug/L	100
3) Vinyl chloride	6.56	62	298666	52.11	ug/L	100
4) Bromomethane	7.16	94	179249	51.21	ug/L	100
5) Chloroethane	7.34	64	199574	50.98	ug/L	100
6) 1,1-Dichloroethene	8.78	96	215505	50.08	ug/L	100
7) Carbon disulfide	9.30	76	788721	50.34	ug/L	100
8) Methylene chloride	8.94	84	265922	50.91	ug/L	100
9) Acetone	8.25	43	65483	50.19	ug/L	100
10) trans-1,2-Dichloroethene	9.74	96	255170	50.52	ug/L	100
11) methyl-tert-butyl-Ether	9.85	73	598639	49.91	ug/L	100
12) 1,1-Dichloroethane	10.05	63	422007	50.45	ug/L	100
13) cis-1,2-Dichloroethene	10.72	96	276117	50.85	ug/L	100
14) Chloroform	10.96	83	369881	49.74	ug/L	100
15) 2-Butanone	10.54	43	107191	50.72	ug/L	100
17) 1,2-Dichloroethane	11.74	62	264013	50.34	ug/L	100
19) Carbon tetrachloride	12.32	117	240072	49.89	ug/L	100
20) 1,1,1-Trichloroethane	11.87	97	279411	50.61	ug/L	100
21) Benzene	12.36	78	971606	51.64	ug/L	100
22) Trichloroethene	13.12	130	291710	51.96	ug/L	100
23) 1,2-Dichloropropane	13.08	63	249864	50.93	ug/L	100
24) Bromodichloromethane	13.19	83	283135	50.65	ug/L	100
25) cis-1,3-Dichloropropene	13.94	75	412835	50.60	ug/L	100
26) trans-1,3-Dichloropropene	14.47	75	343850	50.20	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1965.D
Acq On : 15 Dec 2004 14:57
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:43 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:03 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
27) 1,1,2-Trichloroethane	14.70	97	201888	51.18	ug/L	100
28) Dibromochloromethane	15.39	129	258748	50.62	ug/L	100
29) 1,2-Dibromoethane	15.71	107	233377	50.67	ug/L	100
30) Bromoform	17.51	173	176574	49.51	ug/L	100
33) Toluene	14.95	92	538391	51.17	ug/L	100
34) 4-methyl-2-Pentanone	14.10	43	193175	49.95	ug/L	100
35) Tetrachloroethene	15.91	164	206896	50.06	ug/L	100
36) 2-Hexanone	15.19	43	134102	49.93	ug/L	100
37) Ethyl benzene	17.02	91	1005972	51.03	ug/L	100
38) Chlorobenzene	16.80	112	653325	50.65	ug/L	100
39) m&p-Xylenes	17.27	106	813474	103.85	ug/L	100
40) o-Xylene	17.82	106	384507	50.89	ug/L	100
41) Styrene	17.72	104	667188	50.92	ug/L	100
42) Isopropylbenzene	18.31	105	996145	51.12	ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	273721	52.47	ug/L	100
45) Naphthalene	23.69	128	835396	52.71	ug/L #	100

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

Quantitation Report

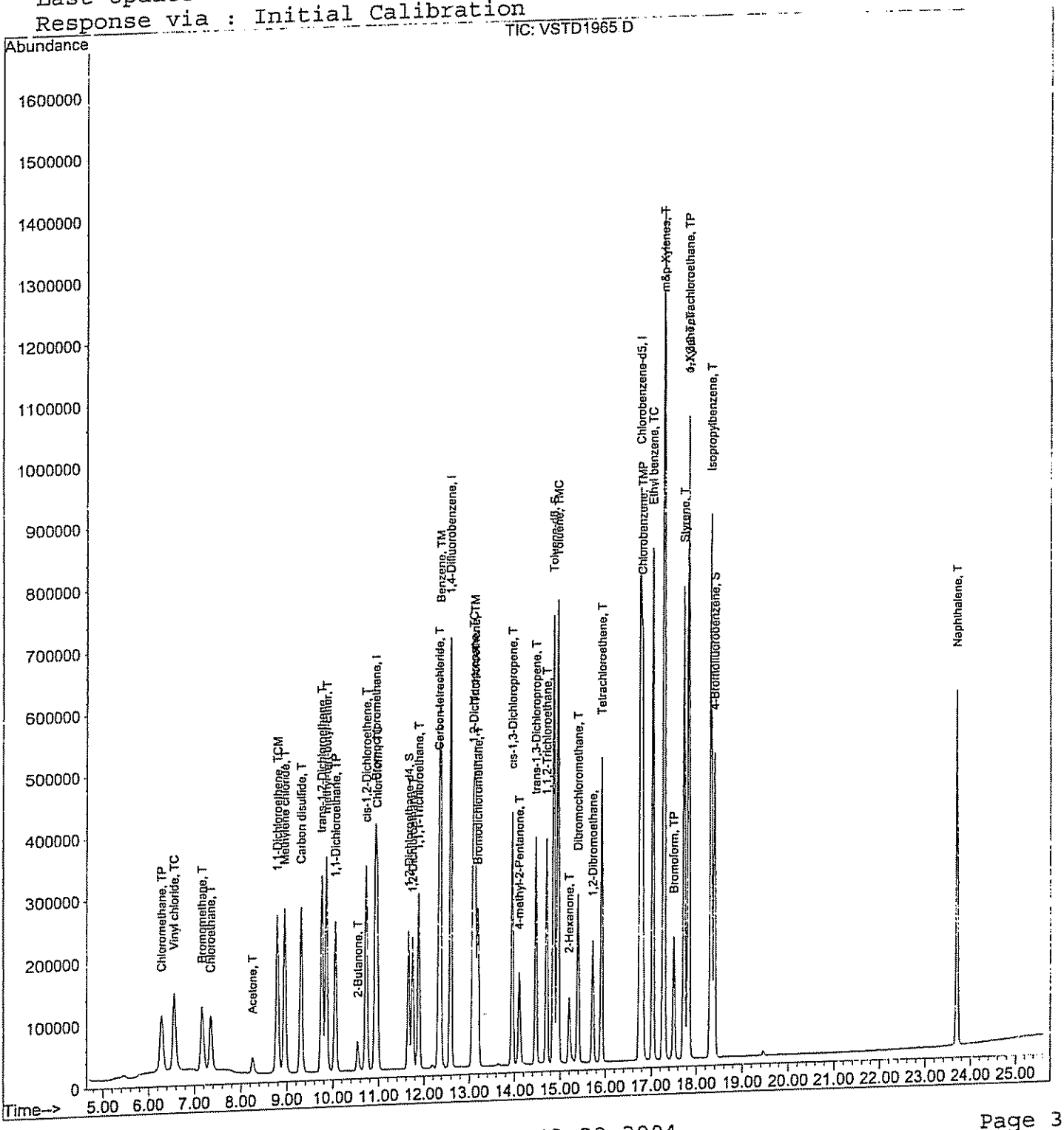
Data File : C:\HPCHEM\1\DATA\VSTD1965.D
Acq On : 15 Dec 2004 14:57
Sample : 50UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:43 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\VSTD1964.D
Acq On : 15 Dec 2004 14:24
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:34:39 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.92	128	197106	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.58	114	1018412	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.75	117	949917	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.65	65	468320	100.02	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 200.04%#			
32) Toluene-d8	14.85	98	1514995	100.87	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 201.74%#			
43) 4-Bromofluorobenzene	18.39	95	560175	99.92	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 199.84%#			
Target Compounds						Qvalue
2) Chloromethane	6.28	50	610112	103.23	ug/L	99
3) Vinyl chloride	6.55	62	589731	101.20	ug/L	100
4) Bromomethane	7.16	94	368749	104.89	ug/L	99
5) Chloroethane	7.35	64	400831	100.44	ug/L	100
6) 1,1-Dichloroethene	8.77	96	438536	99.73	ug/L	99
7) Carbon disulfide	9.30	76	1600613	100.13	ug/L	100
8) Methylene chloride	8.94	84	541060	102.22	ug/L	99
9) Acetone	8.24	43	135475	102.60	ug/L	100
10) trans-1,2-Dichloroethene	9.75	96	515394	99.94	ug/L	99
11) methyl-tert-butyl-Ether	9.85	73	1240832	102.03	ug/L	100
12) 1,1-Dichloroethane	10.04	63	862355	101.49	ug/L	100
13) cis-1,2-Dichloroethene	10.71	96	556445	100.58	ug/L	98
14) Chloroform	10.96	83	766702	101.50	ug/L	100
15) 2-Butanone	10.53	43	221349	103.94	ug/L	100
17) 1,2-Dichloroethane	11.75	62	539331	101.10	ug/L	99
19) Carbon tetrachloride	12.33	117	495711	99.96	ug/L	99
20) 1,1,1-Trichloroethane	11.87	97	569111	100.04	ug/L	99
21) Benzene	12.36	78	1963345	101.91	ug/L	100
22) Trichloroethene	13.12	130	574538	98.98	ug/L	99
23) 1,2-Dichloropropane	13.07	63	511663	101.84	ug/L	99
24) Bromodichloromethane	13.18	83	585848	102.59	ug/L	99
25) cis-1,3-Dichloropropene	13.94	75	855814	102.71	ug/L	99
26) trans-1,3-Dichloropropene	14.47	75	720161	103.06	ug/L	100

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

Data File : C:\HPCHEM\1\DATA\VSTD1964.D
Acq On : 15 Dec 2004 14:24
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:34:39 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.70	97	411875	102.00 ug/L	100
28) Dibromochloromethane	15.39	129	535016	102.38 ug/L	100
29) 1,2-Dibromoethane	15.72	107	486114	103.67 ug/L	99
30) Bromoform	17.50	173	376415	103.69 ug/L	100
33) Toluene	14.94	92	1082684	101.08 ug/L	100
34) 4-methyl-2-Pentanone	14.07	43	407682	104.83 ug/L	99
35) Tetrachloroethene	15.91	164	424132	100.65 ug/L	98
36) 2-Hexanone	15.17	43	279870	103.00 ug/L	100
37) Ethyl benzene	17.03	91	2056049	103.15 ug/L	100
38) Chlorobenzene	16.80	112	1343796	102.97 ug/L	99
39) m&p-Xylenes	17.27	106	1616068	202.88 ug/L	99
40) o-Xylene	17.83	106	788337	103.21 ug/L	99
41) Styrene	17.73	104	1364559	102.93 ug/L	100
42) Isopropylbenzene	18.31	105	2023658	102.46 ug/L #	100
44) 1,1,2,2-Tetrachloroethane	17.83	83	550364	104.97 ug/L	100
45) Naphthalene	23.69	128	1702294	107.88 ug/L #	100

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

Quantitation Report

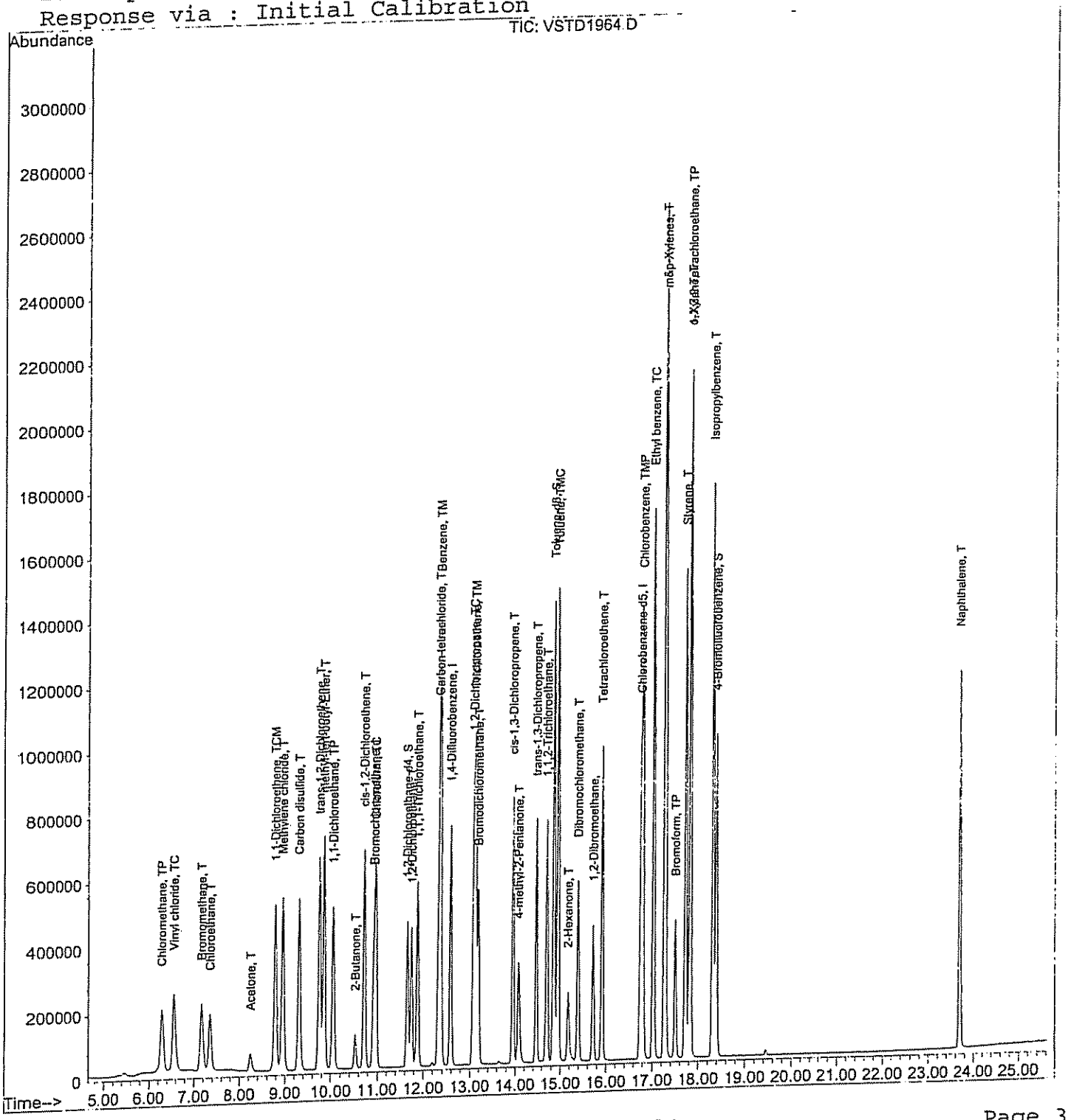
Data File : C:\HPCHEM\1\DATA\VSTD1964.D
Acq On : 15 Dec 2004 14:24
Sample : 100UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

MWB-4

Data File : C:\HPCHEM\1\DATA\VSTD1963.D
Acq On : 15 Dec 2004 13:52
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:34:39 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.91	128	198434	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.59	114	1048497	50.00	ug/L	0.01
31) Chlorobenzene-d5	16.76	117	974620	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.64	65	935677	197.01	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 394.02%#			
32) Toluene-d8	14.85	98	2970294	186.01	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 372.02%#			
43) 4-Bromofluorobenzene	18.39	95	1113305	187.49	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 374.98%#			
Target Compounds						Qvalue
2) Chloromethane	6.28	50	1156906	189.19	ug/L	100
3) Vinyl chloride	6.54	62	1118848	182.26	ug/L	100
4) Bromomethane	7.16	94	678918	184.28	ug/L	99
5) Chloroethane	7.34	64	786620	191.76	ug/L	100
6) 1,1-Dichloroethene	8.78	96	884767	199.75	ug/L	100
7) Carbon disulfide	9.30	76	3195254	197.10	ug/L	100
8) Methylene chloride	8.94	84	1038375	189.98	ug/L	98
9) Acetone	8.23	43	262539	195.06	ug/L	99
10) trans-1,2-Dichloroethene	9.74	96	1027858	195.98	ug/L	98
11) methyl-tert-butyl-Ether	9.84	73	2436698	198.04	ug/L	100
12) 1,1-Dichloroethane	10.05	63	1686805	194.47	ug/L	100
13) cis-1,2-Dichloroethene	10.72	96	1092715	192.54	ug/L	99
14) Chloroform	10.95	83	1521349	200.11	ug/L	99
15) 2-Butanone	10.51	43	416908	189.23	ug/L	99
17) 1,2-Dichloroethane	11.74	62	1062920	195.88	ug/L	99
19) Carbon tetrachloride	12.32	117	1023437	200.91	ug/L	100
20) 1,1,1-Trichloroethane	11.87	97	1157073	195.17	ug/L	98
21) Benzene	12.36	78	3810676	184.84	ug/L	100
22) Trichloroethene	13.12	130	1152480	186.20	ug/L	98
23) 1,2-Dichloropropane	13.08	63	1008777	190.27	ug/L	99
24) Bromodichloromethane	13.19	83	1150255	191.46	ug/L	100
25) cis-1,3-Dichloropropene	13.94	75	1679467	191.73	ug/L	99
26) trans-1,3-Dichloropropene	14.47	75	1418440	194.41	ug/L	99

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

Data File : C:\HPCHEM\1\DATA\VSTD1963.D
Acq On : 15 Dec 2004 13:52
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:34:39 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.70	97	806145	188.19	ug/L		99
28) Dibromochloromethane	15.39	129	1054087	191.99	ug/L		100
29) 1,2-Dibromoethane	15.72	107	940699	189.97	ug/L		100
30) Bromoform	17.51	173	745679	199.03	ug/L		99
33) Toluene	14.95	92	2138336	189.42	ug/L		99
34) 4-methyl-2-Pentanone	14.05	43	785917	194.04	ug/L		99
35) Tetrachloroethene	15.91	164	861858	198.67	ug/L		100
36) 2-Hexanone	15.14	43	552838	196.62	ug/L		100
37) Ethyl benzene	17.03	91	3962075	187.84	ug/L		100
38) Chlorobenzene	16.81	112	2616128	190.98	ug/L		99
39) m&p-Xylenes	17.27	106	3126871	366.65	ug/L		99
40) o-Xylene	17.83	106	1522175	188.81	ug/L		99
41) Styrene	17.72	104	2643151	188.94	ug/L		100
42) Isopropylbenzene	18.31	105	3928318	188.08	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.82	83	1004008	174.94	ug/L		100
45) Naphthalene	23.69	128	2972983	169.73	ug/L	#	100

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

Quantitation Report

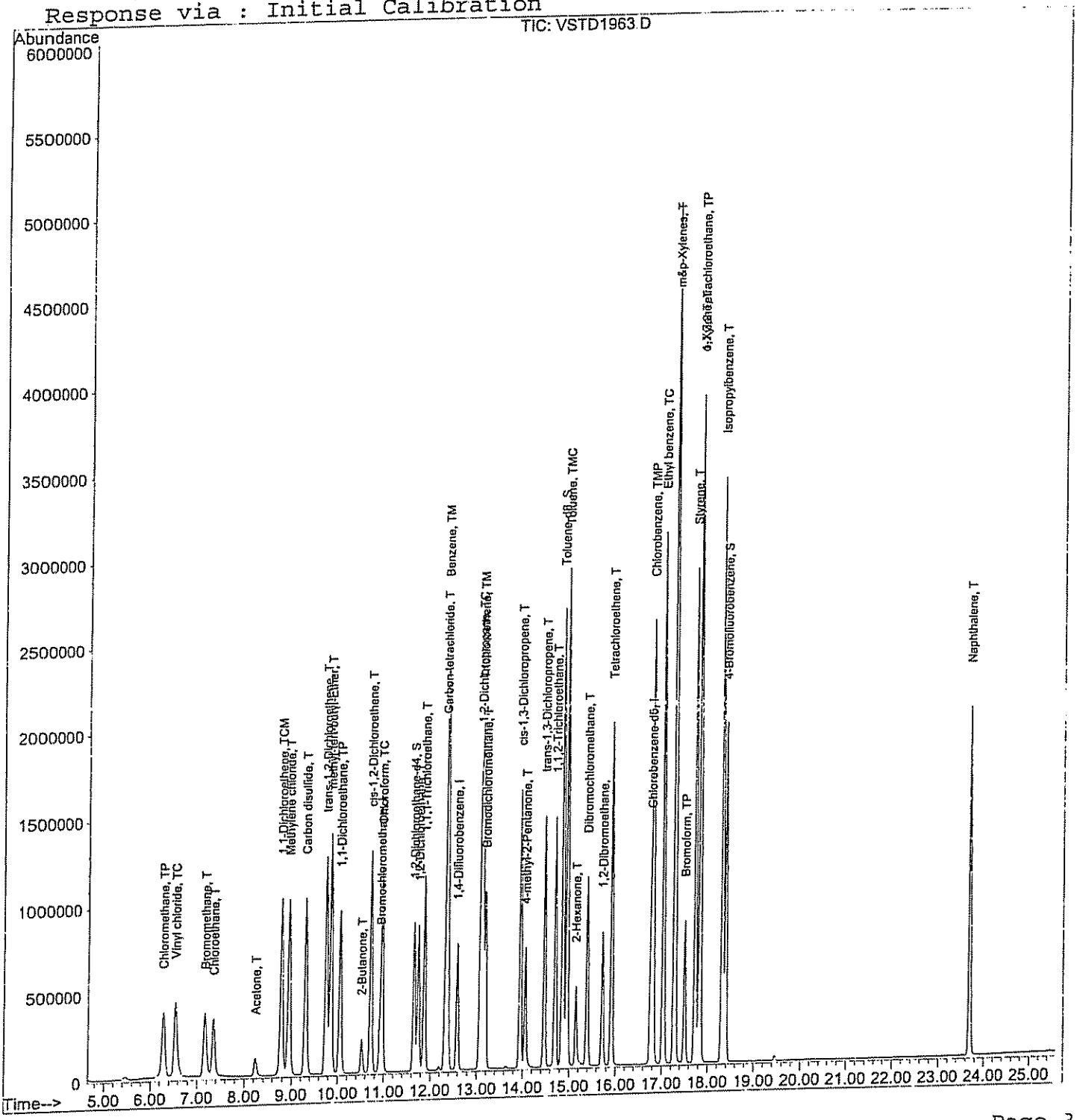
Data File : C:\HPCHEM\1\DATA\VSTD1963.D
Acq On : 15 Dec 2004 13:52
Sample : 200UG/L TCL/PAUST ICAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 20 8:42 2004

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



VSTD1963.D TCL.M Mon Dec 20 08:43:54 2004 Page 3

Continuing Calibration Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Jan 03 11:12:32 2005
Response via : Initial Calibration

Continuing Calibration File: VCAL1456.D

Min. RRF : 0.100 Min. Rel. Area : 50%
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%
1	I	Bromochloromethane	1.000	1.000	0.0	86
2	TP	Chloromethane	1.459	1.370	6.1	77
3	TC	Vinyl chloride	1.456	1.458	-0.1	81
4	T	Bromomethane	0.908	0.798	12.1	74
5	T	Chloroethane	0.993	1.082	-8.9	90
6	TCM	1,1-Dichloroethene	1.117	1.130	-1.1	87
7	T	Carbon disulfide	4.078	4.156	-1.9	88
8	T	Methylene chloride	1.416	1.467	-3.6	92
9	T	Acetone	0.384	0.382	0.7	97
10	T	trans-1,2-Dichloroethene	1.342	1.356	-1.1	88
11	T	methyl-tert-butyl-Ether	3.139	3.392	-8.0	94
12	TP	1,1-Dichloroethane	2.238	2.459	-9.9	97
13	T	cis-1,2-Dichloroethene	1.556	1.446	7.1	87
14	TC	Chloroform	1.997	2.084	-4.3	94
15	T	2-Butanone	0.600	0.593	1.1	92
16	S	1,2-Dichloroethane-d4	1.225	1.341	-9.4	97
17	T	1,2-Dichloroethane	1.409	1.601	-13.7	101
18	I	1,4-Difluorobenzene	1.000	1.000	0.0	90
19	T	Carbon tetrachloride	0.243	0.244	-0.5	91
20	T	1,1,1-Trichloroethane	0.286	0.289	-1.0	93
21	TM	Benzene	0.998	1.010	-1.2	93
22	TM	Trichloroethene	0.325	0.269	17.4	82
23	TC	1,2-Dichloropropane	0.257	0.274	-6.7	98
24	T	Bromodichloromethane	0.292	0.298	-1.9	94
25	T	cis-1,3-Dichloropropene	0.417	0.429	-2.9	93
26	T	trans-1,3-Dichloropropene	0.349	0.353	-1.3	92
27	T	1,1,2-Trichloroethane	0.207	0.216	-4.2	96
28	T	Dibromochloromethane	0.265	0.254	4.2	88
29		1,2-Dibromoethane	0.237	0.243	-2.4	93
30	TP	Bromoform	0.181	0.161	11.4	81
31	I	Chlorobenzene-d5	1.000	1.000	0.0	92
32	S	Toluene-d8	0.816	0.842	-3.2	94
33	TMC	Toluene	0.600	0.586	2.3	93
34	T	4-methyl-2-Pentanone	0.212	0.219	-3.5	97
35	T	Tetrachloroethene	0.226	0.195	13.3	80
36	T	2-Hexanone	0.145	0.150	-3.5	95
37	TC	Ethyl benzene	1.093	1.089	0.4	92
38	TMP	Chlorobenzene	0.727	0.702	3.3	92
39	T	m&p-Xylenes	0.442	0.437	1.3	91
40	T	o-Xylene	0.430	0.426	1.0	94
41	T	Styrene	0.718	0.719	-0.1	92
42	T	Isopropylbenzene	1.072	1.077	-0.4	92
43	S	4-Bromofluorobenzene	0.309	0.312	-0.8	94

44 TP	1,1,2,2-Tetrachloroethane	0.308	0.308	-0.0	96	MWB-4
45 T	Naphthalene	0.893	0.772	13.6	79	

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

VCAL1456.D TCL.M Mon Jan 03 11:12:41 2005

Quantitation Report (QT Reviewed)

MWB-4

Data File : C:\HPCHEM\1\DATA\VCAL1456.D
Acq On : 21 Dec 2004 11:21
Sample : 50UG/L TCL/PAUST CCAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Jan 3 11:12 2005

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Wed Dec 29 09:25:01 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	10.97	128	166530	50.00	ug/L	0.00
18) 1,4-Difluorobenzene	12.63	114	894040	50.00	ug/L	0.00
31) Chlorobenzene-d5	16.81	117	851307	50.00	ug/L	0.00
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.71	65	223328	54.72	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 109.44%			
32) Toluene-d8	14.91	98	716725	51.62	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.24%			
43) 4-Bromofluorobenzene	18.44	95	265265	50.38	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.76%			
Target Compounds						Qvalue
2) Chloromethane	6.33	50	228072	46.94	ug/L	100
3) Vinyl chloride	6.60	62	242851	50.07	ug/L	100
4) Bromomethane	7.21	94	132884m	43.95	ug/L	97
5) Chloroethane	7.40	64	180186	54.47	ug/L	99
6) 1,1-Dichloroethene	8.84	96	188111	50.56	ug/L	95
7) Carbon disulfide	9.36	76	692114	50.95	ug/L	100
8) Methylene chloride	8.99	84	244332	51.81	ug/L	97
9) Acetone	8.31	43	63557	49.65	ug/L	100
10) trans-1,2-Dichloroethene	9.81	96	225805	50.53	ug/L	98
11) methyl-tert-butyl-Ether	9.91	73	564835	54.02	ug/L	99
12) 1,1-Dichloroethane	10.11	63	409491	54.93	ug/L	100
13) cis-1,2-Dichloroethene	10.78	96	240723	46.45	ug/L	94
14) Chloroform	11.02	83	346996	52.16	ug/L	99
15) 2-Butanone	10.59	43	98835	49.44	ug/L	99
17) 1,2-Dichloroethane	11.80	62	266629	56.83	ug/L	99
19) Carbon tetrachloride	12.38	117	218202	50.26	ug/L	100
20) 1,1,1-Trichloroethane	11.93	97	258568	50.48	ug/L	99
21) Benzene	12.42	78	902817	50.60	ug/L	100
22) Trichloroethene	13.18	130	240367	41.31	ug/L	98
23) 1,2-Dichloropropane	13.14	63	245043	53.36	ug/L	100
24) Bromodichloromethane	13.24	83	266573	50.97	ug/L	99
25) cis-1,3-Dichloropropene	14.00	75	383510	51.46	ug/L	99
26) trans-1,3-Dichloropropene	14.52	75	315809	50.65	ug/L	98

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

Data File : C:\HPCHEM\1\DATA\VCAL1456.D
Acq On : 21 Dec 2004 11:21
Sample : 50UG/L TCL/PAUST CCAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Jan 3 11:12 2005

Quant Results File: TCL.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Wed Dec 29 09:25:01 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
27) 1,1,2-Trichloroethane	14.75	97	193239	52.11	ug/L		97
28) Dibromochloromethane	15.45	129	226849	47.90	ug/L		99
29) 1,2-Dibromoethane	15.77	107	216987	51.21	ug/L		100
30) Bromoform	17.55	173	143658	44.28	ug/L		99
33) Toluene	15.01	92	498871	48.85	ug/L		100
34) 4-methyl-2-Pentanone	14.16	43	186816	51.77	ug/L		99
35) Tetrachloroethene	15.97	164	166416	43.34	ug/L		97
36) 2-Hexanone	15.24	43	127917	51.74	ug/L		99
37) Ethyl benzene	17.08	91	926853	49.79	ug/L		100
38) Chlorobenzene	16.86	112	597942	48.33	ug/L		100
39) m&p-Xylenes	17.33	106	743702	98.72	ug/L		99
40) o-Xylene	17.88	106	362245	49.49	ug/L		99
41) Styrene	17.78	104	611816	50.07	ug/L		99
42) Isopropylbenzene	18.36	105	916550	50.21	ug/L	#	100
44) 1,1,2,2-Tetrachloroethane	17.87	83	262228	50.02	ug/L		100
45) Naphthalene	23.74	128	657323	43.22	ug/L	#	100

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

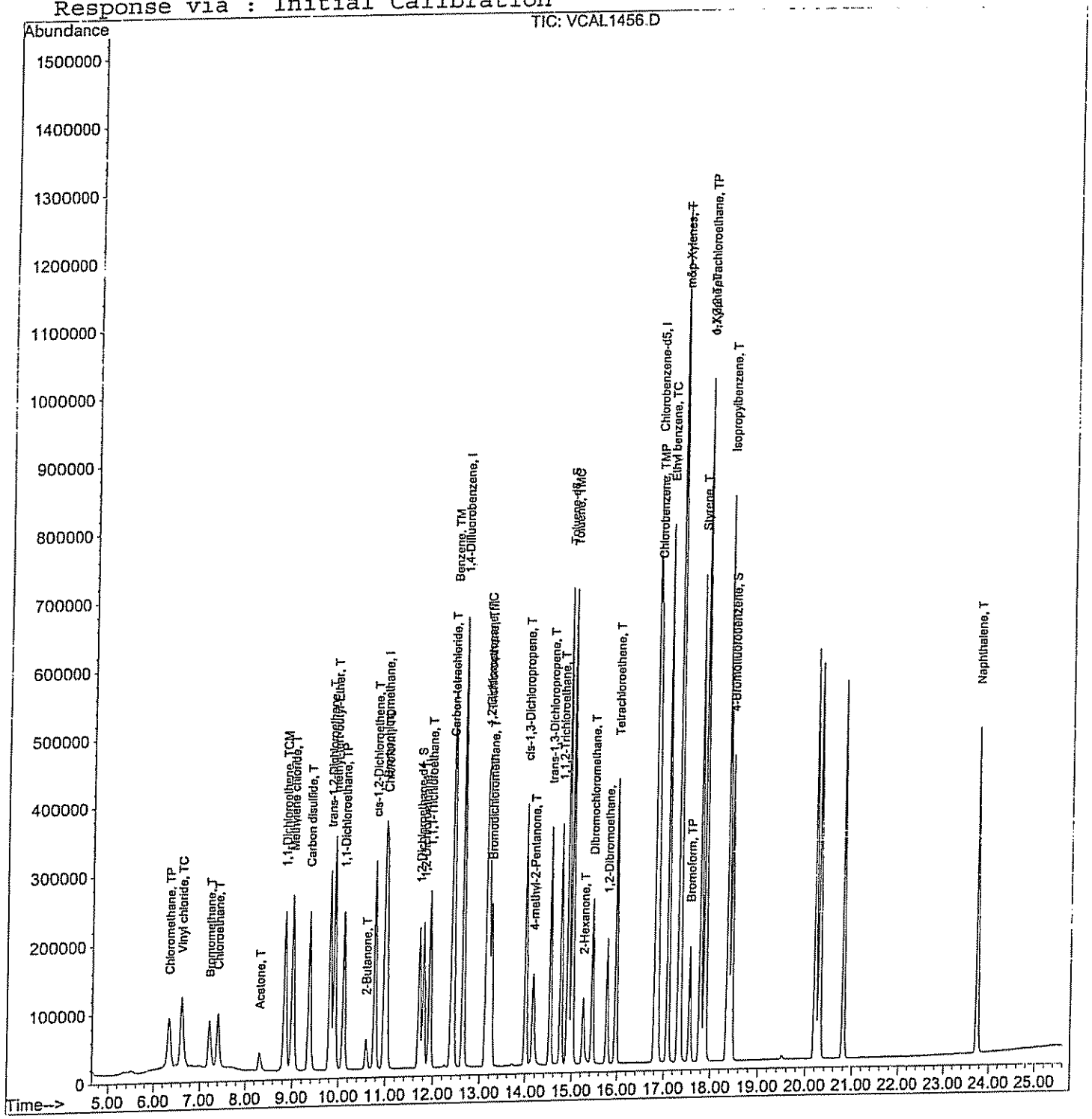
Data File : C:\HPCHEM\1\DATA\VCAL1456.D
Acq On : 21 Dec 2004 11:21
Sample : 50UG/L TCL/PAUST CCAL
Misc : WATER

Vial: 2
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Jan 3 11:12 2005

Quant Results File: TCL.RES

Method : C:\HPCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Wed Dec 29 09:25:01 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

MWB-4

Data File : C:\HPCHEM\1\DATA\VBLK1450.D
Acq On : 21 Dec 2004 12:26
Sample : WATER METHOD BLK
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.97	128	167295	50.00	ug/L	0.06
18) 1,4-Difluorobenzene	12.63	114	907742	50.00	ug/L	0.06
31) Chlorobenzene-d5	16.81	117	848570	50.00	ug/L	0.05
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.71	65	218670	53.34	ug/L	0.06
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.68%			
32) Toluene-d8	14.91	98	720001	52.02	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.04%			
43) 4-Bromofluorobenzene	18.44	95	263950	50.29	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.58%			
Target Compounds						Qvalue
2) Chloromethane	6.31	50	208	0.04	ug/L #	85
4) Bromomethane	7.19	94	678	0.22	ug/L #	70
6) 1,1-Dichloroethene	8.84	96	491	0.13	ug/L #	35
7) Carbon disulfide	9.37	76	2001	0.15	ug/L	100
8) Methylene chloride	8.98	84	372	0.08	ug/L #	72
9) Acetone	8.33	43	2678	2.08	ug/L	99
13) cis-1,2-Dichloroethene	10.78	96	1726	0.33	ug/L	92
15) 2-Butanone	10.64	43	2689	1.34	ug/L	88
21) Benzene	12.41	78	1195	0.07	ug/L	89
22) Trichloroethene	13.18	130	5188	0.88	ug/L	89
27) 1,1,2-Trichloroethane	14.93	97	21637	5.75	ug/L #	50
33) Toluene	15.01	92	1275	0.13	ug/L	93
36) 2-Hexanone	15.17	43	237	0.10	ug/L #	68
37) Ethyl benzene	17.08	91	210	0.01	ug/L #	86
38) Chlorobenzene	16.87	112	1496	0.12	ug/L #	67
39) m&p-Xylenes	17.33	106	223	0.03	ug/L #	46
45) Naphthalene	23.75	128	1859	0.12	ug/L #	97

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

Quantitation Report

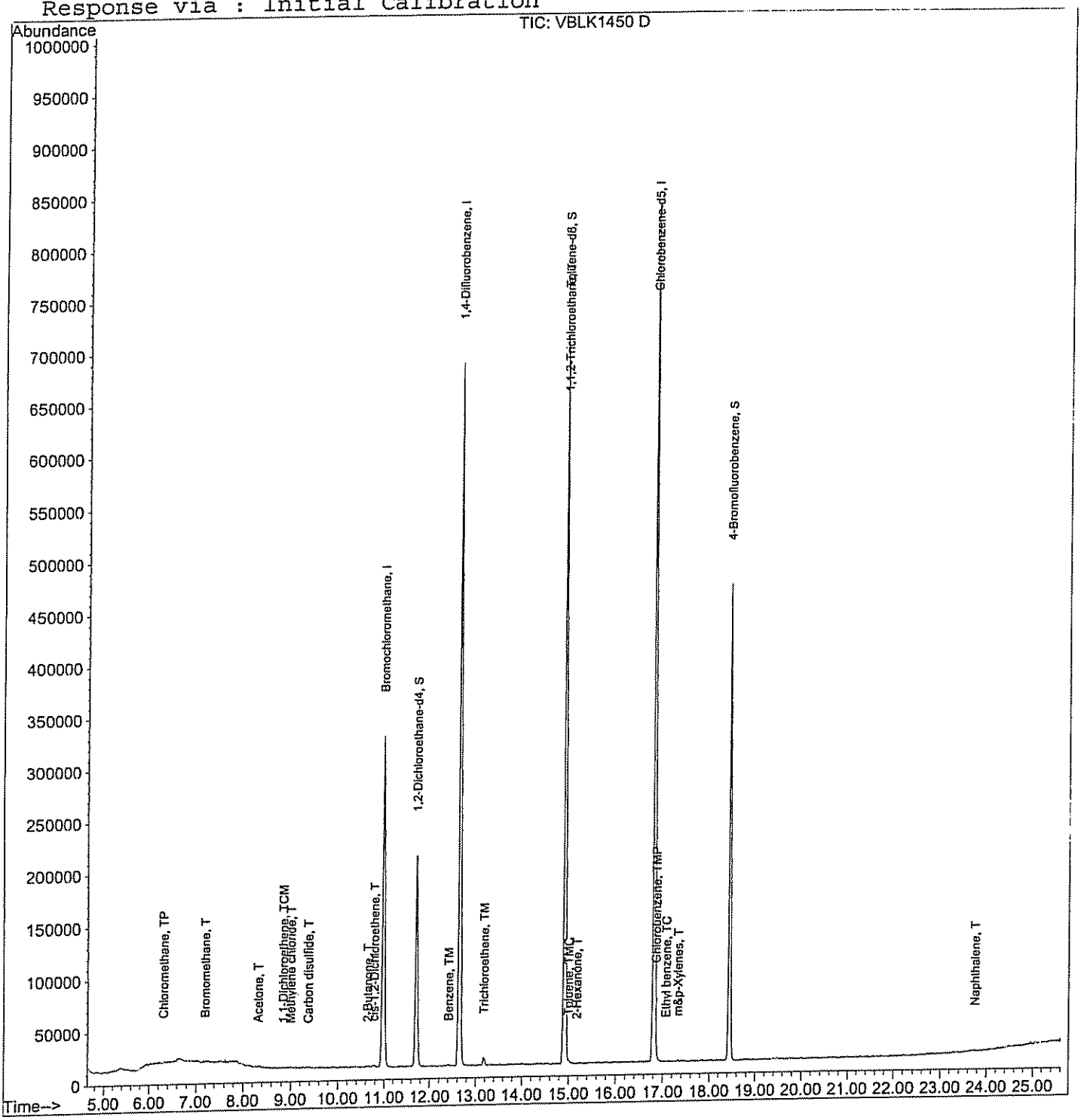
Data File : C:\HPCHEM\1\DATA\VBLK1450.D
Acq On : 21 Dec 2004 12:26
Sample : WATER METHOD BLK
Misc : WATER

Vial: 4
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



LCS Blank Summary Report

Data File : C:\HPCHEM\1\DATA\LCSW1432.D
Acq On : 21 Dec 2004 11:54
Sample : 50UG/L TCL LCS
Misc : WATER
Matrix : WATER
Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Multiple Level Calibration

		Compound Name	Conc	Added	Recv(%)	QC Range	Q
6)	T	1,1-Dichloroethene	36.21	50.00	72.42	54 to 121%	[ ]
21)	T	Benzene	49.70	50.00	99.41	80 to 118%	[ ]
22)	T	Trichloroethene	38.81	50.00	77.62	67 to 118%	[ ]
33)	T	Toluene	48.94	50.00	97.89	73 to 124%	[ ]
38)	T	Chlorobenzene	49.28	50.00	98.55	80 to 117%	[ ]

* = out of control limits
Tue Dec 21 12:29:14 2004

MWB-4

Data File : C:\HPCHEM\1\DATA\LCSW1432.D
Acq On : 21 Dec 2004 11:54
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:28 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1
IS QA File : File name for IS QA unknown

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane	10.97	128	168881	50.00	ug/L	0.06 NA%
18) 1,4-Difluorobenzene	12.63	114	895260	50.00	ug/L	0.06 NA%
31) Chlorobenzene-d5	16.81	117	845064	50.00	ug/L	0.05 NA%
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.70	65	222710	53.81	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.62%			
32) Toluene-d8	14.91	98	723789	52.51	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.02%			
43) 4-Bromofluorobenzene	18.44	95	273248	52.28	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.56%			
Target Compounds						Qvalue
2) Chloromethane	6.31	50	781	0.16	ug/L #	85
3) Vinyl chloride	6.57	62	213	0.04	ug/L #	86
4) Bromomethane	7.04	94	209	0.07	ug/L	89
6) 1,1-Dichloroethene	8.84	96	136623	36.21	ug/L	92
7) Carbon disulfide	9.36	76	5124	0.37	ug/L	100
8) Methylene chloride	9.00	84	1349	0.28	ug/L	90
9) Acetone	8.31	43	3720	2.87	ug/L	95
10) trans-1,2-Dichloroethene	9.79	96	1276	0.28	ug/L #	70
13) cis-1,2-Dichloroethene	10.77	96	2197	0.42	ug/L	94
14) Chloroform	11.01	83	200	0.03	ug/L #	66
15) 2-Butanone	10.60	43	4456	2.20	ug/L	98
21) Benzene	12.42	78	887975	49.70	ug/L	100
22) Trichloroethene	13.18	130	226141	38.81	ug/L	98
24) Bromodichloromethane	13.17	83	2097	0.40	ug/L #	1
26) trans-1,3-Dichloropropene	14.52	75	356	0.06	ug/L #	77
27) 1,1,2-Trichloroethane	14.92	97	22783	6.14	ug/L #	50
33) Toluene	15.00	92	496182	48.94	ug/L	99
35) Tetrachloroethene	15.97	164	295	0.08	ug/L #	64

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

MWB-4

Data File : C:\HPCHEM\1\DATA\LCSW1432.D
Acq On : 21 Dec 2004 11:54
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:28 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
36) 2-Hexanone	15.00	43	7802	3.18	ug/L	#	68
37) Ethyl benzene	17.09	91	1815	0.10	ug/L		98
38) Chlorobenzene	16.85	112	605183	49.28	ug/L		100
39) m&p-Xylenes	17.09	106	237	0.03	ug/L		94
40) o-Xylene	17.88	106	360	0.05	ug/L	#	20
41) Styrene	17.79	104	577	0.05	ug/L	#	79
42) Isopropylbenzene	18.37	105	1207	0.07	ug/L	#	88
44) 1,1,2,2-Tetrachloroethane	17.88	83	450	0.09	ug/L	#	67
45) Naphthalene	23.75	128	15055	1.00	ug/L		100

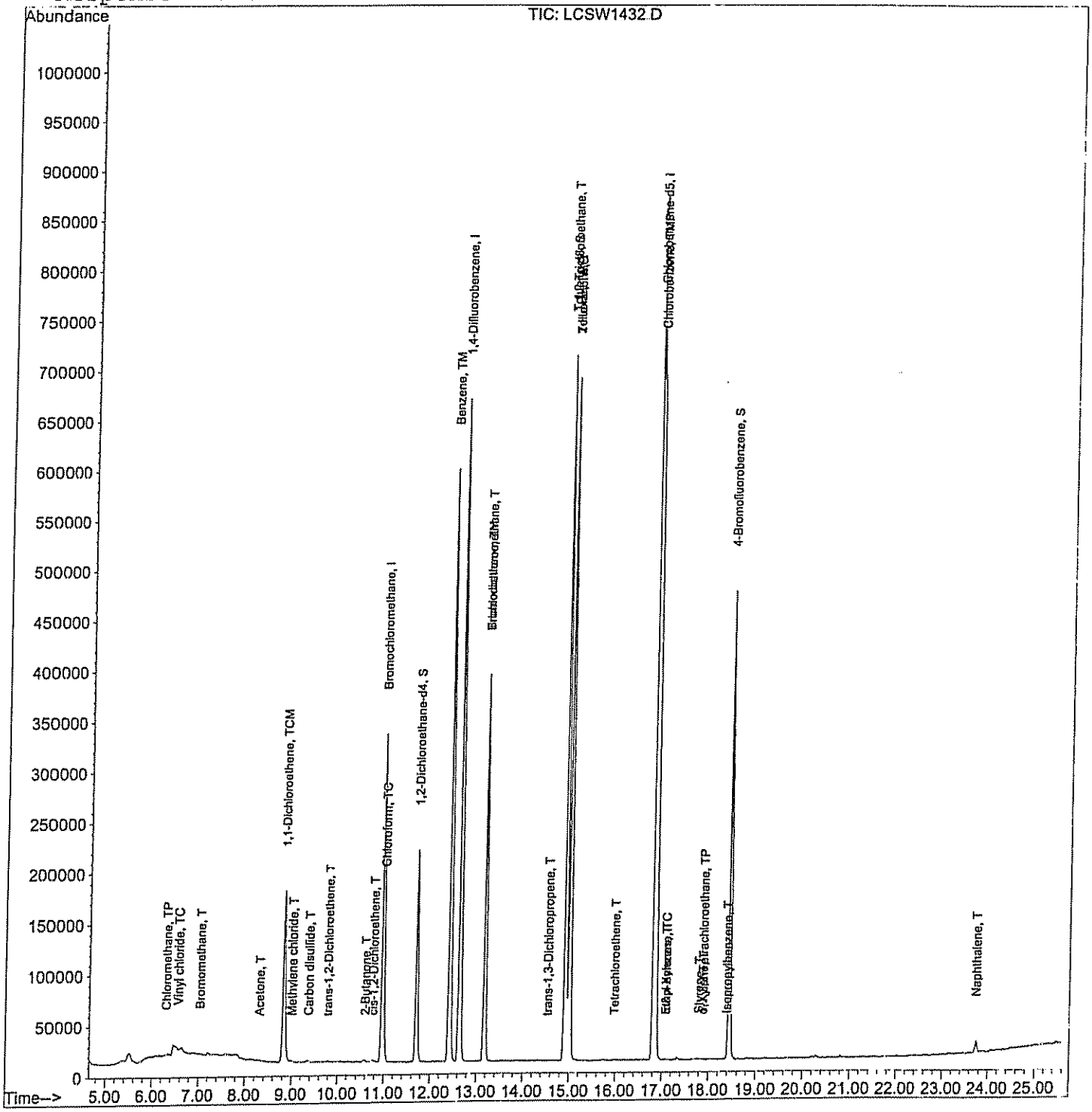
(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\LCSW1432.D
Acq On : 21 Dec 2004 11:54
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 3
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:28 2004 Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\VSA13189.D
Acq On : 21 Dec 2004 17:53
Sample : P0412041-01A DF100 RE
Misc : WATER

Vial: 14
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:02 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.97	128	160586	50.00	ug/L	0.06
18) 1,4-Difluorobenzene	12.63	114	882397	50.00	ug/L	0.05
31) Chlorobenzene-d5	16.80	117	823240	50.00	ug/L	0.04
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.70	65	223195	56.71	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 113.42%			
32) Toluene-d8	14.90	98	697464	51.94	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.88%			
43) 4-Bromofluorobenzene	18.43	95	262974	51.65	ug/L	0.04
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.30%			
Target Compounds						Qvalue
2) Chloromethane	6.30	50	297	0.06	ug/L #	85
3) Vinyl chloride	6.60	62	14811	3.17	ug/L	100
4) Bromomethane	6.97	94	666	0.23	ug/L	91
6) 1,1-Dichloroethene	8.83	96	37794	10.53	ug/L	98
7) Carbon disulfide	9.34	76	218	0.02	ug/L	100
8) Methylene chloride	9.00	84	19927	4.38	ug/L	99
9) Acetone	8.32	43	6091	4.93	ug/L	97
10) trans-1,2-Dichloroethene	9.80	96	17544	4.07	ug/L	90
12) 1,1-Dichloroethane	10.10	63	49816	6.93	ug/L	99
13) cis-1,2-Dichloroethene	10.77	96	1121579	*224.43	ug/L	96
14) Chloroform	11.00	83	1275	0.20	ug/L	94
15) 2-Butanone	10.60	43	2164	1.12	ug/L	88
17) 1,2-Dichloroethane	11.80	62	4911	1.09	ug/L	94
20) 1,1,1-Trichloroethane	11.93	97	106134	21.00	ug/L	99
21) Benzene	12.41	78	5665	0.32	ug/L	97
22) Trichloroethene	13.17	130	1994069	*347.22	ug/L	99
24) Bromodichloromethane	13.17	83	19976	3.87	ug/L #	1
27) 1,1,2-Trichloroethane	14.91	97	21990	6.01	ug/L #	50
33) Toluene	15.00	92	152569	15.45	ug/L	98
35) Tetrachloroethene	15.95	164	1161	0.31	ug/L	86
36) 2-Hexanone	15.37	43	228	0.10	ug/L #	68
37) Ethyl benzene	17.08	91	15572	0.87	ug/L	100
38) Chlorobenzene	16.85	112	226	0.02	ug/L #	67

(#) = qualifier out of range (m) = manual integration DF=100

* See DF=200 HJ 12/29/04

Data File : C:\HPCHEM\1\DATA\VSA13189.D
Acq On : 21 Dec 2004 17:53
Sample : P0412041-01A DF100 RE
Misc : WATER

Vial: 14
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:02 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
39) m&p-Xylenes	17.32	106	13250	1.82	ug/L		96
40) o-Xylene	17.88	106	6431	0.91	ug/L	#	85
42) Isopropylbenzene	18.36	105	1511	0.09	ug/L	#	88
45) Naphthalene	23.74	128	2820	0.19	ug/L	#	97

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

Quantitation Report

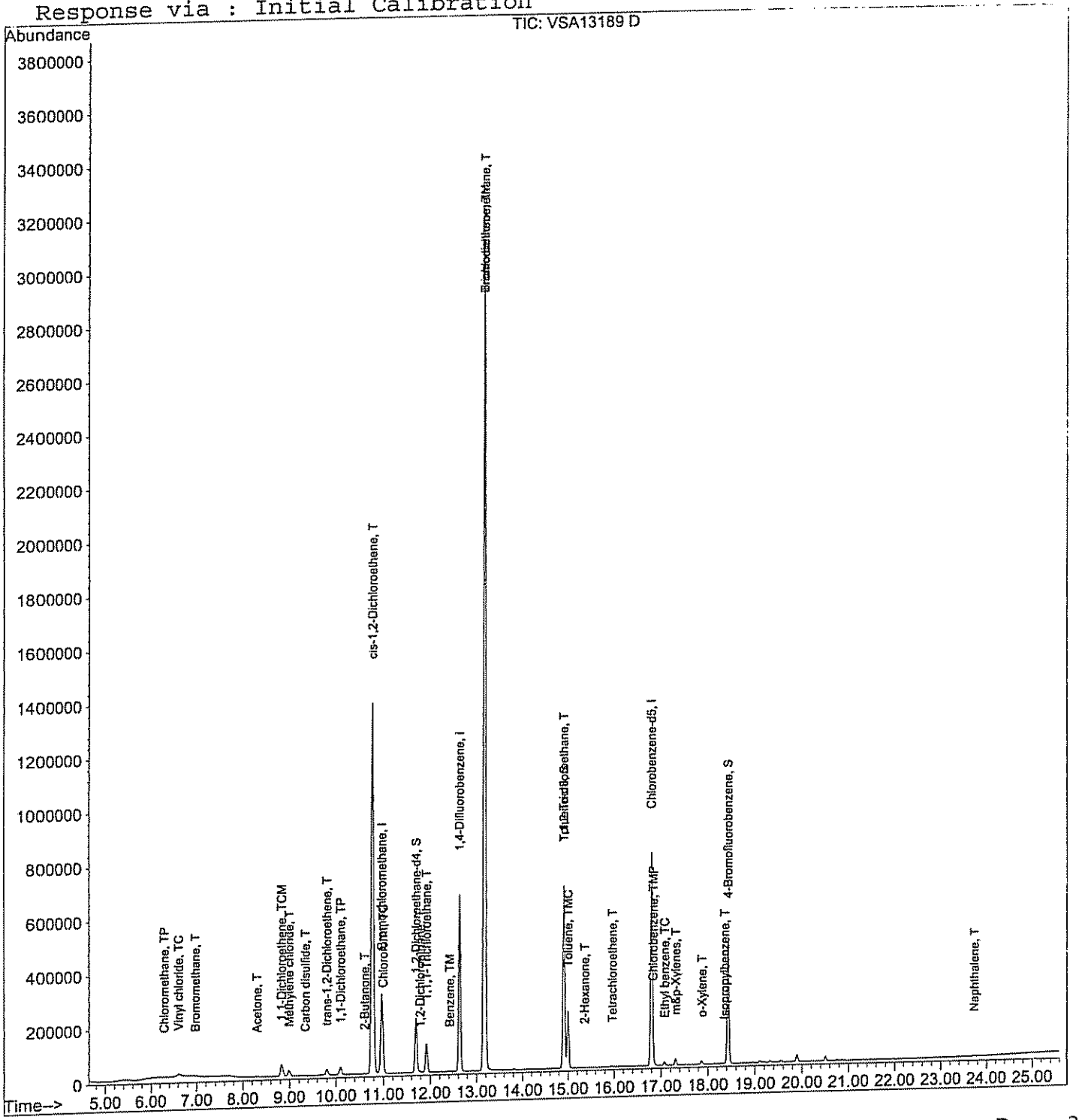
Data File : C:\HPCHEM\1\DATA\VSA13189.D
Acq On : 21 Dec 2004 17:53
Sample : P0412041-01A DF100 RE
Misc : WATER

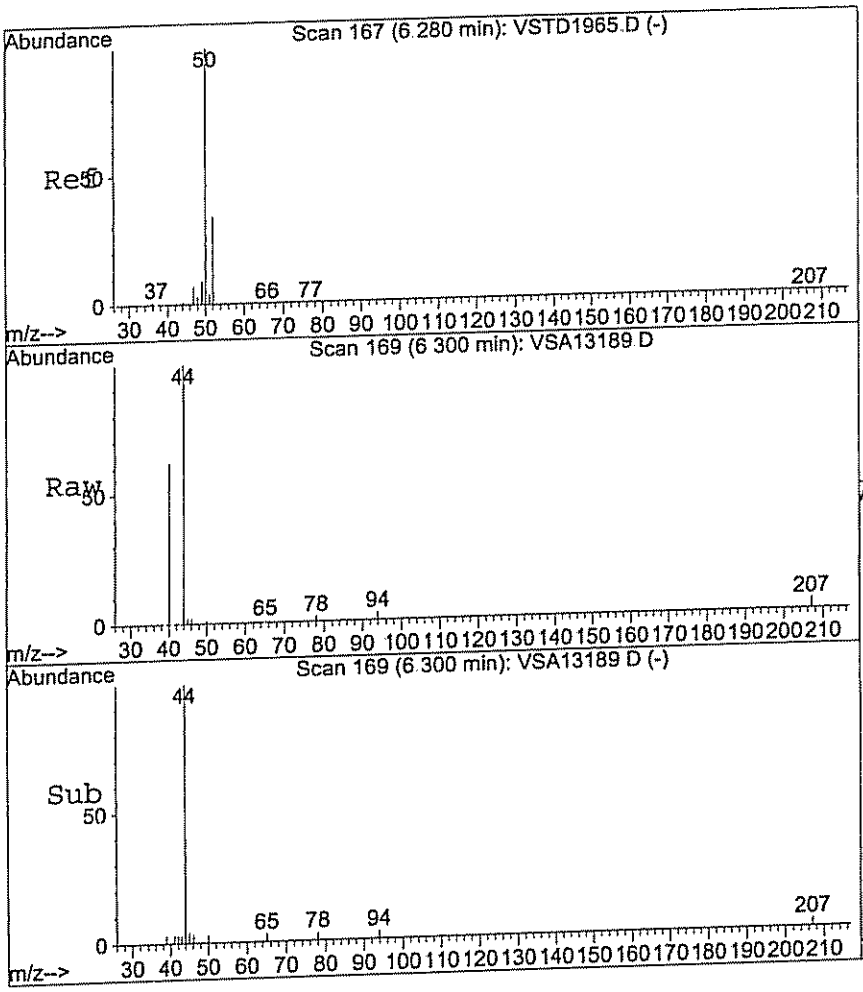
Vial: 14
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:02 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration

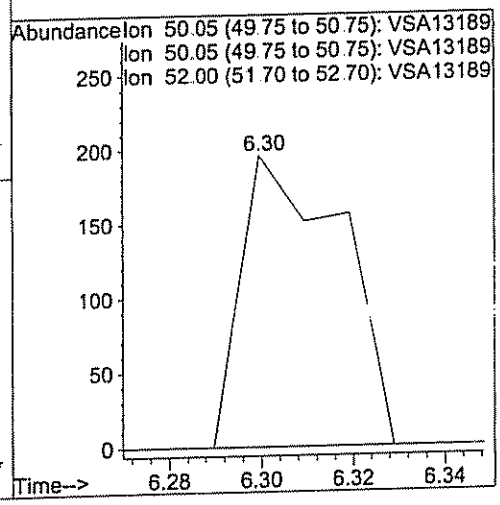


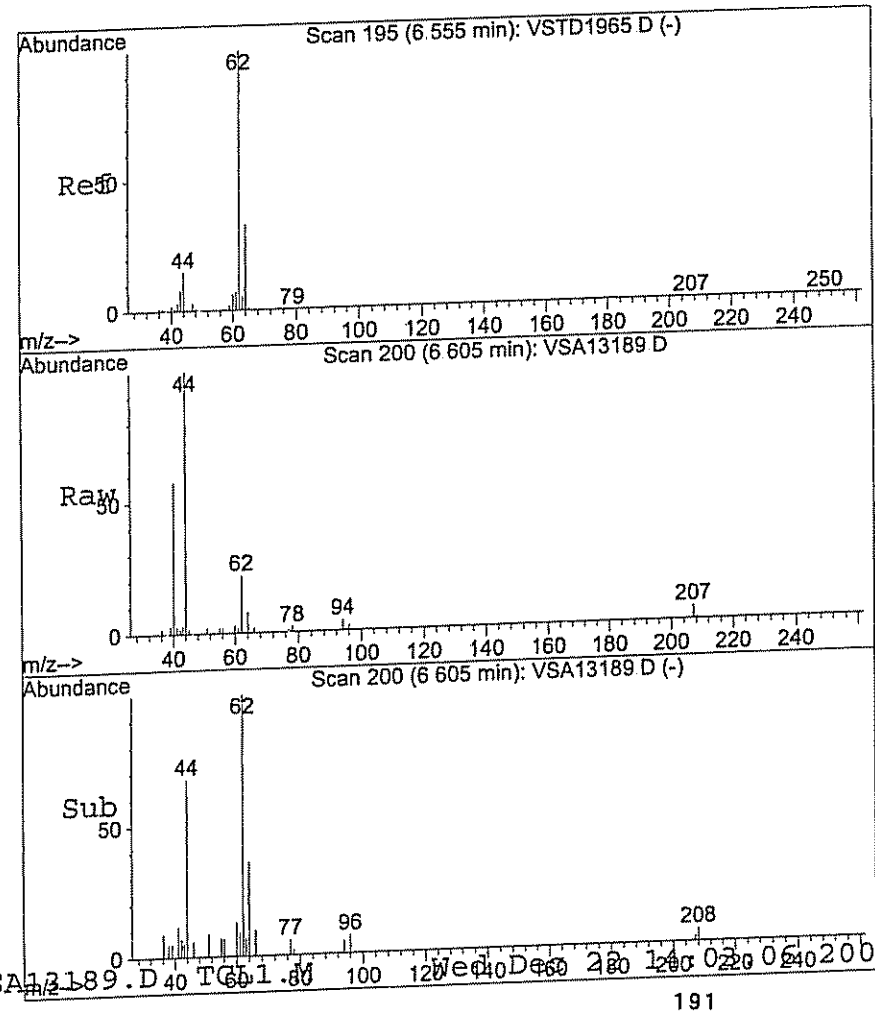


#2
Chloromethane
Concen: 0.06 ug/L
RT: 6.30 min Scan# 169
Delta R.T. 0.02 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 50 Resp: 297

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.9	63.9#

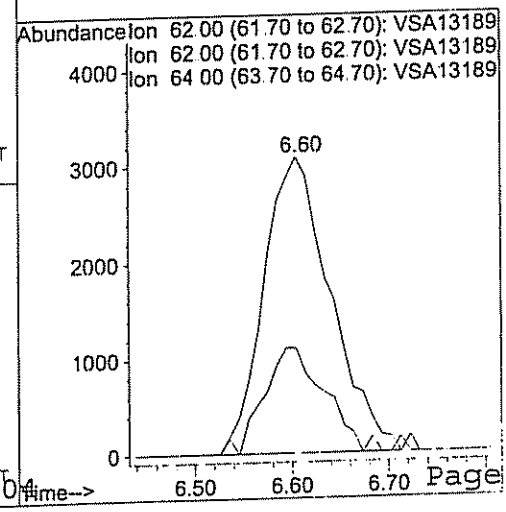


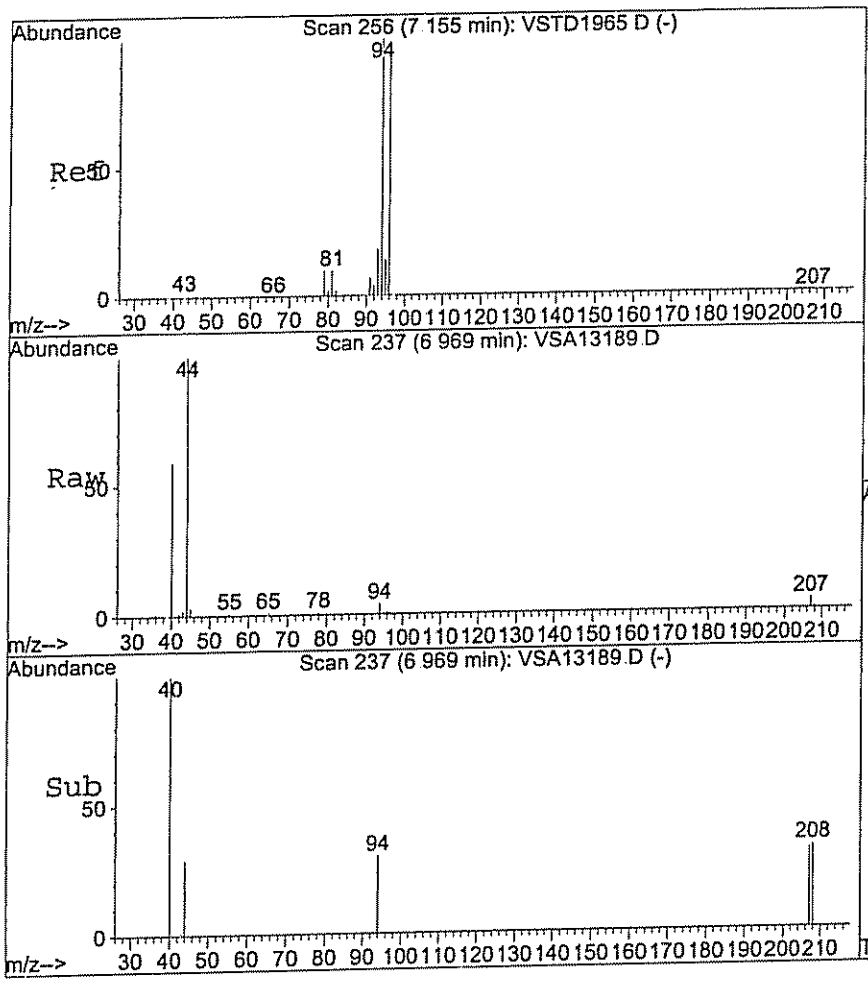


#3
Vinyl chloride
Concen: 3.17 ug/L
RT: 6.60 min Scan# 200
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 62 Resp: 14811

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	33.2	2.4	62.4

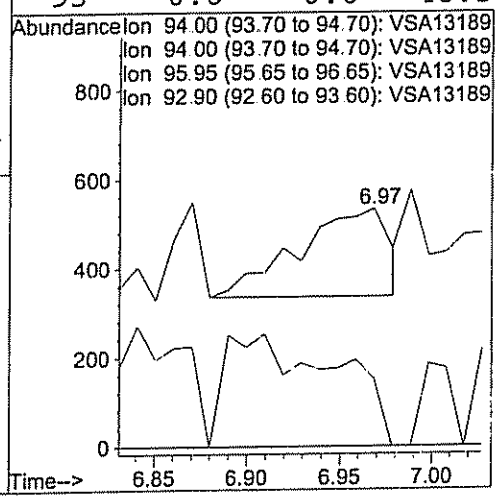


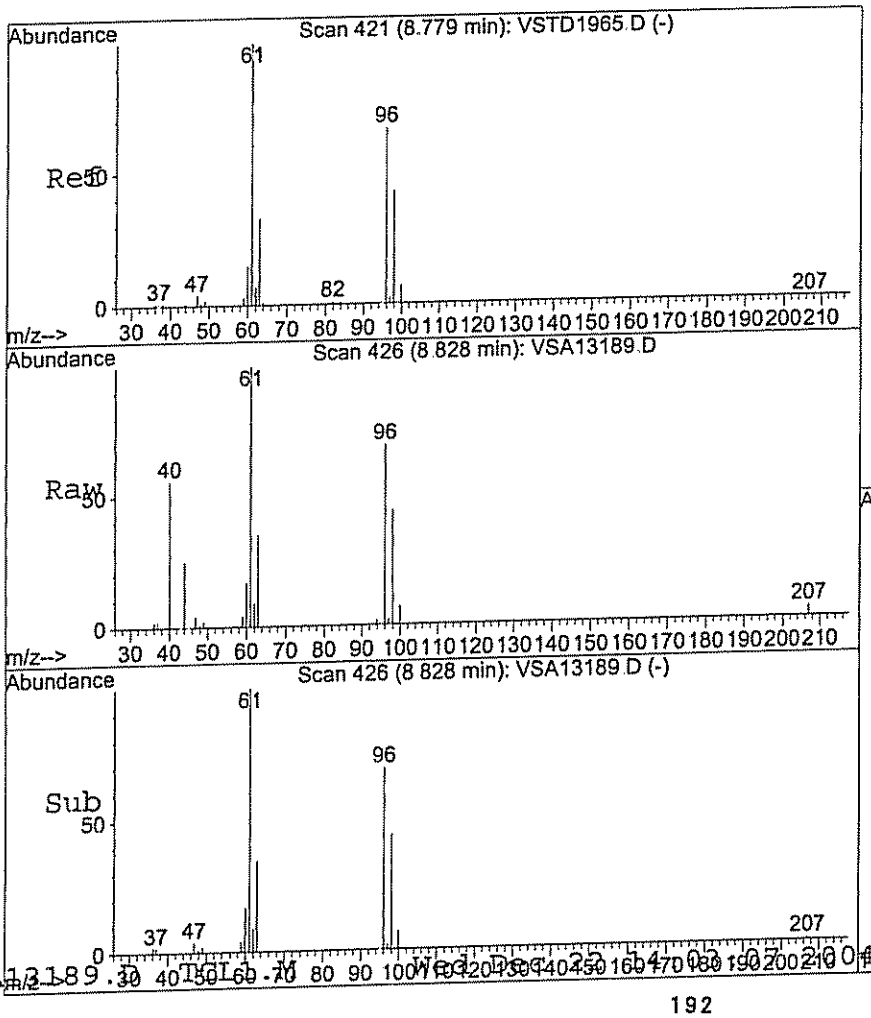


#4
Bromomethane
Concen: 0.23 ug/L
RT: 6.97 min Scan# 237
Delta R.T. -0.19 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 94 Resp: 666

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	105.6	63.6	123.6
93	0.0	0.0	48.5

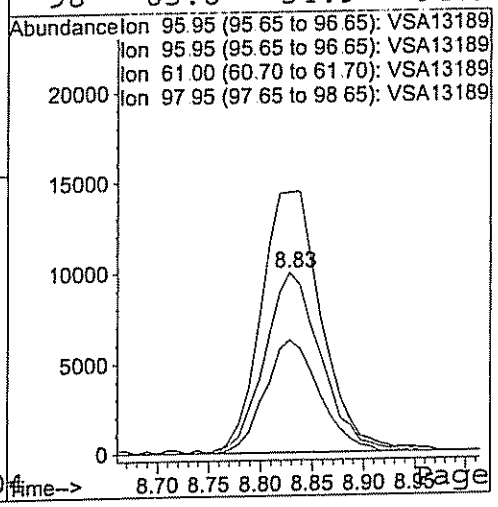


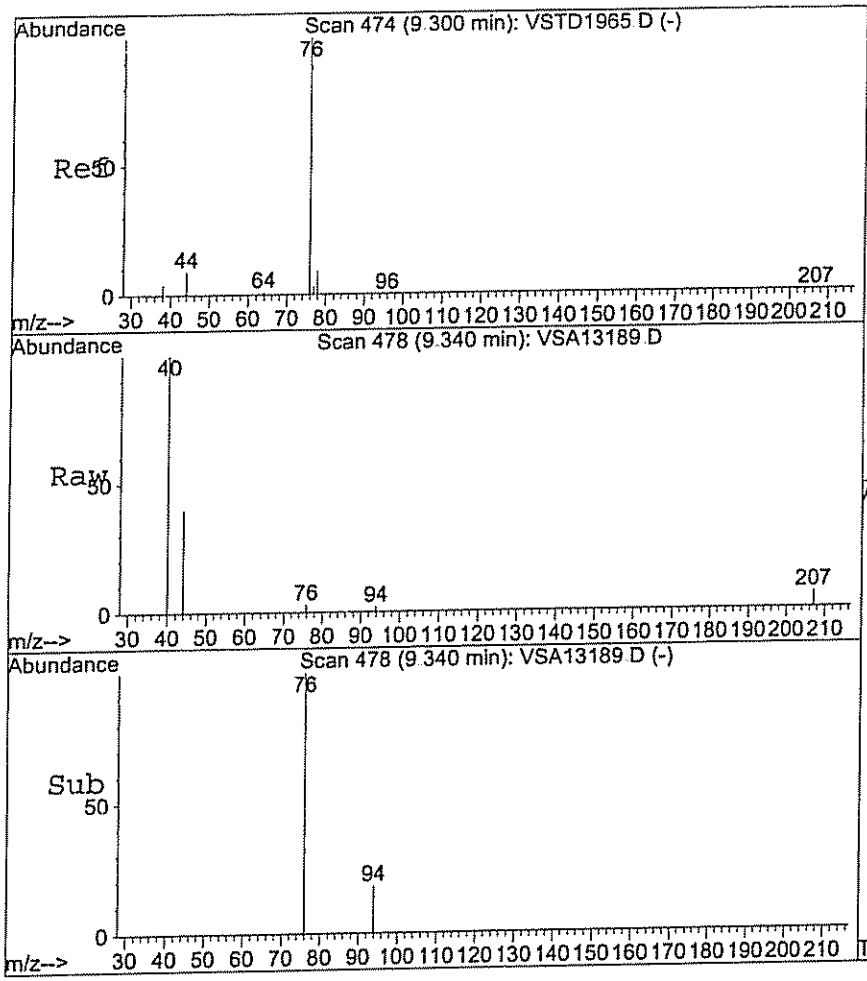


#6
1,1-Dichloroethene
Concen: 10.53 ug/L
RT: 8.83 min Scan# 426
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 96 Resp: 37794

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	144.3	118.9	178.9
98	63.6	34.9	94.9

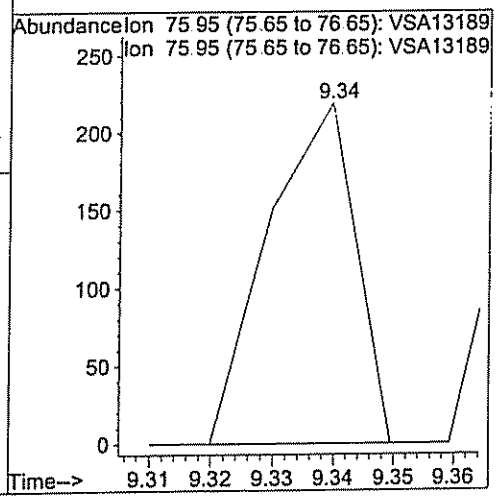


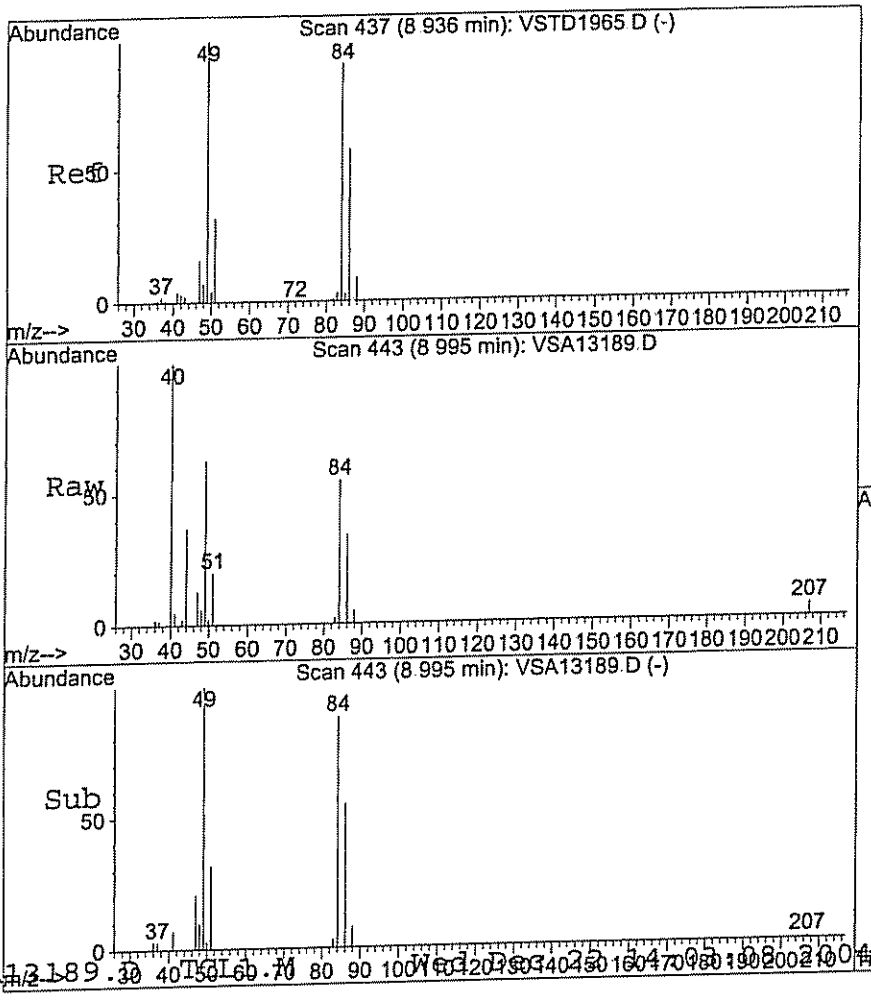


#7
Carbon disulfide
Concen: 0.02 ug/L
RT: 9.34 min Scan# 478
Delta R.T. 0.04 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 76 Resp: 218

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

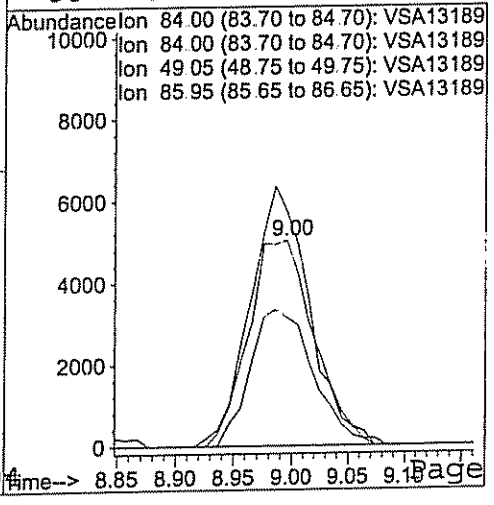


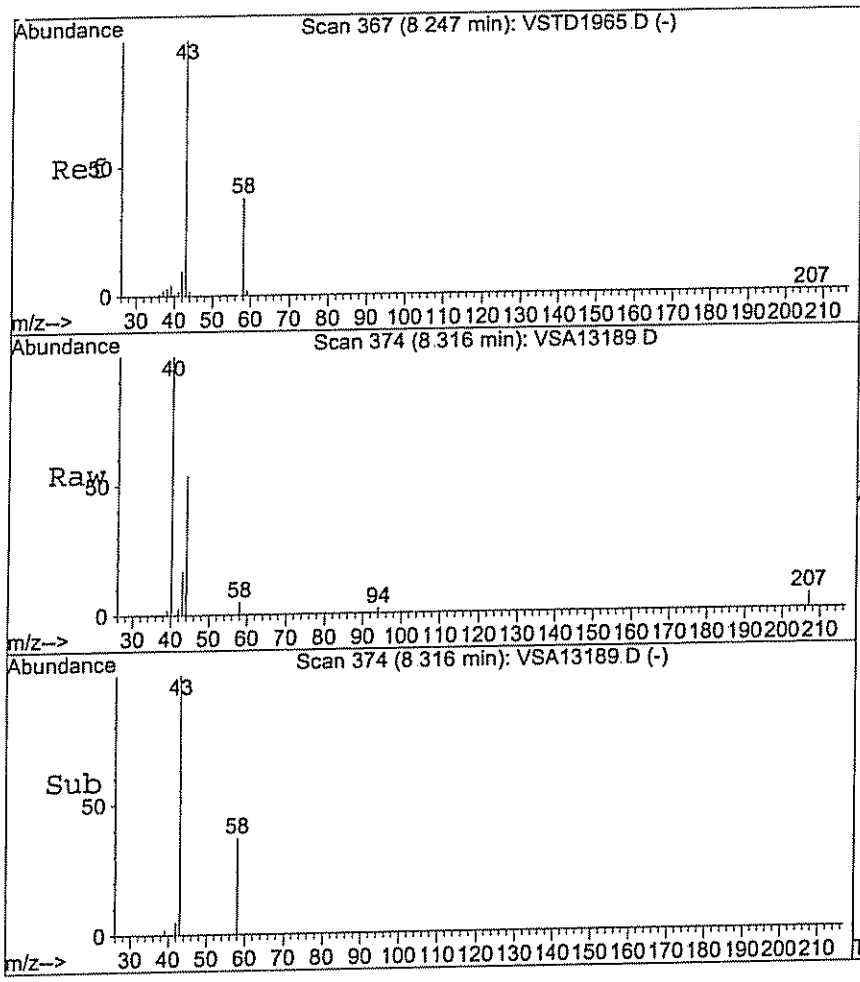


#8
Methylene chloride
Concen: 4.38 ug/L
RT: 9.00 min Scan# 443
Delta R.T. 0.06 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 84 Resp: 19927

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	112.4	80.0	140.0
86	62.6	33.4	93.4

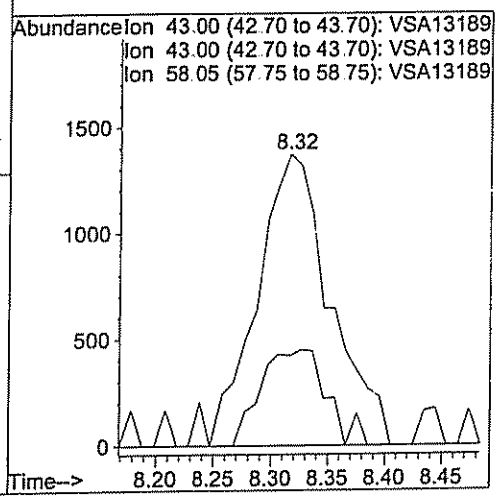


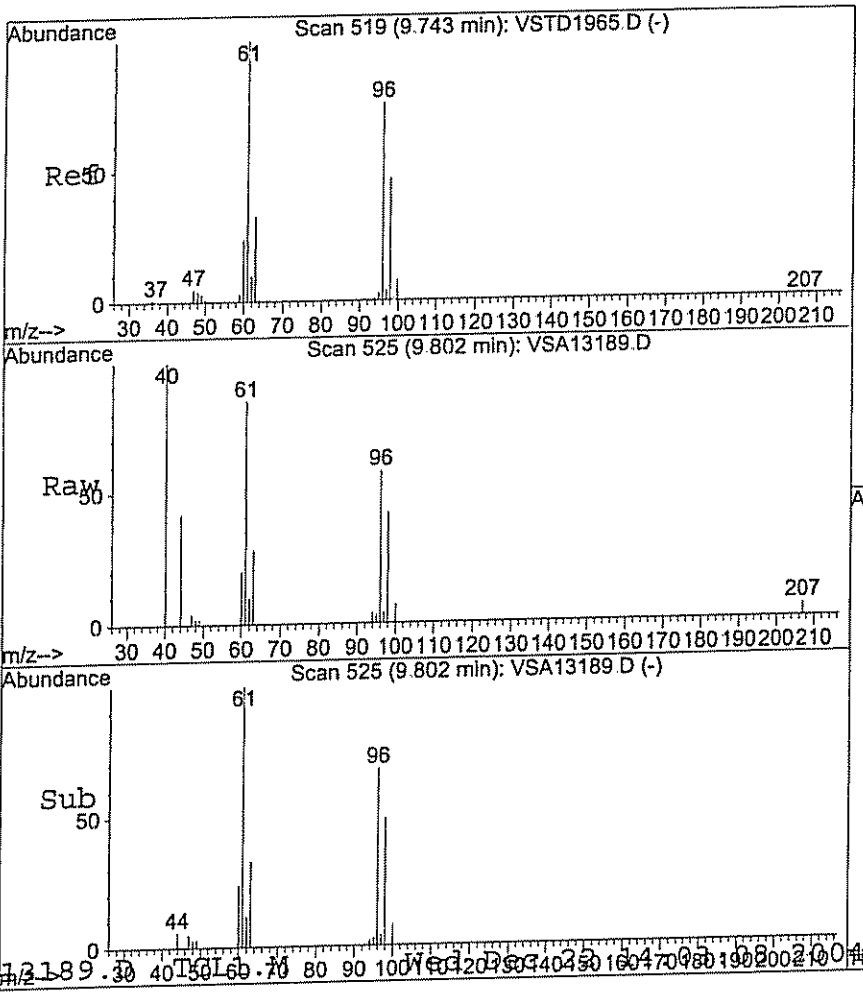


#9
Acetone
Concen: 4.93 ug/L
RT: 8.32 min Scan# 374
Delta R.T. 0.04 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 43 Resp: 6091

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	30.7	7.8	67.8

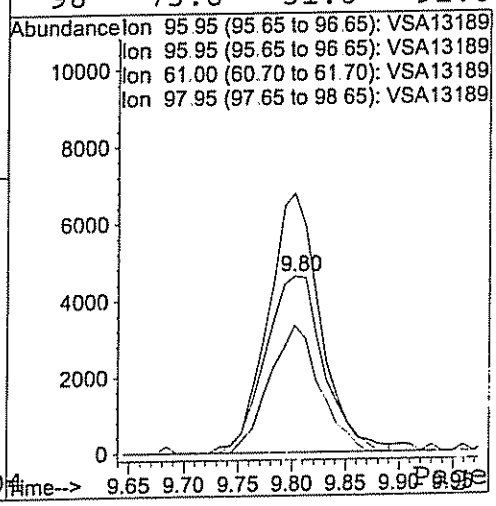


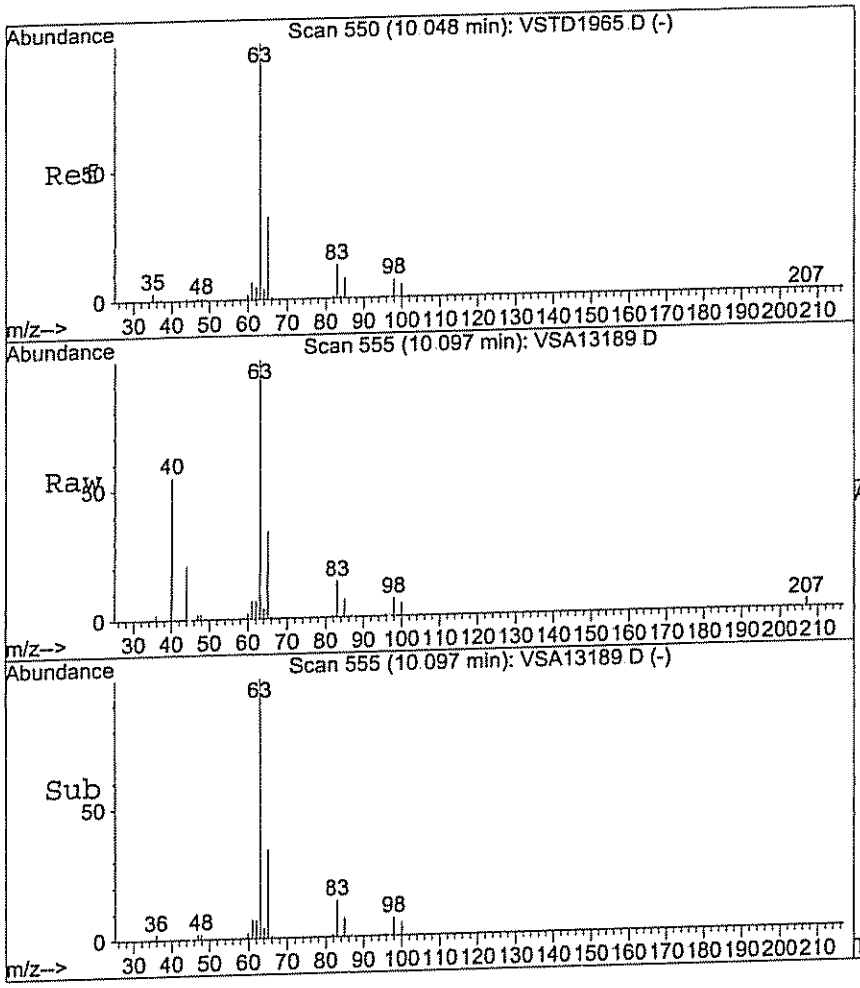


#10
trans-1,2-Dichloroethene
Concen: 4.07 ug/L
RT: 9.80 min Scan# 525
Delta R.T. 0.06 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 96 Resp: 17544

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	149.5	102.4	162.4
98	73.6	31.6	91.6

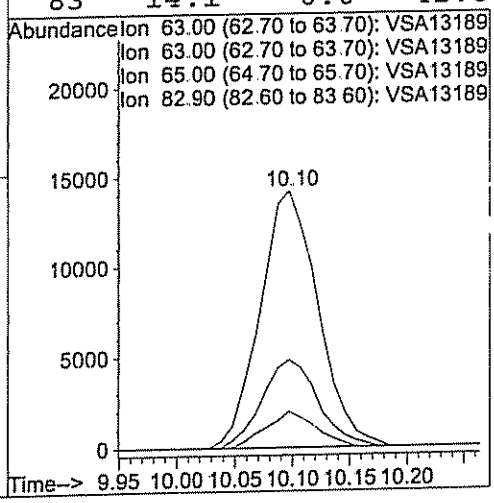


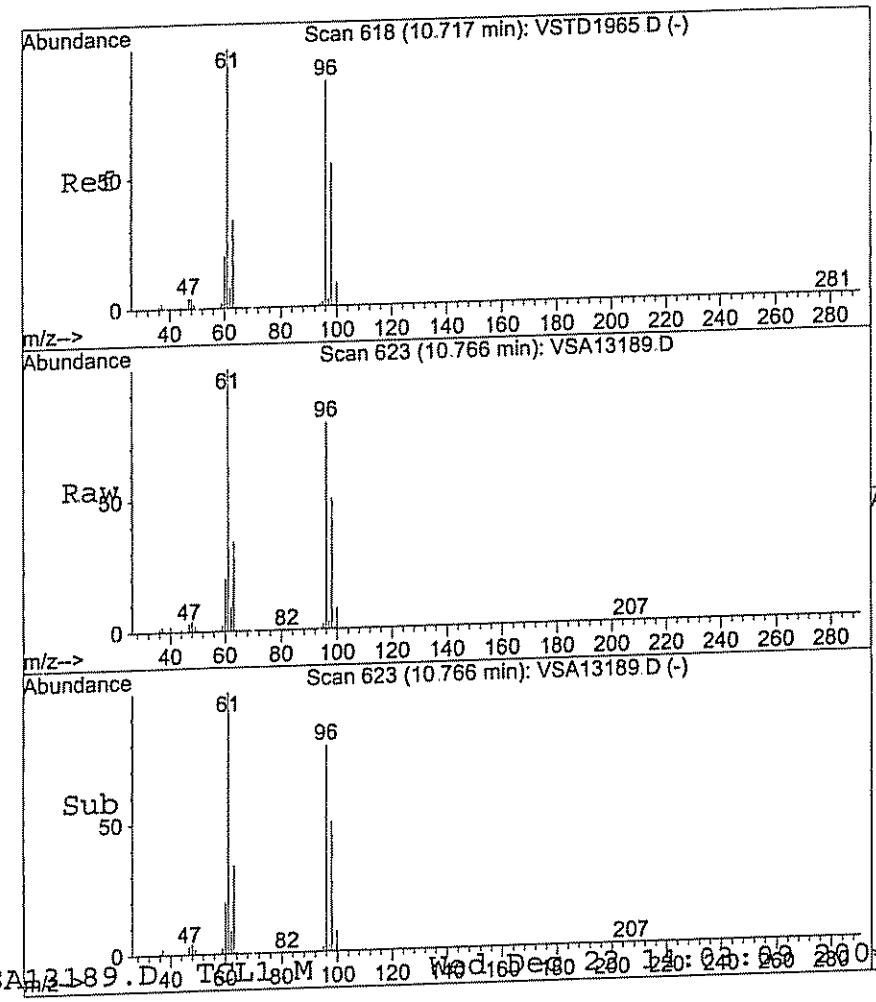


#12
1,1-Dichloroethane
Concen: 6.93 ug/L
RT: 10.10 min Scan# 555
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 63 Resp: 49816

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	33.9	2.1	62.1
83	14.1	0.0	42.6

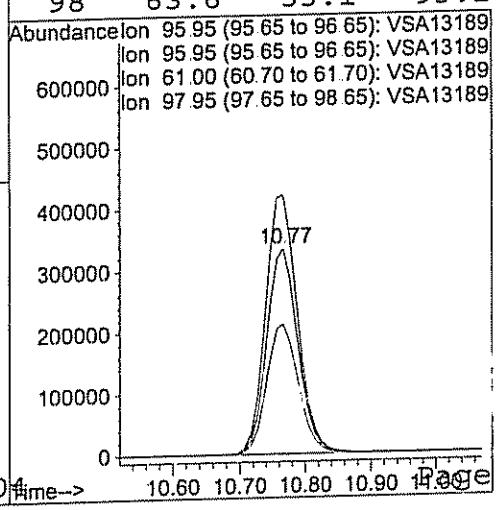


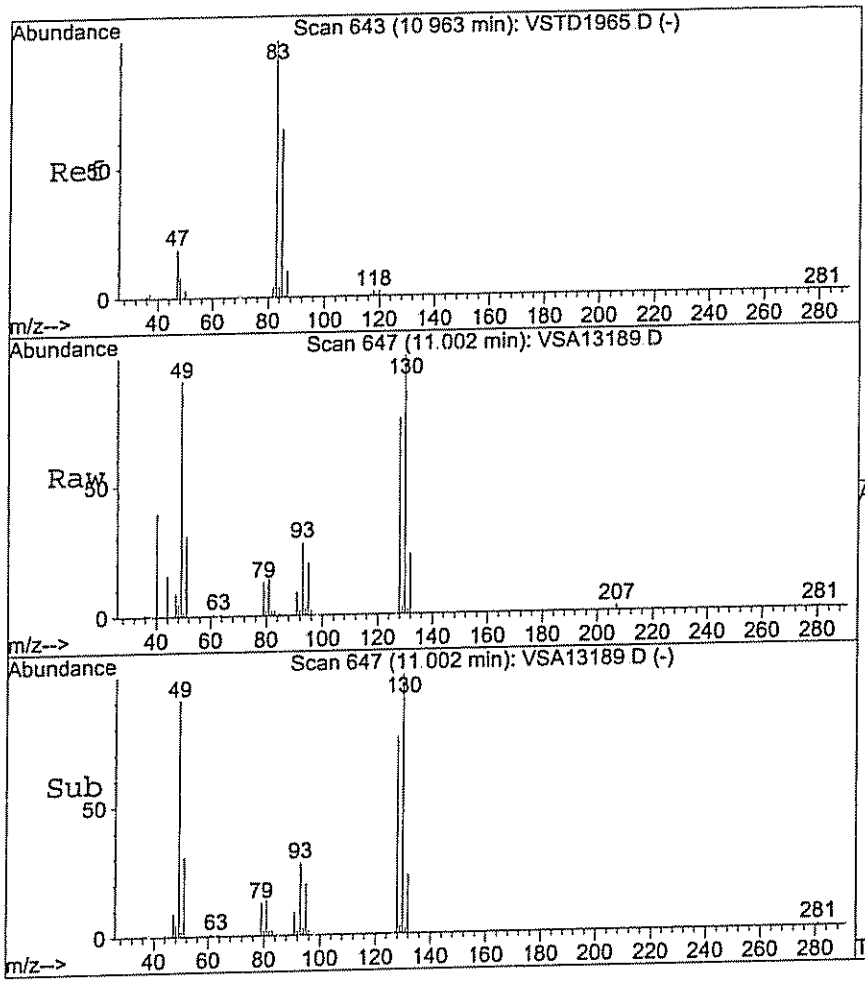


#13
cis-1,2-Dichloroethene
Concen: 224.43 ug/L
RT: 10.77 min Scan# 623
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 96 Resp: 1121579

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	126.2	85.2	145.2
98	63.6	33.1	93.1

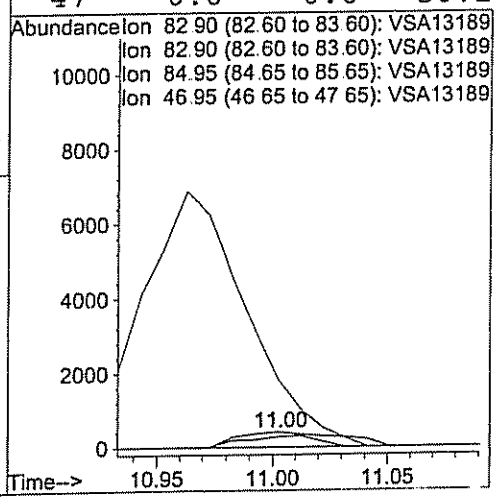


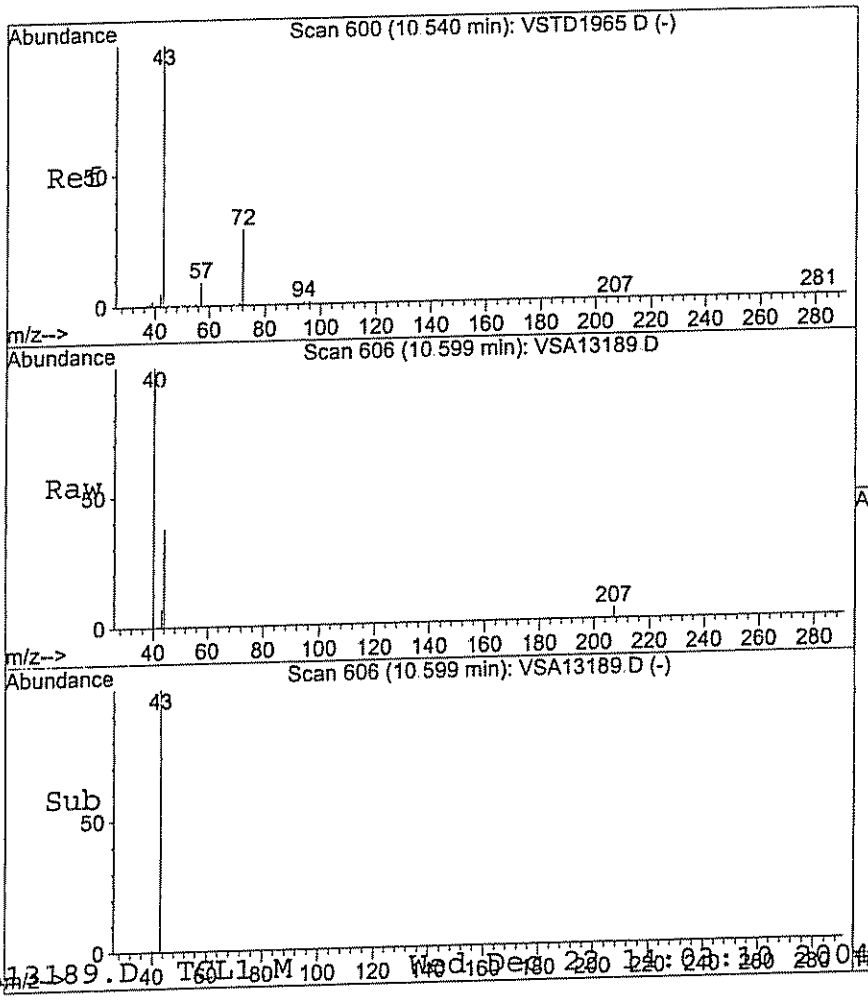


#14
Chloroform
Concen: 0.20 ug/L
RT: 11.00 min Scan# 647
Delta R.T. 0.04 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 83 Resp: 1275

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	67.4	34.7	94.7
47	0.0	0.0	50.1

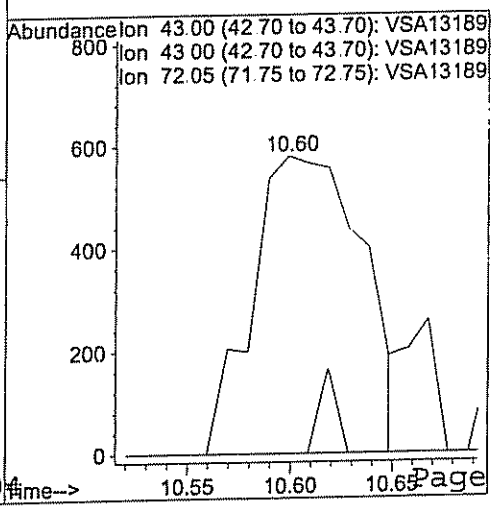


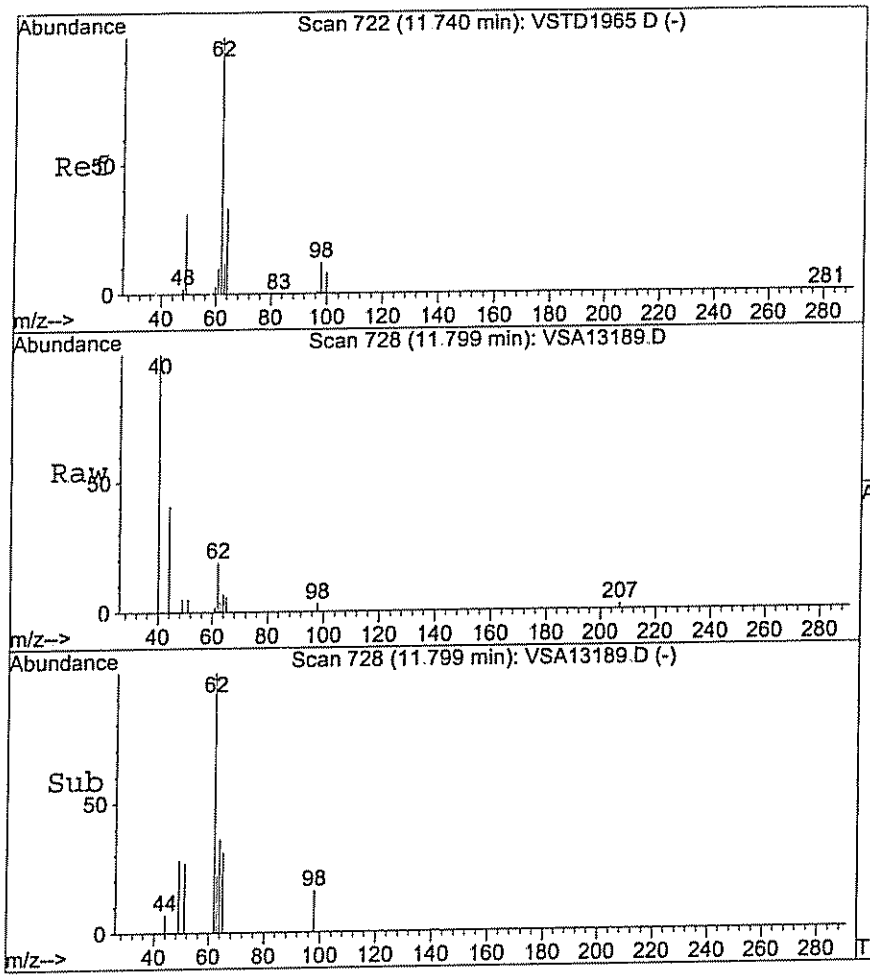


#15
2-Butanone
Concen: 1.12 ug/L
RT: 10.60 min Scan# 606
Delta R.T. 0.04 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 43 Resp: 2164

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	59.3

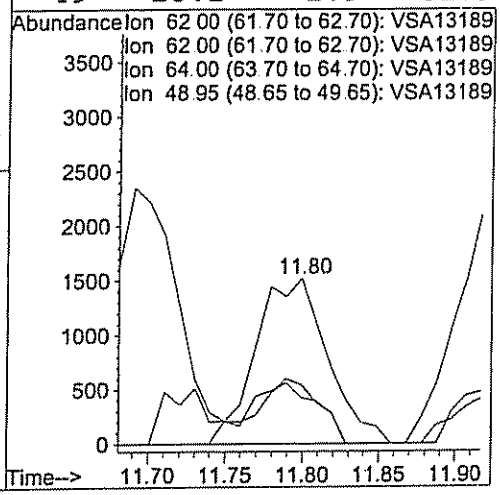


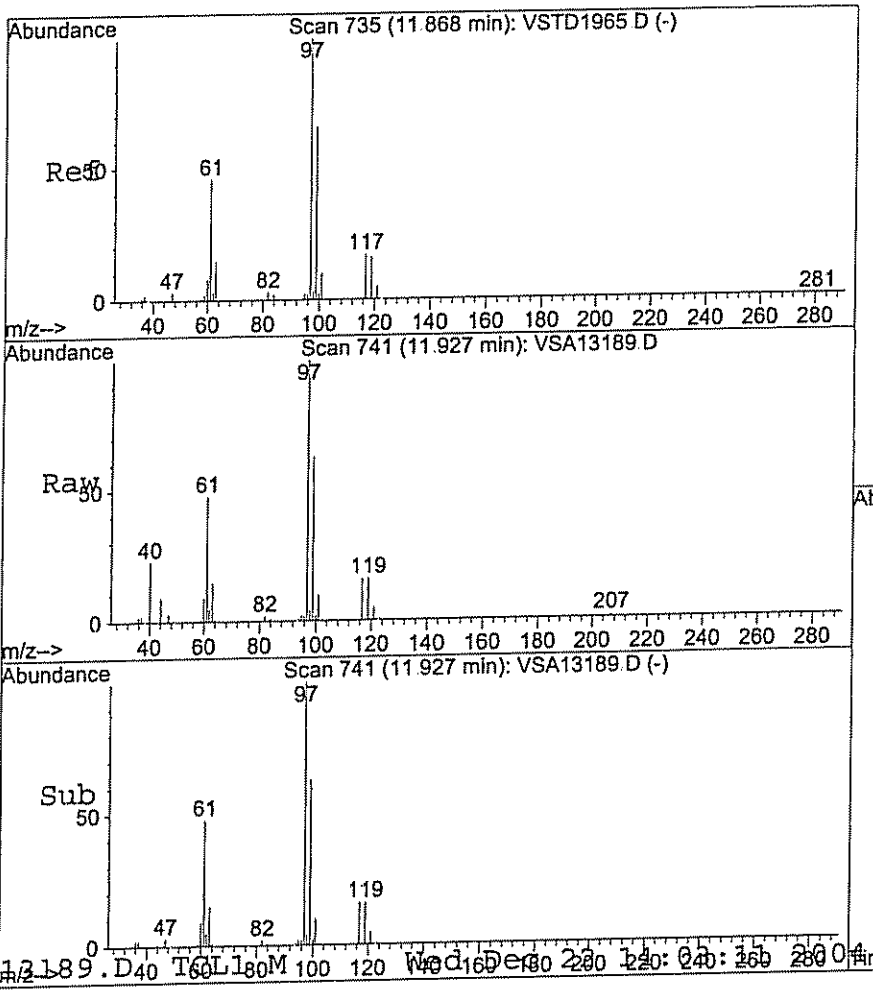


#17
1,2-Dichloroethane
Concen: 1.09 ug/L
RT: 11.80 min Scan# 728
Delta R.T. 0.06 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 62 Resp: 4911

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	28.9	2.9	62.9
49	18.2	1.9	61.9

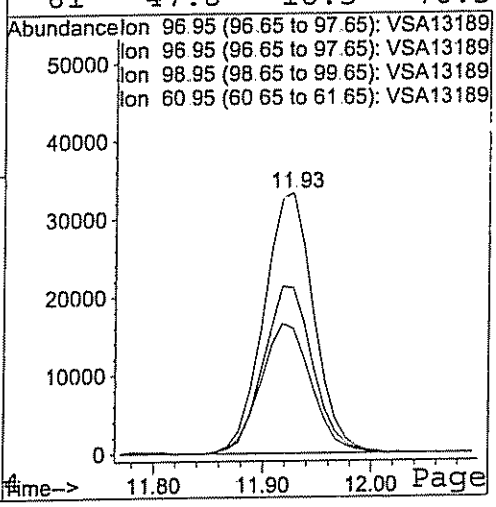


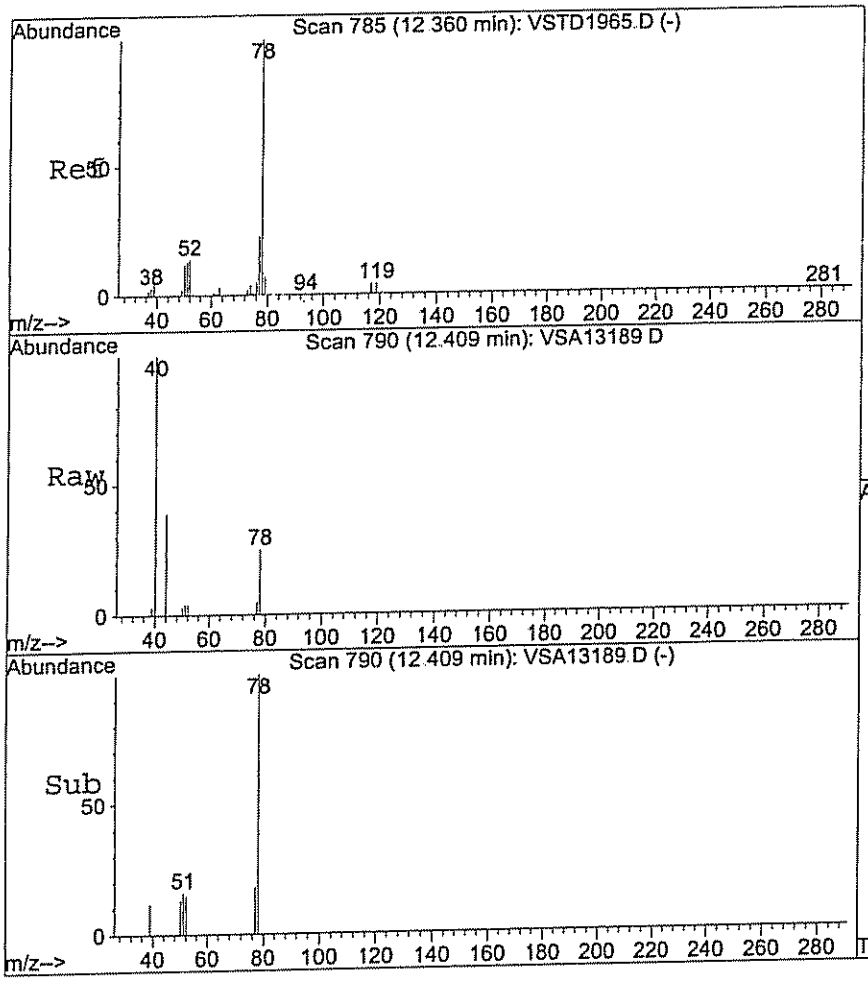


#20
1,1,1-Trichloroethane
Concen: 21.00 ug/L
RT: 11.93 min Scan# 741
Delta R.T. 0.06 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 97 Resp: 106134

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	63.5	35.6	95.6
61	47.8	16.5	76.5

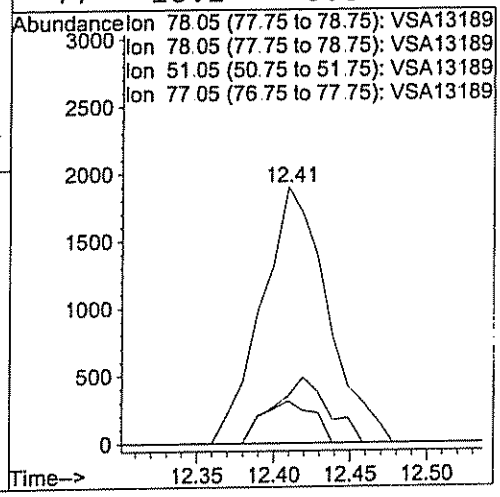


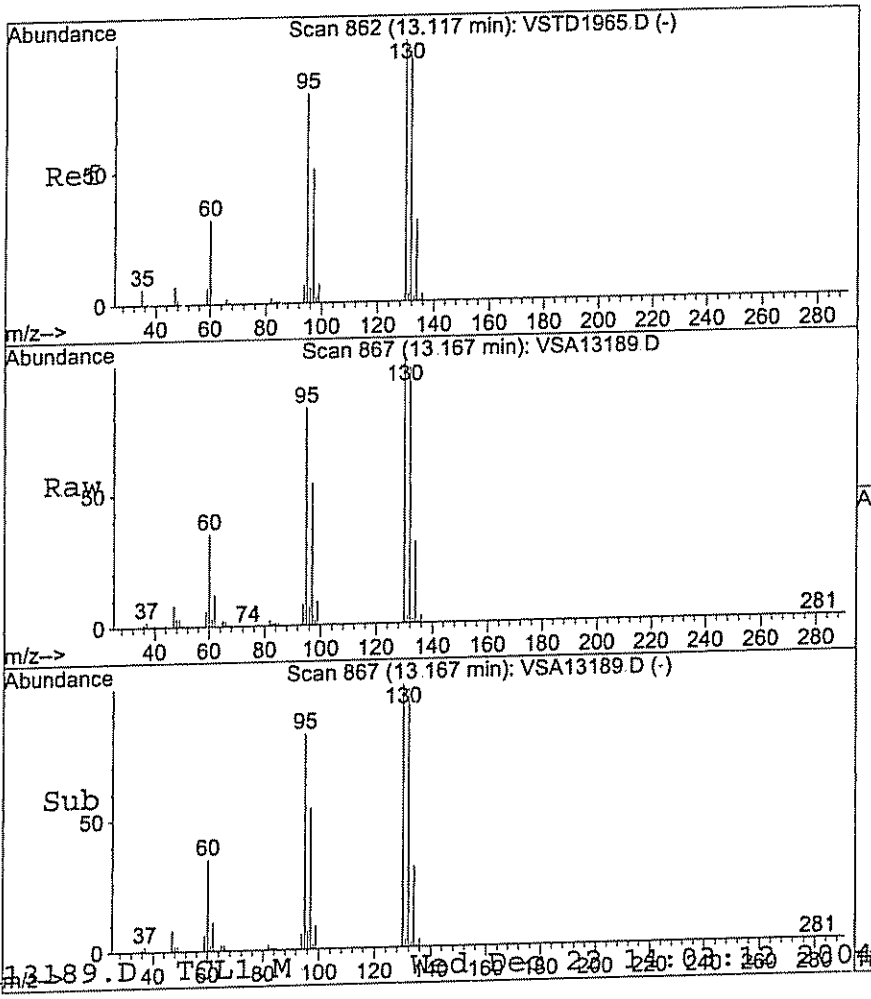


#21
Benzene
Concen: 0.32 ug/L
RT: 12.41 min Scan# 790
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 78 Resp: 5665

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	16.4	0.0	43.2
77	18.2	0.0	53.2

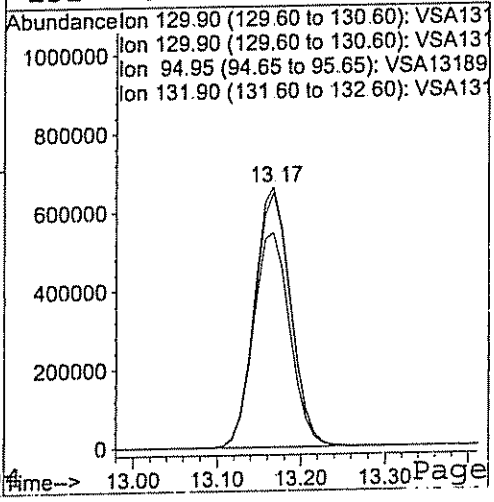


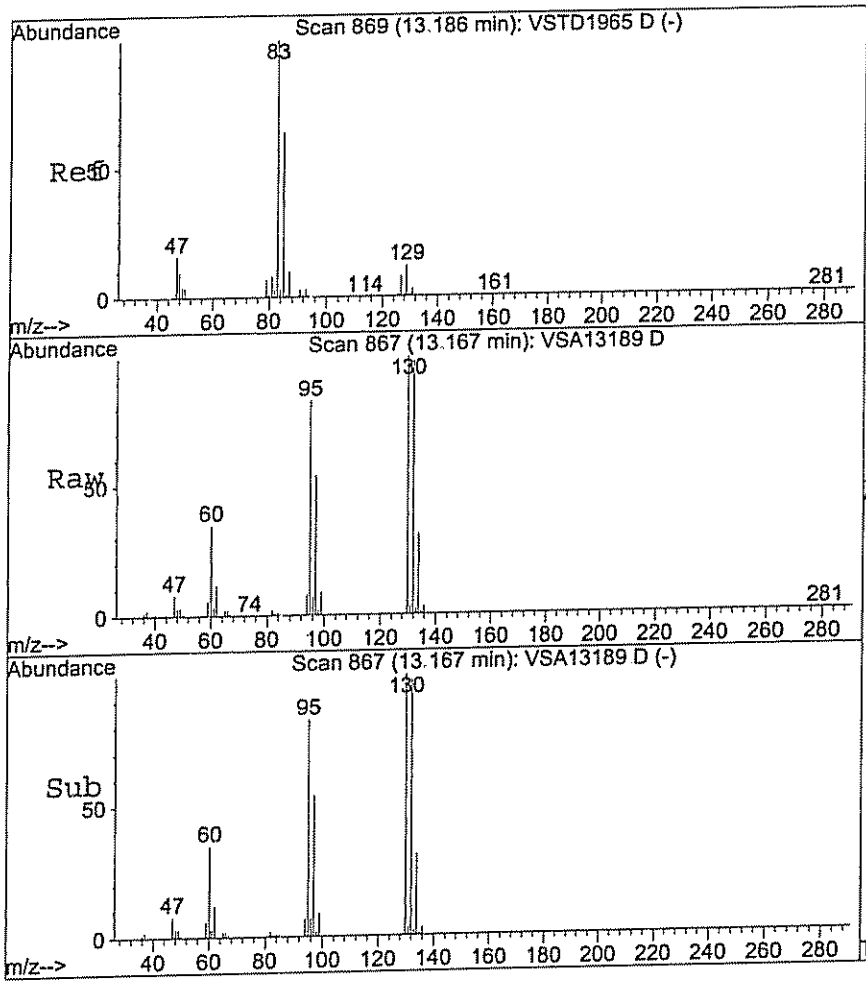


#22
Trichloroethene
Concen: 347.22 ug/L
RT: 13.17 min Scan# 867
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion:130 Resp: 1994069

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	82.6	50.4	110.4
132	97.8	66.6	126.6

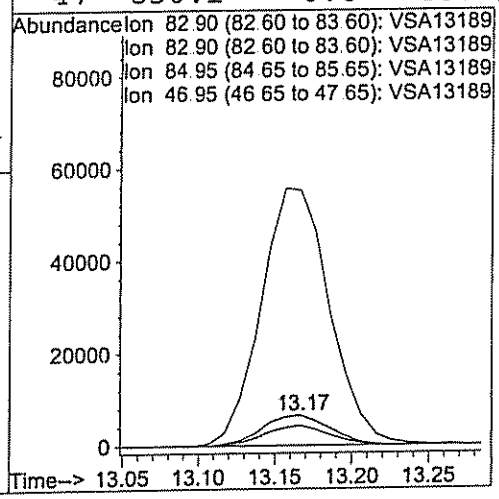


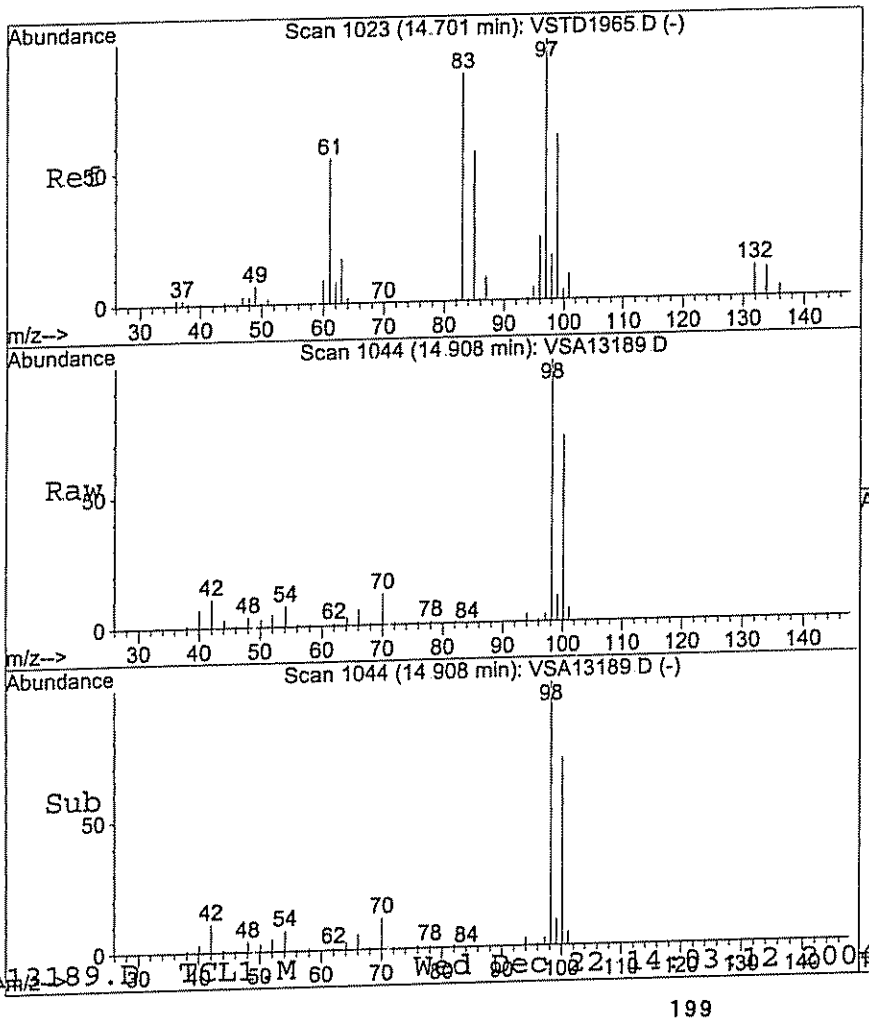


#24
Bromodichloromethane
Concen: 3.87 ug/L
RT: 13.17 min Scan# 867
Delta R.T. -0.02 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 83 Resp: 19976

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	66.0	33.9	93.9
47	830.1	0.0	46.1#

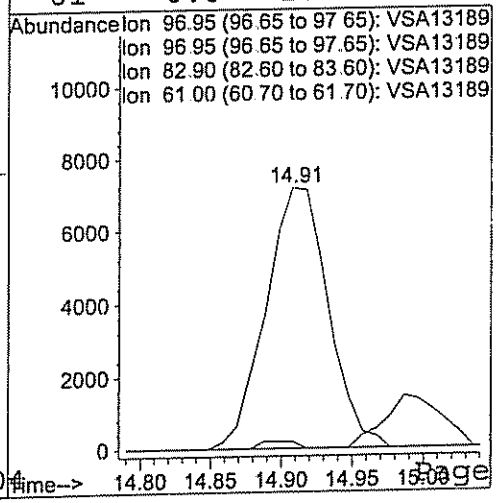


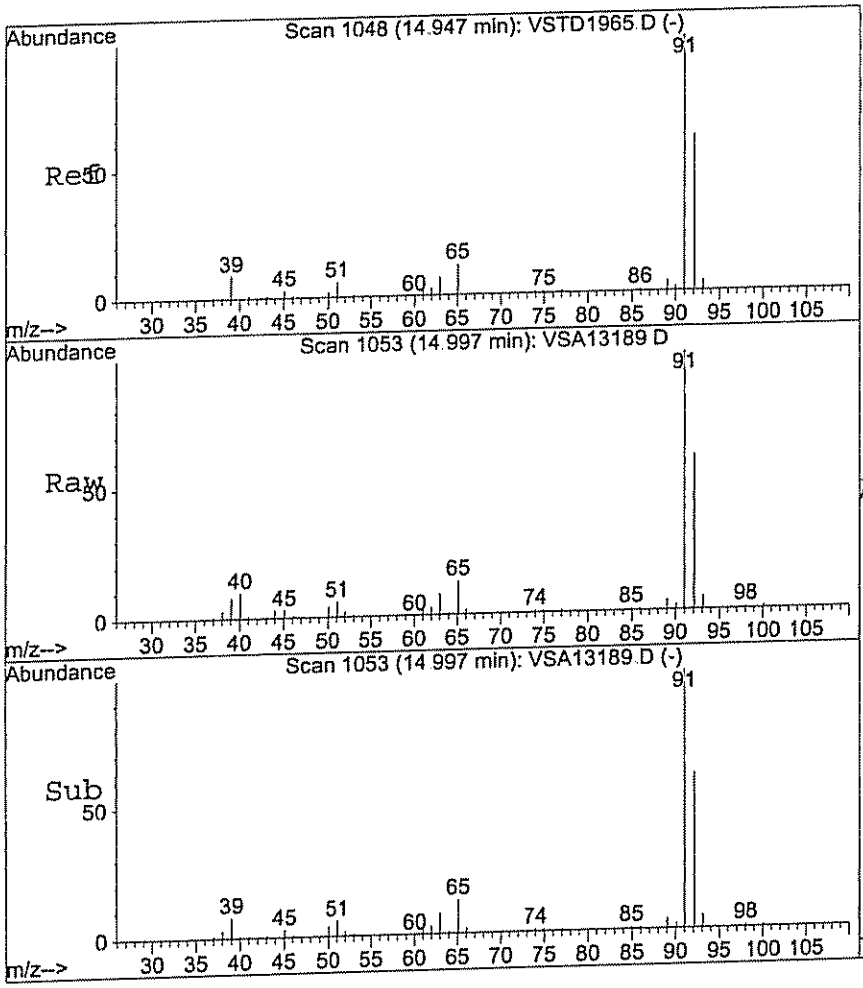


#27
1,1,2-Trichloroethane
Concen: 6.01 ug/L
RT: 14.91 min Scan# 1044
Delta R.T. 0.21 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 97 Resp: 21990

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	2.7	56.9	116.9#
61	0.0	24.6	84.6#

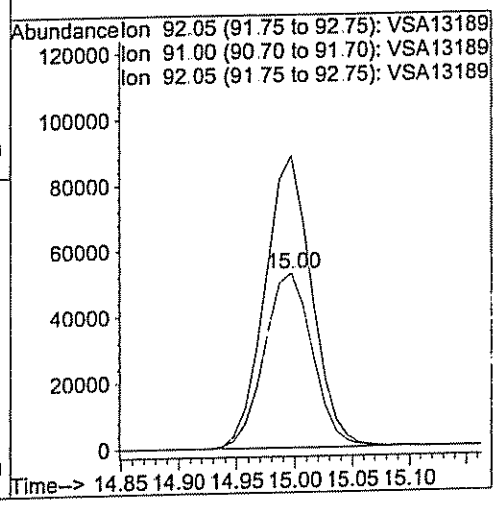


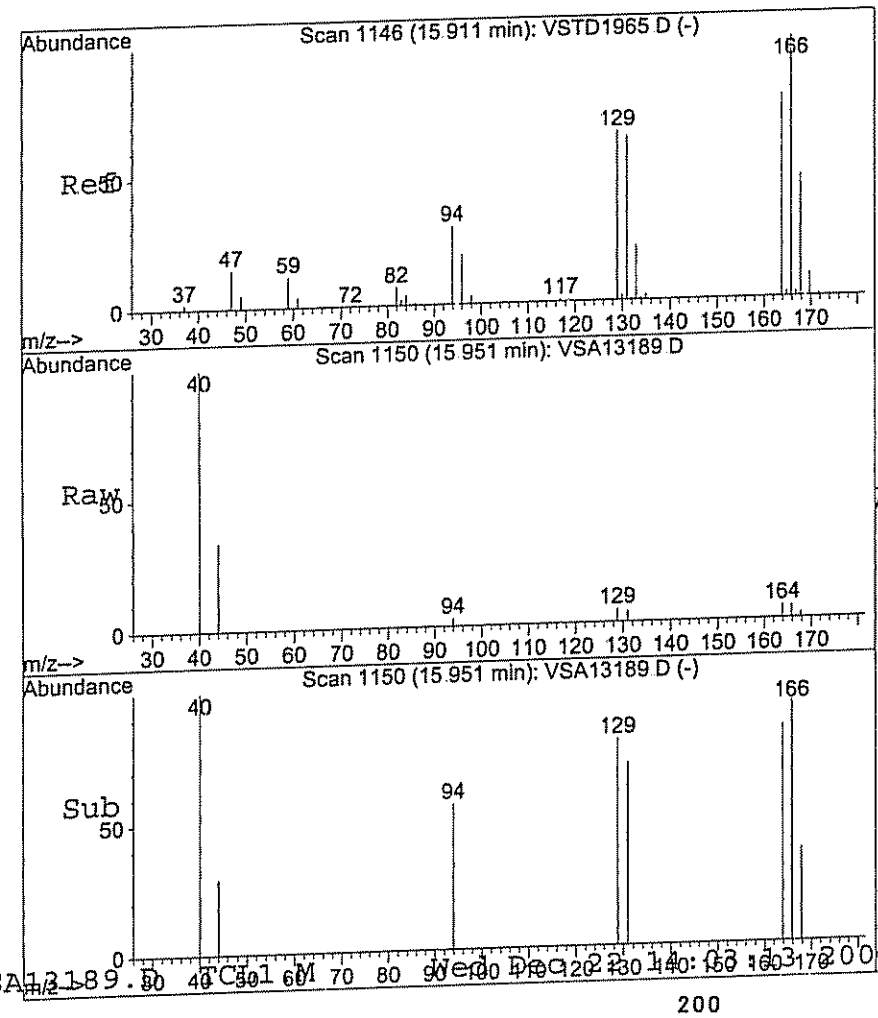


#33
Toluene
Concen: 15.45 ug/L
RT: 15.00 min Scan# 1053
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 92 Resp: 152569

Ion	Ratio	Lower	Upper
92	100		
91	167.2	132.6	192.6
92	100.0	70.0	130.0

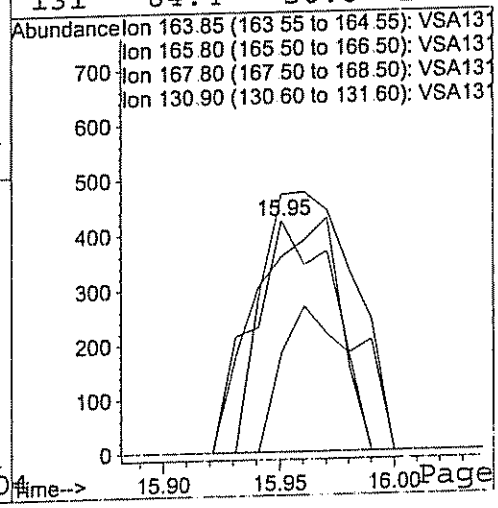


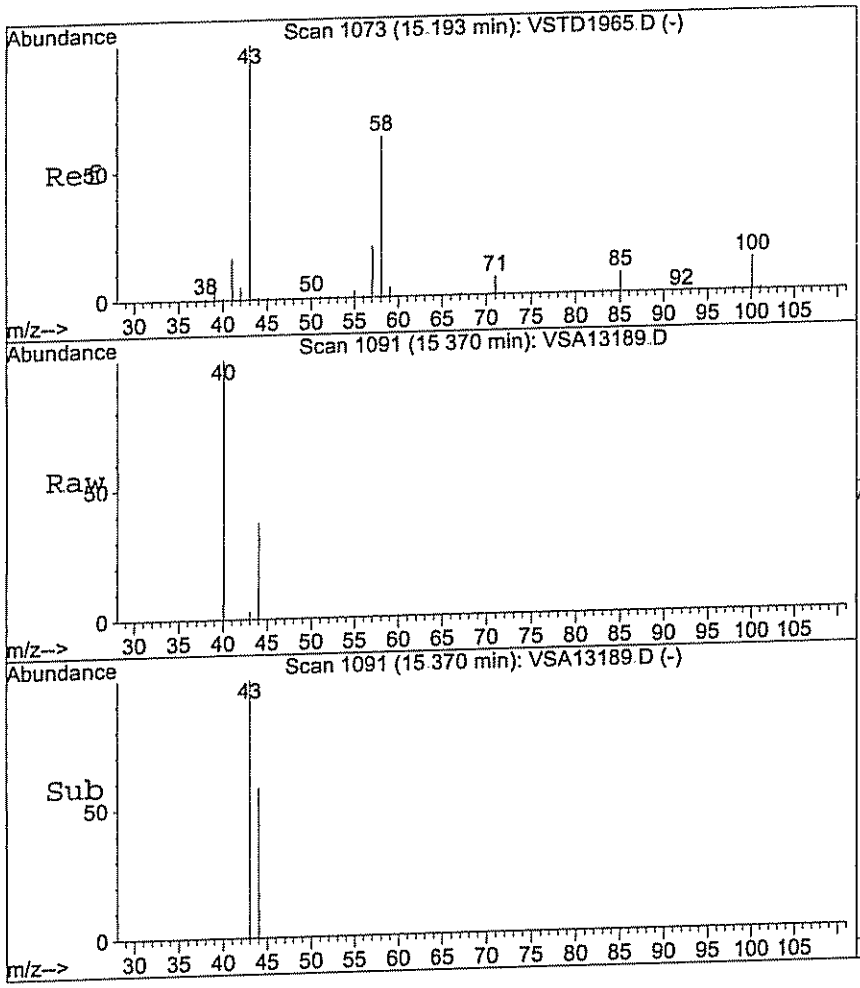


#35
Tetrachloroethene
Concen: 0.31 ug/L
RT: 15.95 min Scan# 1150
Delta R.T. 0.04 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion:164 Resp: 1161

Ion	Ratio	Lower	Upper
164	100		
166	111.1	98.3	158.3
168	43.2	30.5	90.5
131	84.4	50.6	110.6

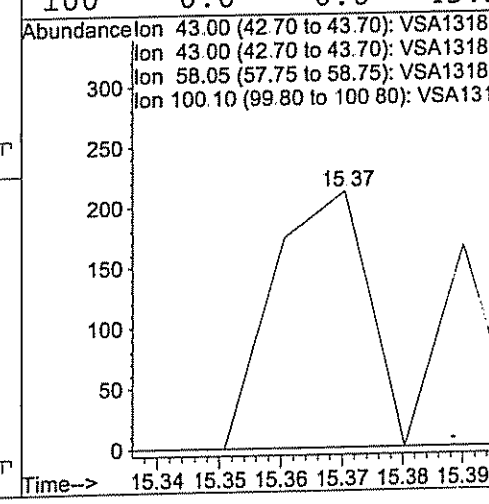


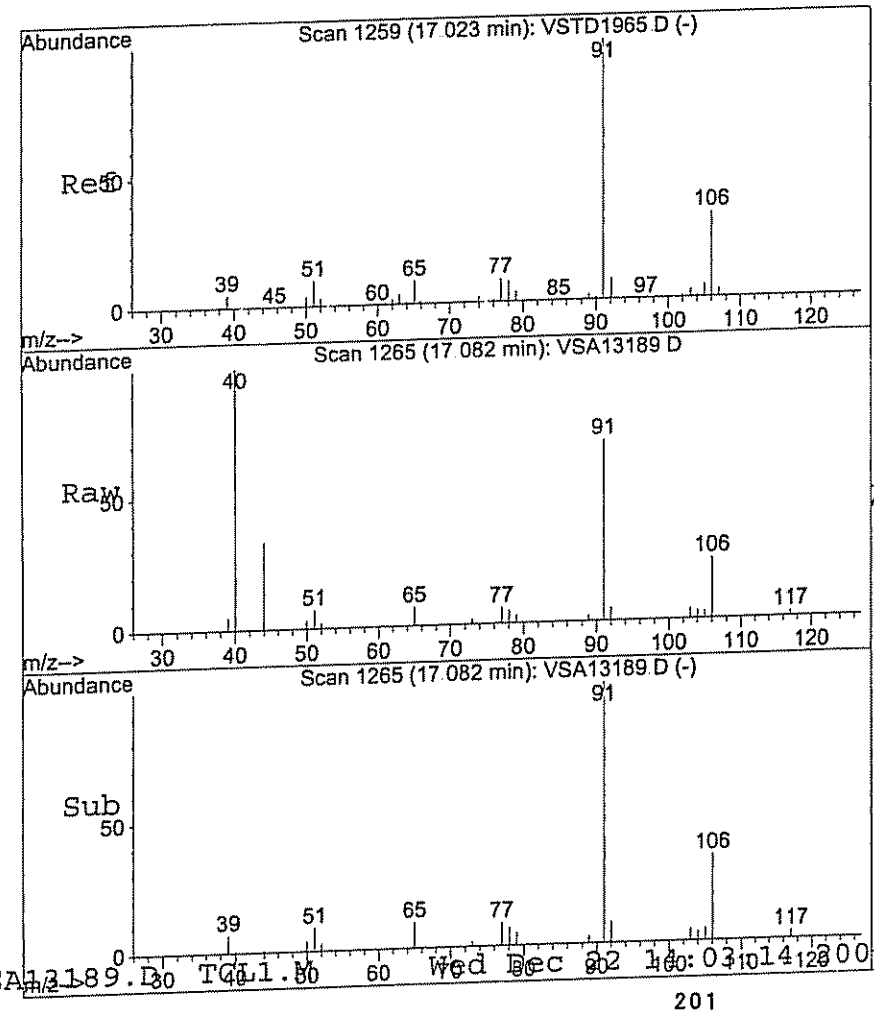


#36
2-Hexanone
Concen: 0.10 ug/L
RT: 15.37 min Scan# 1091
Delta R.T. 0.16 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 43 Resp: 228

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	33.5	93.5#
100	0.0	0.0	43.5

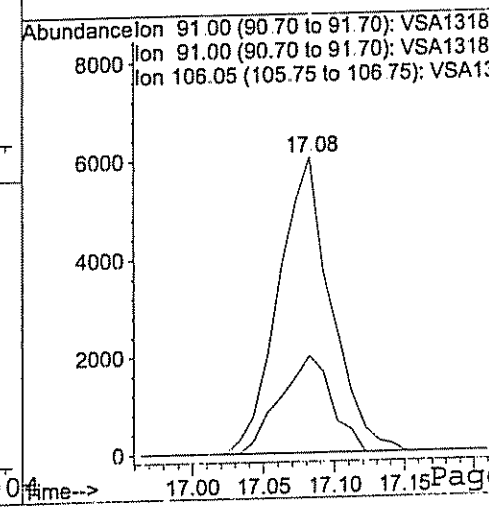


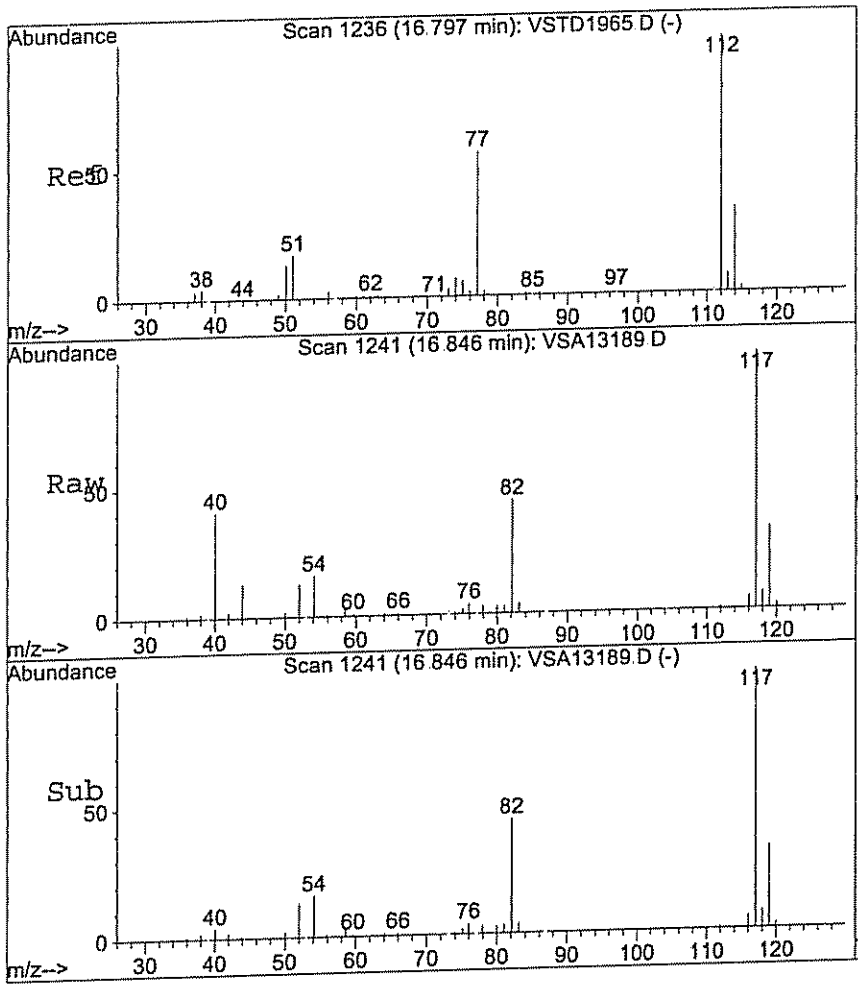


#37
Ethyl benzene
Concen: 0.87 ug/L
RT: 17.08 min Scan# 1265
Delta R.T. 0.06 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion: 91 Resp: 15572

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	32.9	2.9	62.9

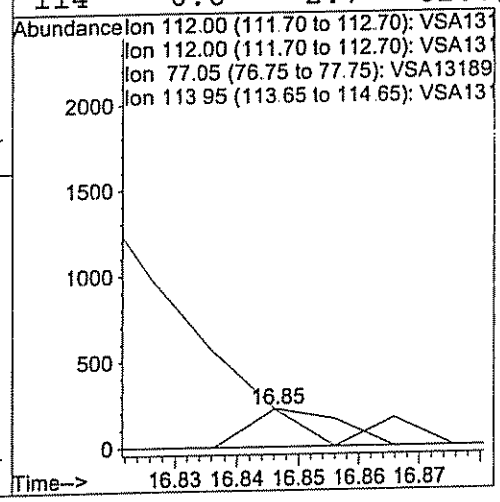


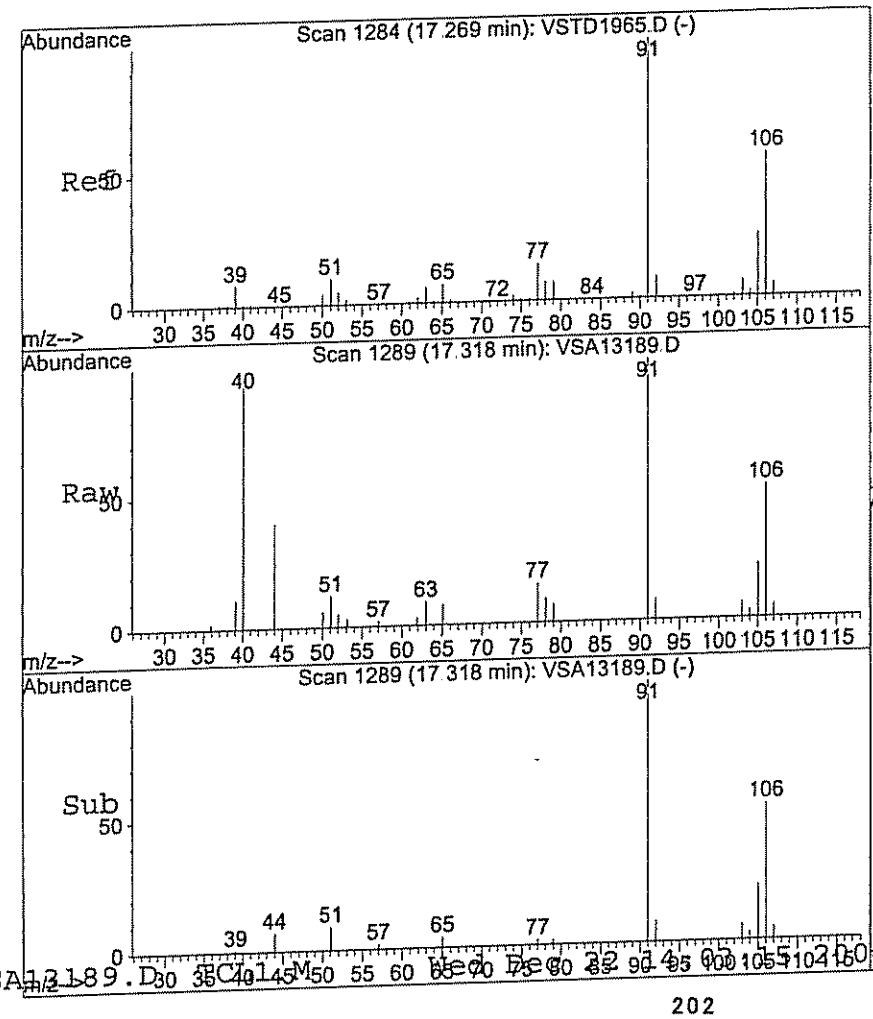


#38
Chlorobenzene
Concen: 0.02 ug/L
RT: 16.85 min Scan# 1241
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion:112 Resp: 226

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	0.0	26.0	86.0#
114	0.0	2.7	62.7#

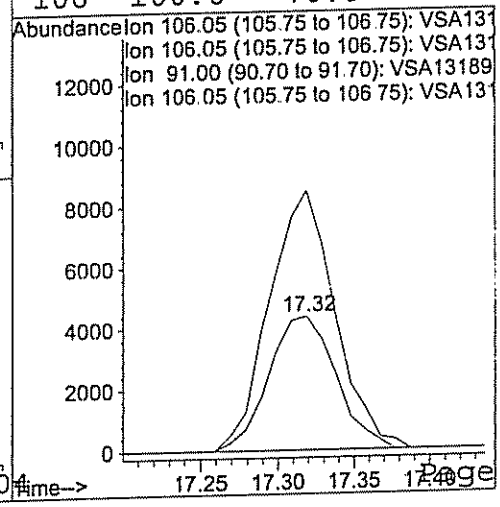


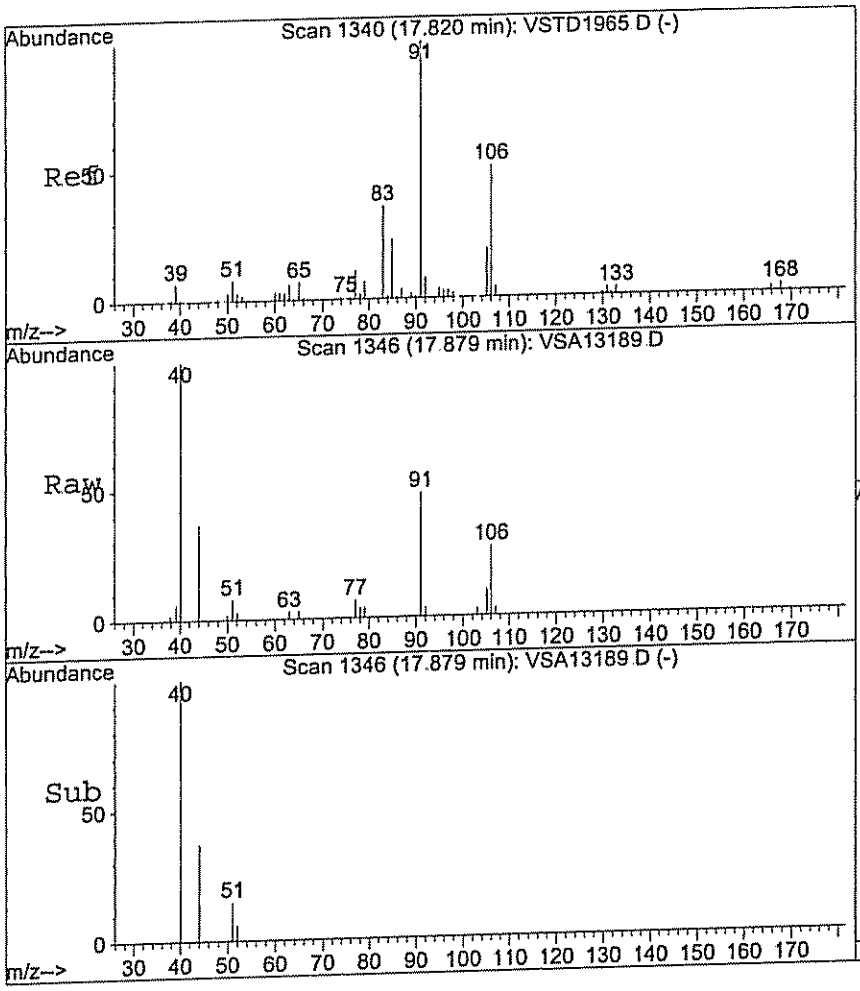


#39
m&p-Xylenes
Concen: 1.82 ug/L
RT: 17.32 min Scan# 1289
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion:106 Resp: 13250

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	190.9	150.2	210.2
106	100.0	70.0	130.0

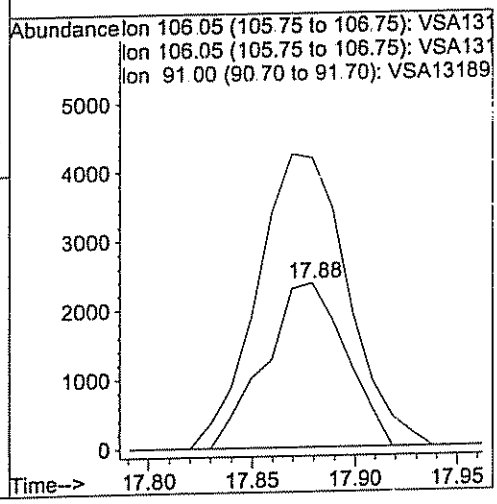


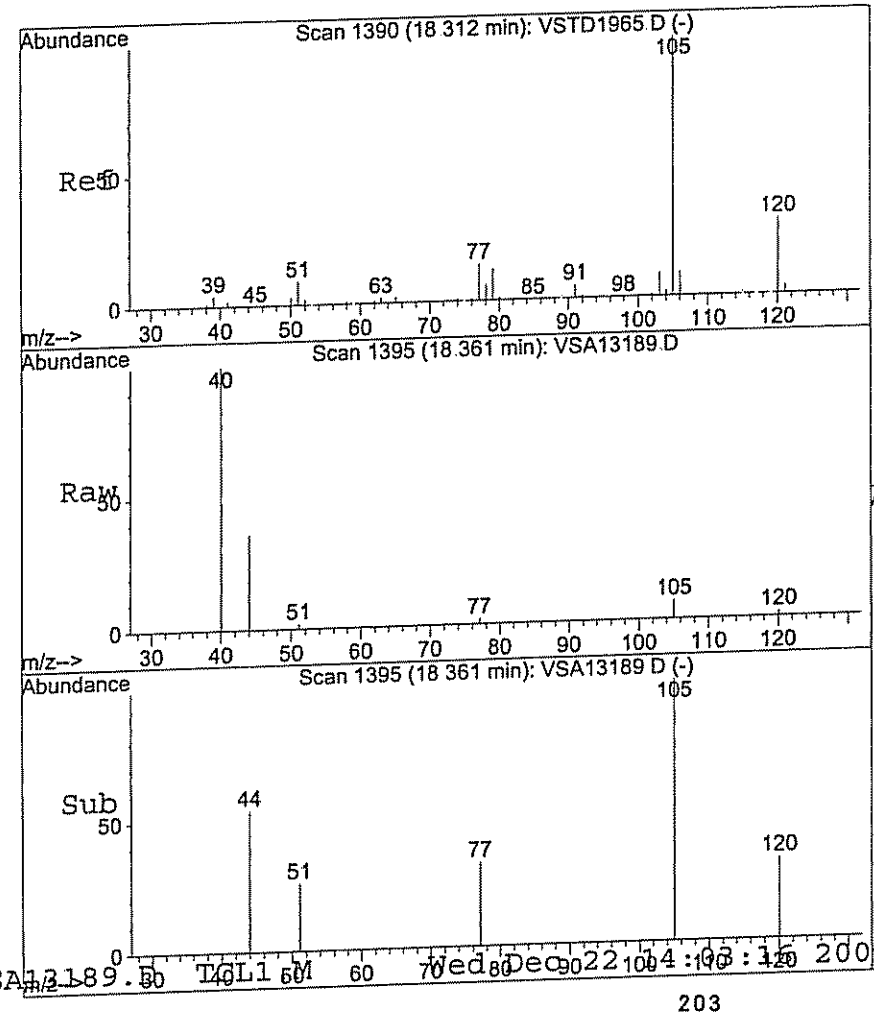


#40
o-Xylene
Concen: 0.91 ug/L
RT: 17.88 min Scan# 1346
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion:106 Resp: 6431

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	160.1	164.9	224.9#

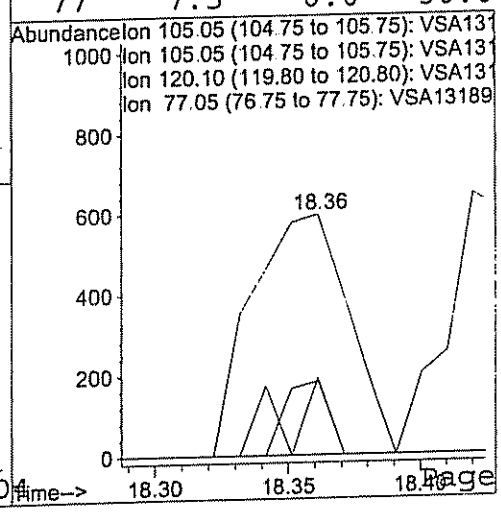


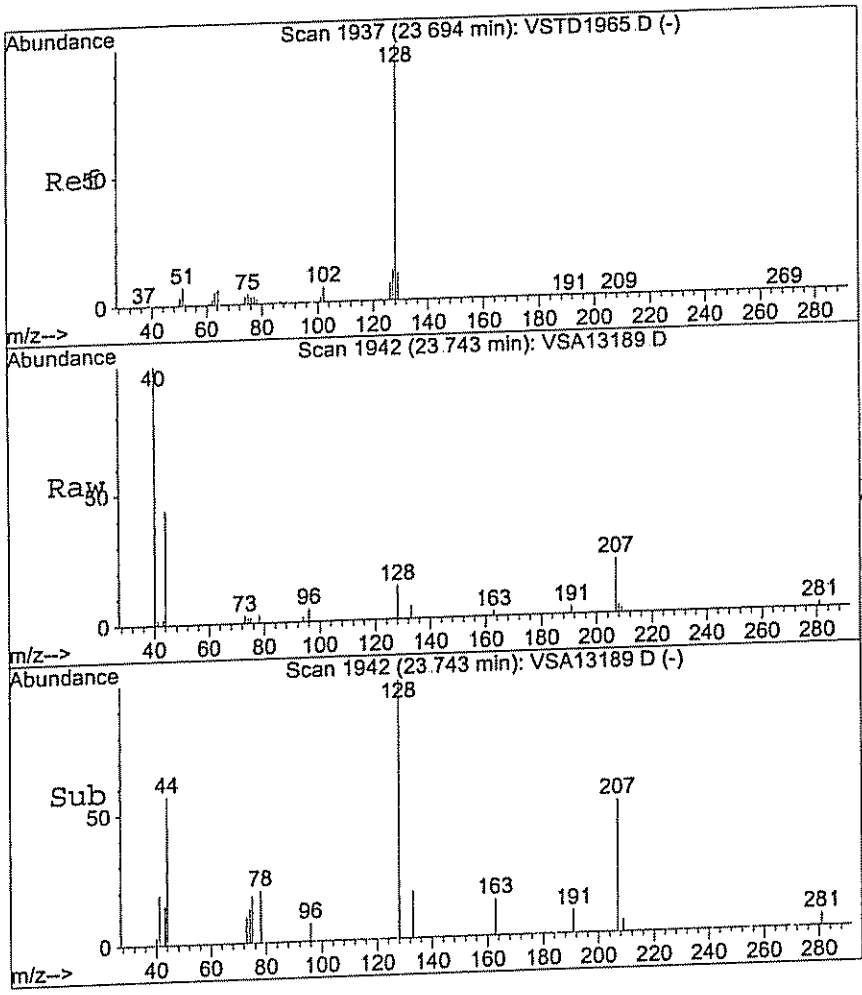


#42
Isopropylbenzene
Concen: 0.09 ug/L
RT: 18.36 min Scan# 1395
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion:105 Resp: 1511

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	0.0	0.0	59.3
77	7.5	0.0	30.0

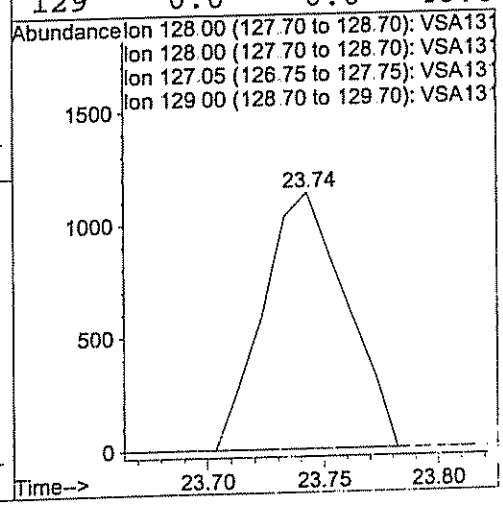




#45
Naphthalene
Concen: 0.19 ug/L
RT: 23.74 min Scan# 1942
Delta R.T. 0.05 min
Lab File: VSA13189.D
Acq: 21 Dec 2004 17:53

Tgt Ion:128 Resp: 2820

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	0.0	0.0	40.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\VSA13190.D
Acq On : 21 Dec 2004 18:25
Sample : P0412041-02A DF100 RE
Misc : WATER

Vial: 15
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:03 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.96	128	160521	50.00	ug/L		0.05
18) 1,4-Difluorobenzene	12.63	114	883065	50.00	ug/L		0.05
31) Chlorobenzene-d5	16.80	117	818788	50.00	ug/L		0.04
System Monitoring Compounds							
16) 1,2-Dichloroethane-d4	11.69	65	224453	57.06	ug/L		0.04
Spiked Amount 50.000	Range 70 - 130		Recovery = 114.12%				
32) Toluene-d8	14.90	98	696286	52.14	ug/L		0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.28%				
43) 4-Bromofluorobenzene	18.43	95	257611	50.87	ug/L		0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.74%				
Target Compounds							Qvalue
2) Chloromethane	6.27	50	181	0.04	ug/L	#	85
3) Vinyl chloride	6.61	62	8267	1.77	ug/L		97
4) Bromomethane	7.14	94	200	0.07	ug/L		87
6) 1,1-Dichloroethene	8.83	96	64342	17.94	ug/L	✓	95
7) Carbon disulfide	9.33	76	311	0.02	ug/L		100
8) Methylene chloride	8.99	84	45623	10.04	ug/L	✓	98
9) Acetone	8.32	43	3583	2.90	ug/L		98
10) trans-1,2-Dichloroethene	9.80	96	3265	0.76	ug/L		82
12) 1,1-Dichloroethane	10.10	63	48658	6.77	ug/L	✓	99
13) cis-1,2-Dichloroethene	10.77	96	297996	59.65	ug/L	✓	96
14) Chloroform	11.00	83	1278	0.20	ug/L		88
15) 2-Butanone	10.62	43	2240	1.16	ug/L		88
17) 1,2-Dichloroethane	11.79	62	16981	3.76	ug/L	✓	96
20) 1,1,1-Trichloroethane	11.92	97	132035	26.10	ug/L	✓	98
21) Benzene	12.40	78	4071	0.23	ug/L		97
22) Trichloroethene	13.17	130	3229511	*561.92	ug/L		99
23) 1,2-Dichloropropane	13.16	63	8803	1.94	ug/L	#	1
24) Bromodichloromethane	13.16	83	31963	~~6.19~~	ug/L	#	1
27) 1,1,2-Trichloroethane	14.75	97	1407	0.38	ug/L		93
33) Toluene	15.00	92	44767	4.56	ug/L	✓	99
35) Tetrachloroethene	15.96	164	5018	1.36	ug/L		90
36) 2-Hexanone	14.98	43	714	0.30	ug/L	#	71
37) Ethyl benzene	17.08	91	18177	1.02	ug/L		100

(#) = qualifier out of range (m) = manual integration DF100

*See DF500
HH 12/29/04

Data File : C:\HPCHEM\1\DATA\VSA13190.D
Acq On : 21 Dec 2004 18:25
Sample : P0412041-02A DF100 RE
Misc : WATER

Vial: 15
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:03 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
38) Chlorobenzene	16.85	112	310	0.03 ug/L #	67
39) m&p-Xylenes	17.32	106	18592	2.57 ug/L	98
40) o-Xylene	17.88	106	6352	0.90 ug/L	95
42) Isopropylbenzene	18.35	105	1139	0.06 ug/L #	88
45) Naphthalene	23.74	128	2689	0.18 ug/L #	97

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

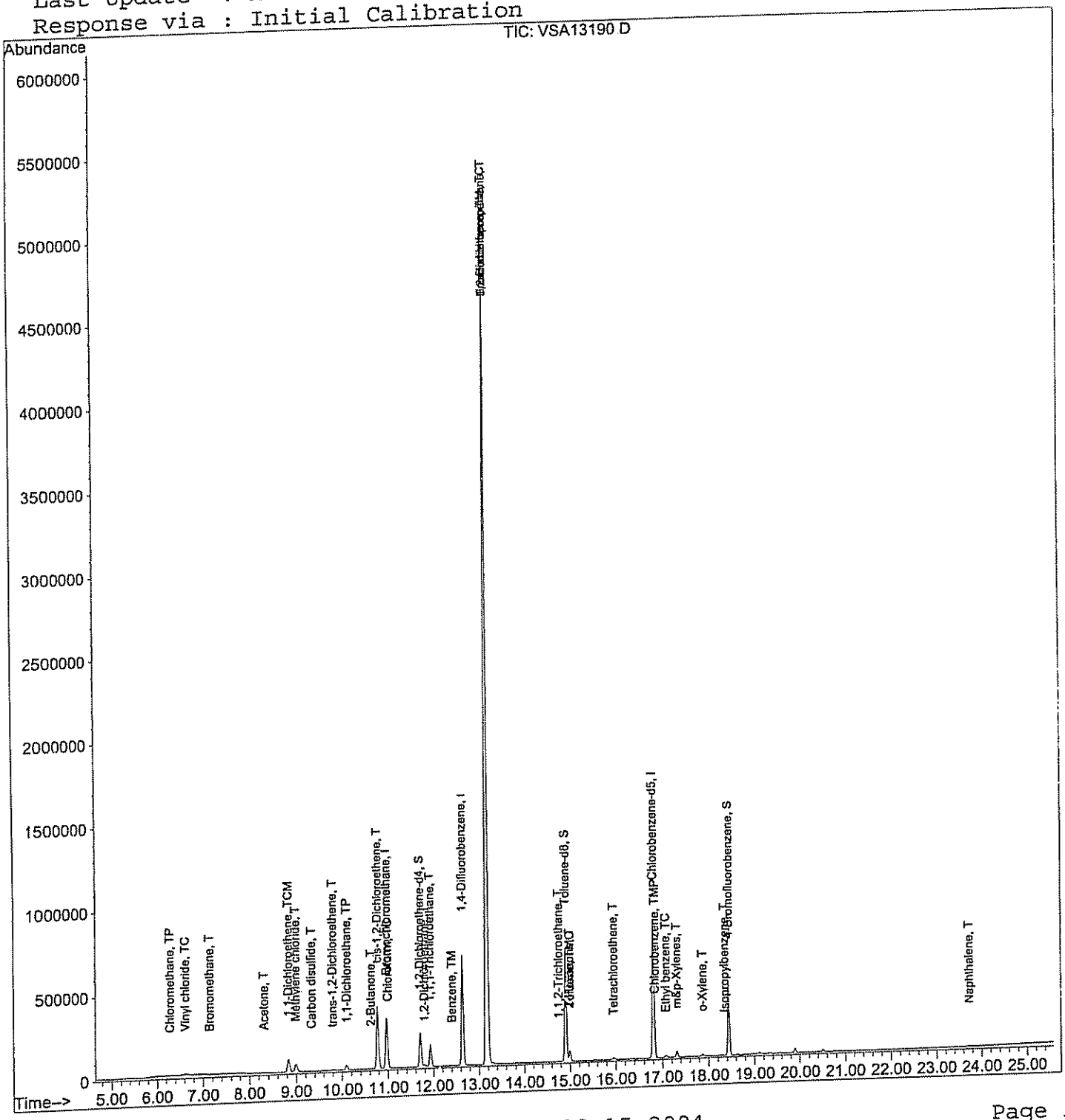
Data File : C:\HPCHEM\1\DATA\VSA13190.D
Acq On : 21 Dec 2004 18:25
Sample : P0412041-02A DF100 RE
Misc : WATER

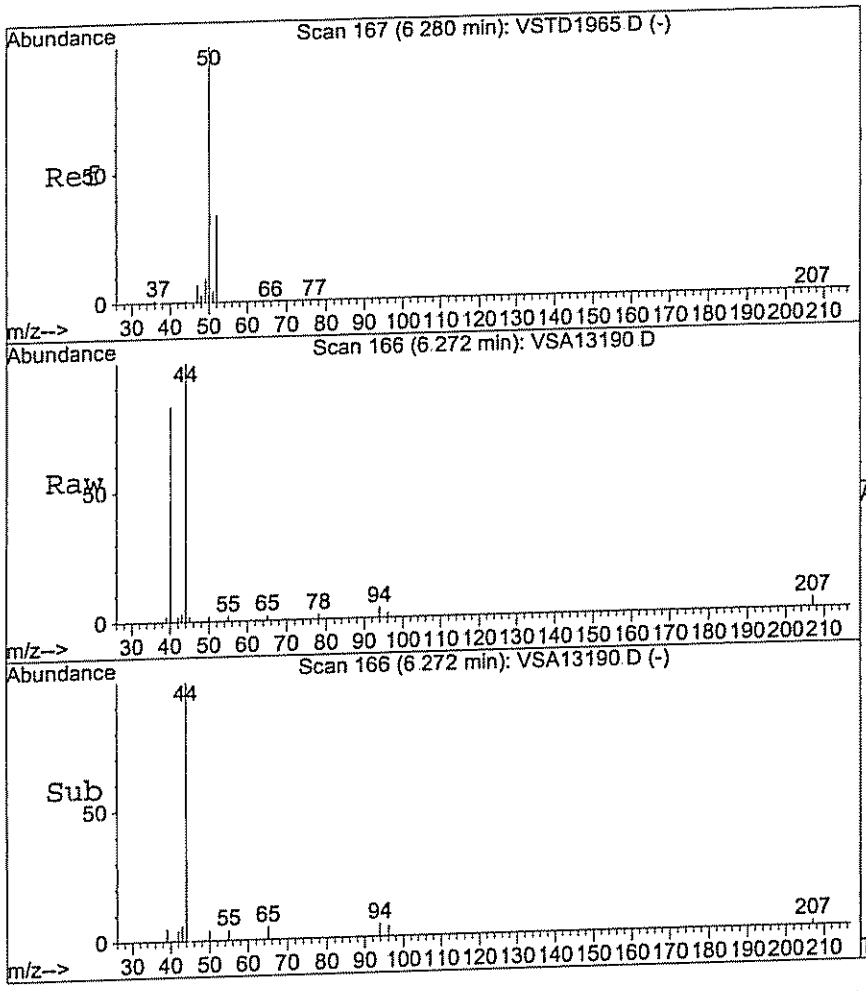
Vial: 15
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:03 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration

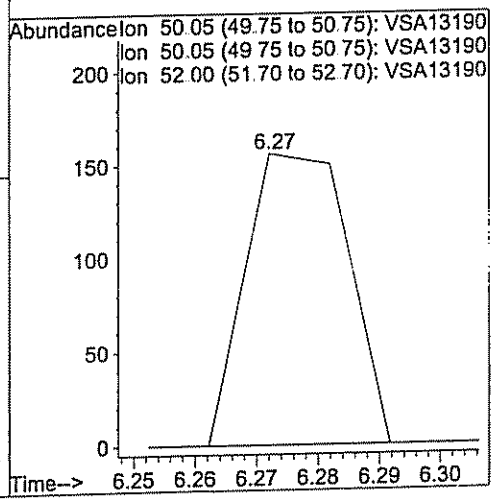


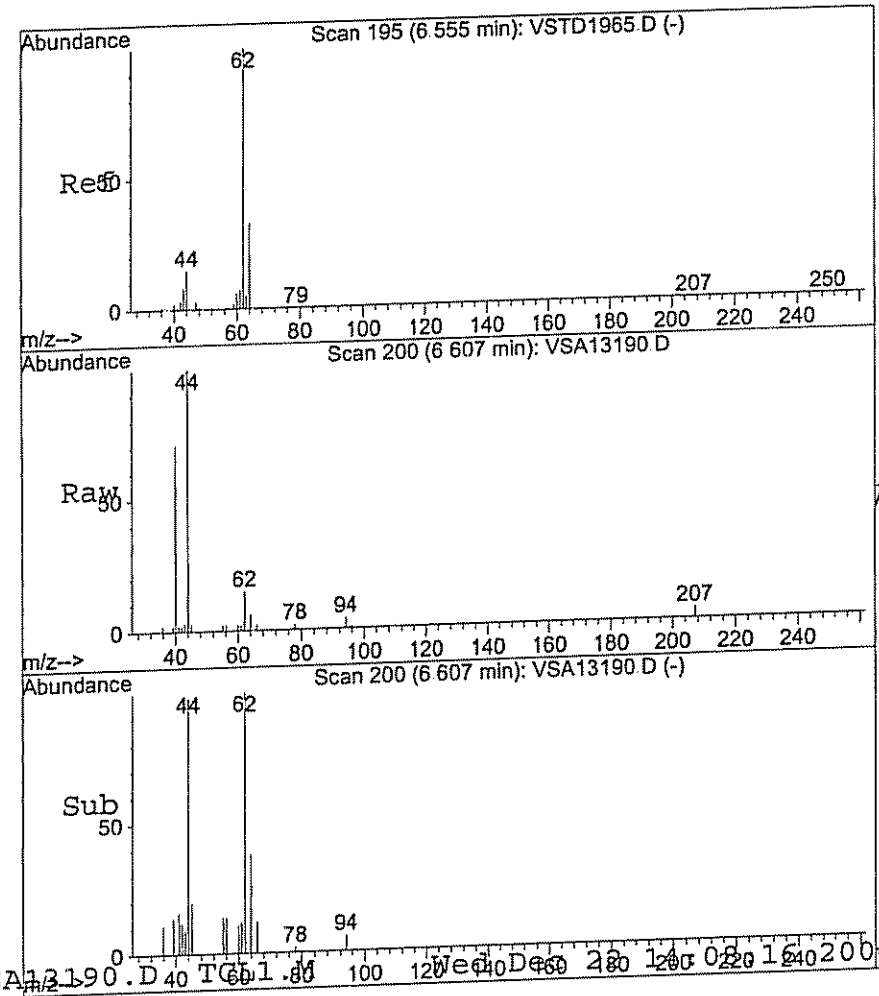


#2
Chloromethane
Concen: 0.04 ug/L
RT: 6.27 min Scan# 166
Delta R.T. -0.00 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 50 Resp: 181

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.9	63.9#

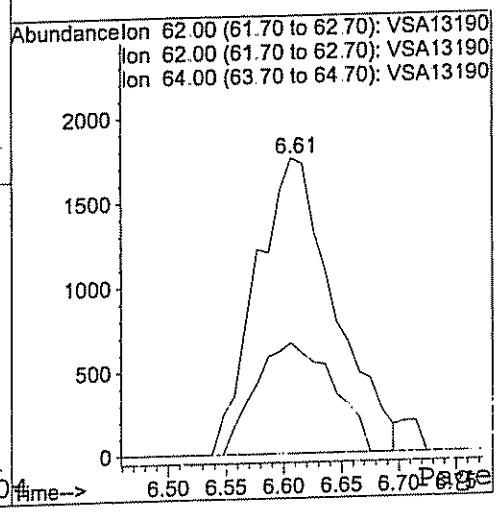


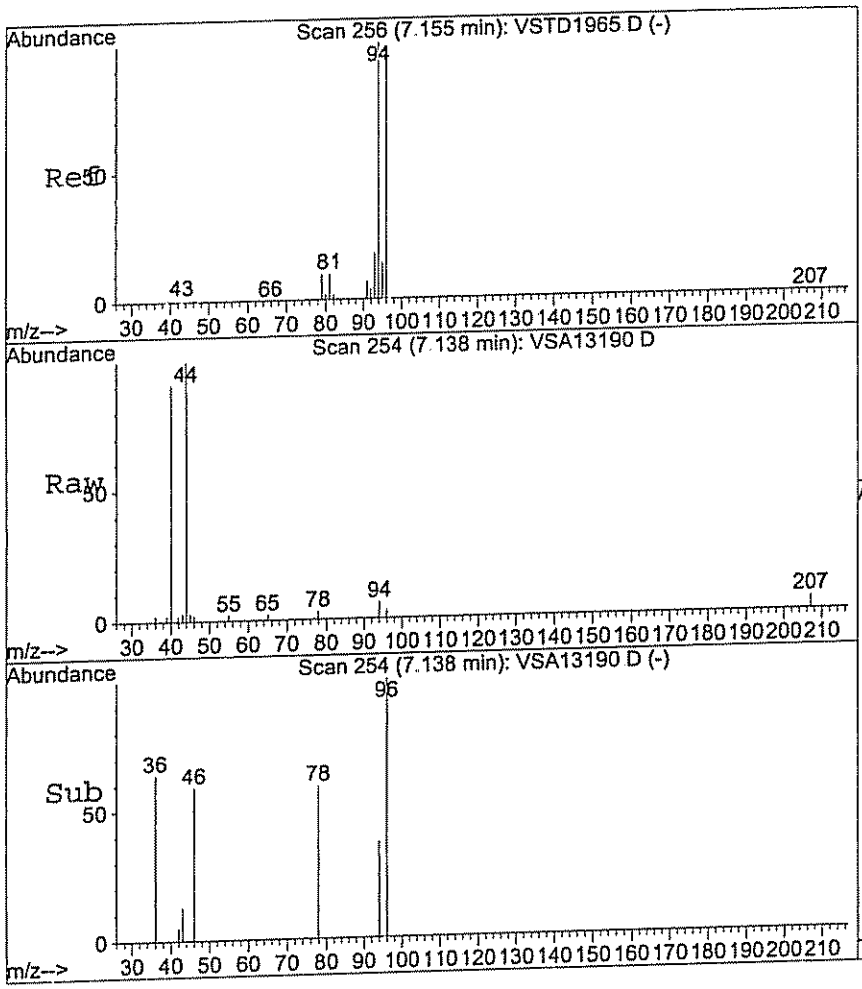


#3
Vinyl chloride
Concen: 1.77 ug/L
RT: 6.61 min Scan# 200
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 62 Resp: 8267

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	39.6	2.4	62.4

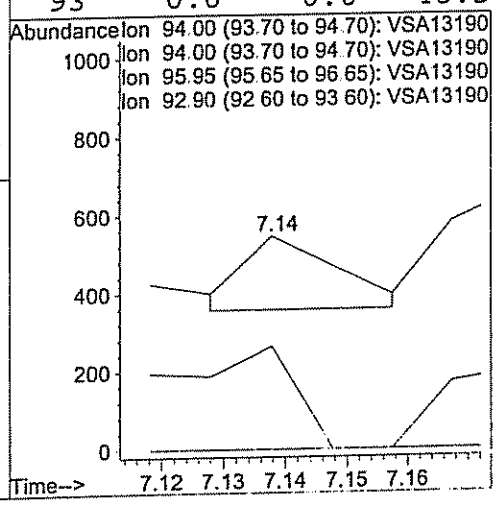


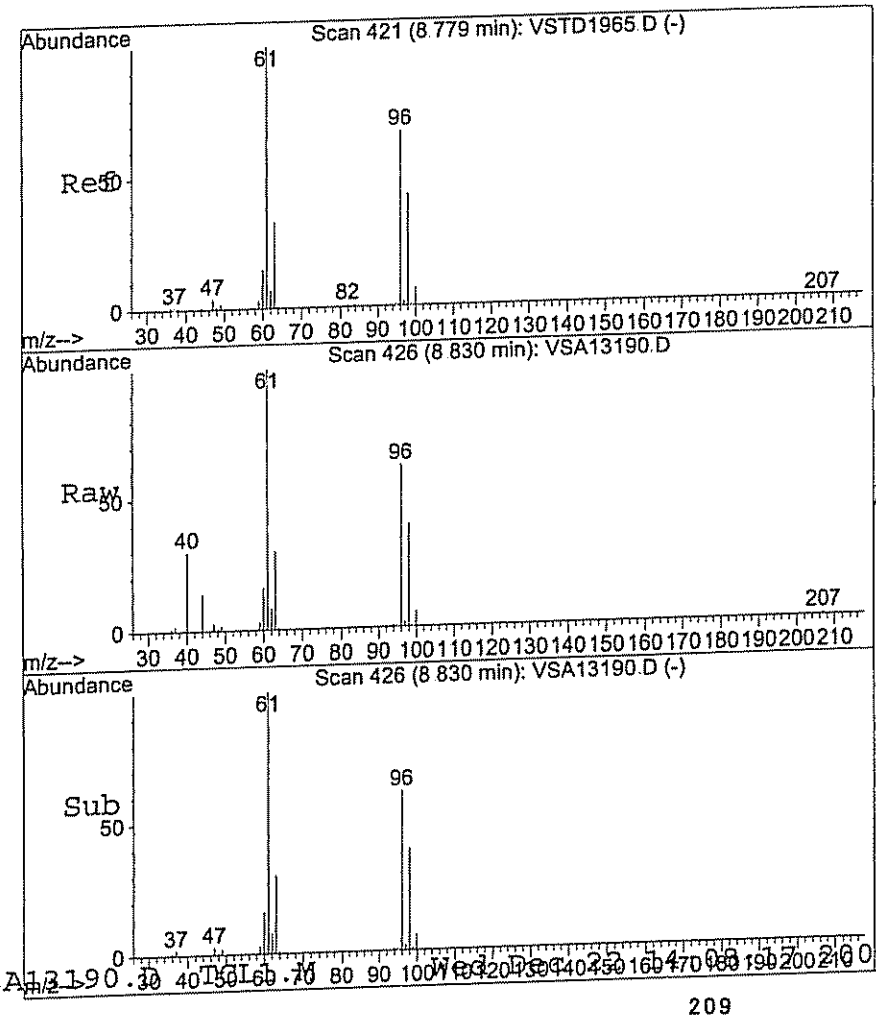


#4
Bromomethane
Concen: 0.07 ug/L
RT: 7.14 min Scan# 254
Delta R.T. -0.02 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 94 Resp: 200

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	113.7	63.6	123.6
93	0.0	0.0	48.5

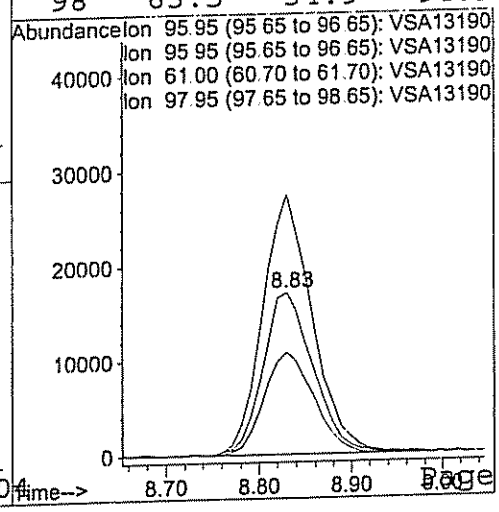


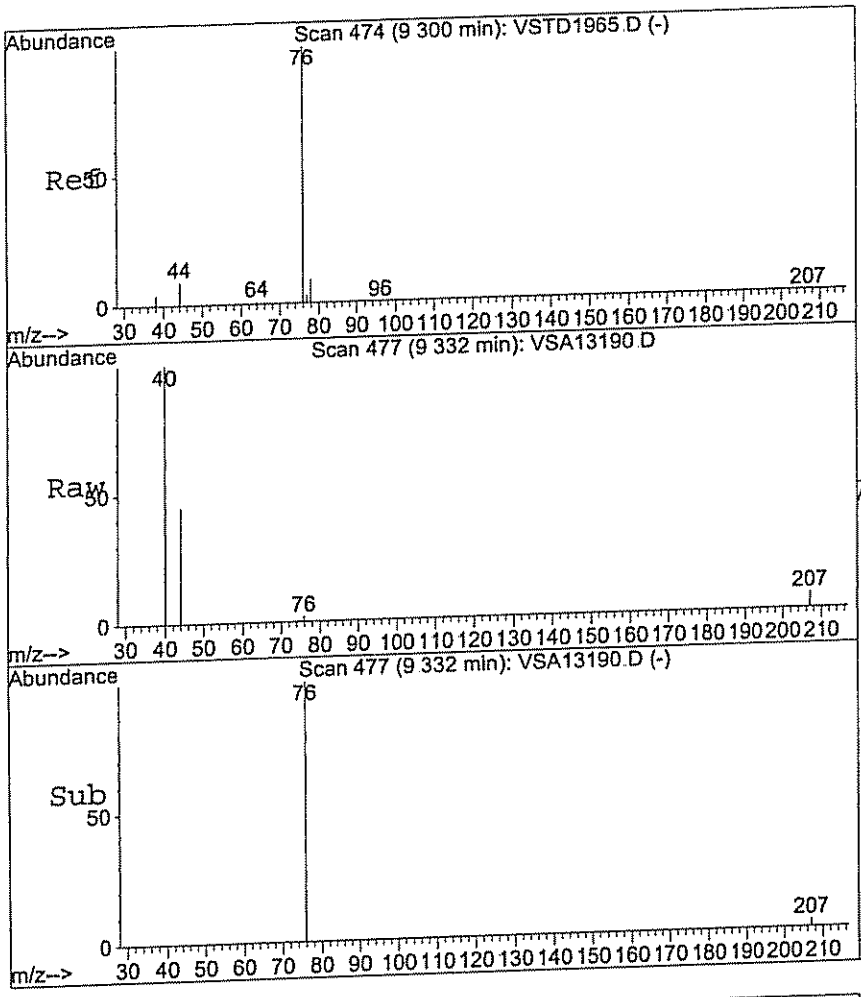


#6
1,1-Dichloroethene
Concen: 17.94 ug/L
RT: 8.83 min Scan# 426
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 96 Resp: 64342

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	160.6	118.9	178.9
98	63.5	34.9	94.9

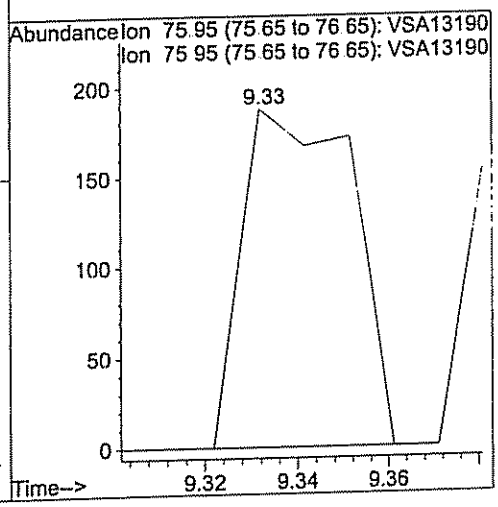


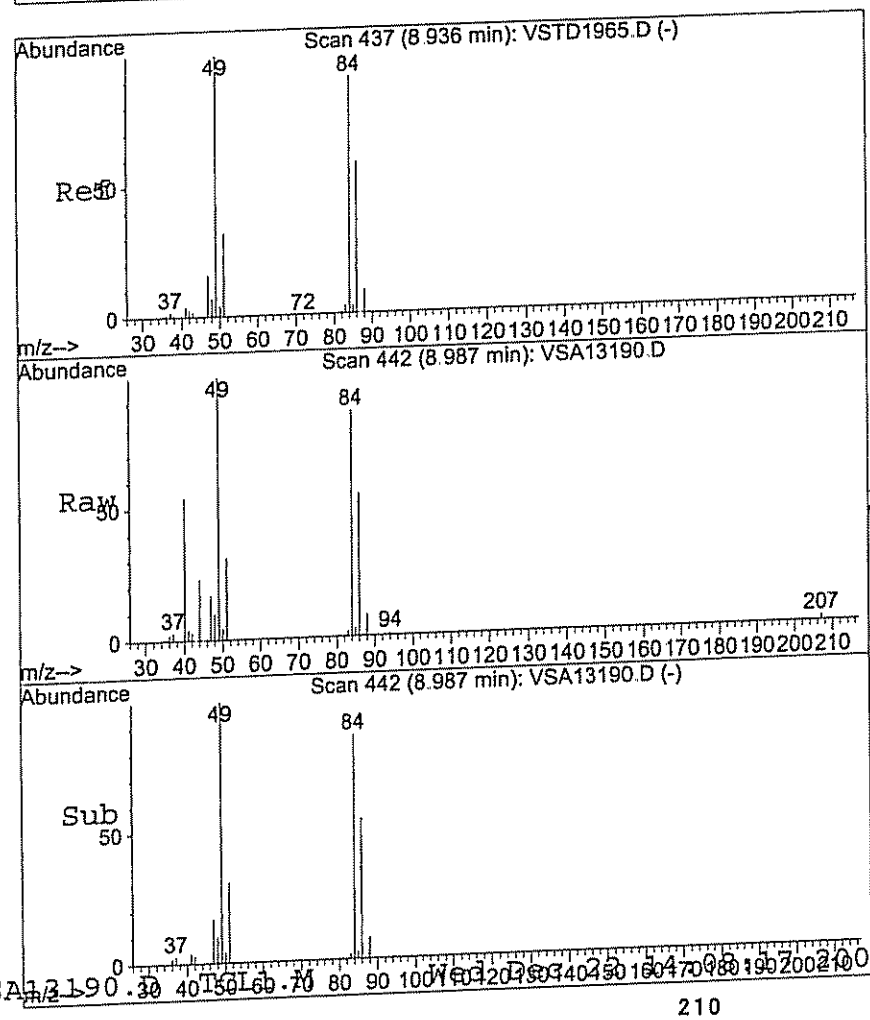


#7
Carbon disulfide
Concen: 0.02 ug/L
RT: 9.33 min Scan# 477
Delta R.T. 0.03 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 76 Resp: 311

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

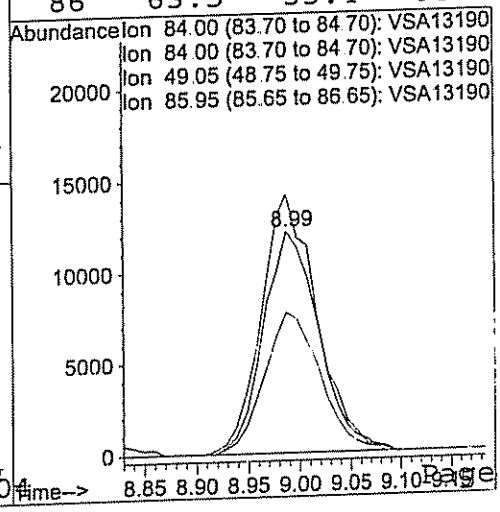


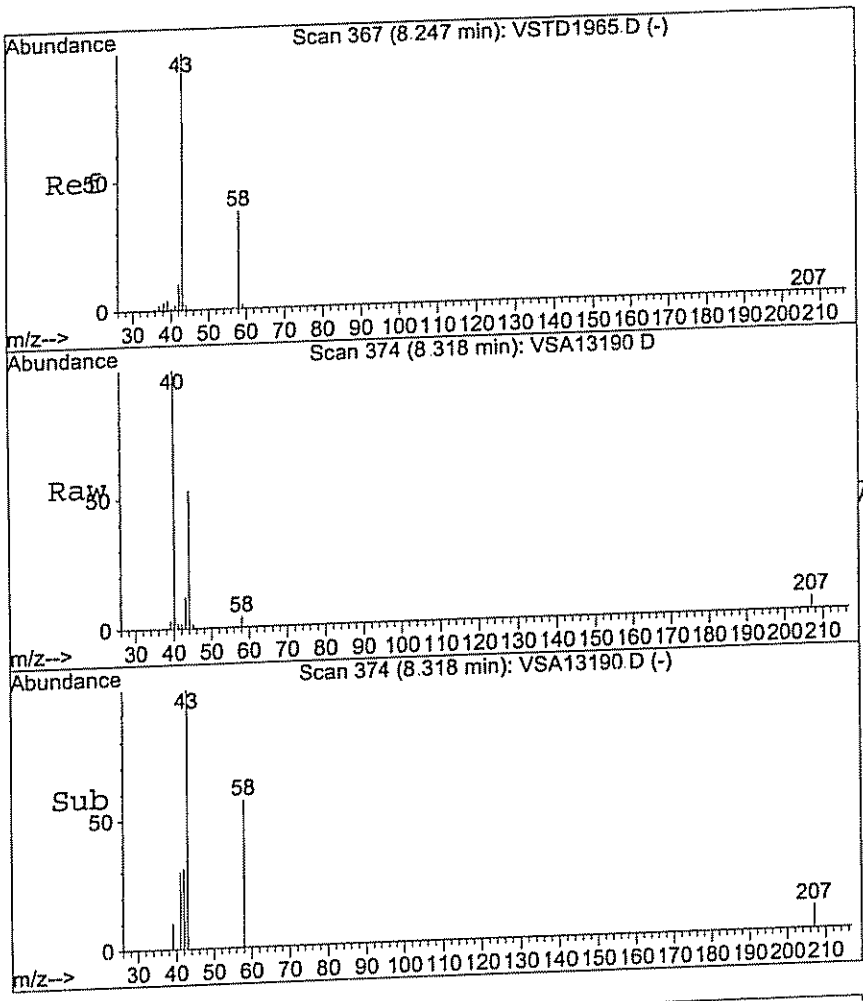


#8
Methylene chloride
Concen: 10.04 ug/L
RT: 8.99 min Scan# 442
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 84 Resp: 45623

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	116.0	80.0	140.0
86	63.5	33.4	93.4

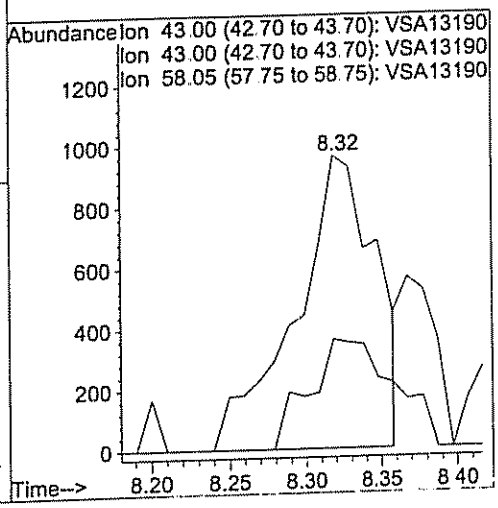


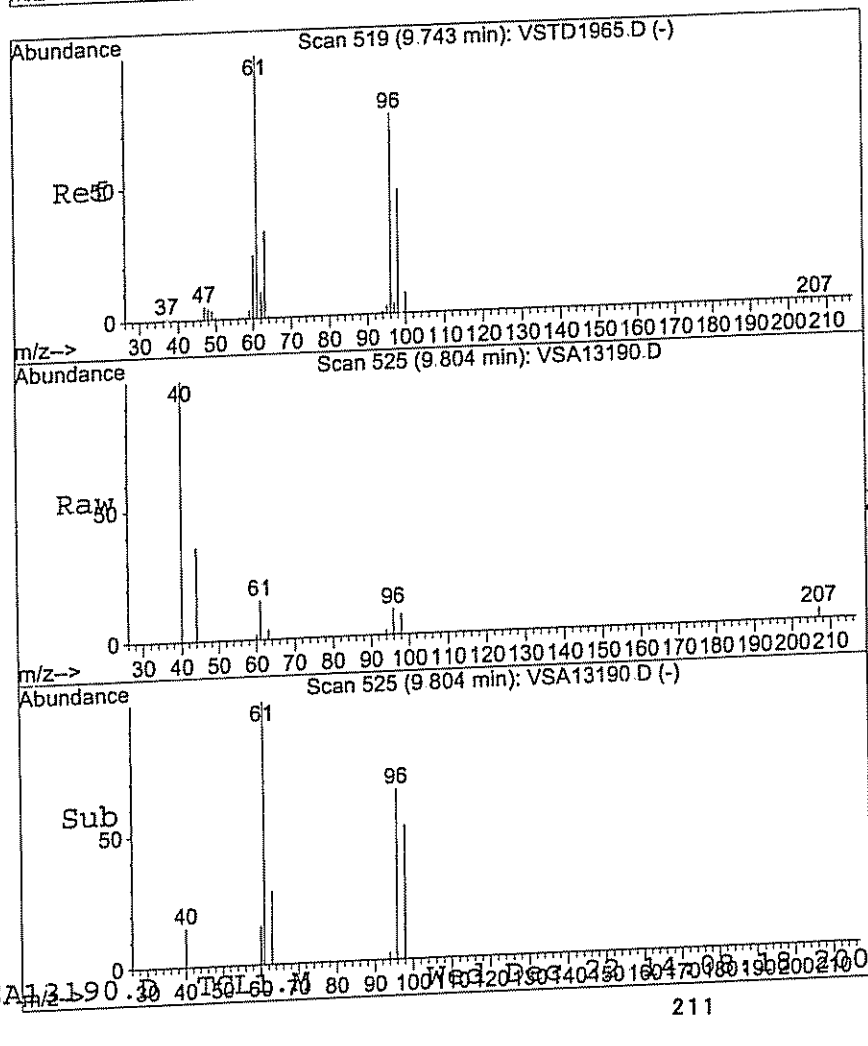


#9
Acetone
Concen: 2.90 ug/L
RT: 8.32 min Scan# 374
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 43 Resp: 3583

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	34.1	7.8	67.8

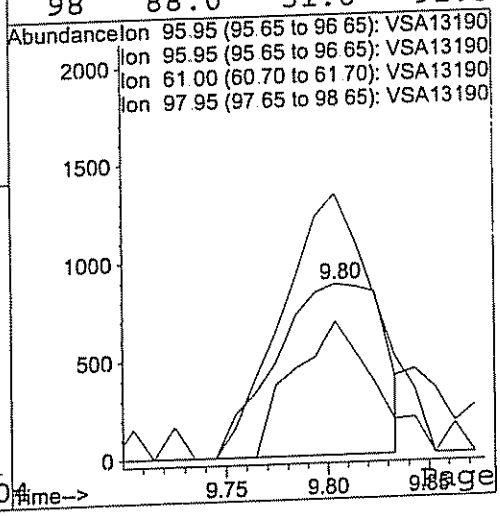


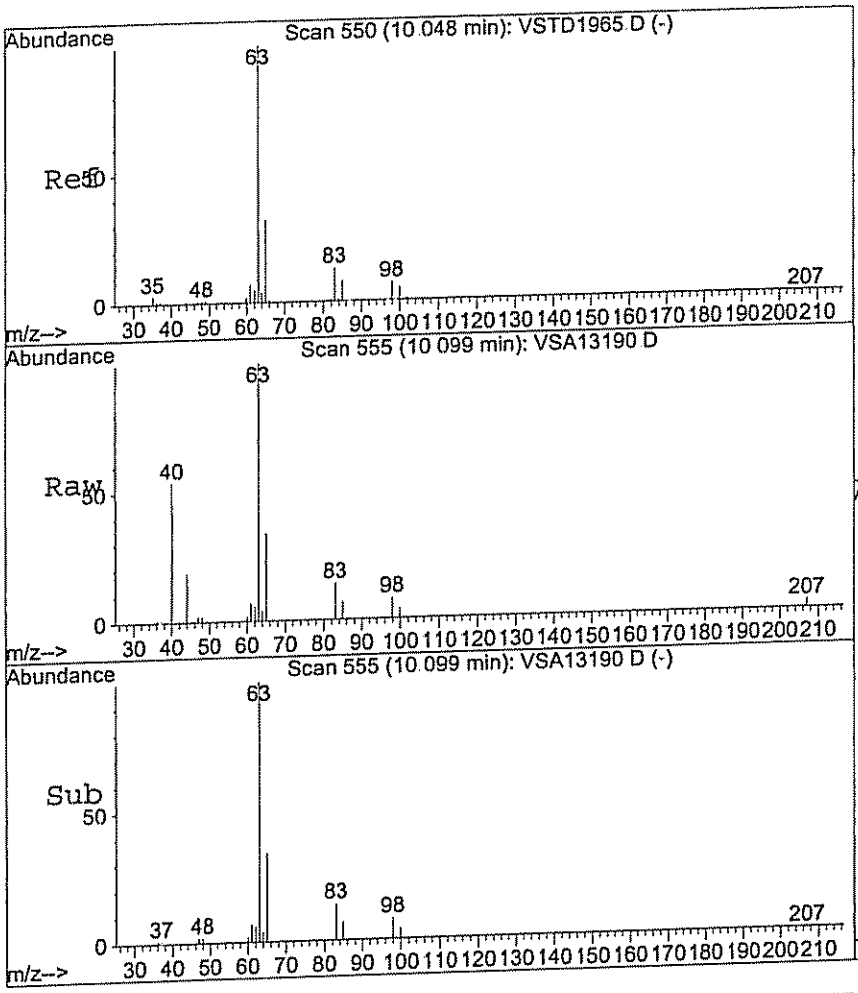


#10
trans-1,2-Dichloroethene
Concen: 0.76 ug/L
RT: 9.80 min Scan# 525
Delta R.T. 0.06 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 96 Resp: 3265

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	160.8	102.4	162.4
98	88.0	31.6	91.6

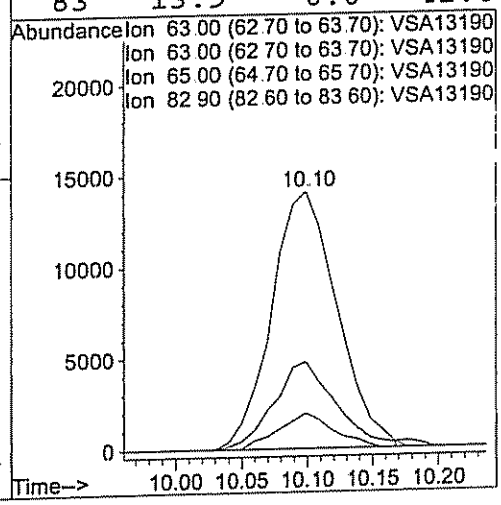


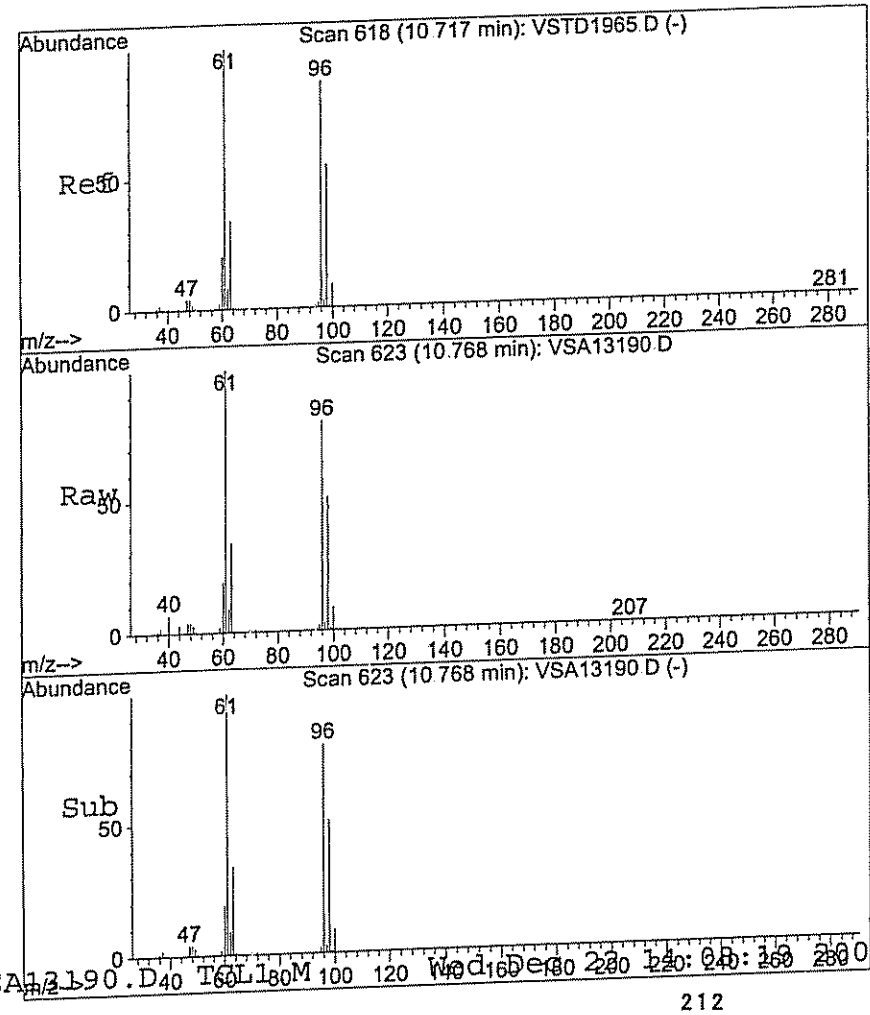


#12
1,1-Dichloroethane
Concen: 6.77 ug/L
RT: 10.10 min Scan# 555
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 63 Resp: 48658

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	33.0	2.1	62.1
83	13.9	0.0	42.6

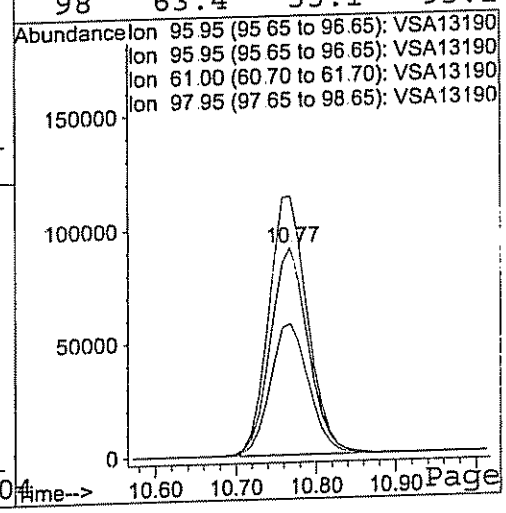


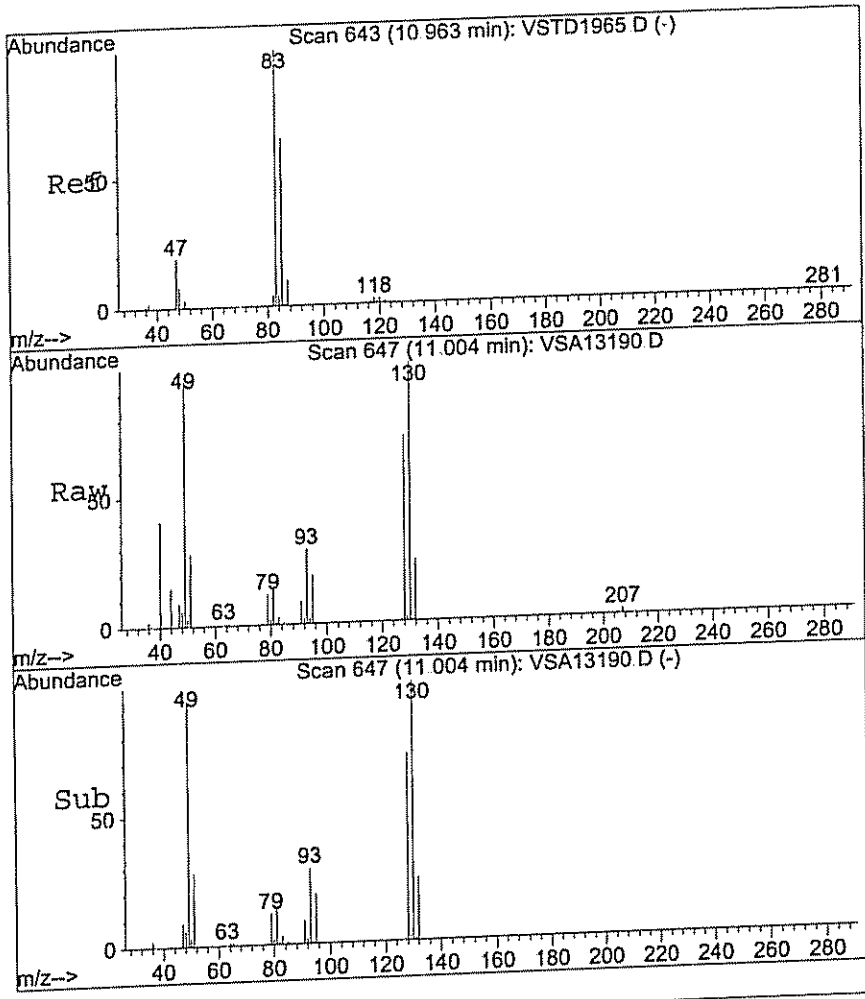


#13
cis-1,2-Dichloroethene
Concen: 59.65 ug/L
RT: 10.77 min Scan# 623
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 96 Resp: 297996

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	124.7	85.2	145.2
98	63.4	33.1	93.1

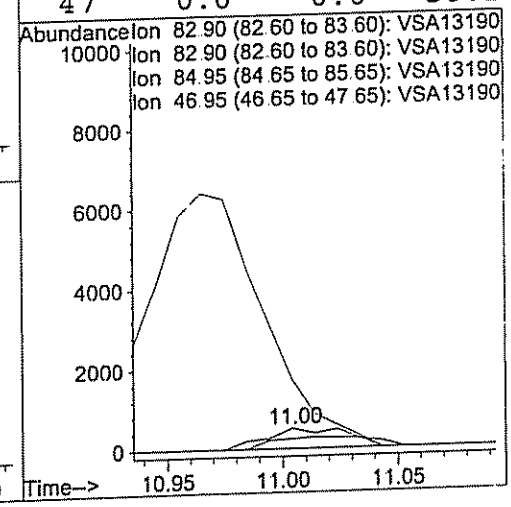


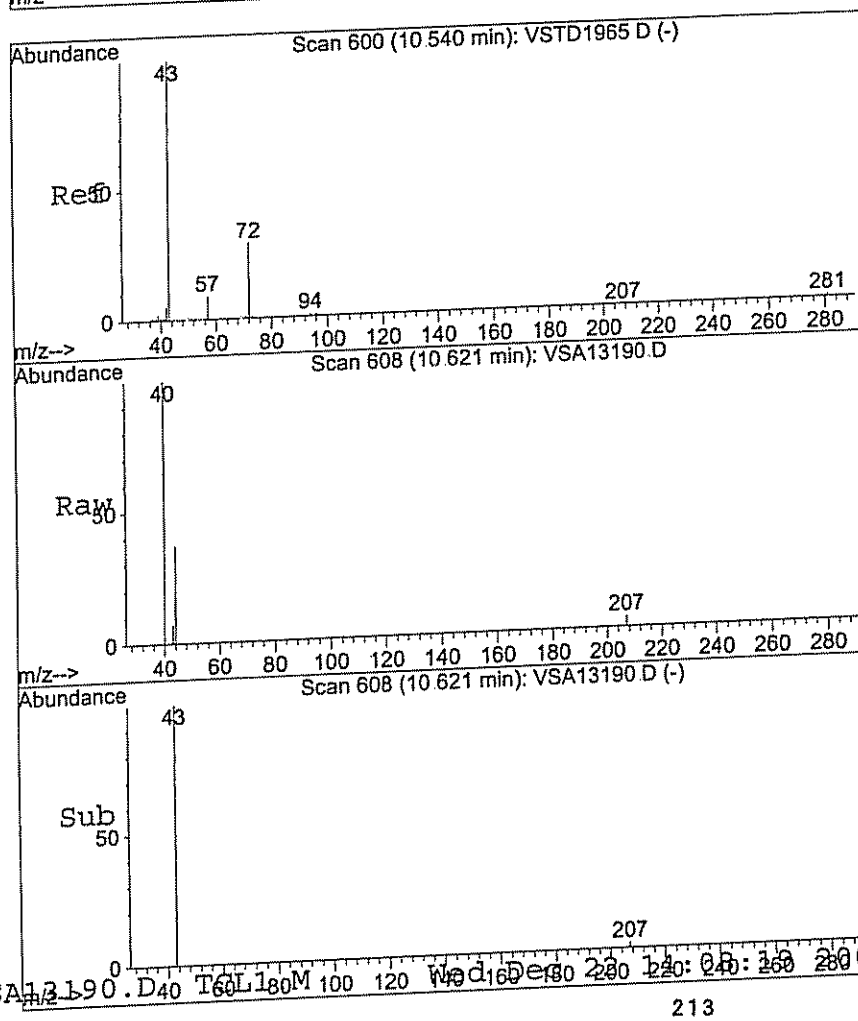


#14
Chloroform
Concen: 0.20 ug/L
RT: 11.00 min Scan# 647
Delta R.T. 0.04 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 83 Resp: 1278

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	48.1	34.7	94.7
47	0.0	0.0	50.1

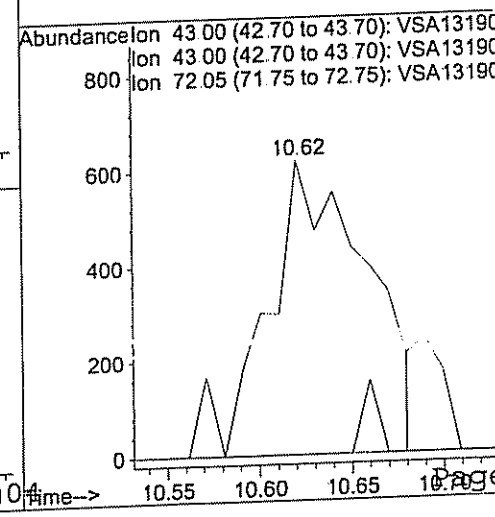


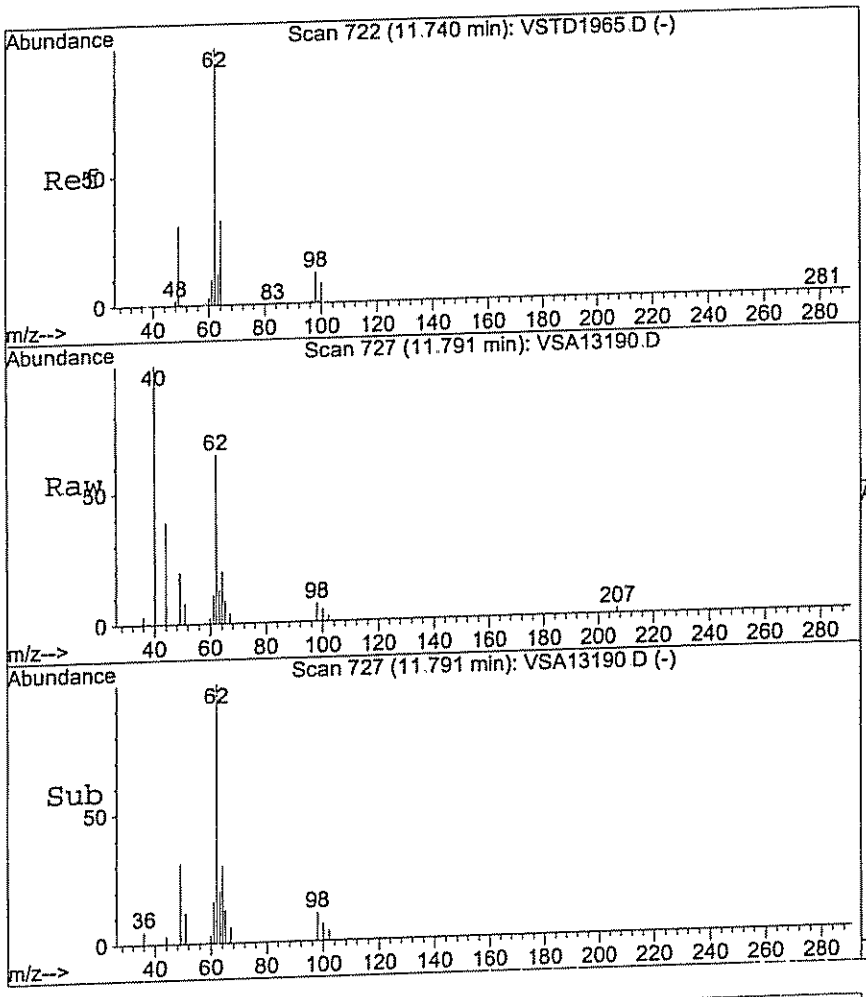


#15
2-Butanone
Concen: 1.16 ug/L
RT: 10.62 min Scan# 608
Delta R.T. 0.06 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 43 Resp: 2240

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	59.3

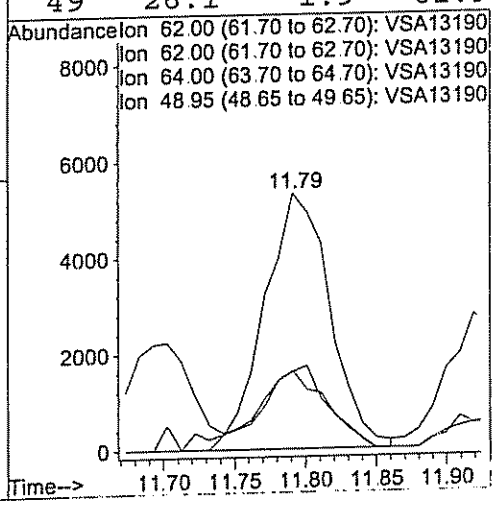


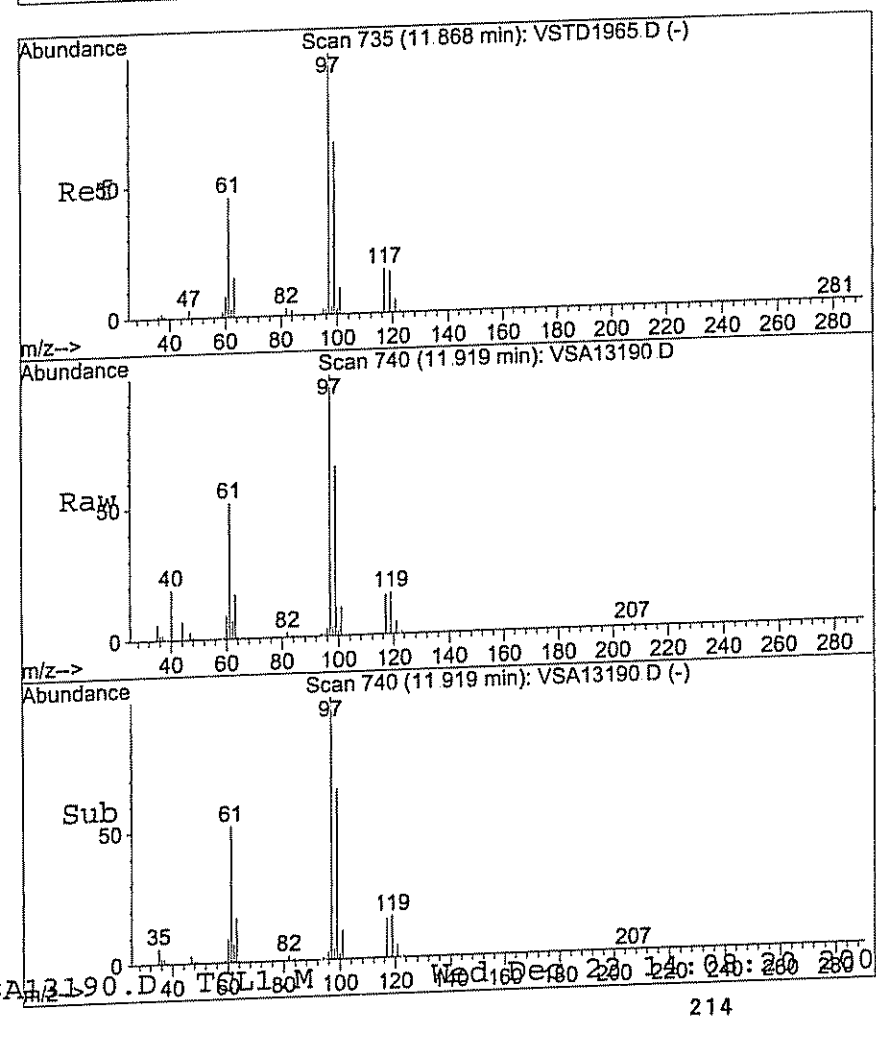


#17
1,2-Dichloroethane
Concen: 3.76 ug/L
RT: 11.79 min Scan# 727
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 62 Resp: 16981

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	28.6	2.9	62.9
49	26.1	1.9	61.9

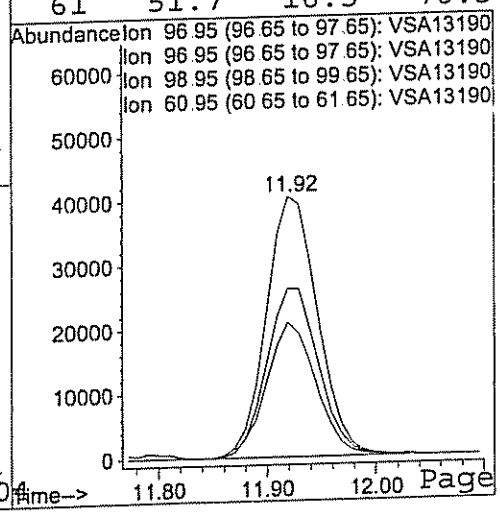


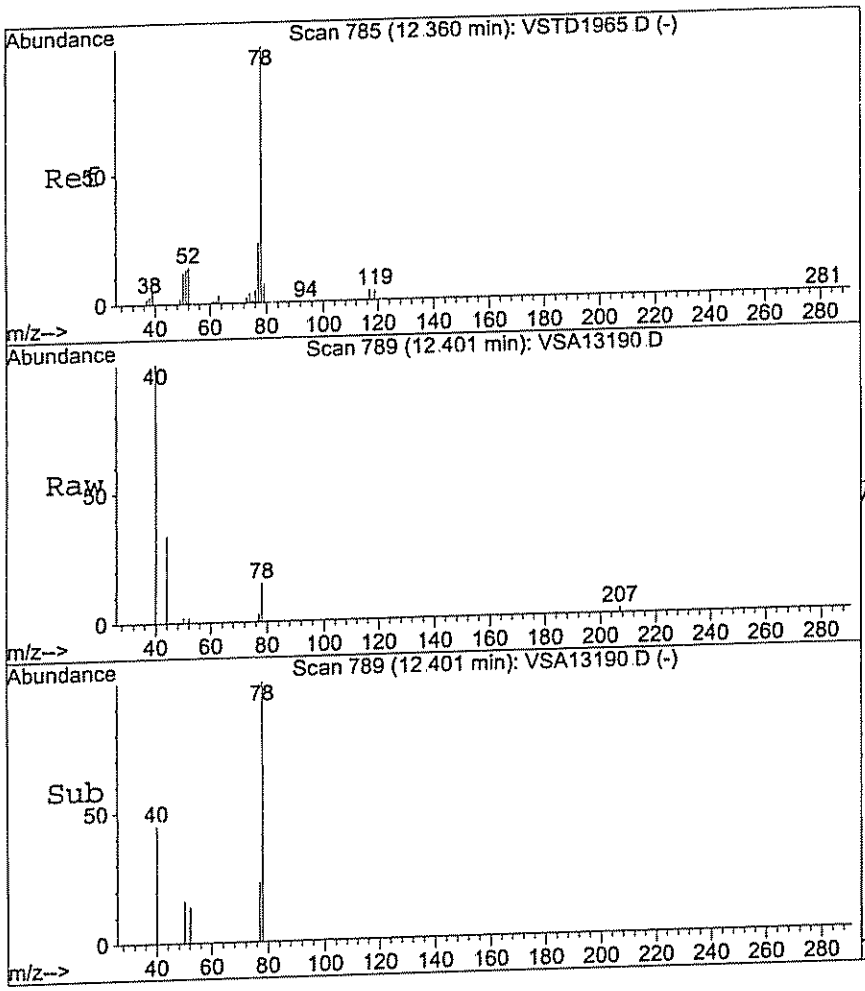


#20
1,1,1-Trichloroethane
Concen: 26.10 ug/L
RT: 11.92 min Scan# 740
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 97 Resp: 132035

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	64.6	35.6	95.6
61	51.7	16.5	76.5

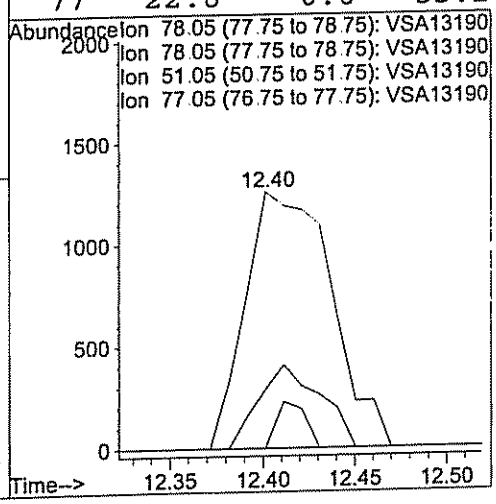


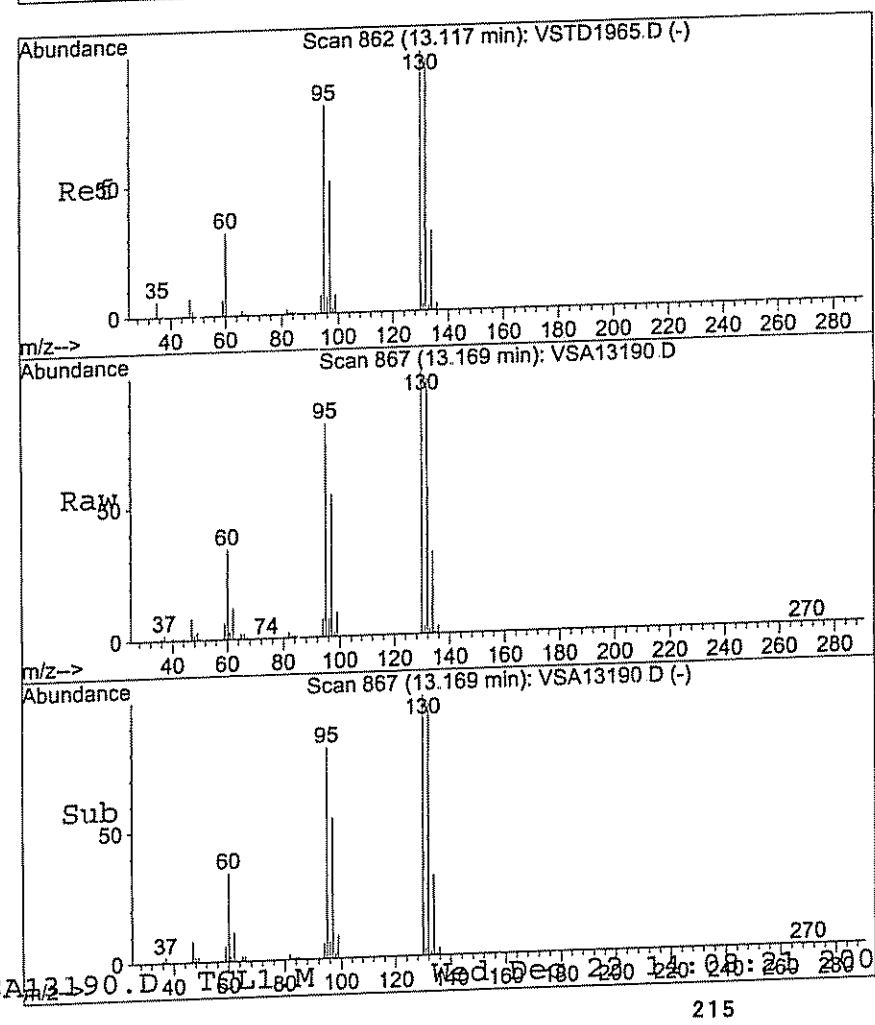


#21
Benzene
Concen: 0.23 ug/L
RT: 12.40 min Scan# 789
Delta R.T. 0.04 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 78 Resp: 4071

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	0.0	0.0	43.2
77	22.8	0.0	53.2

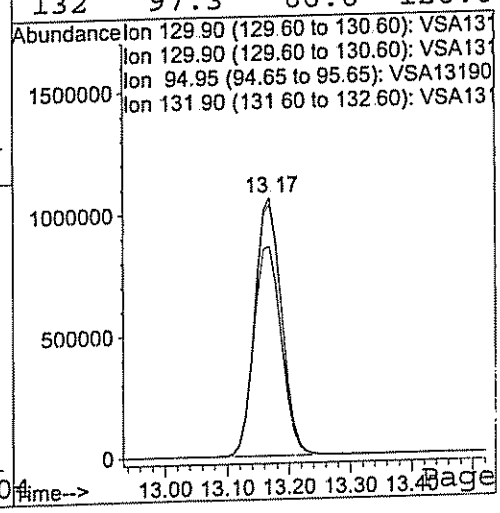


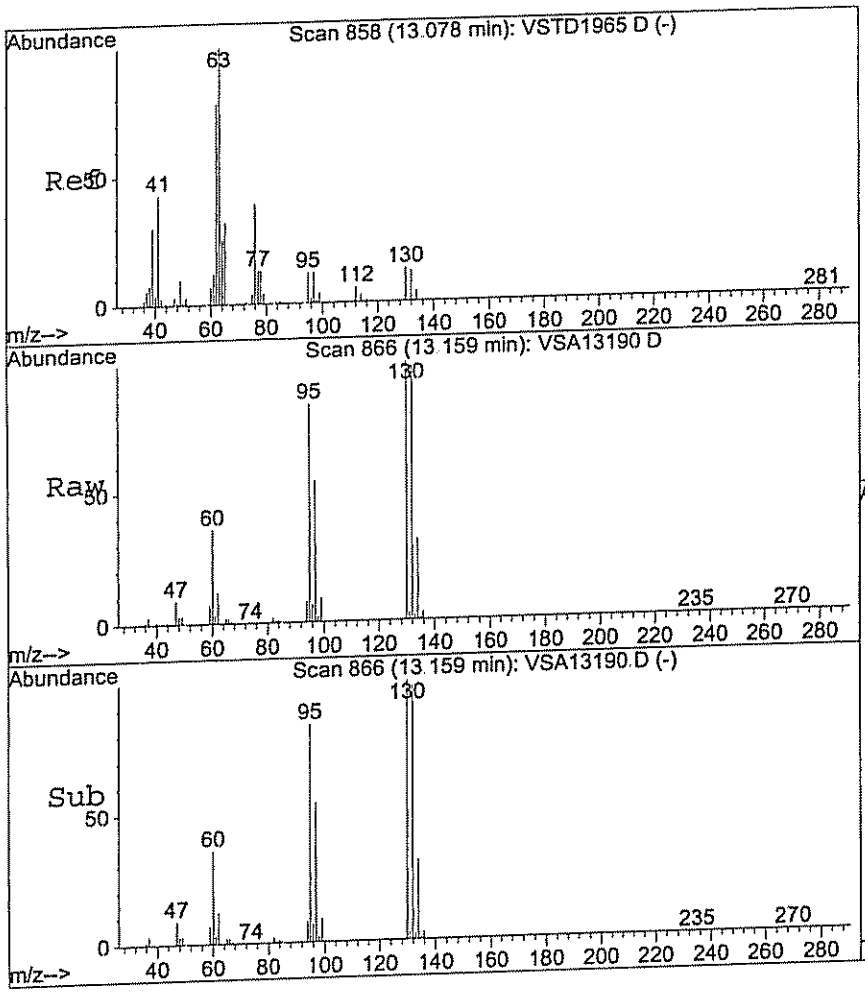


#22
Trichloroethene
Concen: 561.92 ug/L
RT: 13.17 min Scan# 867
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion:130 Resp: 3229511

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	81.1	50.4	110.4
132	97.3	66.6	126.6

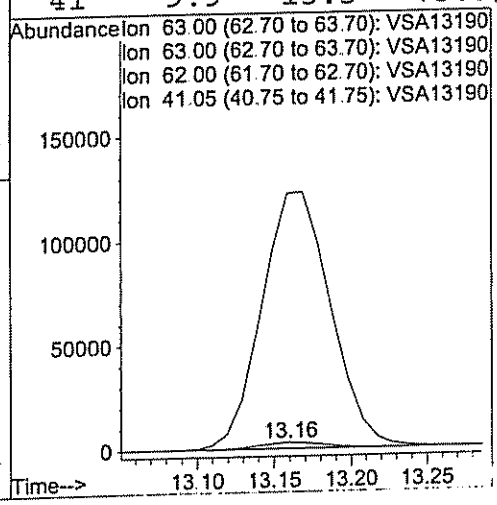


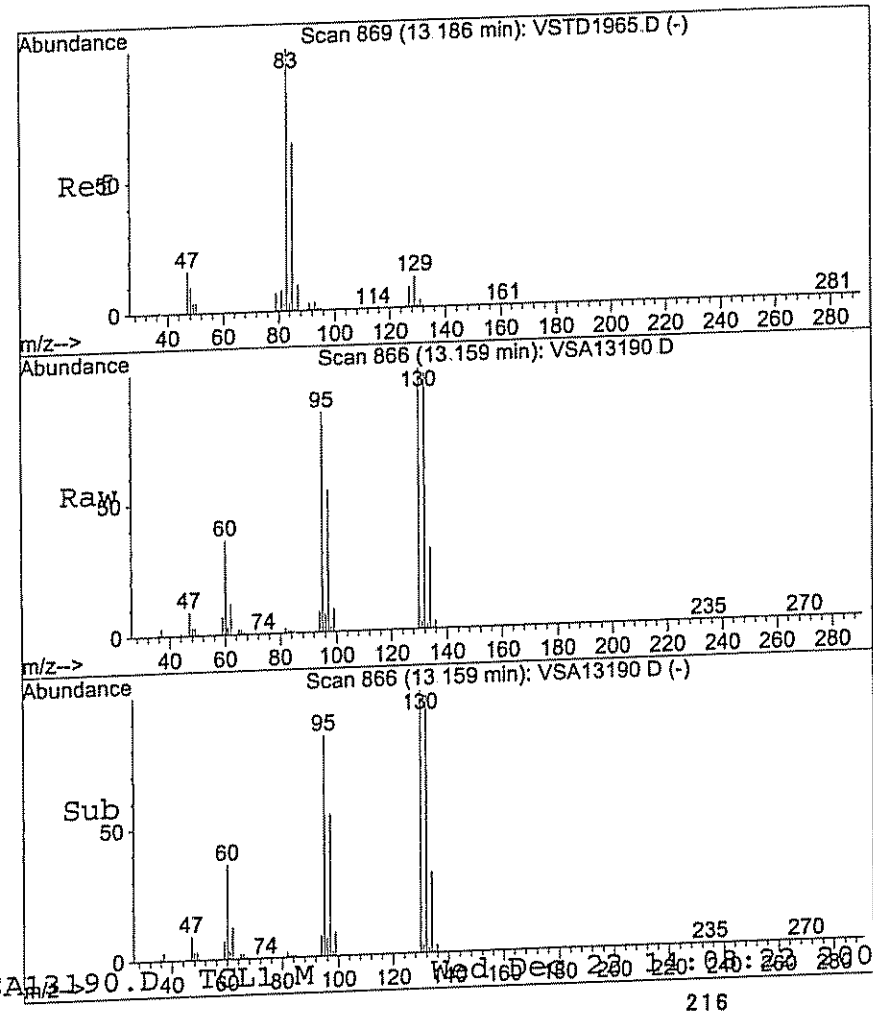


#23
1,2-Dichloropropane
Concen: 1.94 ug/L
RT: 13.16 min Scan# 866
Delta R.T. 0.08 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 63 Resp: 8803

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
62	4011.5	48.4	108.4#
41	9.9	13.5	73.5#

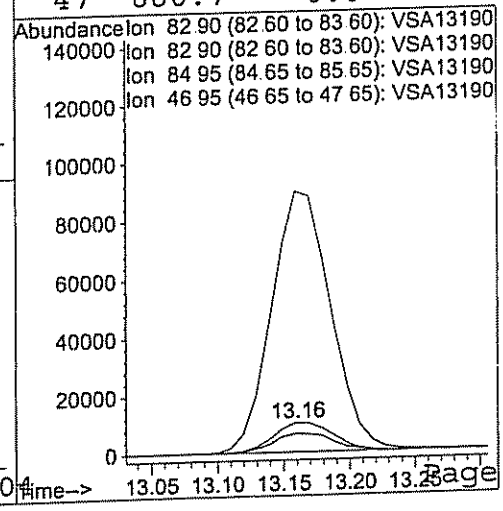


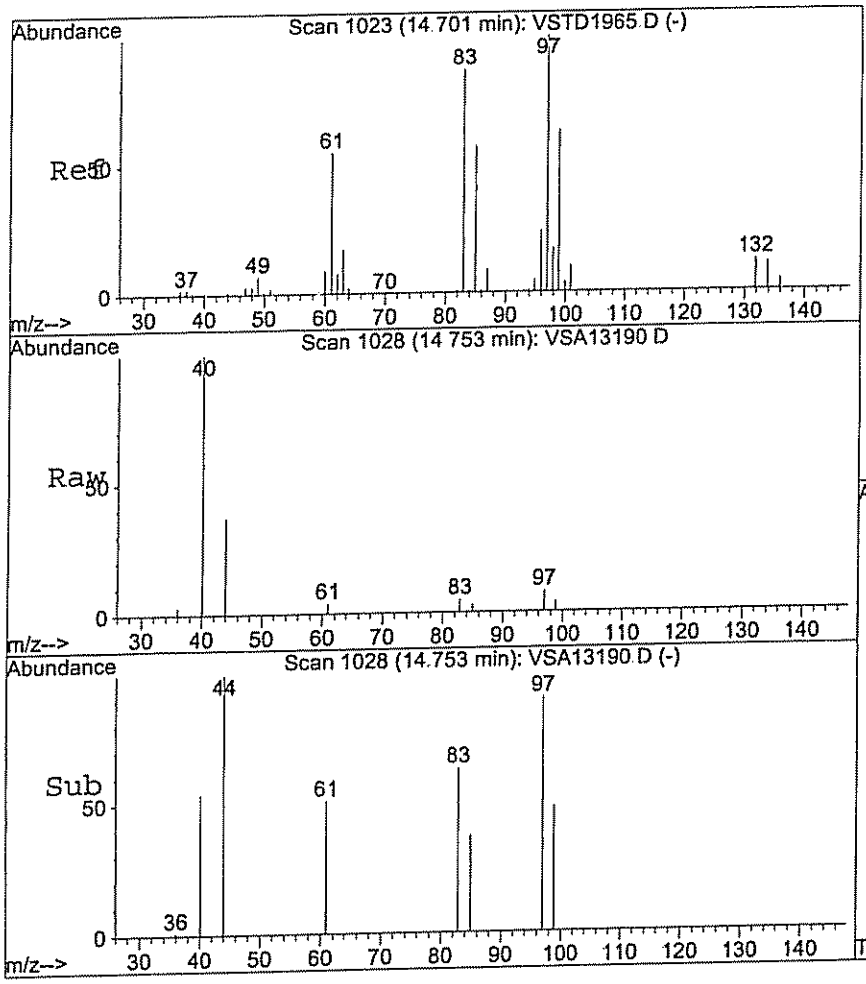


#24
Bromodichloromethane
Concen: 6.19 ug/L
RT: 13.16 min Scan# 866
Delta R.T. -0.03 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 83 Resp: 31963

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	62.8	33.9	93.9
47	880.7	0.0	46.1#

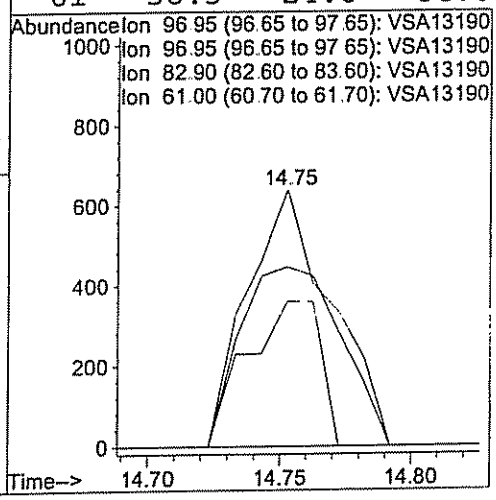


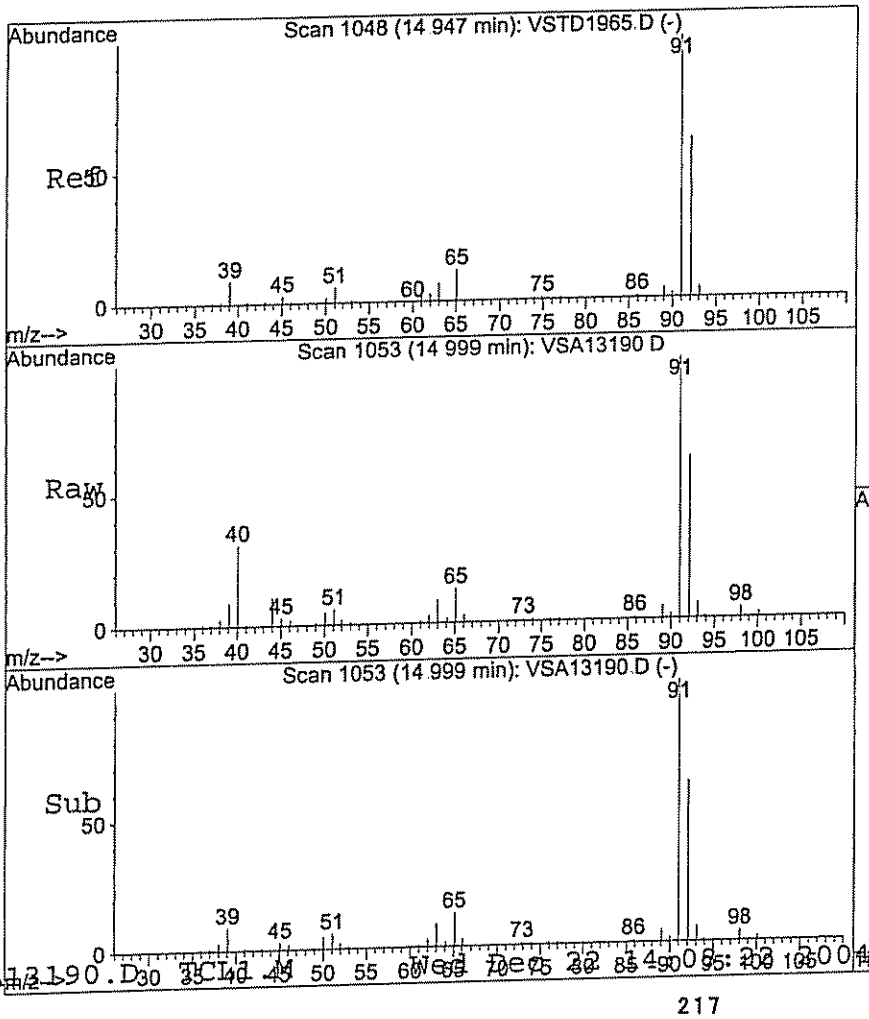


#27
1,1,2-Trichloroethane
Concen: 0.38 ug/L
RT: 14.75 min Scan# 1028
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 97 Resp: 1407

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	69.8	56.9	116.9
61	56.3	24.6	84.6

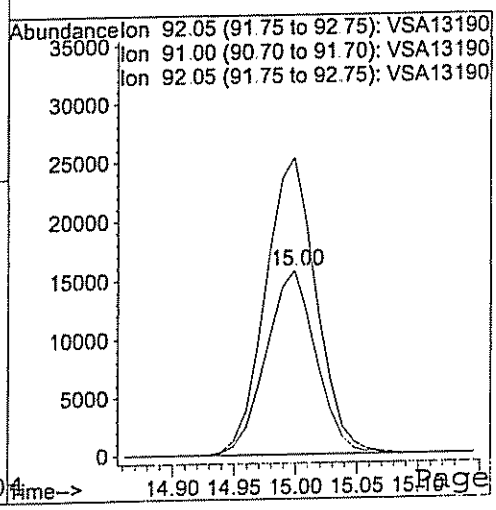


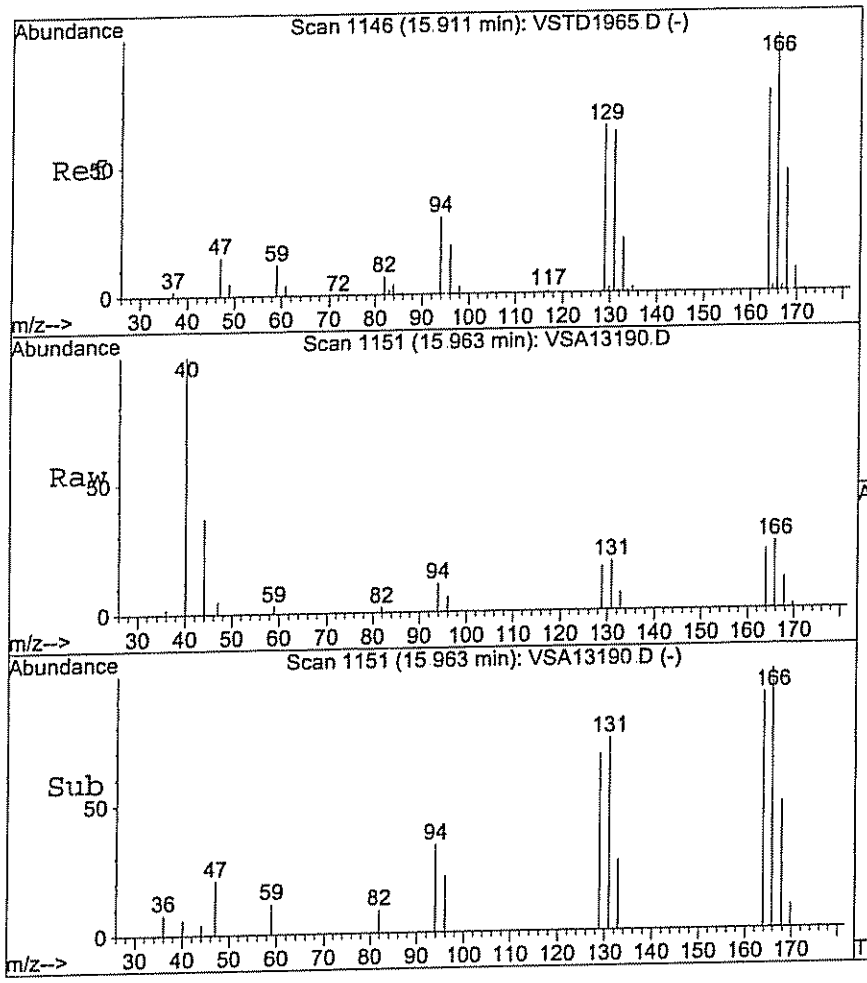


#33
Toluene
Concen: 4.56 ug/L
RT: 15.00 min Scan# 1053
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 92 Resp: 44767

Ion	Ratio	Lower	Upper
92	100		
91	160.2	132.6	192.6
92	100.0	70.0	130.0

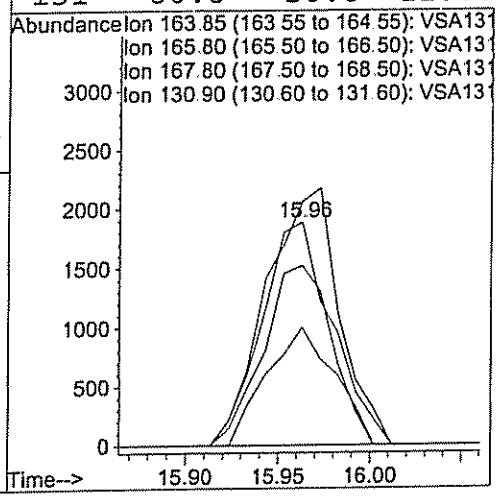


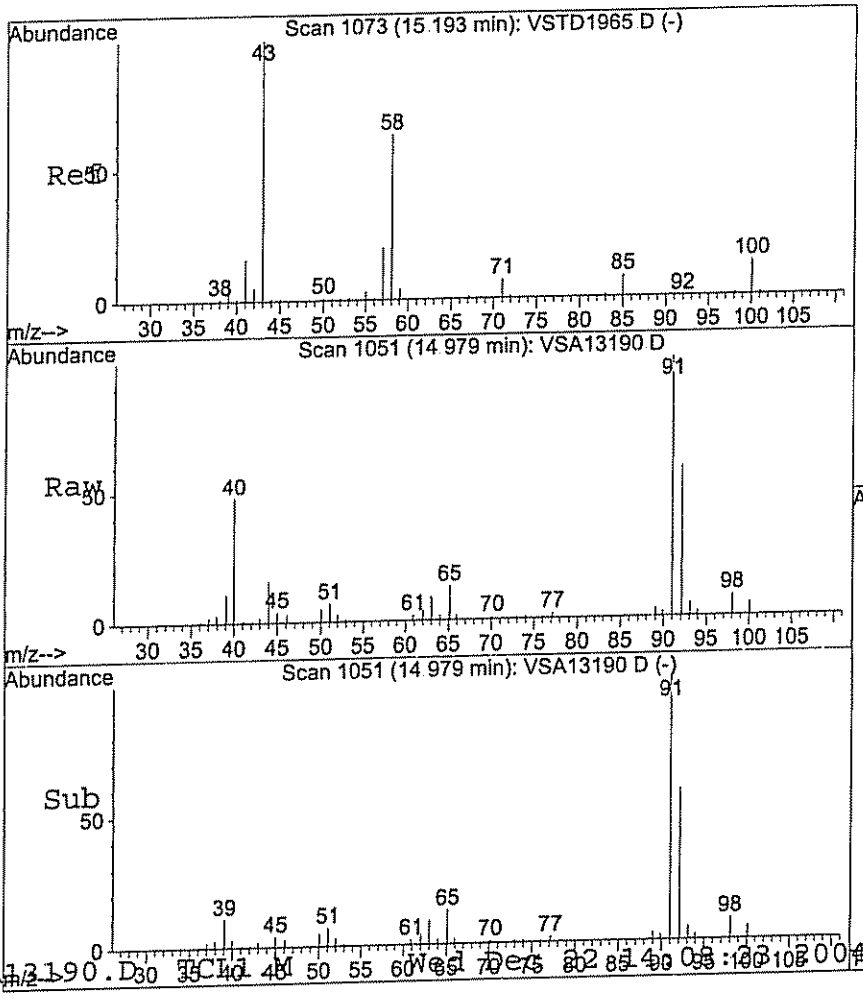


#35
Tetrachloroethene
Concen: 1.36 ug/L
RT: 15.96 min Scan# 1151
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion:164 Resp: 5018

Ion	Ratio	Lower	Upper
164	100		
166	109.3	98.3	158.3
168	53.1	30.5	90.5
131	80.6	50.6	110.6

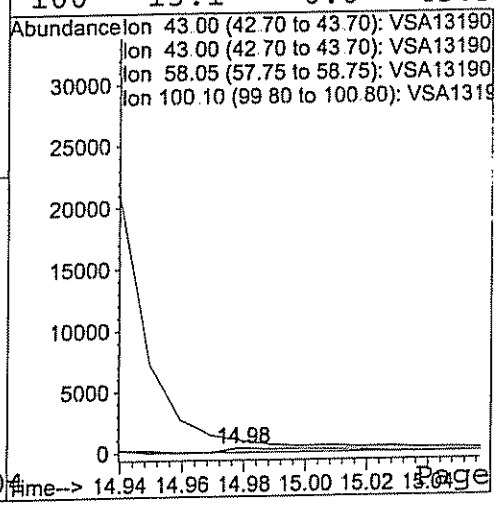


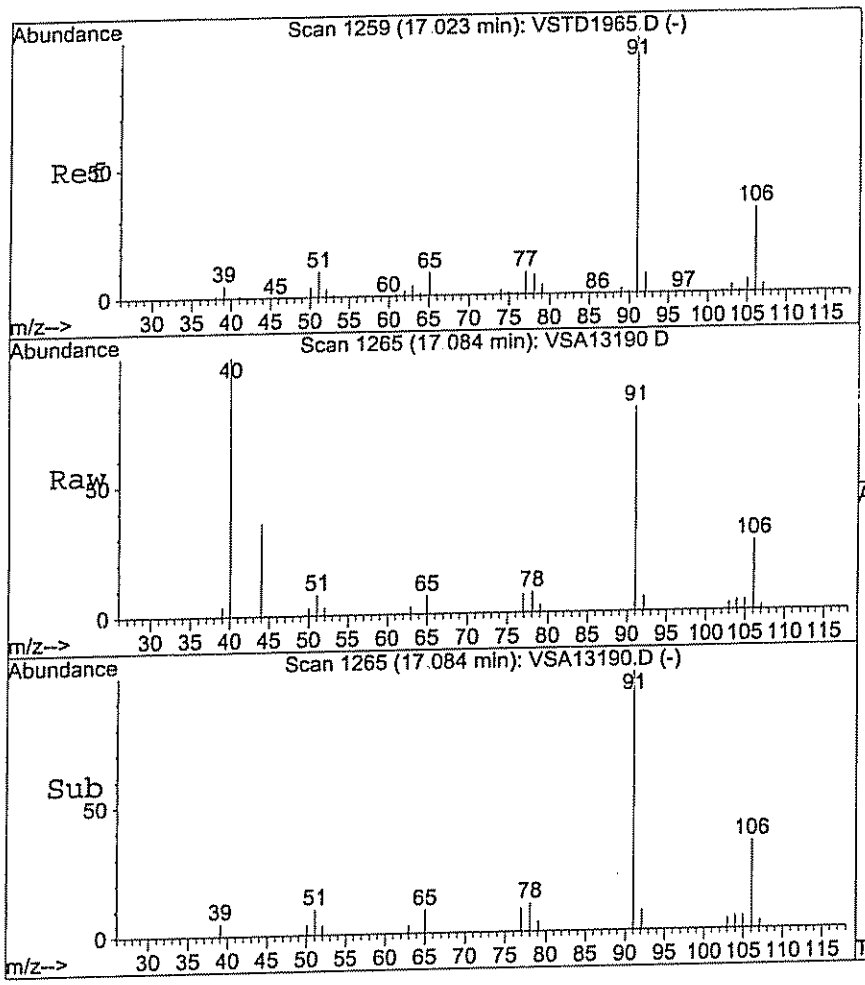


#36
2-Hexanone
Concen: 0.30 ug/L
RT: 14.98 min Scan# 1051
Delta R.T. -0.23 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 43 Resp: 714

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	33.5	93.5#
100	13.1	0.0	43.5

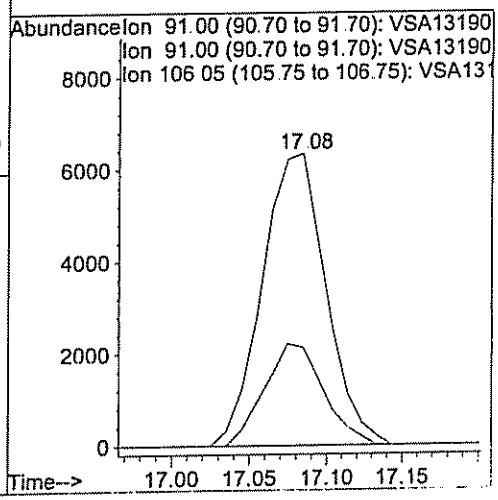


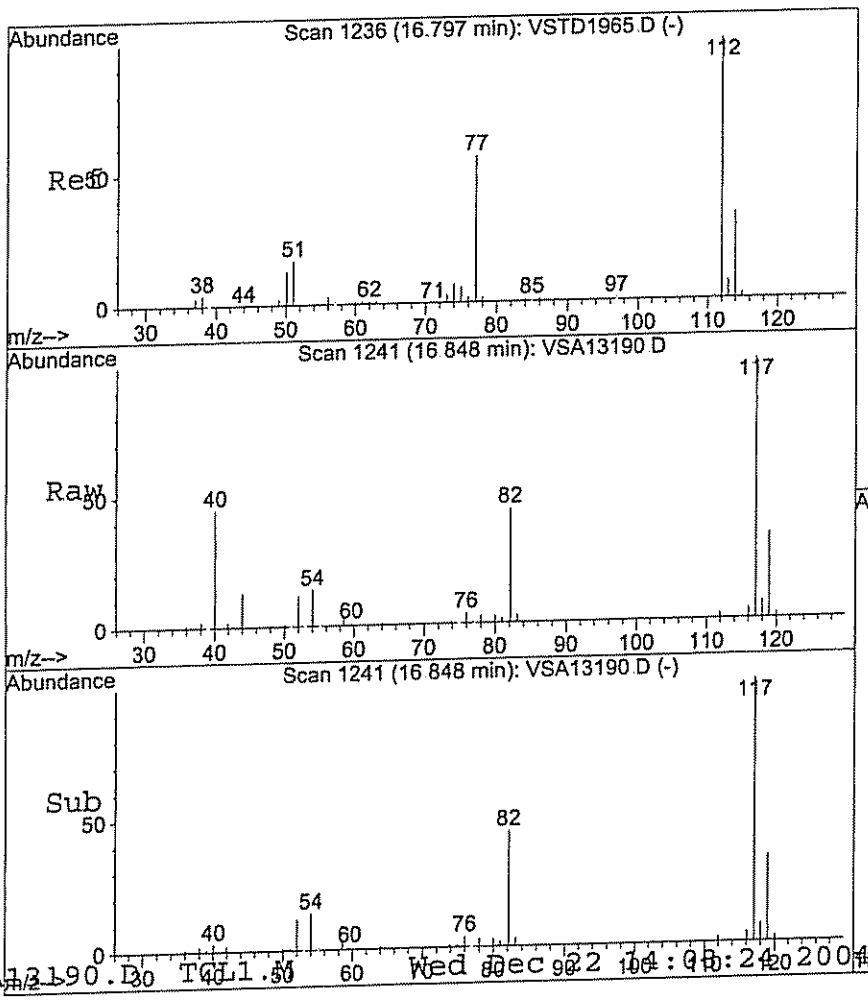


#37
Ethyl benzene
Concen: 1.02 ug/L
RT: 17.08 min Scan# 1265
Delta R.T. 0.06 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion: 91 Resp: 18177

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	33.7	2.9	62.9

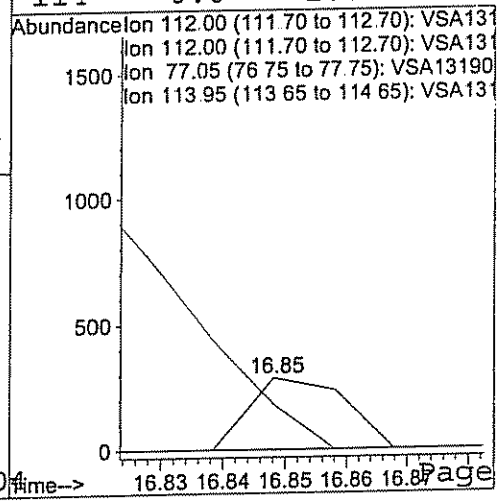


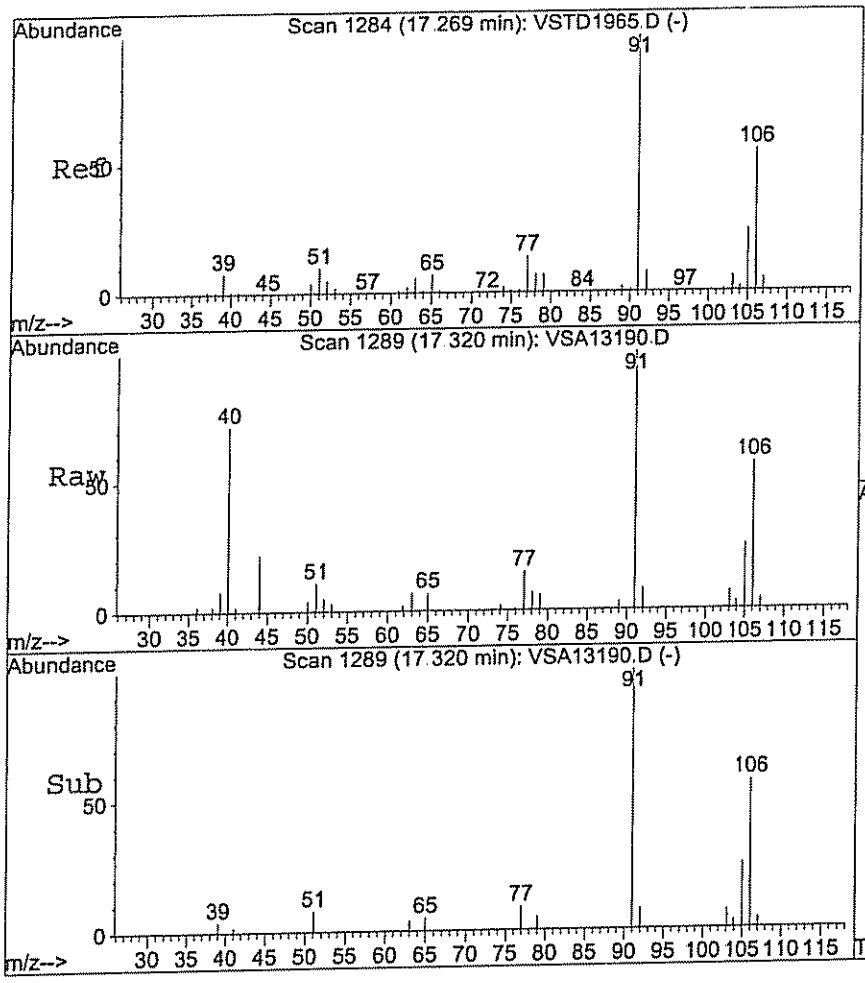


#38
Chlorobenzene
Concen: 0.03 ug/L
RT: 16.85 min Scan# 1241
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion:112 Resp: 310

Ion	Ratio	Lower	Upper
112	100		
112	100.0	70.0	130.0
77	0.0	26.0	86.0#
114	0.0	2.7	62.7#

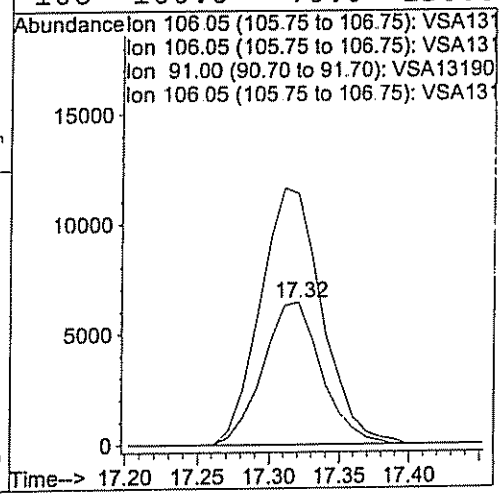


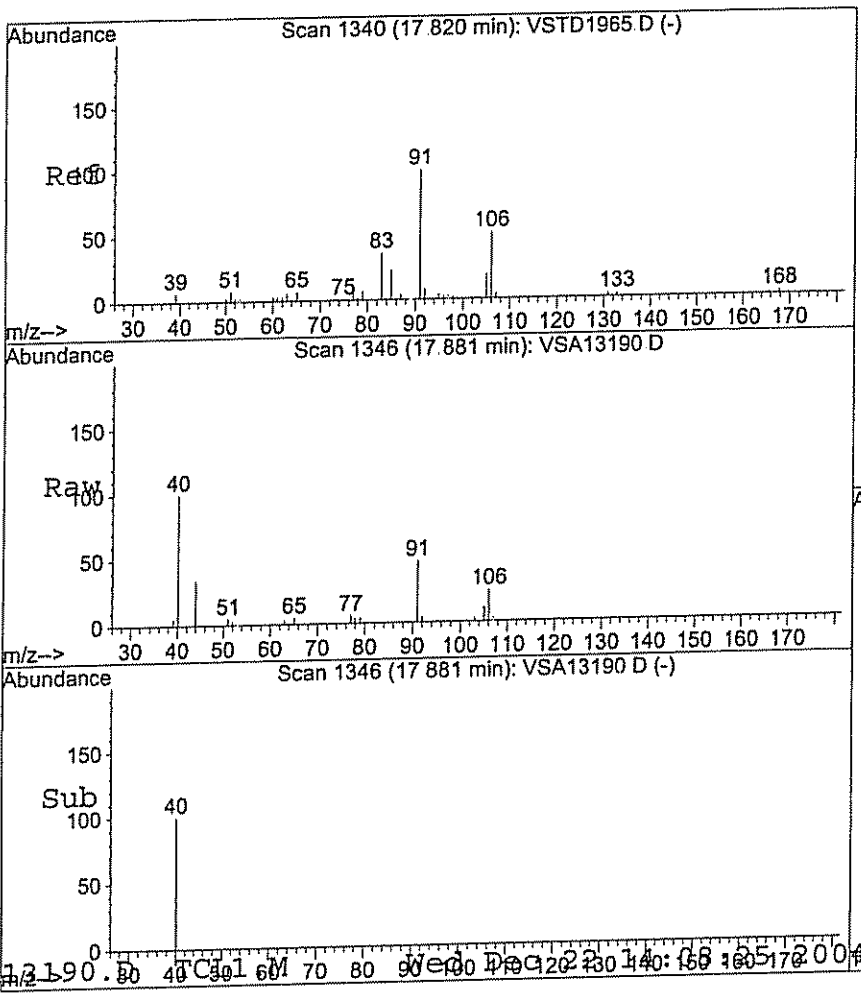


#39
m&p-Xylenes
Concen: 2.57 ug/L
RT: 17.32 min Scan# 1289
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion:106 Resp: 18592

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	175.2	150.2	210.2
106	100.0	70.0	130.0

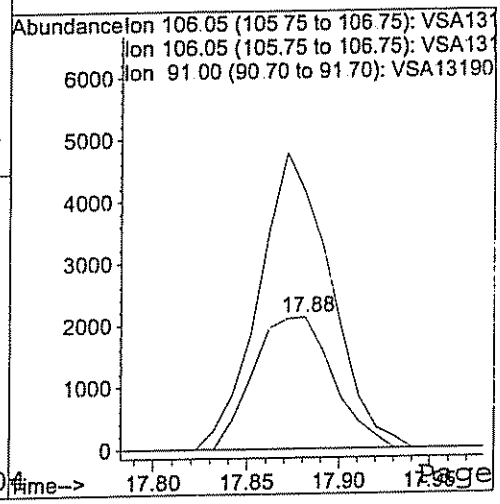


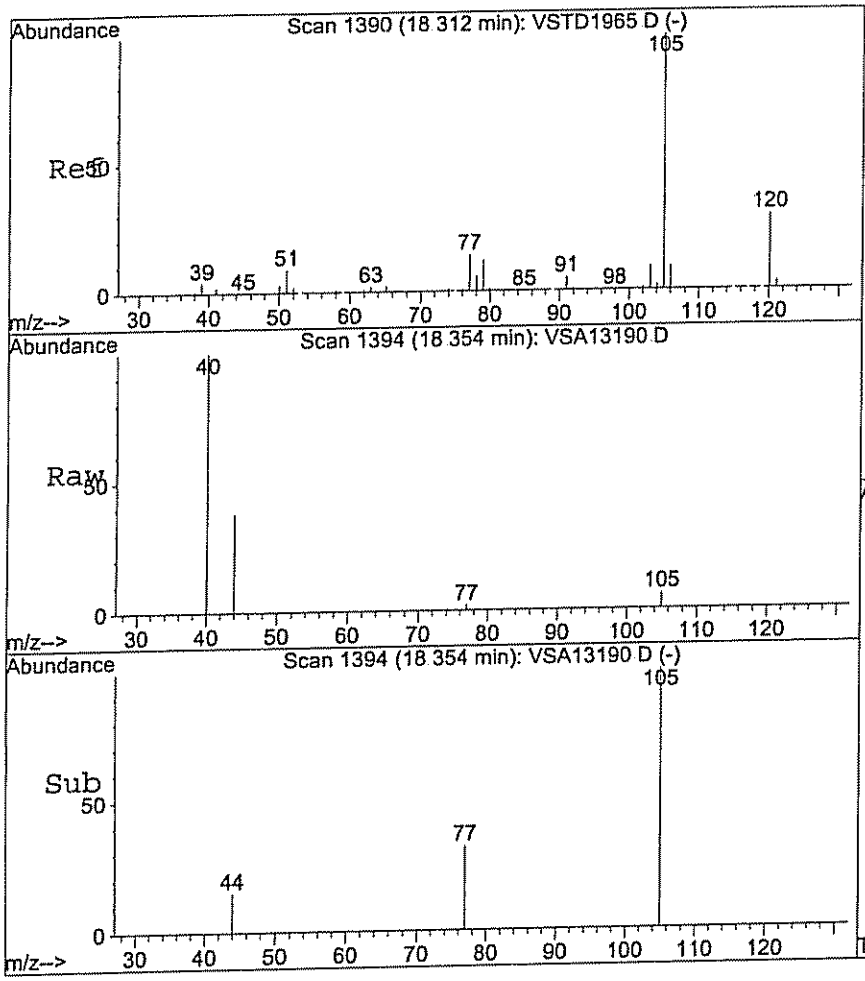


#40
o-Xylene
Concen: 0.90 ug/L
RT: 17.88 min Scan# 1346
Delta R.T. 0.05 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion:106 Resp: 6352

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	184.1	164.9	224.9

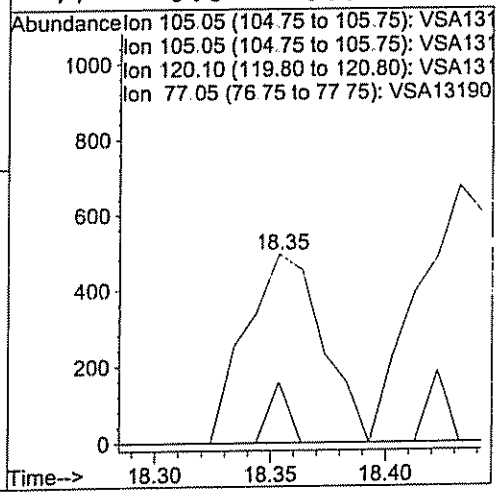


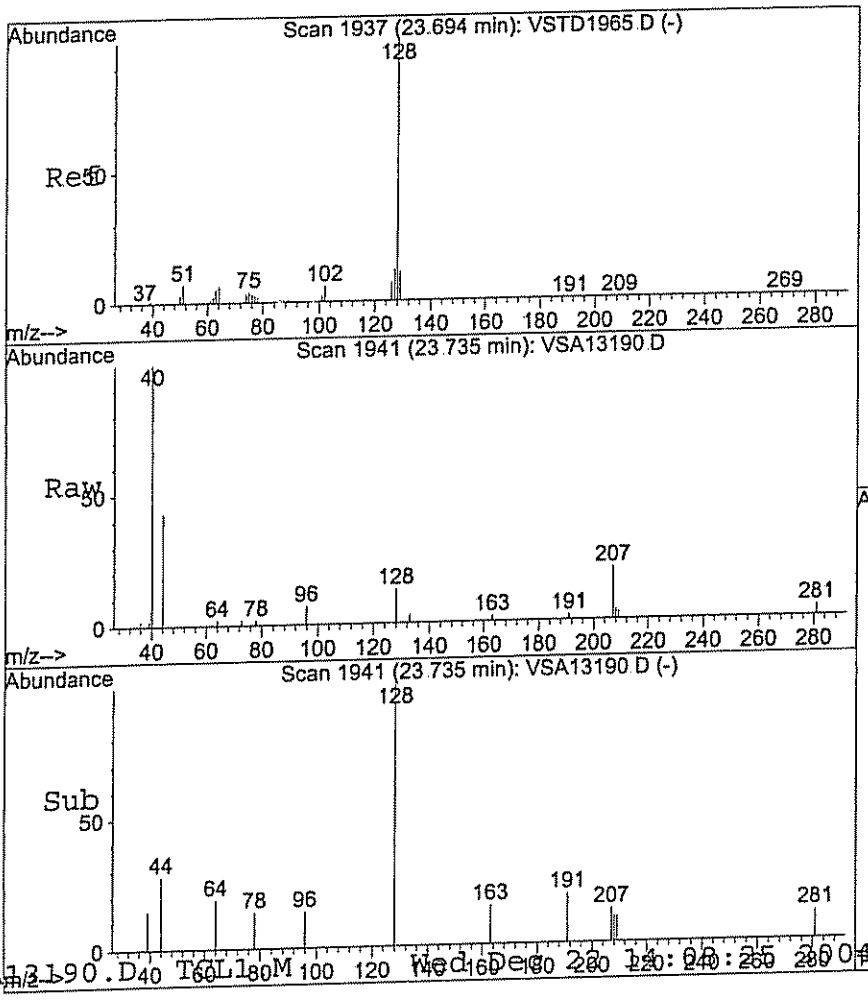


#42
Isopropylbenzene
Concen: 0.06 ug/L
RT: 18.35 min Scan# 1394
Delta R.T. 0.04 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion:105 Resp: 1139

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	0.0	0.0	59.3
77	0.0	0.0	30.0

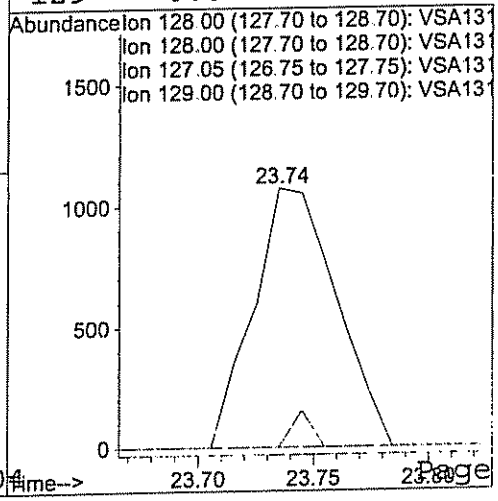




#45
Naphthalene
Concen: 0.18 ug/L
RT: 23.74 min Scan# 1941
Delta R.T. 0.04 min
Lab File: VSA13190.D
Acq: 21 Dec 2004 18:25

Tgt Ion:128 Resp: 2689

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	0.0	0.0	40.8



GC/MS QA-QC Check Report

MWB-4

Tune File : C:\HPCHEM\1\DATA\BB122204.D
Tune Time : 22 Dec 2004 22:00

Daily Calibration File : C:\HPCHEM\1\DATA\VSTD1965.D

						193087	988291	929660
File	Sample	Surrogate Recovery %				Internal Standard Responses		
LCSW1434.D	50UG/L TCL LCS	104	102	98		168932	888103	798997
LCSW1435.D	50UG/L TCL LCS DUP	104	102	98		169656	888940	794557
/BLK1454.D	WATER METHOD BLK	103	101	98		166356	879115	803149
/CAL1458.D	50UG/L TCL/PAUST/DCB CCAL	215*	197*	198*		157372	868209	790546
/SA13220.D	P0412041-01A DF200 RE	107	101	99		158521	858963	787170
/SA13221.D	P0412041-02A DF200 RE	105	104	100		162958	865283	759394
/SA13222.D	P0412024-01A DF500 RE	108	101	99		155105	856976	781167
/SA13223.D	P0412024-02A DF100 RE	109	103	98		154389	848452	764538
/SA13224.D	P0412024-03A DF100 RE	112	102	99		150794	849995	769531
/SA13225.D	P0412077-02A DF100 RE	110	101	96		154951	846910	777427
/SA13226.D	P0412077-03A DF50 RE	111	102	99		152456	838258	760349
/SA13227.D	P0412077-04A DF100 RE	109	103	99		155299	846346	764512
/SA13228.D	P0412077-05A DF100 RE	110	102	99		158444	851170	773208
/SA13229.D	P0412093-01A DF500	109	102	100		152635	835354	756368
/SA13230.D	P0412093-02A DF500	109	104	101		151195	819052	734515
/SA13231.D	P0412093-03A DF500	111	103	100		151220	826581	734091

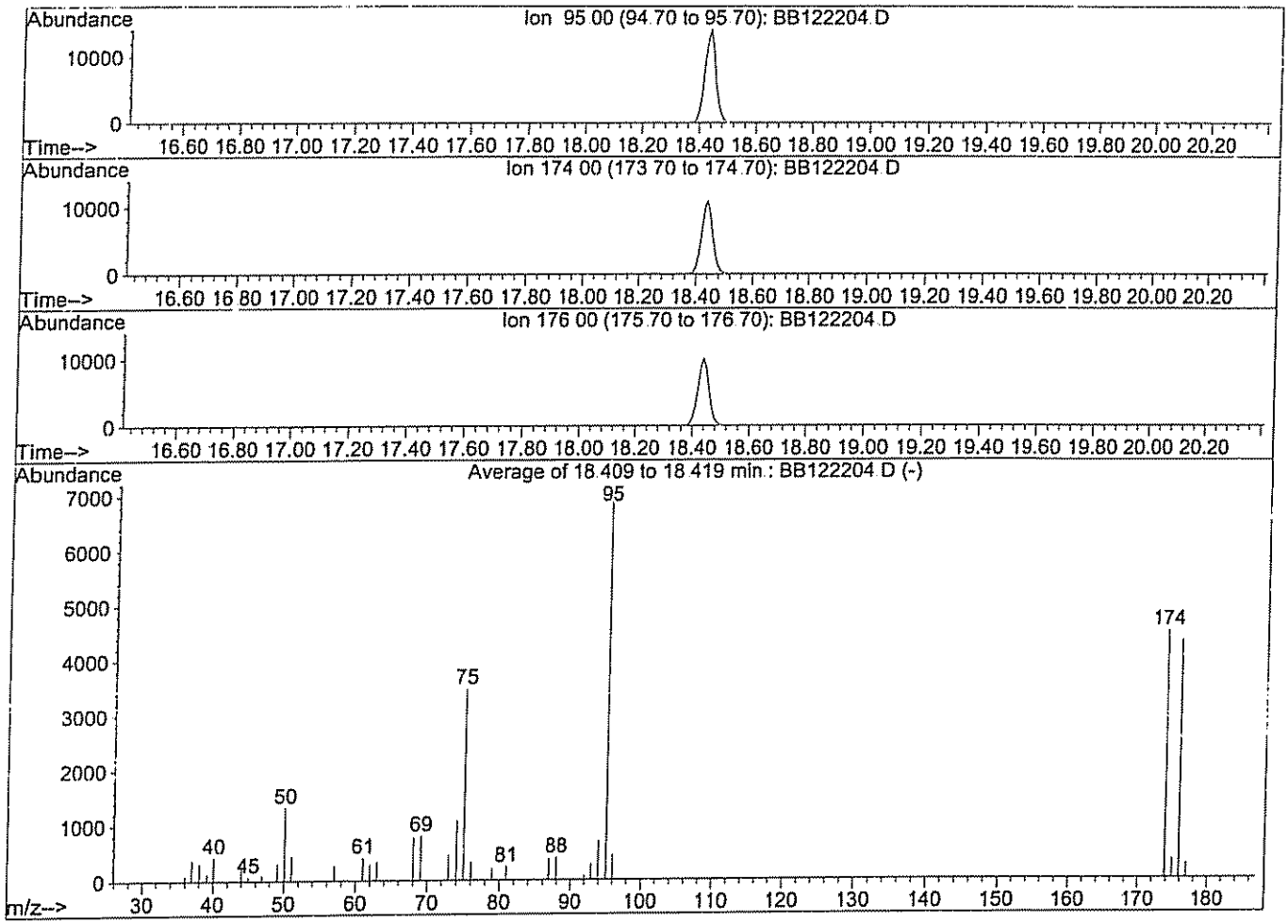
t - fails 12hr time check * - fails criteria

Created: Tue Dec 28 12:31:14 2004 GC

S Ins

BFB

Data File : C:\HPCHEM\1\DATA\BB122204.D
Acq On : 22 Dec 2004 22:00
Sample : 50NG BFB TUNING STD
Misc : WATER
Vial: 14
Operator: hfg system
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00
Method : C:\HPCHEM\1\METHODS\BFB.M (Chemstation Integrator)
Title :



Spectrum Information: Average of 18.409 to 18.419 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	1336	PASS
75	95	30	60	50.7	3494	PASS
95	95	100	100	100.0	6894	PASS
96	95	5	9	6.7	461	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	65.8	4538	PASS
175	174	5	9	7.8	355	PASS
176	174	95	101	96.3	4371	PASS
177	176	5	9	6.2	270	PASS

BB122204.D BFB.M Thu Dec 23 08:45:11 2004

Average of 18.409 to 18.419 min.: BB122204.D
50NG BFB TUNING STD

MWB-4

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	90	57.05	279	80.90	247	176.95	270
37.00	374	61.00	416	86.90	389		
38.05	317	62.00	288	87.95	408		
39.15	134	63.00	347	92.00	83		
40.05	430	68.00	784	92.95	286		
44.00	279	69.05	812	93.95	715		
45.00	82	73.00	457	95.05	6894		
46.95	109	74.00	1087	96.00	461		
49.05	320	75.05	3494	173.90	4538		
50.05	1336	76.05	326	174.90	355		
51.00	448	78.95	215	175.90	4371		

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 28 11:55:58 2004
Response via : Initial Calibration

Continuing Calibration File: VCAL1458.D

Min. RRF : 0.100 Min. Rel. Area : 50%
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%
1	I	Bromochloromethane	1.000	1.000	0.0	82
2	TP	Chloromethane	1.459	1.009	30.8#	53
3	TC	Vinyl chloride	1.456	1.197	17.8	63
4	T	Bromomethane	0.908	0.618	31.9#	54
5	T	Chloroethane	0.993	0.940	5.3	74
6	TCM	1,1-Dichloroethene	1.117	1.003	10.2	73
7	T	Carbon disulfide	4.078	3.450	15.4	69
8	T	Methylene chloride	1.416	1.356	4.2	80
9	T	Acetone	0.384	0.362	5.7	87
10	T	trans-1,2-Dichloroethene	1.342	1.243	7.3	77
11	T	methyl-tert-butyl-Ether	3.139	3.053	2.8	80
12	TP	1,1-Dichloroethane	2.238	2.333	-4.2	87
13	T	cis-1,2-Dichloroethene	1.556	1.364	12.3	78
14	TC	Chloroform	1.997	1.970	1.4	84
15	T	2-Butanone	0.600	0.555	7.5	81
16	S	1,2-Dichloroethane-d4	1.225	2.637	-115.2#	180#
17	T	1,2-Dichloroethane	1.409	1.530	-8.6	91
18	I	1,4-Difluorobenzene	1.000	1.000	0.0	88
19	T	Carbon tetrachloride	0.243	0.223	8.0	81
20	T	1,1,1-Trichloroethane	0.286	0.263	8.1	82
21	TM	Benzene	0.998	0.900	9.8	80
22	TM	Trichloroethene	0.325	0.235	27.8#	70
23	TC	1,2-Dichloropropane	0.257	0.253	1.5	88
24	T	Bromodichloromethane	0.292	0.271	7.2	83
25	T	cis-1,3-Dichloropropene	0.417	0.377	9.4	79
26	T	trans-1,3-Dichloropropene	0.349	0.322	7.6	81
27	T	1,1,2-Trichloroethane	0.207	0.194	6.3	84
28	T	Dibromochloromethane	0.265	0.230	13.0	77
29		1,2-Dibromoethane	0.237	0.221	6.5	82
30	TP	Bromoform	0.181	0.144	20.5#	71
31	I	Chlorobenzene-d5	1.000	1.000	0.0	85
32	S	Toluene-d8	0.816	1.603	-96.5#	166#
33	TMC	Toluene	0.600	0.543	9.5	80
34	T	4-methyl-2-Pentanone	0.212	0.212	0.1	87
35	T	Tetrachloroethene	0.226	0.182	19.5	69
36	T	2-Hexanone	0.145	0.144	0.7	85
37	TC	Ethyl benzene	1.093	1.023	6.4	80

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 28 11:55:58 2004
Response via : Initial Calibration

Continuing Calibration File: VCAL1458.D

Min. RRF : 0.100 Min. Rel. Area : 50%
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%
38 TMP	Chlorobenzene	0.727	0.674	7.3	82
39 T	m&p-Xylenes	0.442	0.418	5.6	81
40 T	o-Xylene	0.430	0.415	3.6	85
41 T	Styrene	0.718	0.693	3.4	82
42 T	Isopropylbenzene	1.072	1.058	1.3	84
43 S	4-Bromofluorobenzene	0.309	0.613	-98.3#	171#
44 TP	1,1,2,2-Tetrachloroethane	0.308	0.301	2.1	87
45 T	Naphthalene	0.893	0.743	16.8	70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
VCAL1458.D TCL1.M Tue Dec 28 11:56:05 2004 Page 2

MWB-4

Data File : C:\HPCHEM\1\DATA\VCAL1458.D
Acq On : 22 Dec 2004 22:32
Sample : 50UG/L TCL/PAUST/DCB CCAL
Misc : WATER

Vial: 15
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:55 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.97	128	157372m	50.00	ug/L	0.05
18) 1,4-Difluorobenzene	12.63	114	868209	50.00	ug/L	0.05
31) Chlorobenzene-d5	16.80	117	790546	50.00	ug/L	0.04
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.69	65	414981	107.60	ug/L	0.04
Spiked Amount 50.000	Range 70 - 130		Recovery = 215.20%#			
32) Toluene-d8	14.90	98	1266895	98.25	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 196.50%#			
43) 4-Bromofluorobenzene	18.43	95	484719	99.14	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 198.28%#			
Target Compounds						Qvalue
2) Chloromethane	6.31	50	158799m	34.59	ug/L	99
3) Vinyl chloride	6.60	62	188358	41.09	ug/L	100
4) Bromomethane	7.21	94	97268	34.04	ug/L	99
5) Chloroethane	7.39	64	147964	47.33	ug/L	99
6) 1,1-Dichloroethene	8.83	96	157861	44.90	ug/L	95
7) Carbon disulfide	9.35	76	542908	42.29	ug/L	100
8) Methylene chloride	8.99	84	213453	47.90	ug/L	95
9) Acetone	8.29	43	57020	47.14	ug/L	98
10) trans-1,2-Dichloroethene	9.80	96	195672	46.33	ug/L	96
11) methyl-tert-butyl-Ether	9.89	73	480427	48.62	ug/L	99
12) 1,1-Dichloroethane	10.09	63	367204	52.12	ug/L	100
13) cis-1,2-Dichloroethene	10.77	96	214670	43.83	ug/L	96
14) Chloroform	11.01	83	309965	49.31	ug/L	99
15) 2-Butanone	10.58	43	87334	46.23	ug/L	99
17) 1,2-Dichloroethane	11.79	62	240846	54.32	ug/L	98
19) Carbon tetrachloride	12.37	117	193878	45.98	ug/L	99
20) 1,1,1-Trichloroethane	11.92	97	228507	45.94	ug/L	98
21) Benzene	12.41	78	781563	45.11	ug/L	100
22) Trichloroethene	13.17	130	204107	36.12	ug/L	98
23) 1,2-Dichloropropane	13.13	63	219732	49.27	ug/L	99
24) Bromodichloromethane	13.23	83	235567	46.38	ug/L	99
25) cis-1,3-Dichloropropene	14.00	75	327690	45.28	ug/L	99
26) trans-1,3-Dichloropropene	14.52	75	279806	46.21	ug/L	98

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

MWB-4

Data File : C:\HPCHEM\1\DATA\VCAL1458.D
Acq On : 22 Dec 2004 22:32
Sample : 50UG/L TCL/PAUST/DCB CCAL
Misc : WATER

Vial: 15
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:55 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) 1,1,2-Trichloroethane	14.74	97	168681	46.85 ug/L	96
28) Dibromochloromethane	15.44	129	199971	43.48 ug/L	99
29) 1,2-Dibromoethane	15.77	107	192282	46.73 ug/L	100
30) Bromoform	17.55	173	125302	39.77 ug/L	99
33) Toluene	14.99	92	428924	45.23 ug/L	100
34) 4-methyl-2-Pentanone	14.13	43	167401	49.95 ug/L	100
35) Tetrachloroethene	15.95	164	143548	40.26 ug/L	95
36) 2-Hexanone	15.24	43	113943	49.63 ug/L	99
37) Ethyl benzene	17.08	91	809099	46.81 ug/L	100
38) Chlorobenzene	16.85	112	532479	46.35 ug/L	100
39) m&p-Xylenes	17.32	106	660215	94.37 ug/L	99
40) o-Xylene	17.87	106	327732	48.22 ug/L	99
41) Styrene	17.77	104	547795	48.28 ug/L	99
42) Isopropylbenzene	18.35	105	836729	49.36 ug/L #	99
44) 1,1,2,2-Tetrachloroethane	17.86	83	238262	48.94 ug/L	100
45) Naphthalene	23.74	128	587386	41.59 ug/L #	100

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

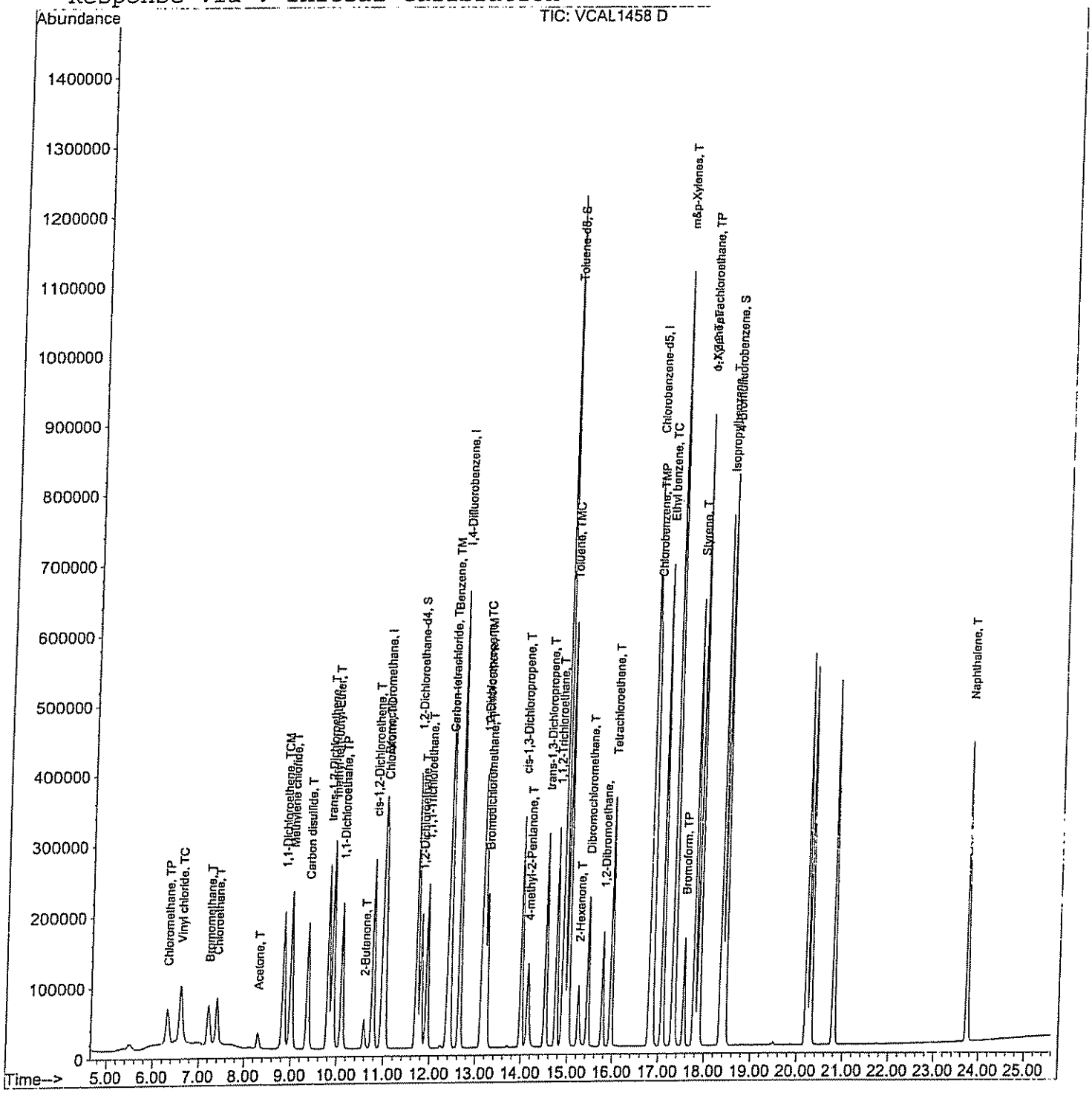
Data File : C:\HPCHEM\1\DATA\VCAL1458.D
Acq On : 22 Dec 2004 22:32
Sample : 50UG/L TCL/PAUST/DCB CCAL
Misc : WATER

Vial: 15
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:55 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

MWB-4

Data File : C:\HPCHEM\1\DATA\VBLK1454.D
Acq On : 23 Dec 2004 00:09
Sample : WATER METHOD BLK
Misc : WATER

Vial: 18
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 9:38 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	10.98	128	166356	50.00	ug/L		0.07
18) 1,4-Difluorobenzene	12.64	114	879115	50.00	ug/L		0.06
31) Chlorobenzene-d5	16.82	117	803149	50.00	ug/L		0.06
System Monitoring Compounds							
16) 1,2-Dichloroethane-d4	11.71	65	210375	51.60	ug/L		0.06
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.20%				
32) Toluene-d8	14.91	98	661537	50.50	ug/L		0.06
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.00%				
43) 4-Bromofluorobenzene	18.44	95	242974	48.92	ug/L		0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.84%				
Target Compounds							Qvalue
2) Chloromethane	6.29	50	221	0.05	ug/L	#	85
4) Bromomethane	7.10	94	273	0.09	ug/L		92
6) 1,1-Dichloroethene	8.83	96	412	0.11	ug/L	#	38
7) Carbon disulfide	9.34	76	360	0.03	ug/L		100
8) Methylene chloride	9.00	84	551	0.12	ug/L	#	78
9) Acetone	8.35	43	2830	2.21	ug/L		95
13) cis-1,2-Dichloroethene	10.77	96	426	0.08	ug/L	#	56
15) 2-Butanone	10.66	43	2963	1.48	ug/L		88
21) Benzene	12.43	78	1023	0.06	ug/L		88
22) Trichloroethene	13.18	130	2812	0.49	ug/L		98
27) 1,1,2-Trichloroethane	14.92	97	19810	5.43	ug/L	#	50
33) Toluene	15.01	92	1316	0.14	ug/L	#	78
37) Ethyl benzene	16.81	91	1255	0.07	ug/L	#	86
38) Chlorobenzene	16.86	112	1534	0.13	ug/L	#	74
45) Naphthalene	23.75	128	878	0.06	ug/L	#	97

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

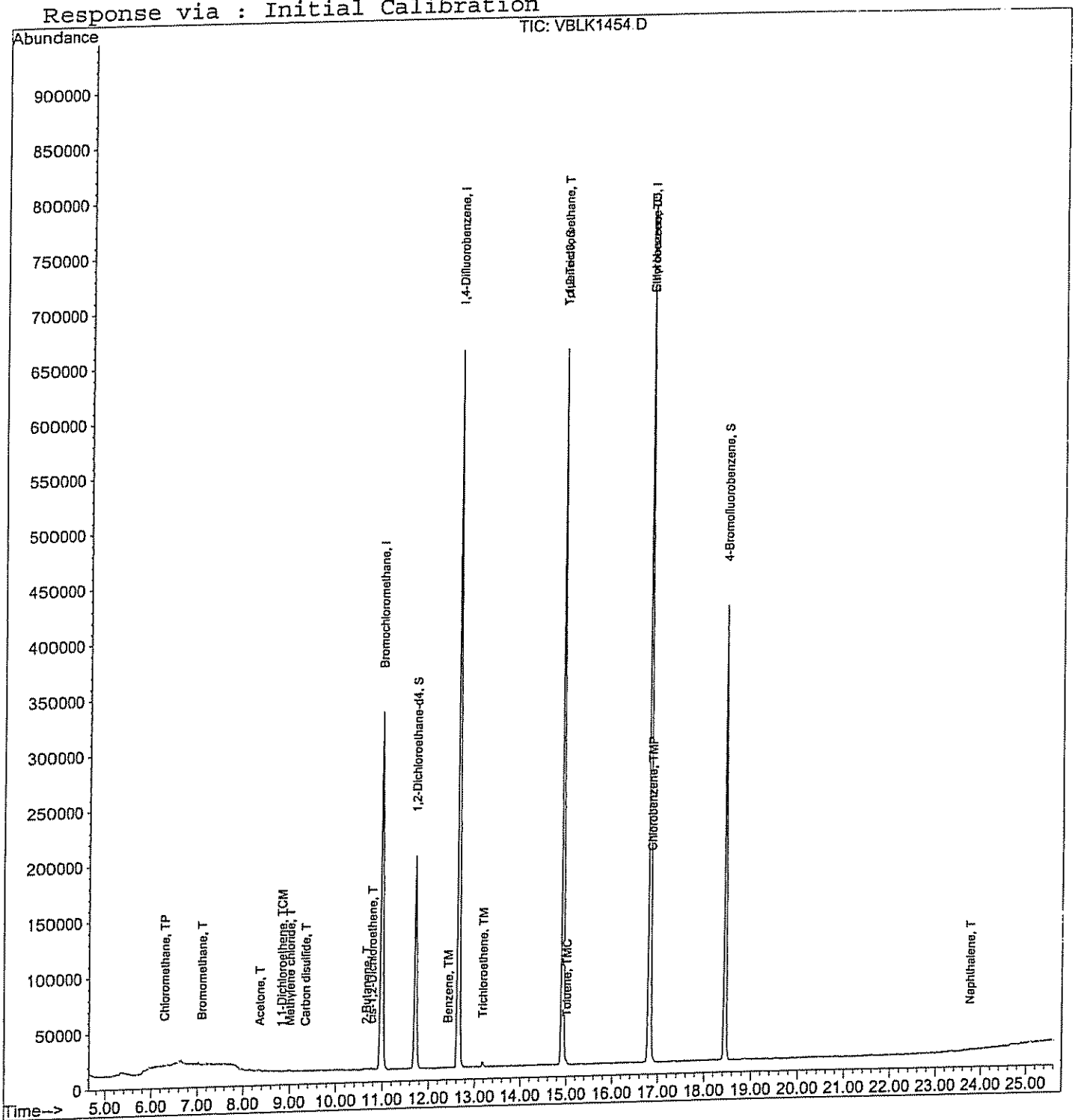
Data File : C:\HPCHEM\1\DATA\VBLK1454.D
Acq On : 23 Dec 2004 00:09
Sample : WATER METHOD BLK
Misc : WATER

Vial: 18
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 9:38 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\LCSW1434.D
Acq On : 22 Dec 2004 23:05
Sample : 50UG/L TCL LCS
Misc : WATER
Matrix : WATER
Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Multiple Level Calibration

		Compound Name	Conc	Added	Recv(%)	QC Range	Q
6)	T	1,1-Dichloroethene	29.84	50.00	59.68	54 to 121%	[ ]
21)	T	Benzene	43.20	50.00	86.40	80 to 118%	[ ]
22)	T	Trichloroethene	32.70	50.00	65.40	67 to 118%	[*]
33)	T	Toluene	44.44	50.00	88.88	73 to 124%	[ ]
38)	T	Chlorobenzene	44.92	50.00	89.84	80 to 117%	[ ]

* = out of control limits

Data File : C:\HPCHEM\1\DATA\LCSW1434.D
Acq On : 22 Dec 2004 23:05
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:56 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1
IS QA File : File name for IS QA unknown

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane	10.97	128	168932	50.00	ug/L	0.05 NA%
18) 1,4-Difluorobenzene	12.63	114	888103	50.00	ug/L	0.05 NA%
31) Chlorobenzene-d5	16.80	117	798997	50.00	ug/L	0.05 NA%
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.70	65	214888	51.91	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.82%			
32) Toluene-d8	14.90	98	665511	51.07	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.14%			
43) 4-Bromofluorobenzene	18.44	95	243214	49.22	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.44%			
Target Compounds						Qvalue
2) Chloromethane	6.31	50	707	0.14	ug/L	97
3) Vinyl chloride	6.58	62	328	0.07	ug/L #	86
4) Bromomethane	7.20	94	4034	1.32	ug/L	96
5) Chloroethane	7.38	64	194	0.06	ug/L #	82
6) 1,1-Dichloroethene	8.82	96	112637	29.84	ug/L	94
7) Carbon disulfide	9.36	76	3763	0.27	ug/L	100
8) Methylene chloride	9.00	84	1325	0.28	ug/L #	82
9) Acetone	8.29	43	2055	1.58	ug/L	88
10) trans-1,2-Dichloroethene	9.81	96	896	0.20	ug/L #	55
13) cis-1,2-Dichloroethene	10.77	96	1288	0.25	ug/L	88
15) 2-Butanone	10.59	43	3951	1.95	ug/L	100
21) Benzene	12.42	78	765571	43.20	ug/L	99
22) Trichloroethene	13.17	130	188995	32.70	ug/L	98
24) Bromodichloromethane	13.17	83	1822	0.35	ug/L #	1
26) trans-1,3-Dichloropropene	14.52	75	112	0.02	ug/L #	77
27) 1,1,2-Trichloroethane	14.91	97	20791	5.64	ug/L #	50
33) Toluene	14.99	92	425955	44.44	ug/L	99
36) 2-Hexanone	14.99	43	7274	3.14	ug/L #	68

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

MWB-4

Data File : C:\HPCHEM\1\DATA\LCSW1434.D
Acq On : 22 Dec 2004 23:05
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:56 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) Ethyl benzene	17.08	91	1473	0.08	ug/L	#	86
38) Chlorobenzene	16.85	112	521614	44.92	ug/L		99
39) m&p-Xylenes	17.32	106	1169	0.17	ug/L	#	67
41) Styrene	17.81	104	699	0.06	ug/L		86
42) Isopropylbenzene	18.35	105	991	0.06	ug/L	#	88
44) 1,1,2,2-Tetrachloroethane	17.87	83	408	0.08	ug/L	#	67
45) Naphthalene	23.75	128	12464	0.87	ug/L		98

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

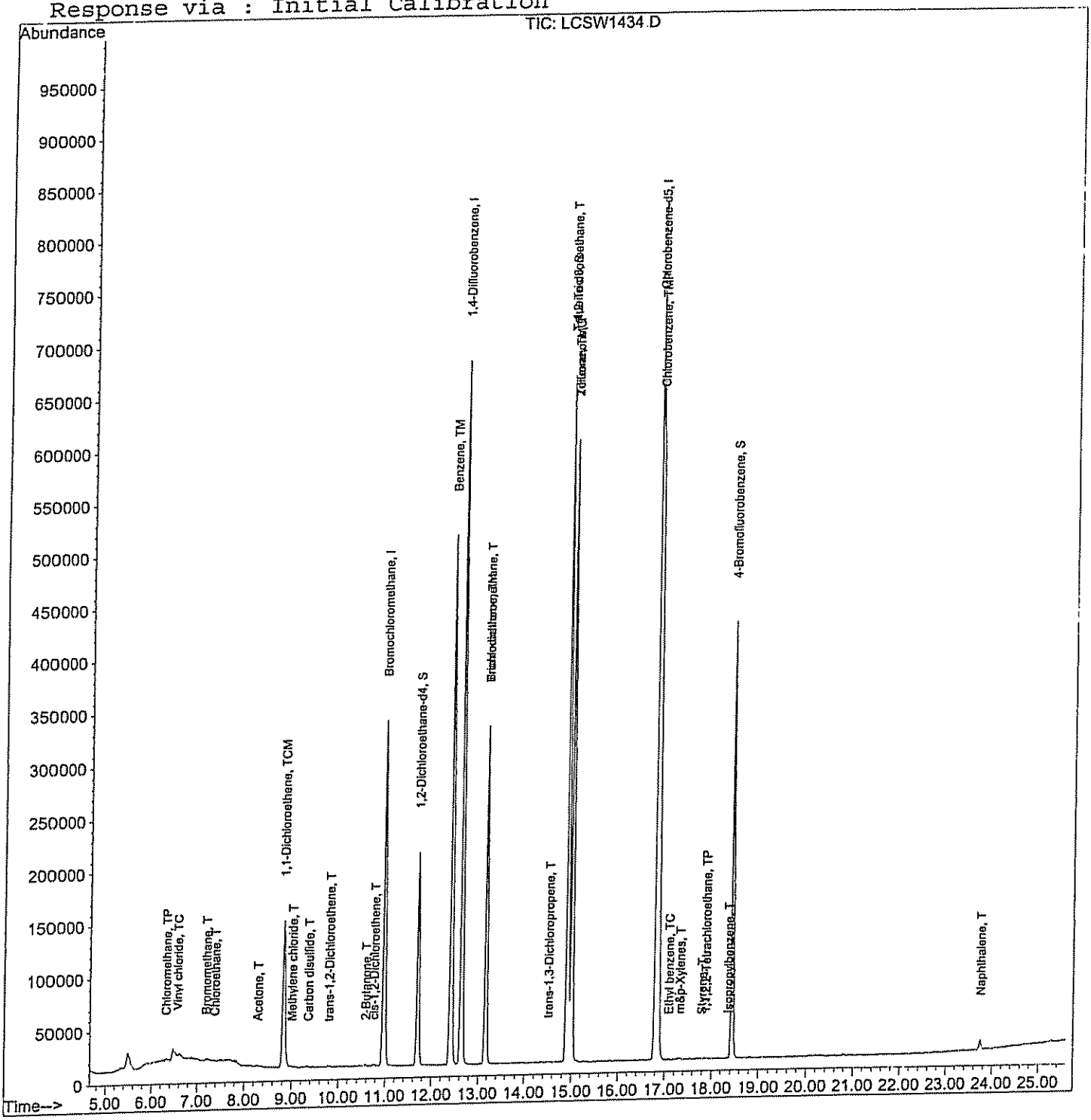
Data File : C:\HPCHEM\1\DATA\LCSW1434.D
Acq On : 22 Dec 2004 23:05
Sample : 50UG/L TCL LCS
Misc : WATER

Vial: 16
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:56 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\LCSW1435.D
Acq On : 22 Dec 2004 23:37
Sample : 50UG/L TCL LCS DUP
Misc : WATER
Matrix : WATER
Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Tue Dec 14 13:25:33 2004
Response via : Multiple Level Calibration

		Compound Name	Conc	Added	Recv(%)	QC Range	Q
6)	T	1,1-Dichloroethene	29.84	50.00	59.68	54 to 121%	[ ]
21)	T	Benzene	42.60	50.00	85.19	80 to 118%	[ ]
22)	T	Trichloroethene	32.16	50.00	64.33	67 to 118%	[*]
33)	T	Toluene	44.08	50.00	88.16	73 to 124%	[ ]
38)	T	Chlorobenzene	44.34	50.00	88.69	80 to 117%	[ ]

* = out of control limits

Data File : C:\HPCHEM\1\DATA\LCSW1435.D
Acq On : 22 Dec 2004 23:37
Sample : 50UG/L TCL LCS DUP
Misc : WATER

Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:58 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1
IS QA File : C:\HPCHEM\1\DATA\VSTD1965.D (15 Dec 2004 14:57)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Bromochloromethane	10.97	128	169656	50.00	ug/L	0.06 87.87%
18) 1,4-Difluorobenzene	12.64	114	888940	50.00	ug/L	0.06 89.95%
31) Chlorobenzene-d5	16.81	117	794557	50.00	ug/L	0.05 85.47%
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.70	65	216251	52.01	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.02%			
32) Toluene-d8	14.91	98	663986	51.23	ug/L	0.06
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.46%			
43) 4-Bromofluorobenzene	18.44	95	240388	48.92	ug/L	0.05
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.84%			
Target Compounds						Qvalue
2) Chloromethane	6.36	50	143	0.03	ug/L	87
4) Bromomethane	7.19	94	1108	0.36	ug/L #	83
6) 1,1-Dichloroethene	8.83	96	113105	29.84	ug/L	93
7) Carbon disulfide	9.32	76	261	0.02	ug/L	100
8) Methylene chloride	8.98	84	1033	0.22	ug/L #	64
9) Acetone	8.29	43	2009	1.54	ug/L	95
10) trans-1,2-Dichloroethene	9.82	96	310	0.07	ug/L #	33
13) cis-1,2-Dichloroethene	10.76	96	999	0.19	ug/L #	69
15) 2-Butanone	10.58	43	3446	1.69	ug/L	98
21) Benzene	12.41	78	755622	42.60	ug/L	99
22) Trichloroethene	13.17	130	186080	32.16	ug/L	96
24) Bromodichloromethane	13.17	83	2111	0.41	ug/L #	1
27) 1,1,2-Trichloroethane	14.92	97	21113	5.73	ug/L #	50
33) Toluene	15.00	92	420180	44.08	ug/L	100
36) 2-Hexanone	15.00	43	6806	2.95	ug/L #	68
37) Ethyl benzene	17.08	91	552	0.03	ug/L #	86
38) Chlorobenzene	16.86	112	512062	44.34	ug/L	100
39) m&p-Xylenes	17.34	106	299	0.04	ug/L #	54

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

MWB-4

Data File : C:\HPCHEM\1\DATA\LCSW1435.D
Acq On : 22 Dec 2004 23:37
Sample : 50UG/L TCL LCS DUP
Misc : WATER

Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:58 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45) Naphthalene	23.75	128	1870	0.13	ug/L	#	97

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

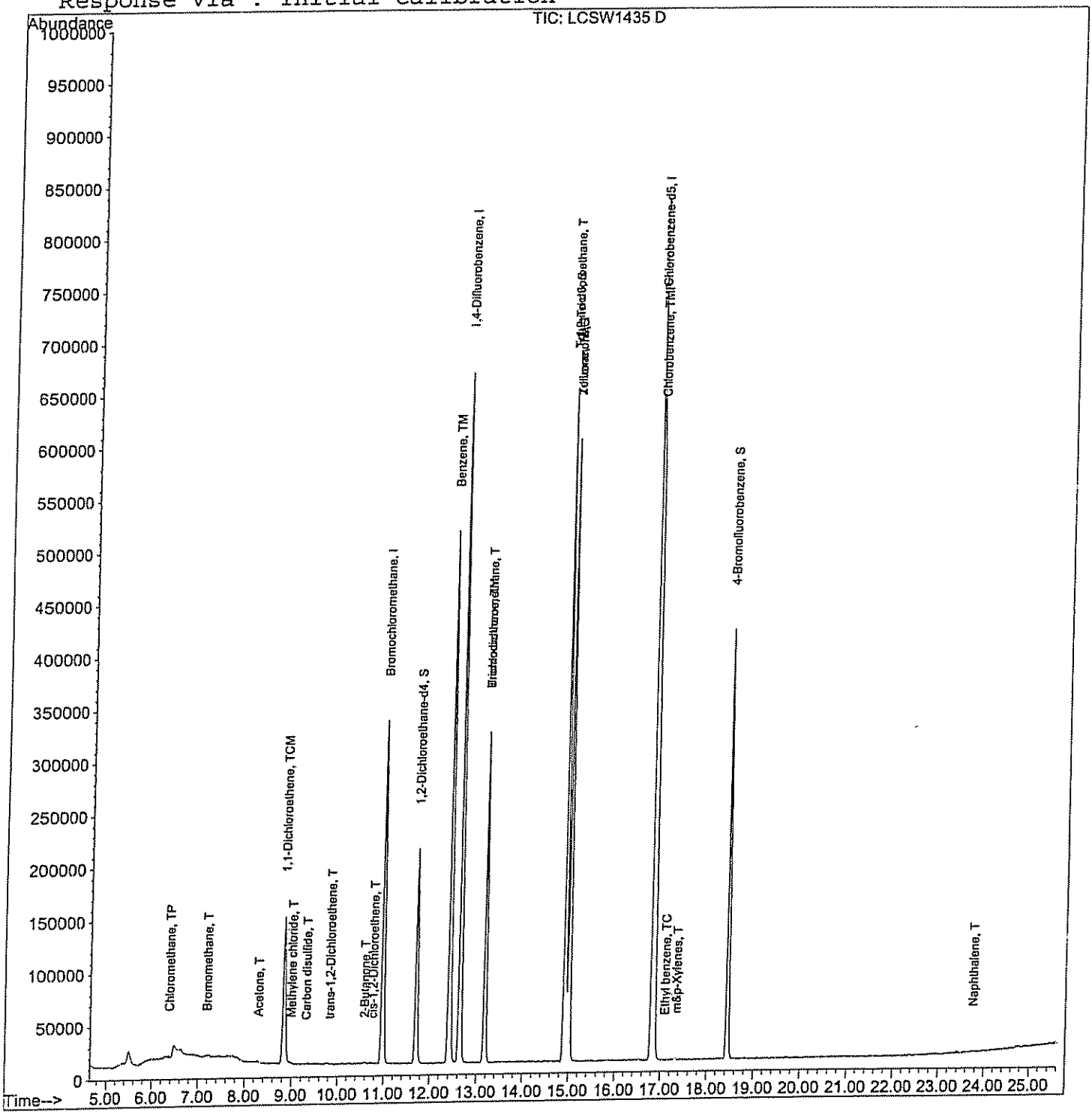
Data File : C:\HPCHEM\1\DATA\LCSW1435.D
Acq On : 22 Dec 2004 23:37
Sample : 50UG/L TCL LCS DUP
Misc : WATER

Vial: 17
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:58 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

MWB-4

Data File : C:\HPCHEM\1\DATA\VSA13220.D
Acq On : 23 Dec 2004 2:51
Sample : P0412041-01A DF200 RE
Misc : WATER

Vial: 23
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:31 2004 Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.99	128	158521	50.00	ug/L	0.08
18) 1,4-Difluorobenzene	12.65	114	858963	50.00	ug/L	0.08
31) Chlorobenzene-d5	16.83	117	787170	50.00	ug/L	0.07
System Monitoring Compounds						
16) 1,2-Dichloroethane-d4	11.72	65	207574	53.43	ug/L	0.07
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.86%			
32) Toluene-d8	14.93	98	651123	50.71	ug/L	0.07
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.42%			
43) 4-Bromofluorobenzene	18.46	95	241212	49.55	ug/L	0.07
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.10%			
Target Compounds						Qvalue
2) Chloromethane	6.35	50	216	0.05	ug/L #	85
3) Vinyl chloride	6.61	62	7193	1.56	ug/L	99
4) Bromomethane	7.01	94	155	0.05	ug/L	92
6) 1,1-Dichloroethene	8.86	96	16009	4.52	ug/L	96
7) Carbon disulfide	9.37	76	207	0.02	ug/L	100
8) Methylene chloride	9.00	84	12297	2.74	ug/L	96
9) Acetone	8.35	43	5229	4.29	ug/L	89
10) trans-1,2-Dichloroethene	9.83	96	7341	1.73	ug/L	92
12) 1,1-Dichloroethane	10.13	63	23155	3.26	ug/L	99
13) cis-1,2-Dichloroethene	10.78	96	510249	103.43	ug/L ✓	92
14) Chloroform	11.04	83	219	0.03	ug/L #	66
15) 2-Butanone	10.65	43	2471	1.30	ug/L	88
17) 1,2-Dichloroethane	11.82	62	2133	0.48	ug/L	95
20) 1,1,1-Trichloroethane	11.95	97	45027	9.15	ug/L	97
21) Benzene	12.45	78	2744	0.16	ug/L ✓	94
22) Trichloroethene	13.20	130	855330	153.00	ug/L ✓	97
24) Bromodichloromethane	13.19	83	8787	1.75	ug/L #	1
27) 1,1,2-Trichloroethane	14.94	97	19934	5.60	ug/L #	50
33) Toluene	15.02	92	66284	7.02	ug/L	98
34) 4-methyl-2-Pentanone	14.22	43	622	0.19	ug/L #	77
36) 2-Hexanone	15.38	43	186	0.08	ug/L #	68
37) Ethyl benzene	17.10	91	6938	0.40	ug/L	99
39) m&p-Xylenes	17.34	106	5606	0.80	ug/L	95

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

VSA13220.D TCL1.M Tue Dec 28 11:31:41 2004 Page 1

MWB-4

Data File : C:\HPCHEM\1\DATA\VSA13220.D
Acq On : 23 Dec 2004 2:51
Sample : P0412041-01A DF200 RE
Misc : WATER

Vial: 23
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:31 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
40) o-Xylene	17.91	106	2555	0.38	ug/L		97
42) Isopropylbenzene	18.38	105	415	0.02	ug/L	#	88
45) Naphthalene	23.77	128	2026	0.14	ug/L	#	97

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

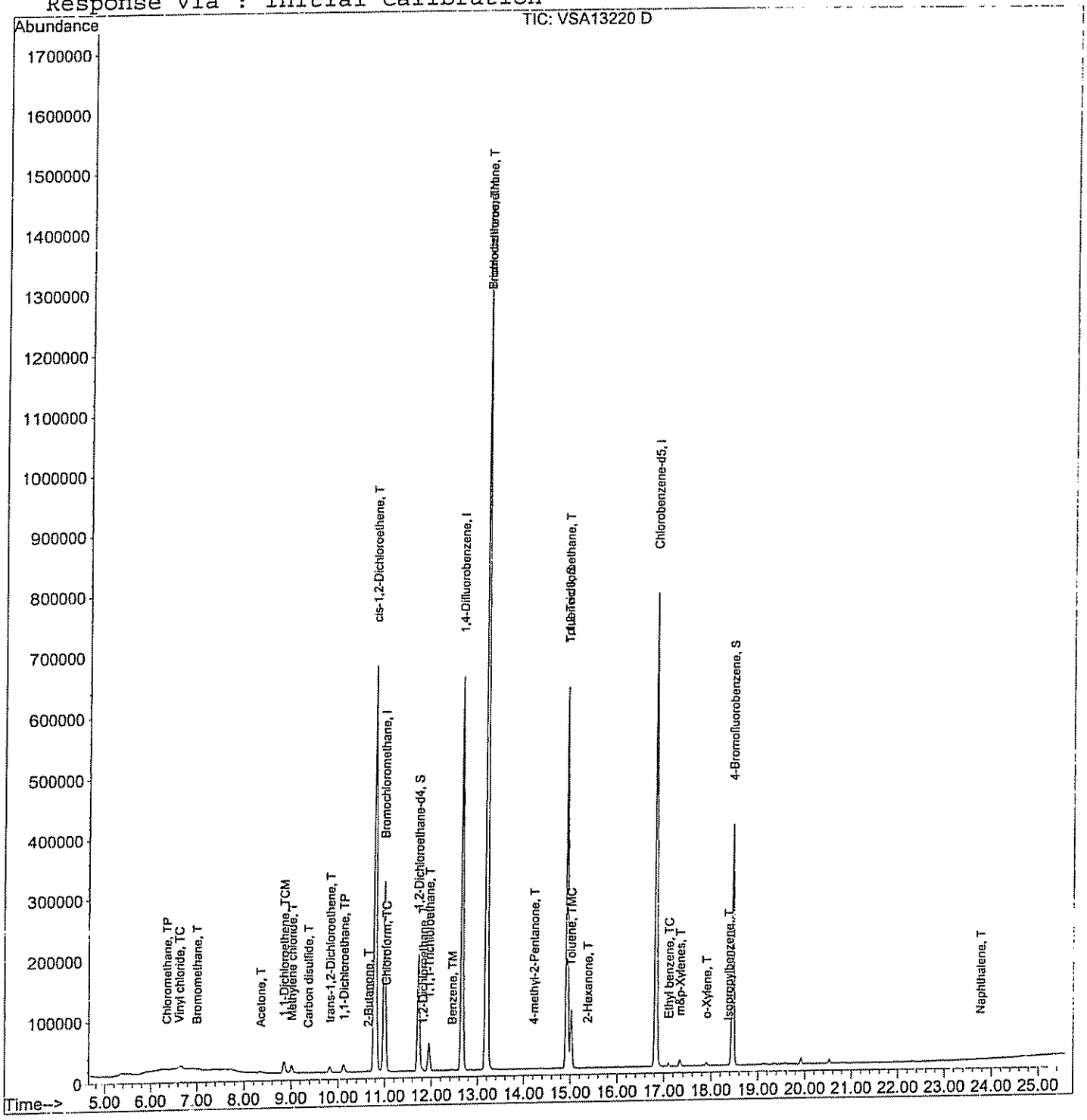
Data File : C:\HPCHEM\1\DATA\VSA13220.D
Acq On : 23 Dec 2004 2:51
Sample : P0412041-01A DF200 RE
Misc : WATER

Vial: 23
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

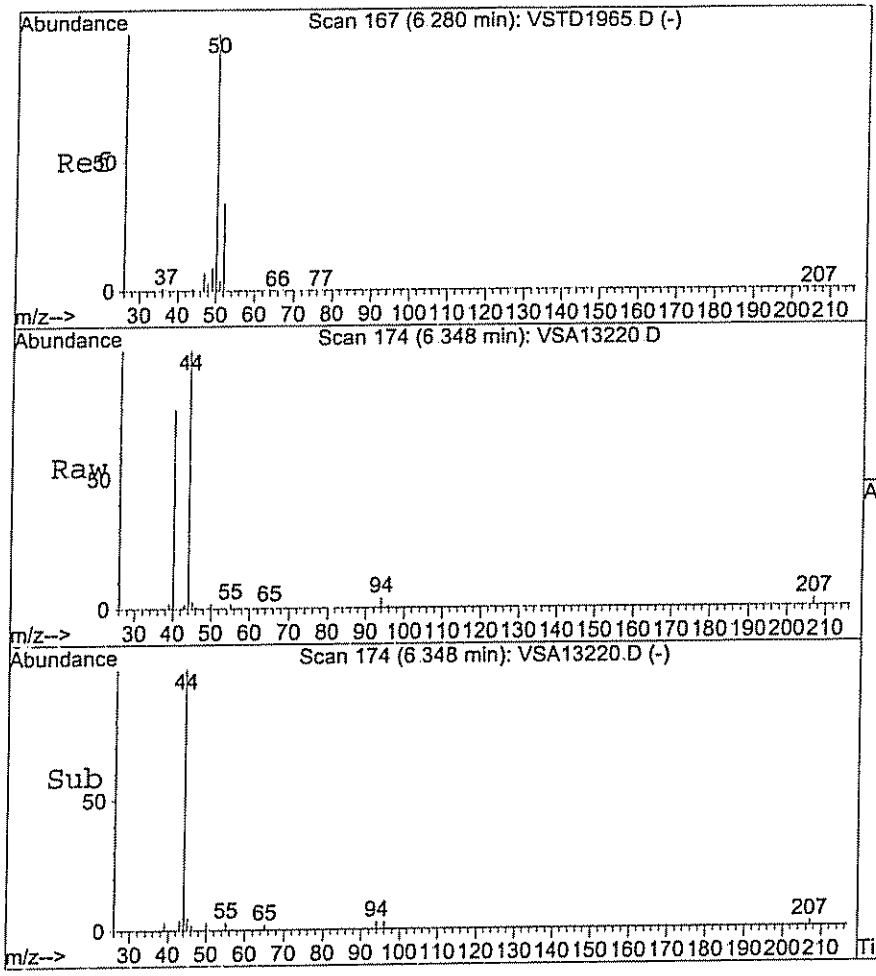
MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:31 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration



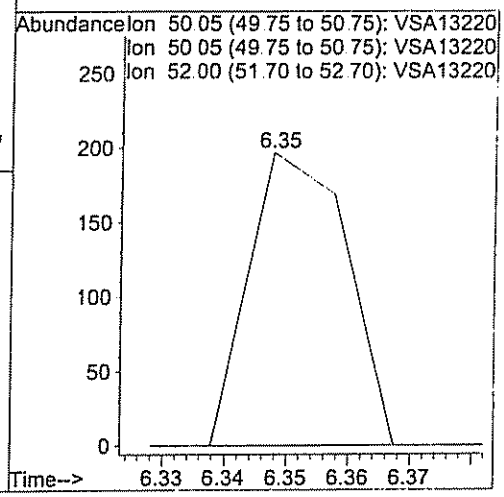
VSA13220.D TCL1.M Tue Dec 28 11:31:42 2004 Page 3

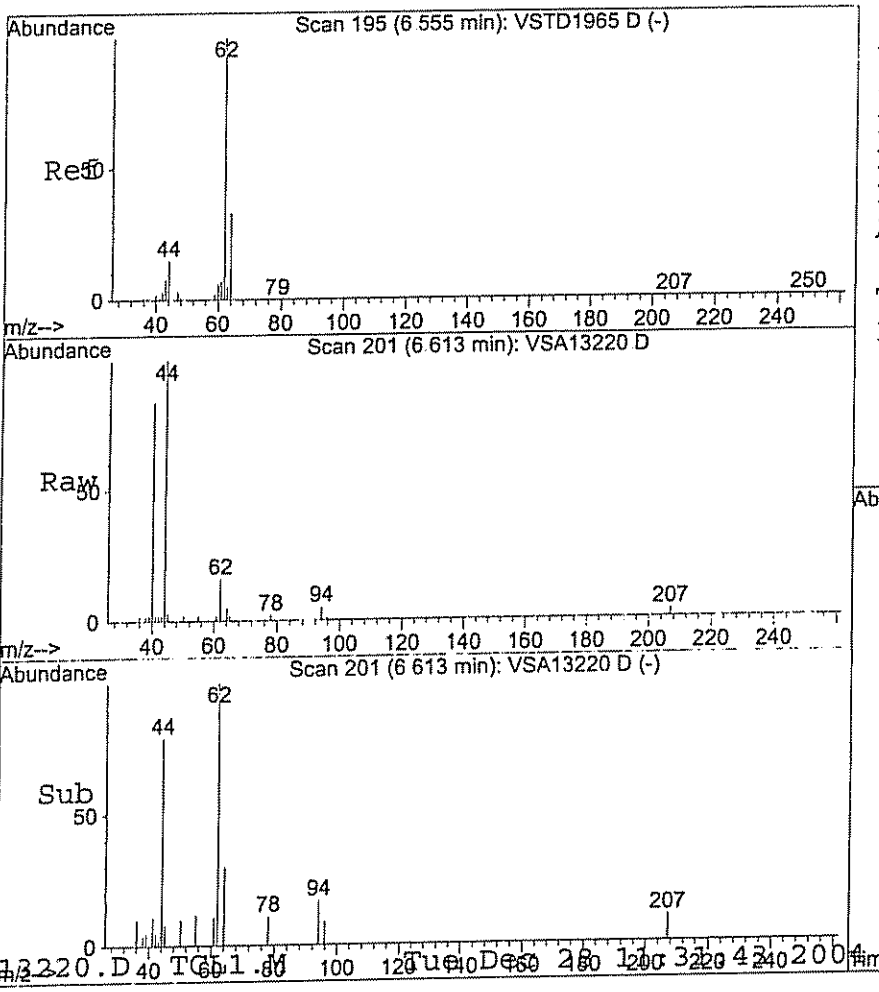


#2
Chloromethane
Concen: 0.05 ug/L
RT: 6.35 min Scan# 174
Delta R.T. 0.07 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 50 Resp: 216

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.9	63.9#

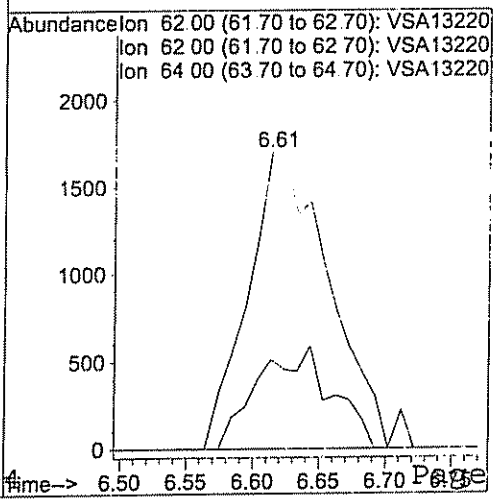


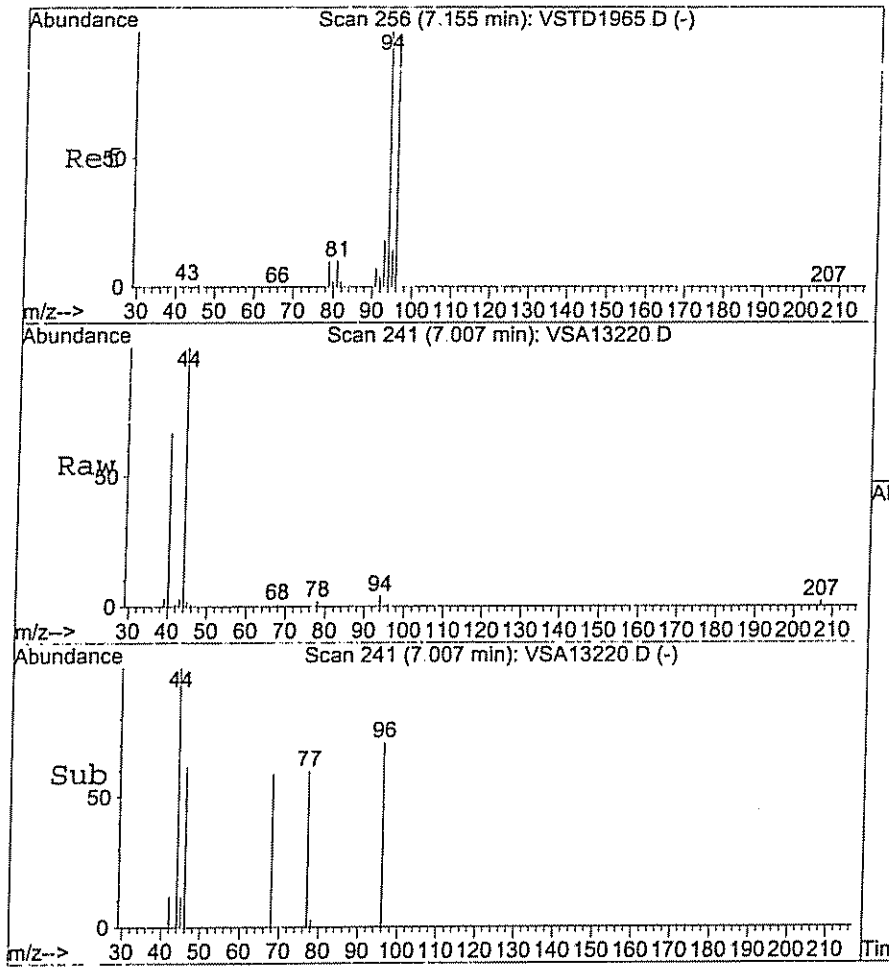


#3
Vinyl chloride
Concen: 1.56 ug/L
RT: 6.61 min Scan# 201
Delta R.T. 0.06 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 62 Resp: 7193

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	30.1	2.4	62.4

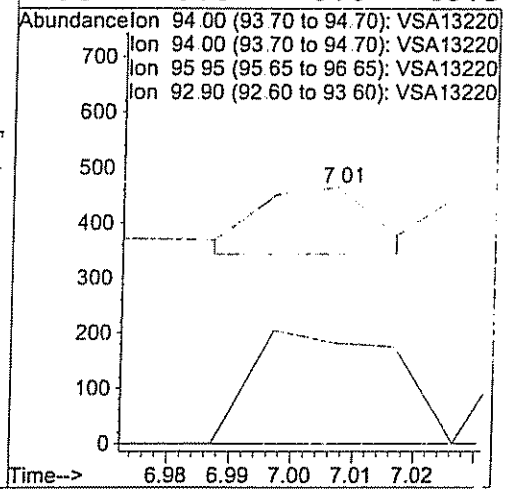


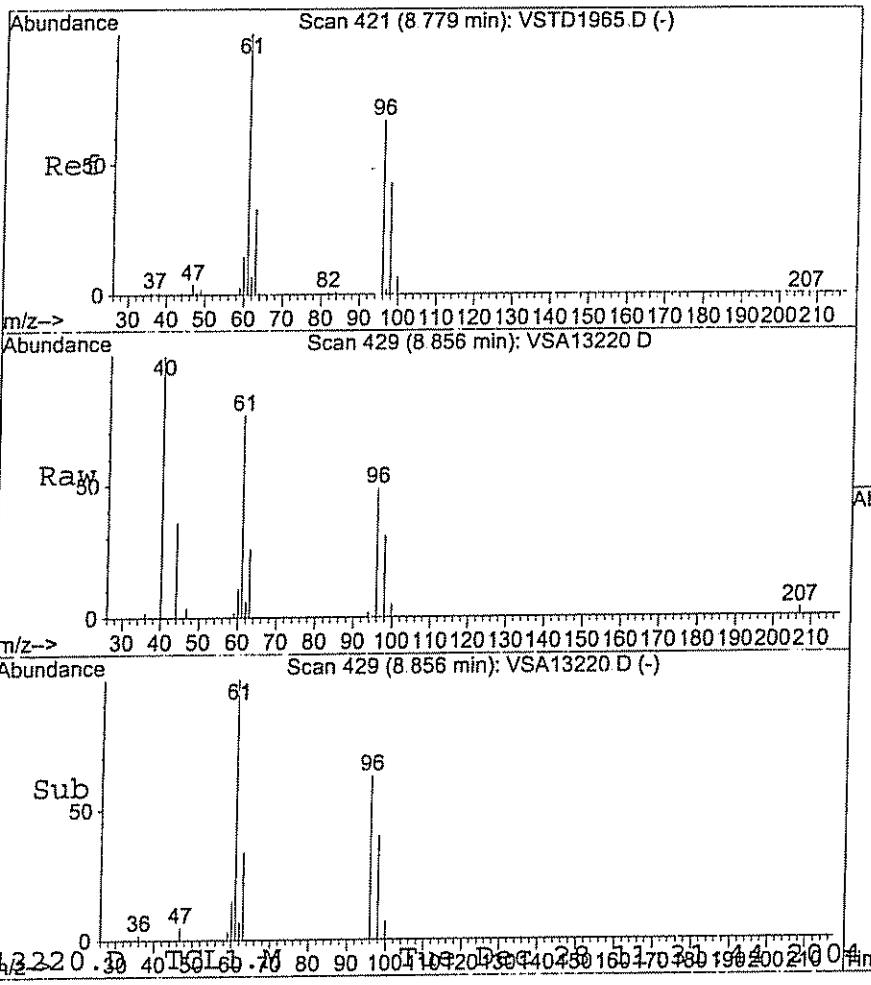


#4
Bromomethane
Concen: 0.05 ug/L
RT: 7.01 min Scan# 241
Delta R.T. -0.15 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 94 Resp: 155

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	102.7	63.6	123.6
93	0.0	0.0	48.5

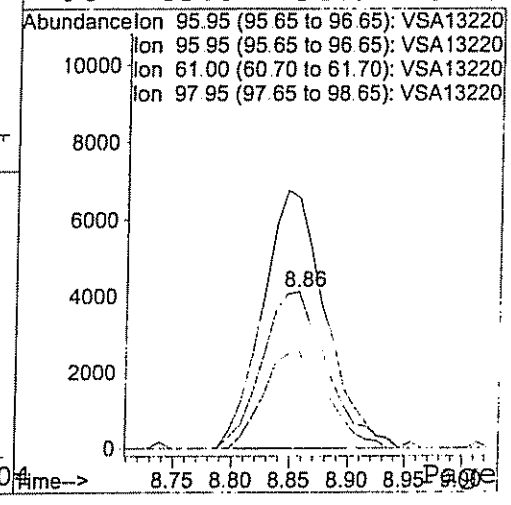


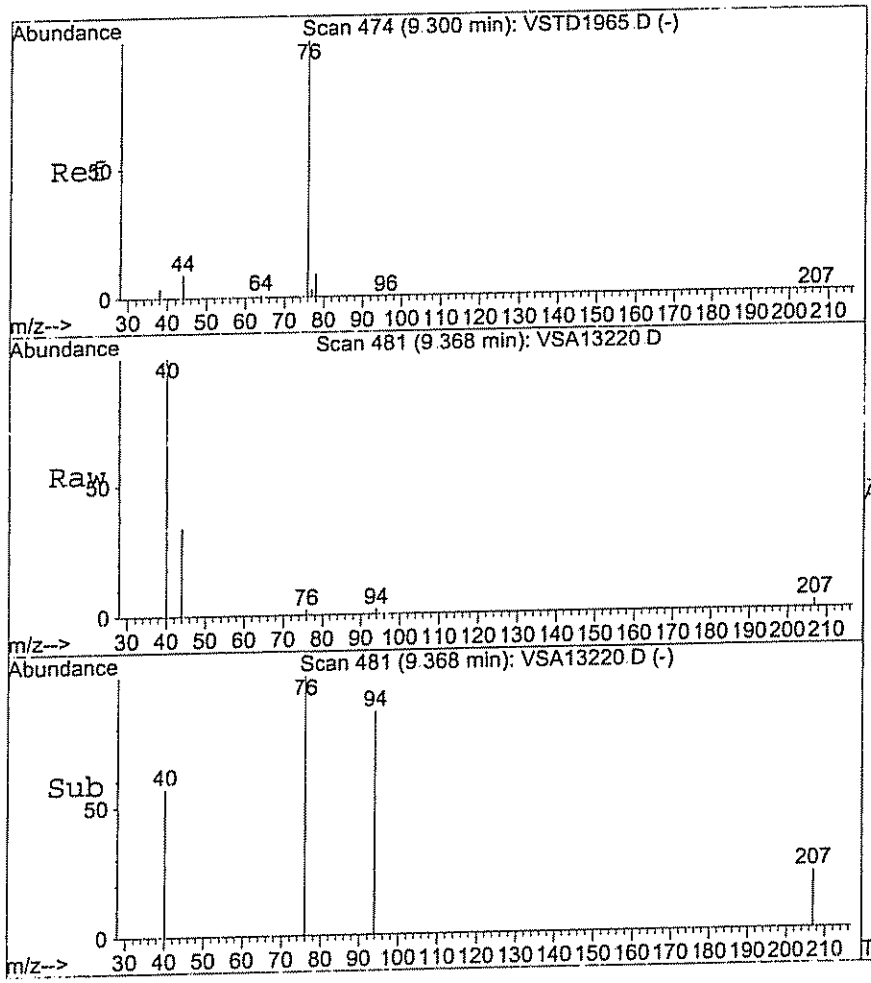


#6
1,1-Dichloroethene
Concen: 4.52 ug/L
RT: 8.86 min Scan# 429
Delta R.T. 0.08 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 96 Resp: 16009

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	159.0	118.9	178.9
98	63.8	34.9	94.9

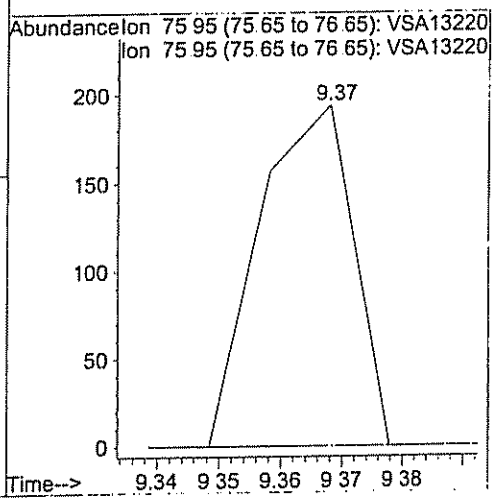


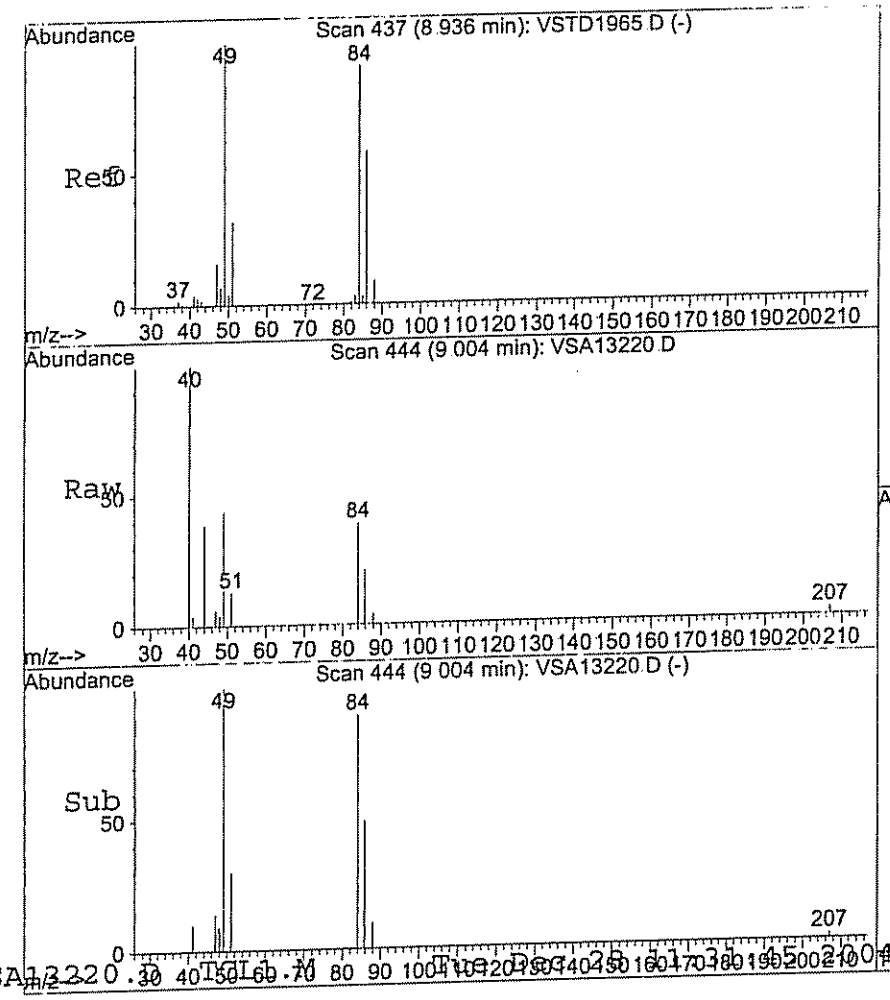


#7
Carbon disulfide
Concen: 0.02 ug/L
RT: 9.37 min Scan# 481
Delta R.T. 0.07 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 76 Resp: 207

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

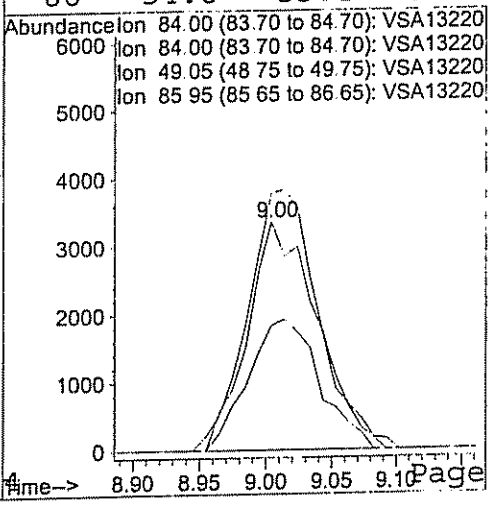


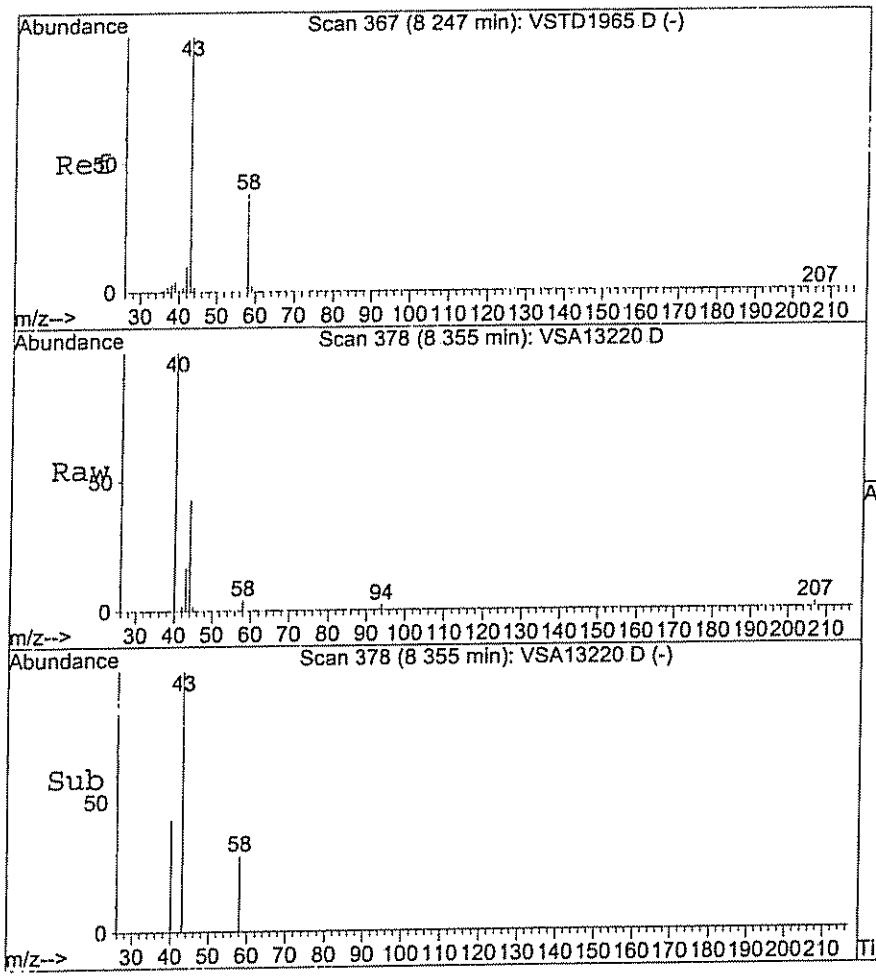


#8
Methylene chloride
Concen: 2.74 ug/L
RT: 9.00 min Scan# 444
Delta R.T. 0.07 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 84 Resp: 12297

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	107.1	80.0	140.0
86	54.6	33.4	93.4

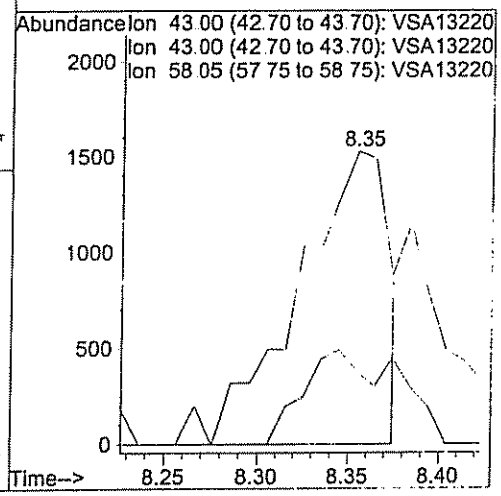


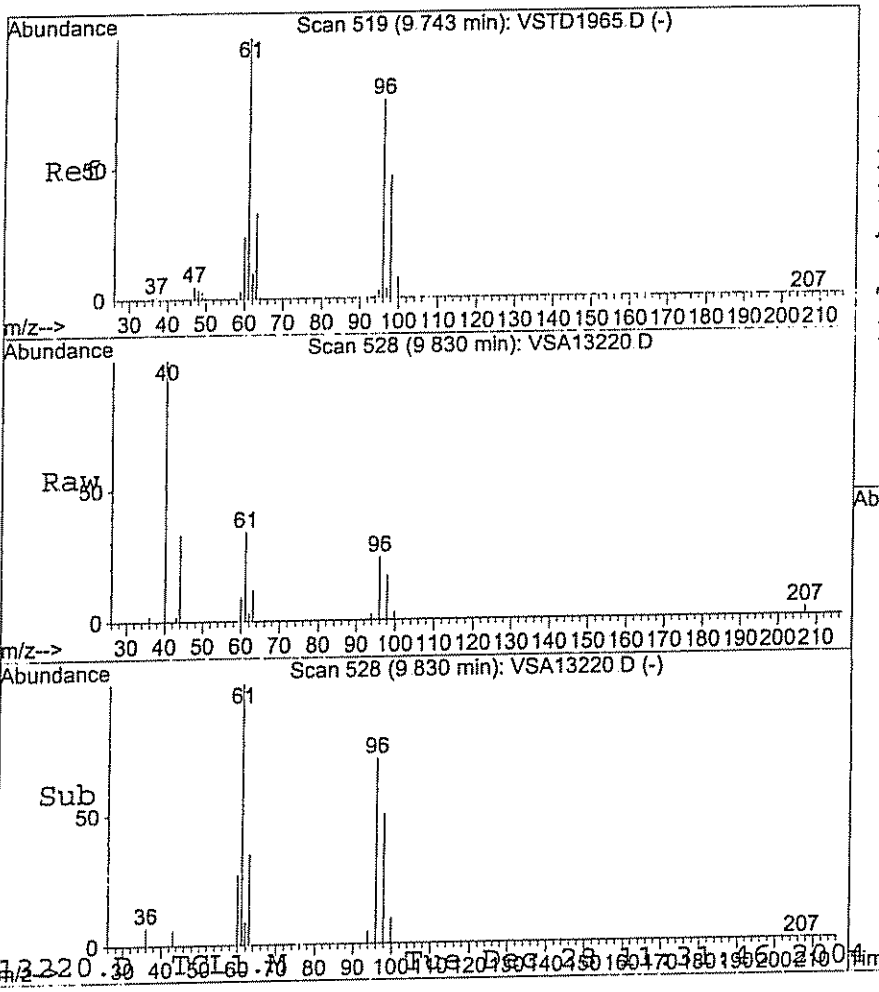


#9
Acetone
Concen: 4.29 ug/L
RT: 8.35 min Scan# 378
Delta R.T. 0.08 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 43 Resp: 5229

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	14.0	7.8	67.8

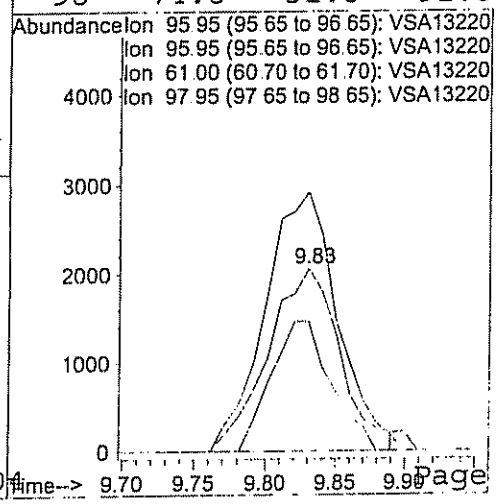


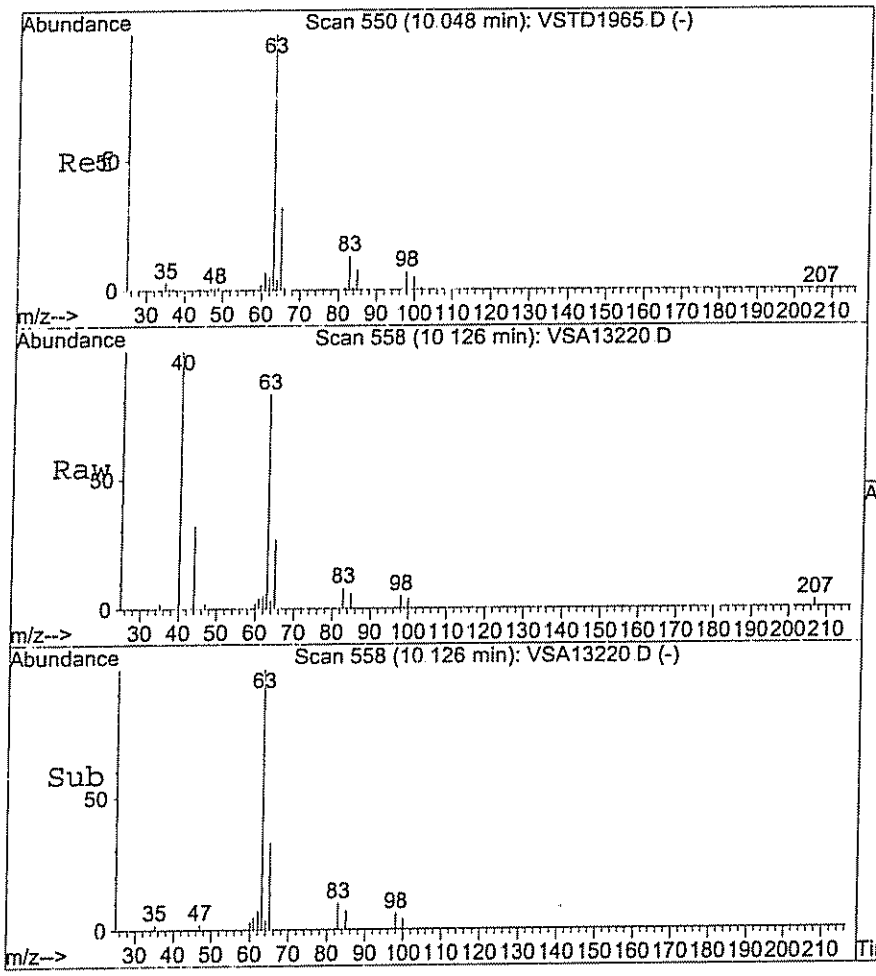


#10
trans-1,2-Dichloroethene
Concen: 1.73 ug/L
RT: 9.83 min Scan# 528
Delta R.T. 0.08 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 96 Resp: 7341

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	144.6	102.4	162.4
98	74.8	31.6	91.6

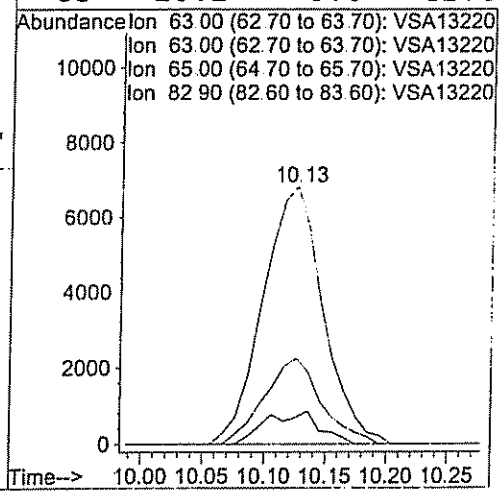


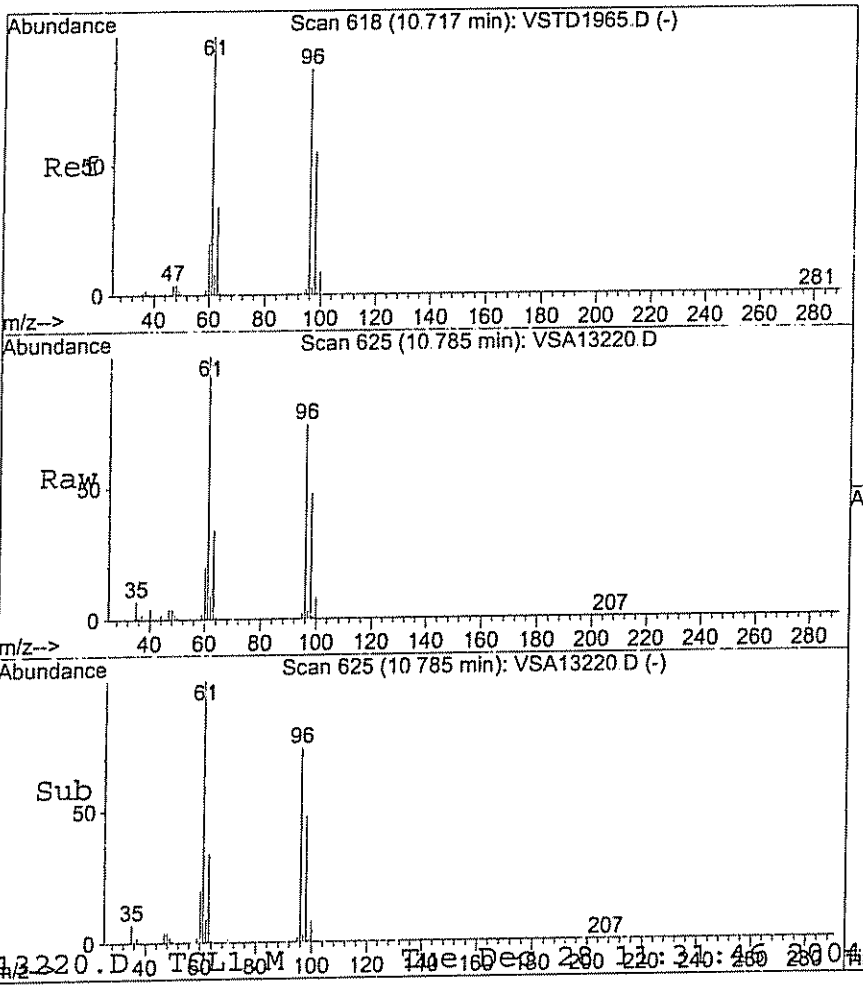


#12
1,1-Dichloroethane
Concen: 3.26 ug/L
RT: 10.13 min Scan# 558
Delta R.T. 0.08 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 63 Resp: 23155

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	32.8	2.1	62.1
83	10.2	0.0	42.6

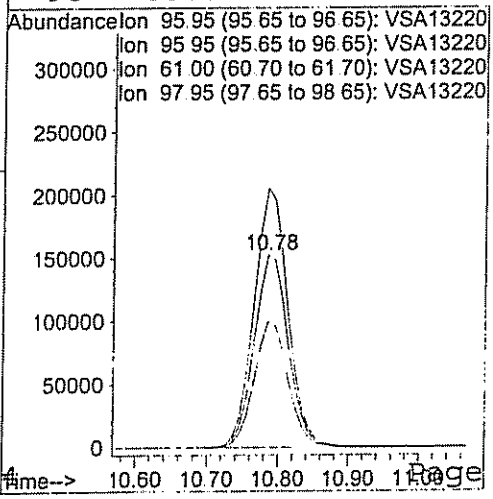


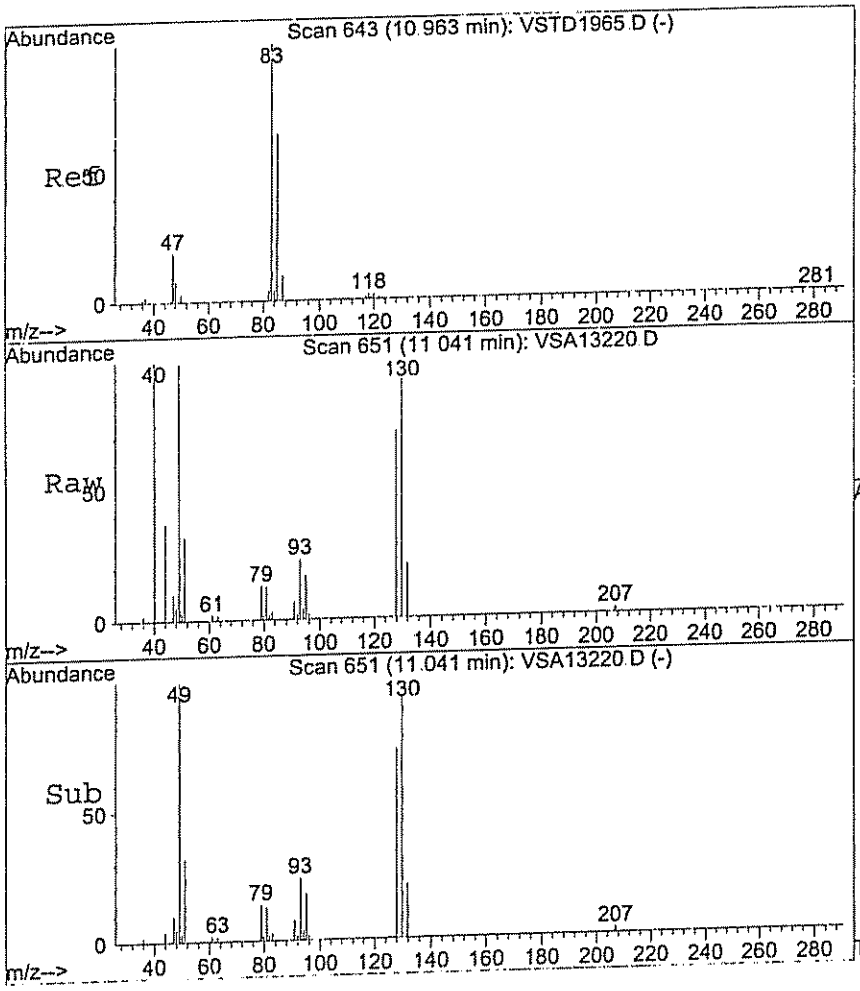


#13
cis-1,2-Dichloroethene
Concen: 103.43 ug/L
RT: 10.78 min Scan# 625
Delta R.T. 0.07 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 96 Resp: 510249

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	134.6	85.2	145.2
98	65.3	33.1	93.1

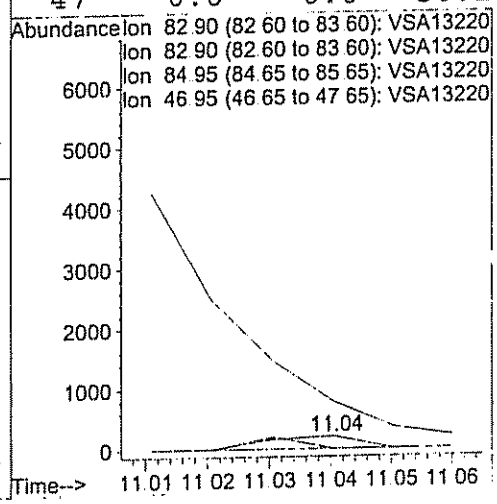


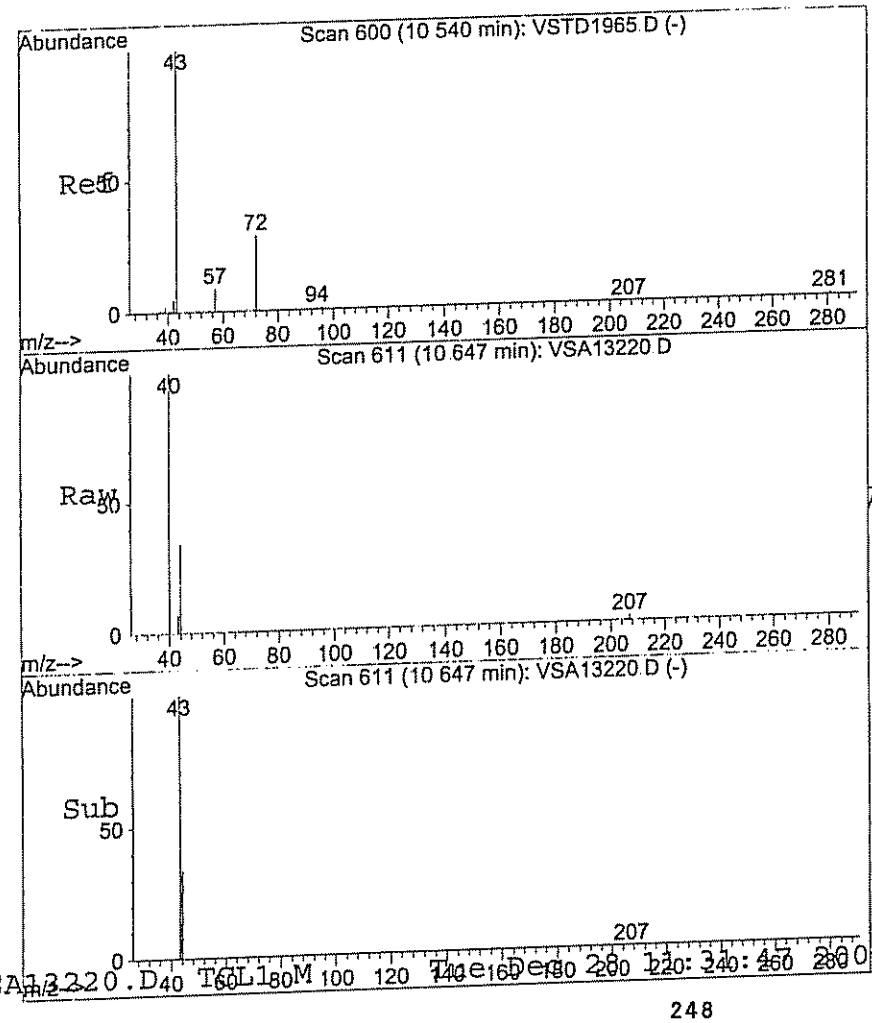


#14
Chloroform
Concen: 0.03 ug/L
RT: 11.04 min Scan# 651
Delta R.T. 0.08 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 83 Resp: 219

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	0.0	34.7	94.7#
47	0.0	0.0	50.1

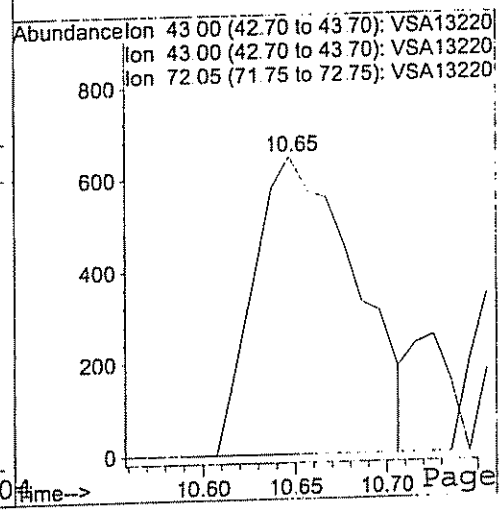


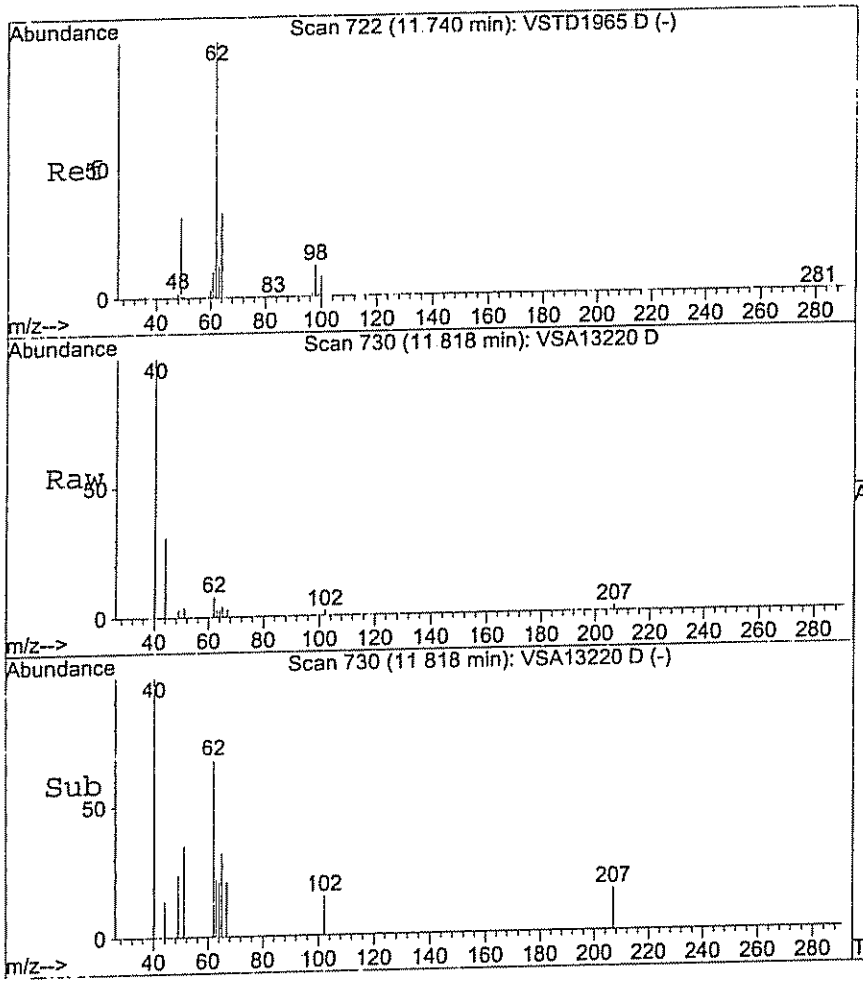


#15
2-Butanone
Concen: 1.30 ug/L
RT: 10.65 min Scan# 611
Delta R.T. 0.09 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 43 Resp: 2471

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	59.3

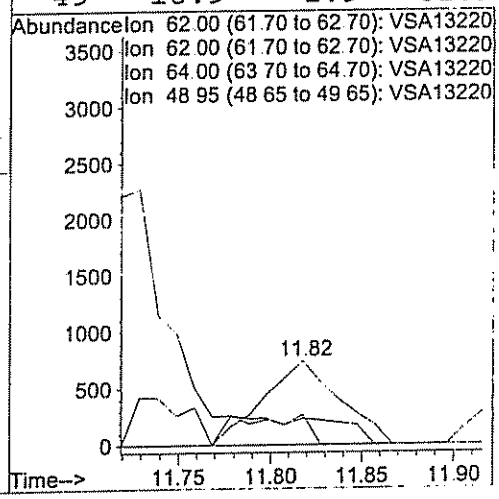


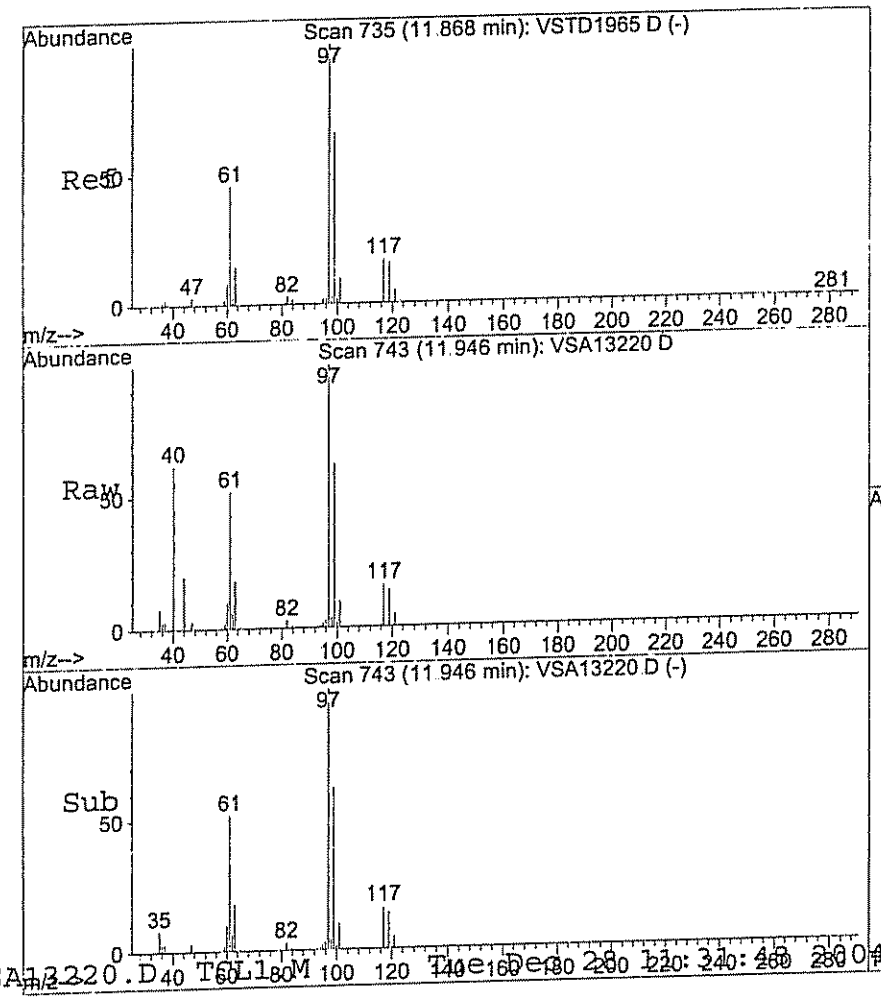


#17
1,2-Dichloroethane
Concen: 0.48 ug/L
RT: 11.82 min Scan# 730
Delta R.T. 0.07 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 62 Resp: 2133

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	31.4	2.9	62.9
49	18.9	1.9	61.9

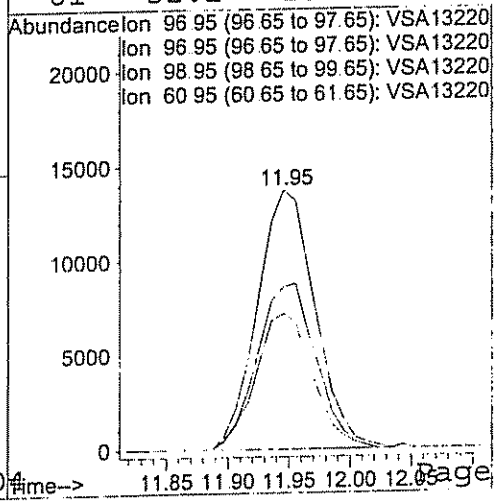


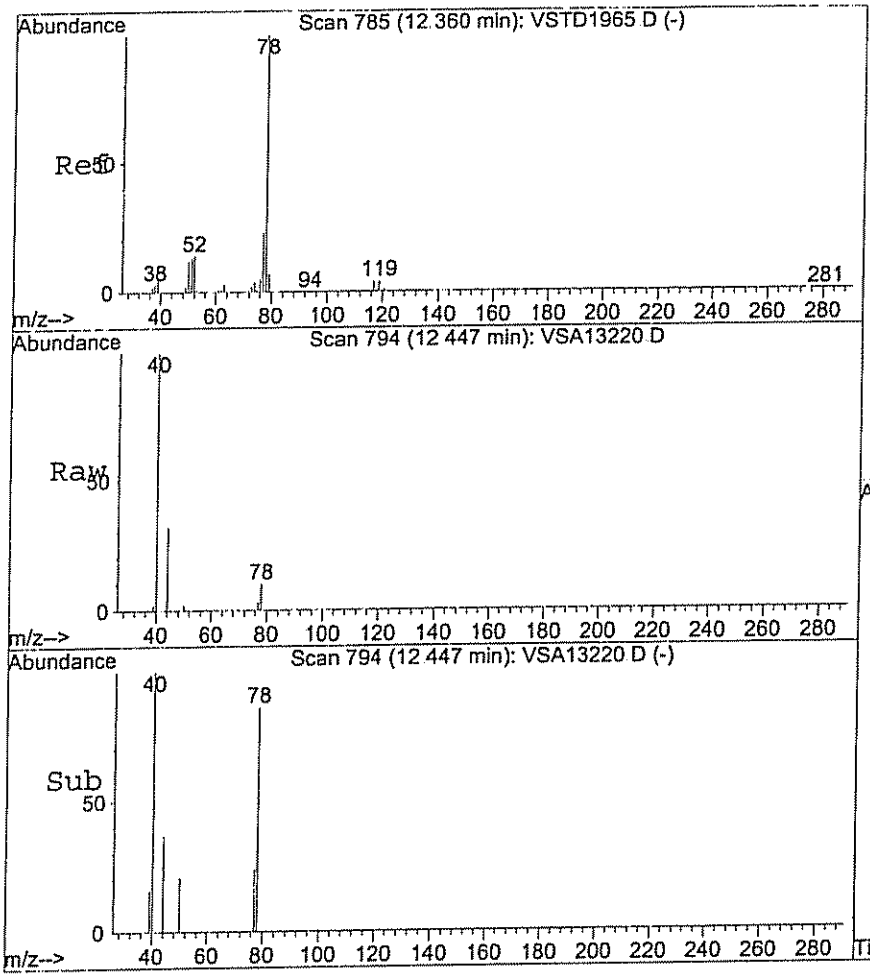


#20
1,1,1-Trichloroethane
Concen: 9.15 ug/L
RT: 11.95 min Scan# 743
Delta R.T. 0.07 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 97 Resp: 45027

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	62.3	35.6	95.6
61	52.1	16.5	76.5

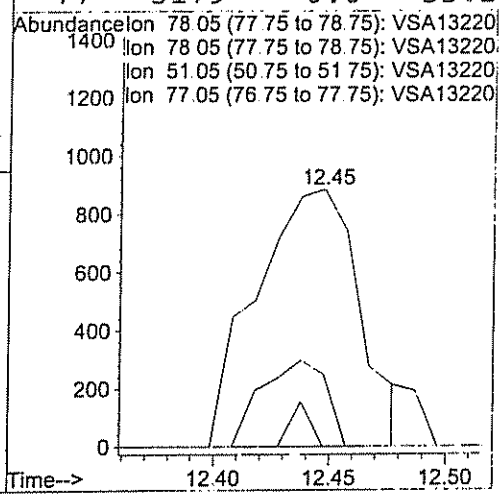


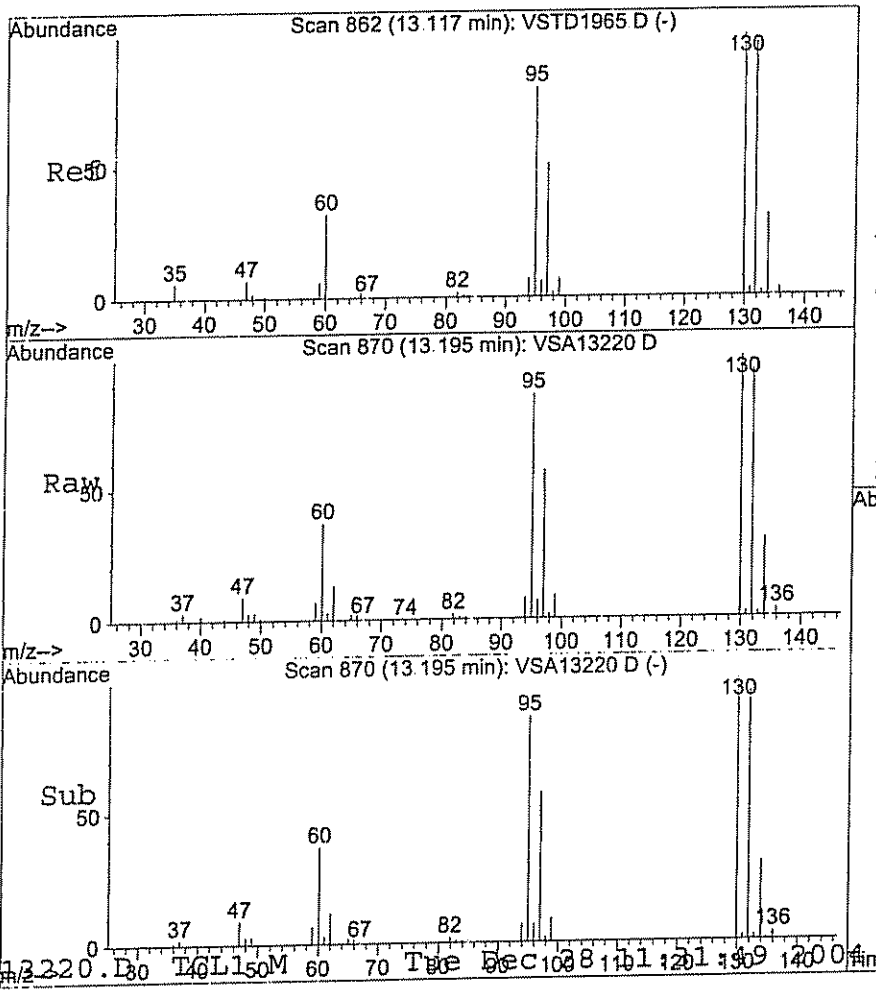


#21
Benzene
Concen: 0.16 ug/L
RT: 12.45 min Scan# 794
Delta R.T. 0.09 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 78 Resp: 2744

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	0.0	0.0	43.2
77	31.9	0.0	53.2

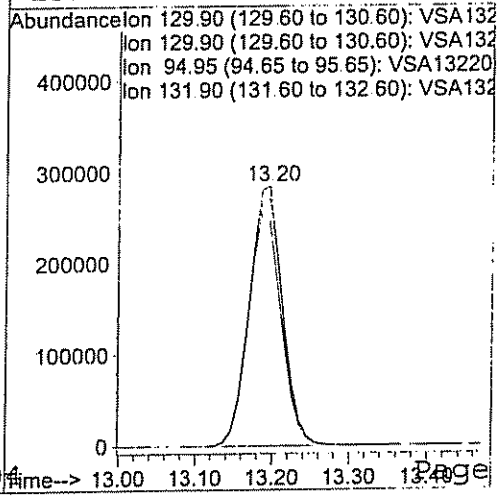


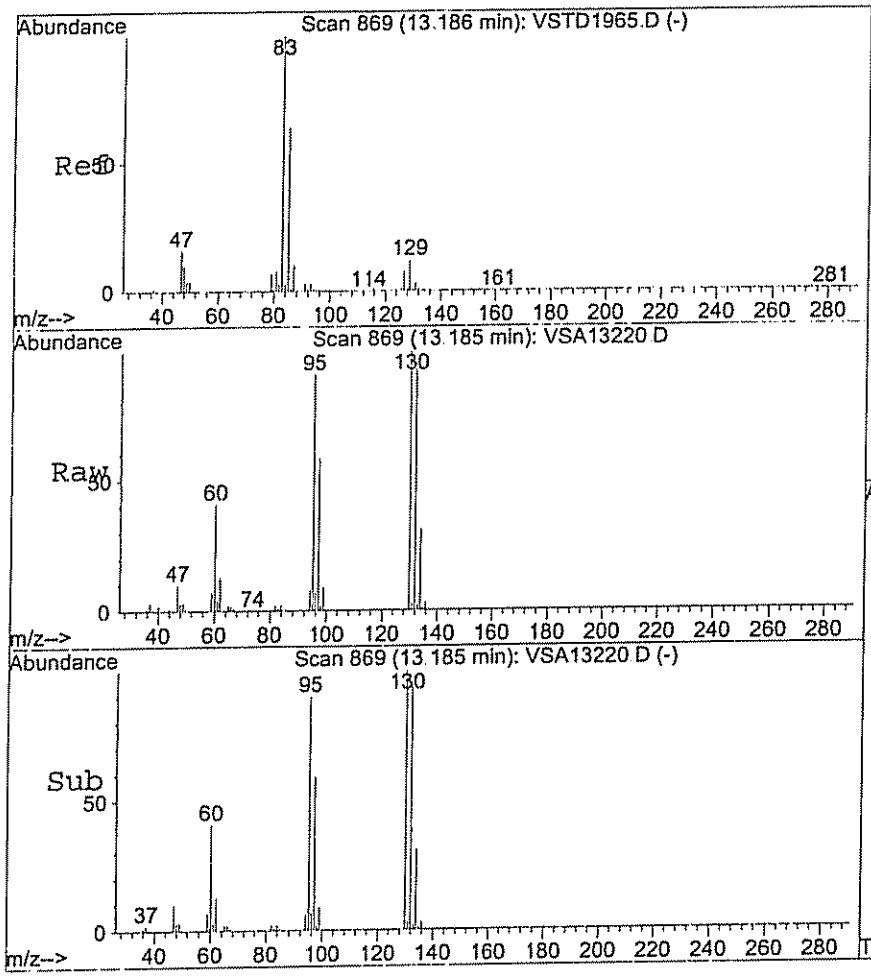


#22
Trichloroethene
Concen: 153.00 ug/L
RT: 13.20 min Scan# 870
Delta R.T. 0.08 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion:130 Resp: 855330

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	86.5	50.4	110.4
132	95.0	66.6	126.6

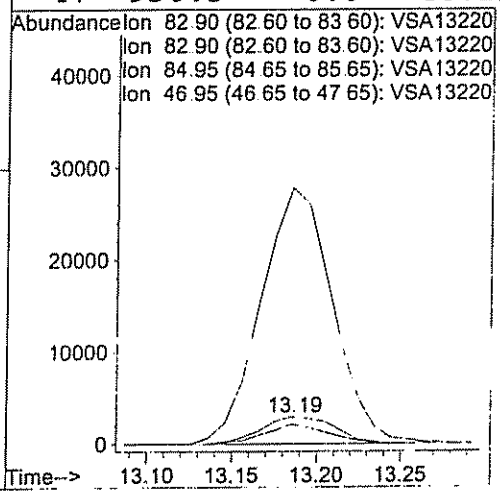


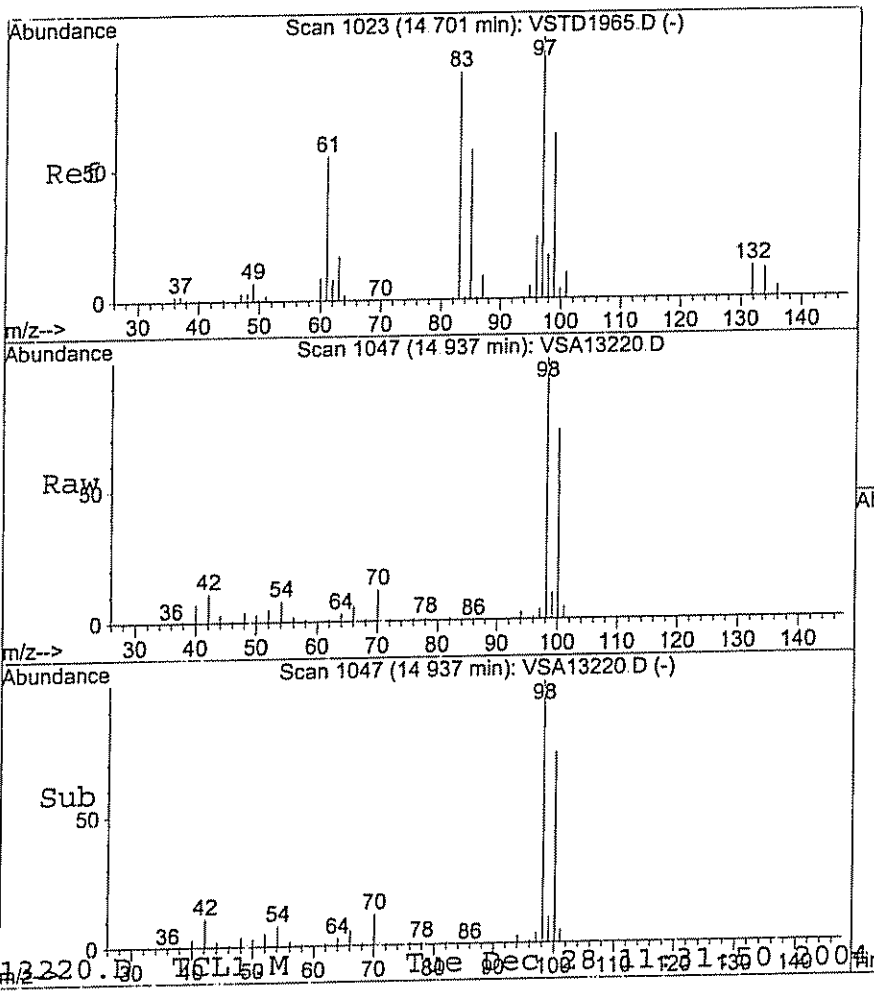


#24
Bromodichloromethane
Concen: 1.75 ug/L
RT: 13.19 min Scan# 869
Delta R.T. -0.00 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 83 Resp: 8787

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	72.8	33.9	93.9
47	930.3	0.0	46.1#

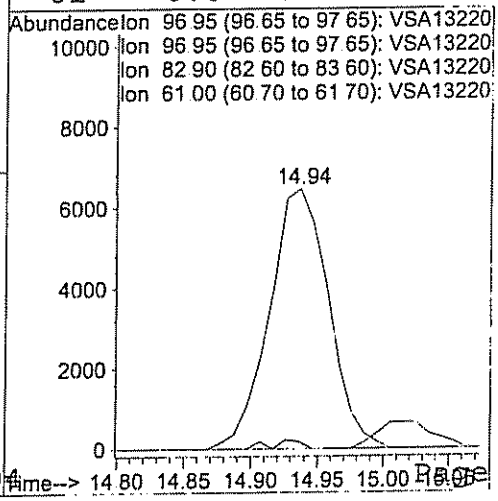


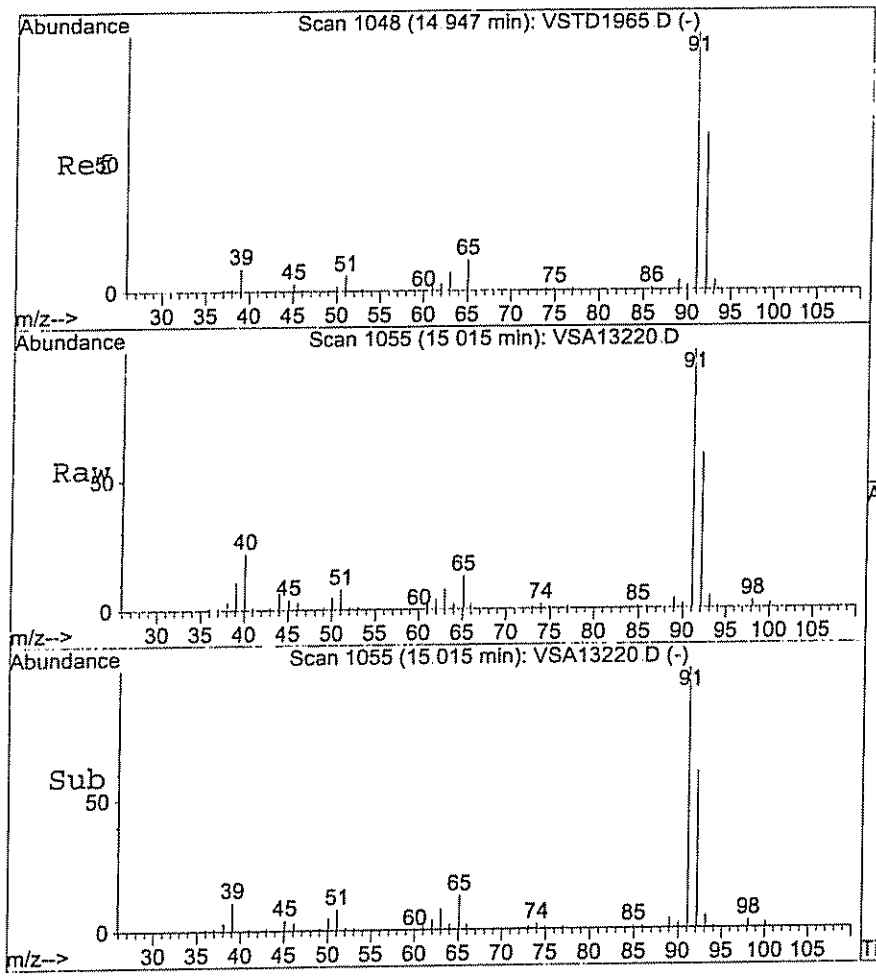


#27
1,1,2-Trichloroethane
Concen: 5.60 ug/L
RT: 14.94 min Scan# 1047
Delta R.T. 0.24 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 97 Resp: 19934

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	2.7	56.9	116.9#
61	0.0	24.6	84.6#

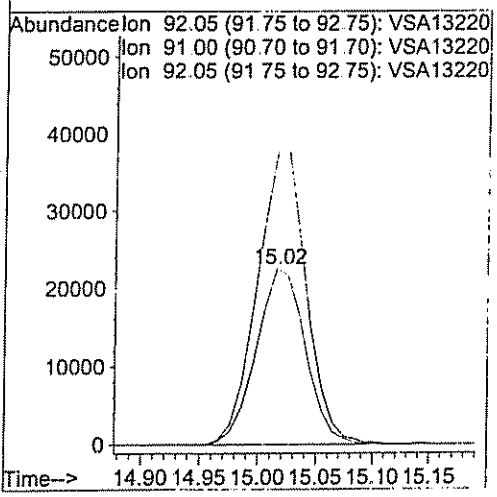


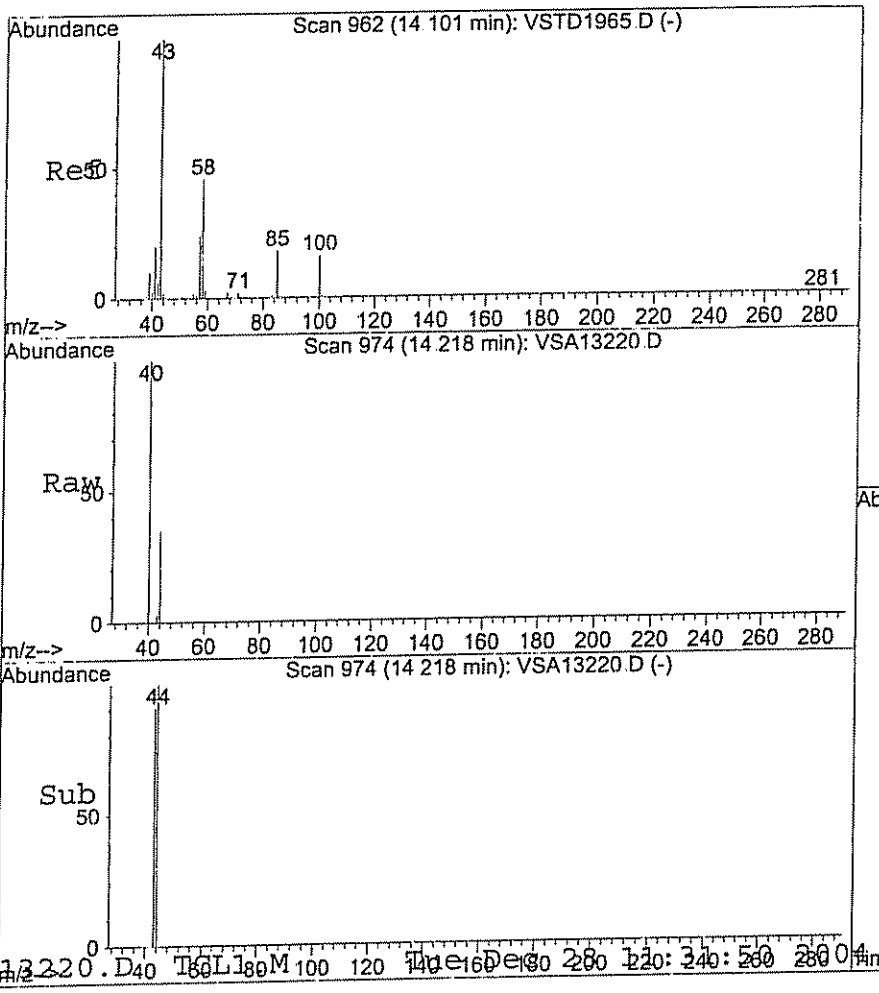


#33
Toluene
Concen: 7.02 ug/L
RT: 15.02 min Scan# 1055
Delta R.T. 0.07 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 92 Resp: 66284

Ion	Ratio	Lower	Upper
92	100		
91	167.4	132.6	192.6
92	100.0	70.0	130.0

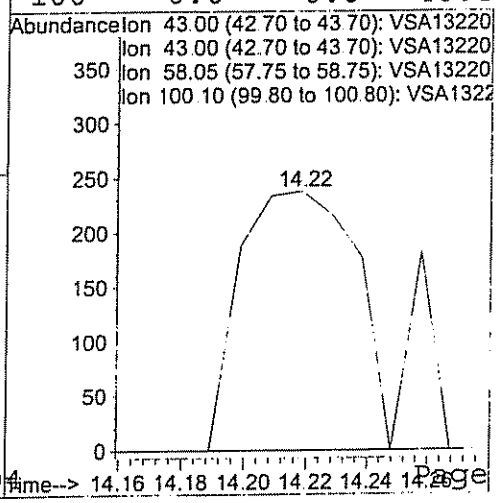


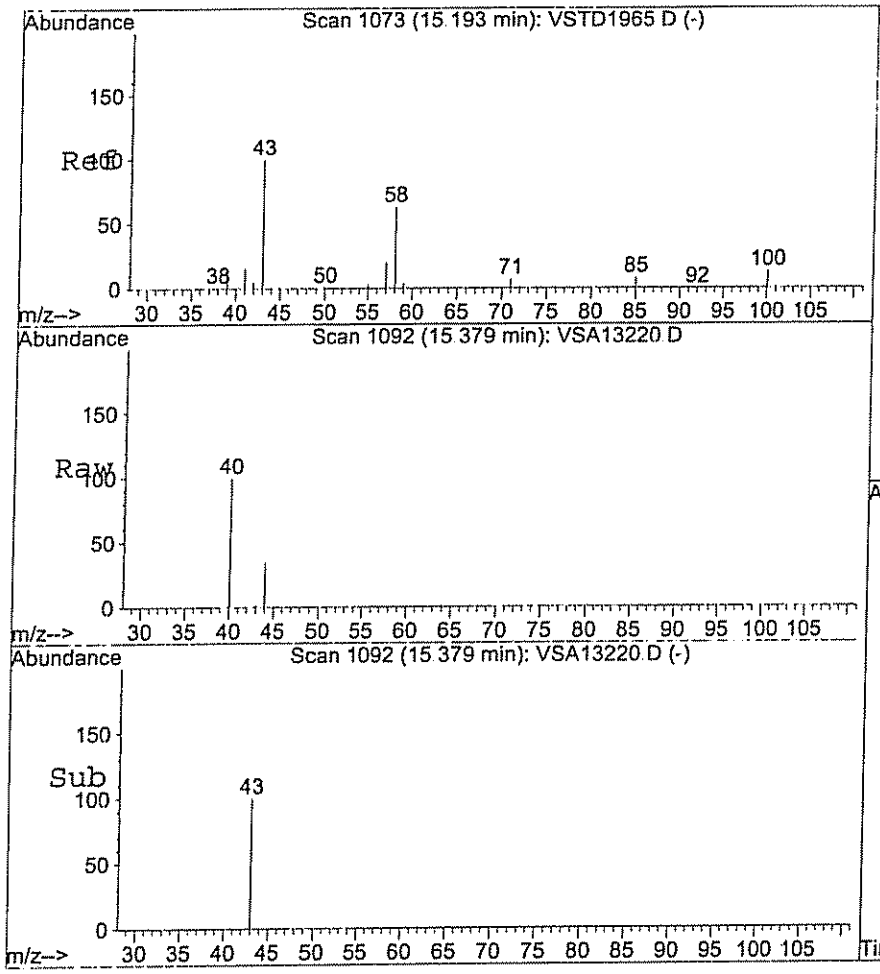


#34
4-methyl-2-Pentanone
Concen: 0.19 ug/L
RT: 14.22 min Scan# 974
Delta R.T. 0.10 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 43 Resp: 622

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	15.8	75.8#
100	0.0	0.0	46.4

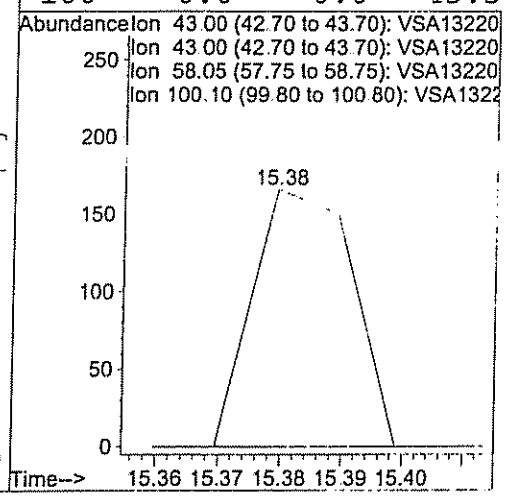


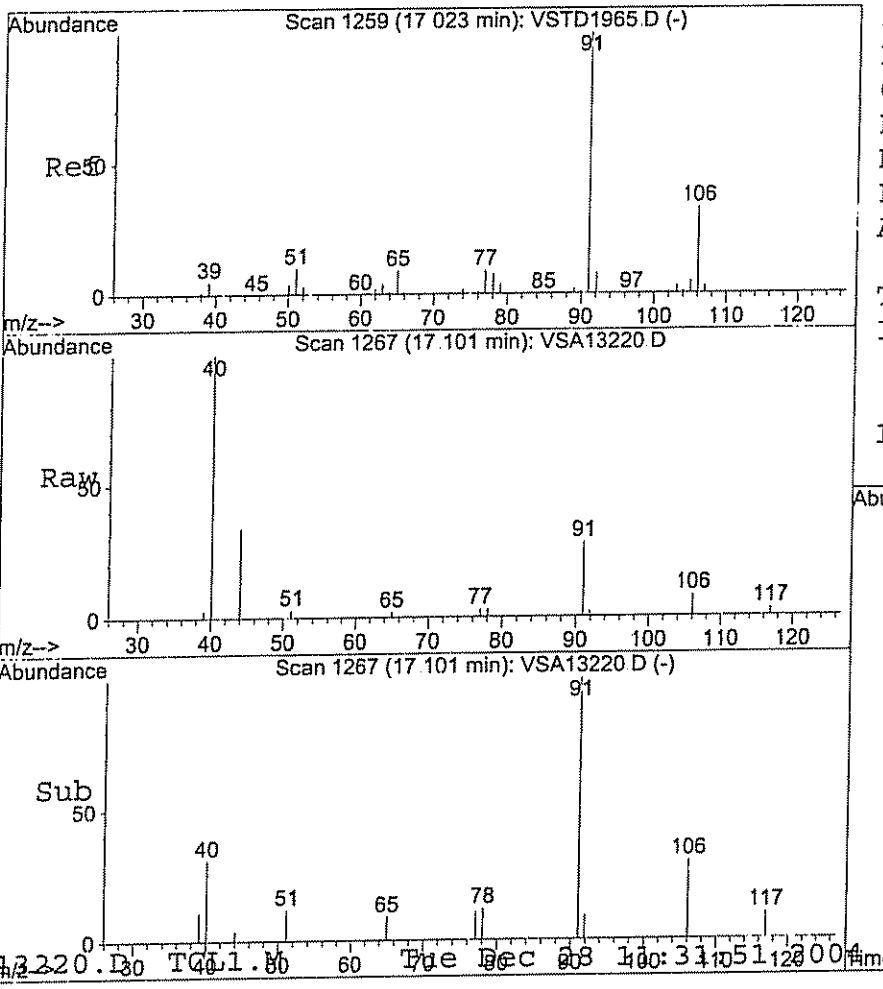


#36
2-Hexanone
Concen: 0.08 ug/L
RT: 15.38 min Scan# 1092
Delta R.T. 0.17 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 43 Resp: 186

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	33.5	93.5#
100	0.0	0.0	43.5

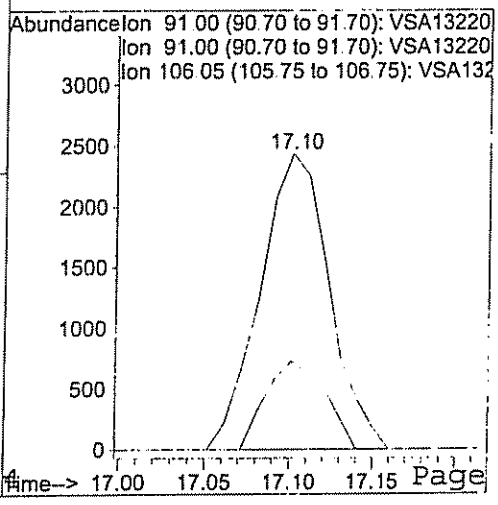


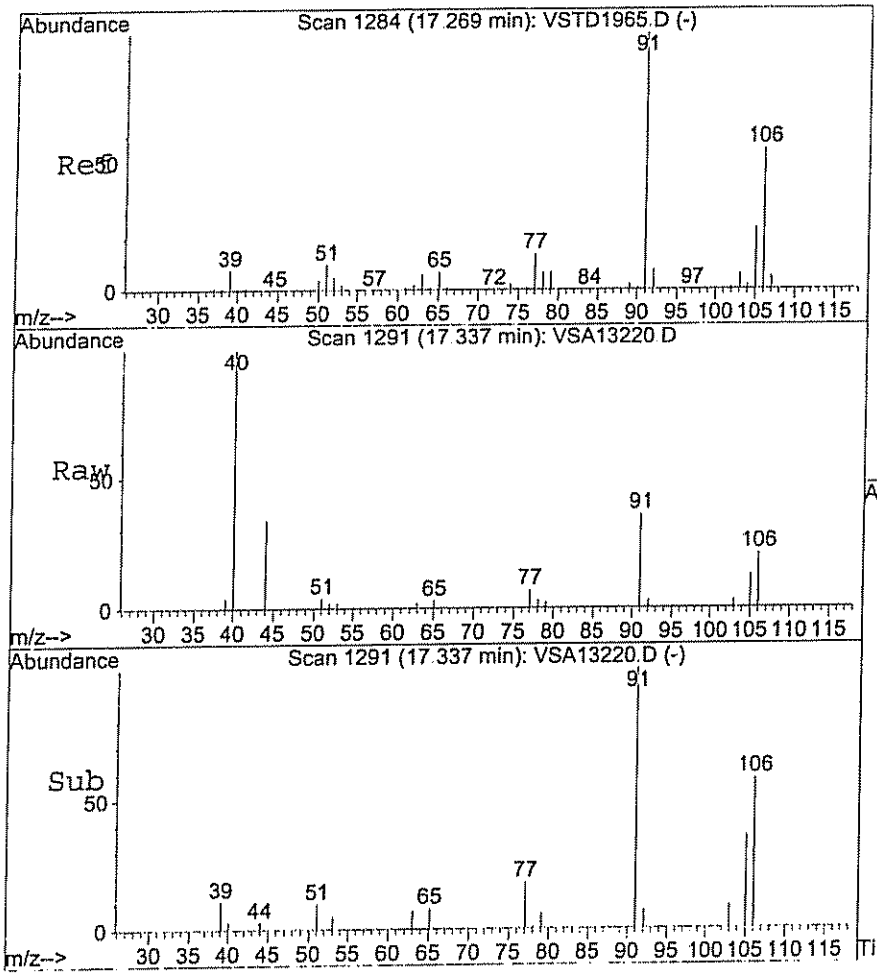


#37
Ethyl benzene
Concen: 0.40 ug/L
RT: 17.10 min Scan# 1267
Delta R.T. 0.07 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion: 91 Resp: 6938

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	29.9	2.9	62.9

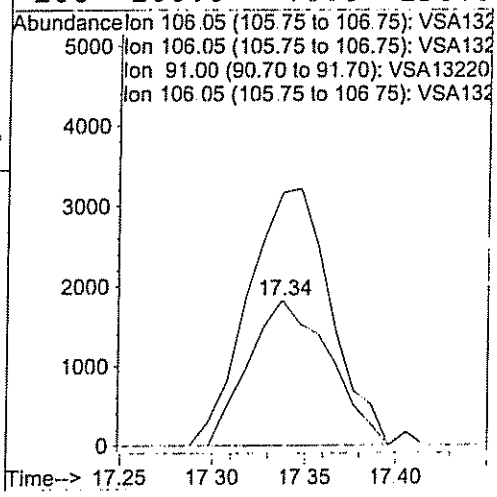


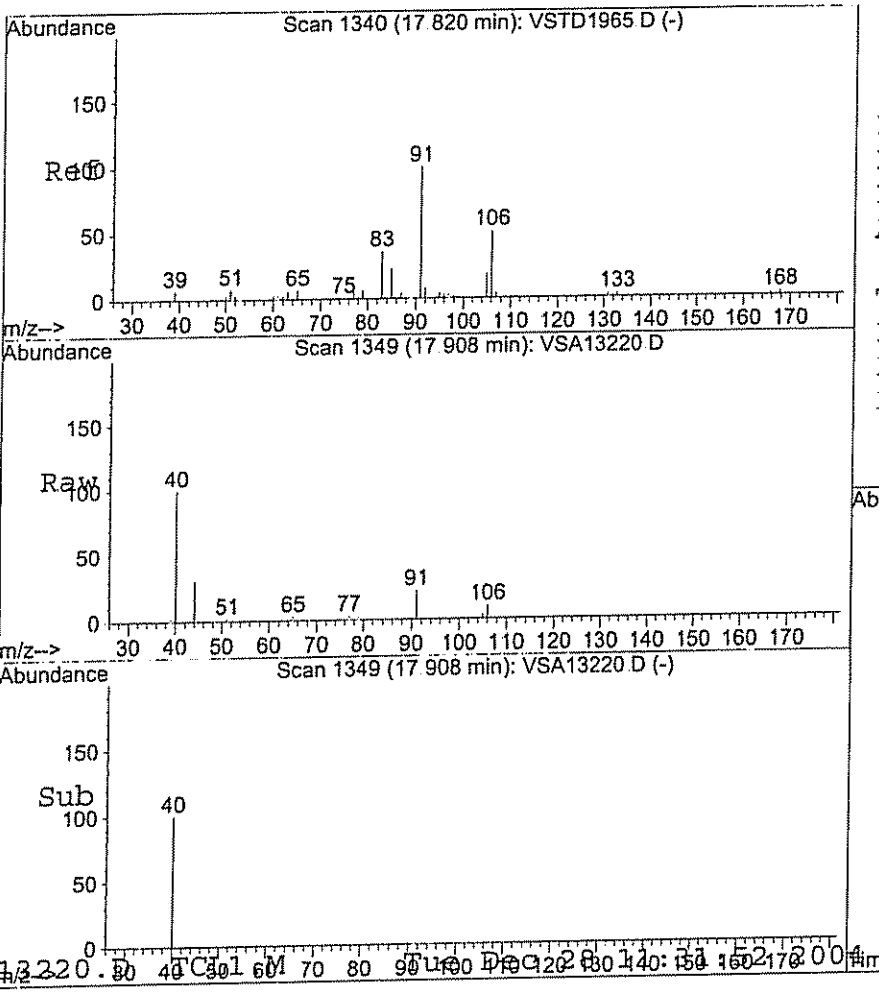


#39
m&p-Xylenes
Concen: 0.80 ug/L
RT: 17.34 min Scan# 1291
Delta R.T. 0.06 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion:106 Resp: 5606

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	164.1	150.2	210.2
106	100.0	70.0	130.0

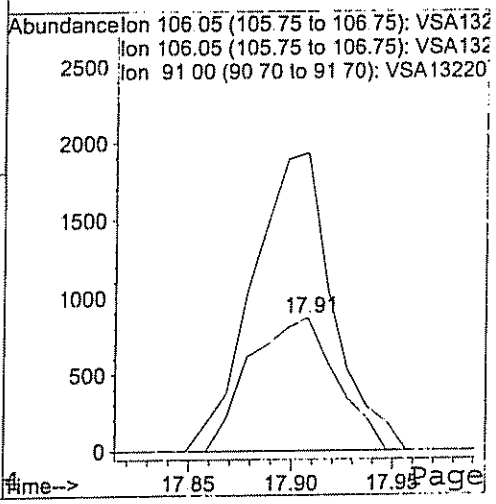


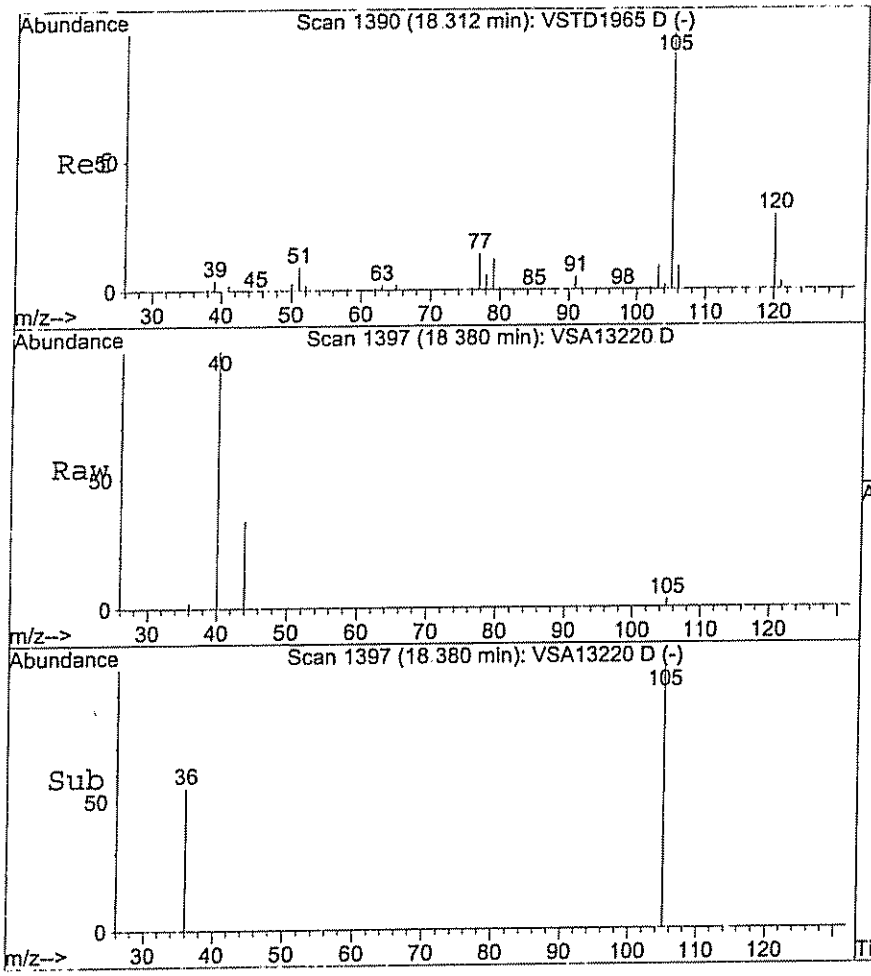


#40
o-Xylene
Concen: 0.38 ug/L
RT: 17.91 min Scan# 1349
Delta R.T. 0.08 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion:106 Resp: 2555

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	201.2	164.9	224.9

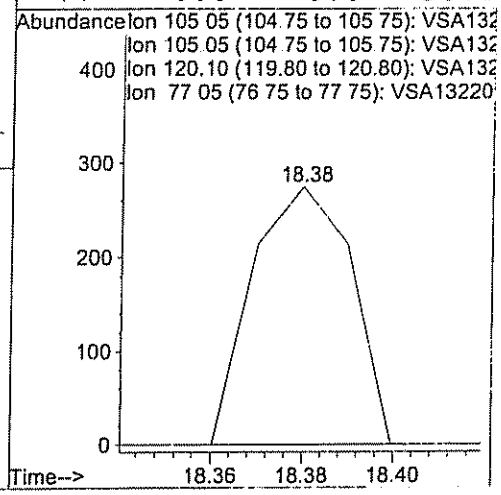


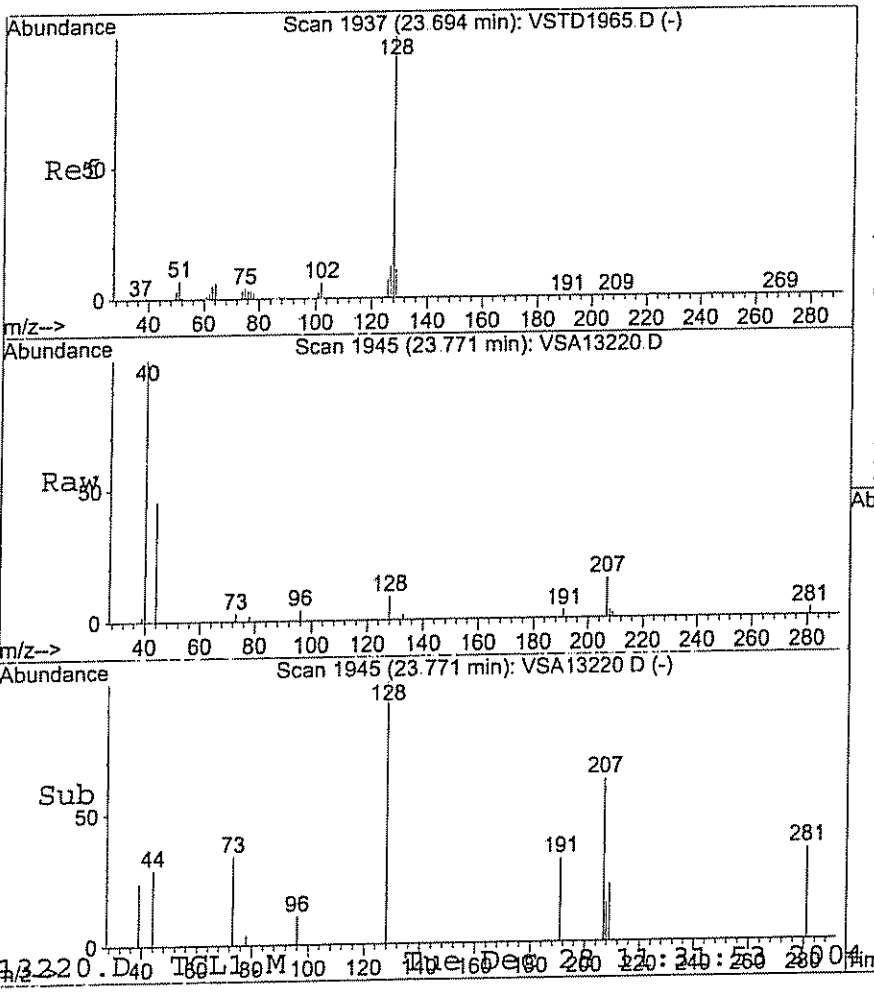


#42
Isopropylbenzene
Concen: 0.02 ug/L
RT: 18.38 min Scan# 1397
Delta R.T. 0.07 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion:105 Resp: 415

Ion	Ratio	Lower	Upper
105	100		
105	100.0	70.0	130.0
120	0.0	0.0	59.3
77	0.0	0.0	30.0

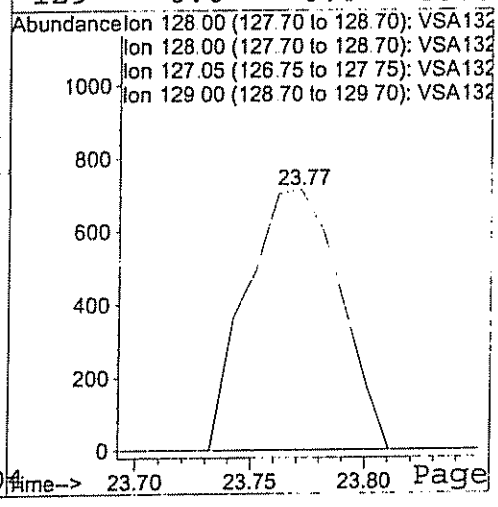




#45
Naphthalene
Concen: 0.14 ug/L
RT: 23.77 min Scan# 1945
Delta R.T. 0.08 min
Lab File: VSA13220.D
Acq: 23 Dec 2004 2:51

Tgt Ion:128 Resp: 2026

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	0.0	0.0	40.8



Quantitation Report (QT Reviewed) MWB-4

Data File : C:\HPCHEM\1\DATA\VSA13221.D Vial: 24
Acq On : 23 Dec 2004 3:24 Operator: hfg system B
Sample : P0412041-02A ~~DF200~~ RE Inst : GC/MS Ins
Misc : WATER DF=50 Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:32 2004 Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	11.00	128	162958	50.00 ug/L	0.08
18) 1,4-Difluorobenzene	12.66	114	865283	50.00 ug/L	0.08
31) Chlorobenzene-d5	16.83	117	759394	50.00 ug/L	0.07
System Monitoring Compounds					
16) 1,2-Dichloroethane-d4	11.73	65	210042	52.60 ug/L	0.07
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.20%		
32) Toluene-d8	14.92	98	643205	51.93 ug/L	0.07
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.86%		
43) 4-Bromofluorobenzene	18.46	95	235733	50.19 ug/L	0.07
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.38%		
Target Compounds					Qvalue
2) Chloromethane	6.33	50	112	0.02 ug/L #	85
3) Vinyl chloride	6.62	62	1432	0.30 ug/L #	86
4) Bromomethane	7.01	94	169	0.06 ug/L	95
6) 1,1-Dichloroethene	8.85	96	11588	3.18 ug/L	96
7) Carbon disulfide	9.36	76	120	0.01 ug/L	100
8) Methylene chloride	9.02	84	11509	2.49 ug/L	97
9) Acetone	8.34	43	3084	2.46 ug/L	96
10) trans-1,2-Dichloroethene	9.80	96	136	0.03 ug/L #	33
12) 1,1-Dichloroethane	10.12	63	9022	1.24 ug/L	98
13) cis-1,2-Dichloroethene	10.80	96	54372	10.72 ug/L	94
15) 2-Butanone	10.65	43	2774	1.42 ug/L	88
17) 1,2-Dichloroethane	11.82	62	3027	0.66 ug/L	94
20) 1,1,1-Trichloroethane	11.95	97	23377	4.72 ug/L	97
21) Benzene	12.43	78	1216	0.07 ug/L	89
22) Trichloroethene	13.19	130	585235	103.92 ug/L ✓	96
24) Bromodichloromethane	13.19	83	5940	1.17 ug/L #	1
27) 1,1,2-Trichloroethane	14.94	97	19495	~~5.43~~ ug/L #	50
33) Toluene	15.02	92	8156	0.90 ug/L	96
34) 4-methyl-2-Pentanone	14.22	43	606	0.19 ug/L #	77
35) Tetrachloroethene	15.98	164	391	0.11 ug/L #	2
37) Ethyl benzene	17.12	91	3075	0.19 ug/L	97
39) m&p-Xylenes	17.12	106	965	0.14 ug/L	94
40) o-Xylene	17.90	106	852	0.13 ug/L #	65

(#) = qualifier out of range (m) = manual integration
VSA13221.D TCL1.M Tue Dec 28 11:32:47 2004 DF=50 Page 1

Data File : C:\HPCHEM\1\DATA\VSA13221.D
Acq On : 23 Dec 2004 3:24
Sample : P0412041-02A DF200 RE
Misc : WATER

Vial: 24
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:32 2004

Quant Results File: TCL1.RES

Quant Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration
DataAcq Meth : VOA1

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45) Naphthalene	23.77	128	607	0.04	ug/L	#	97

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

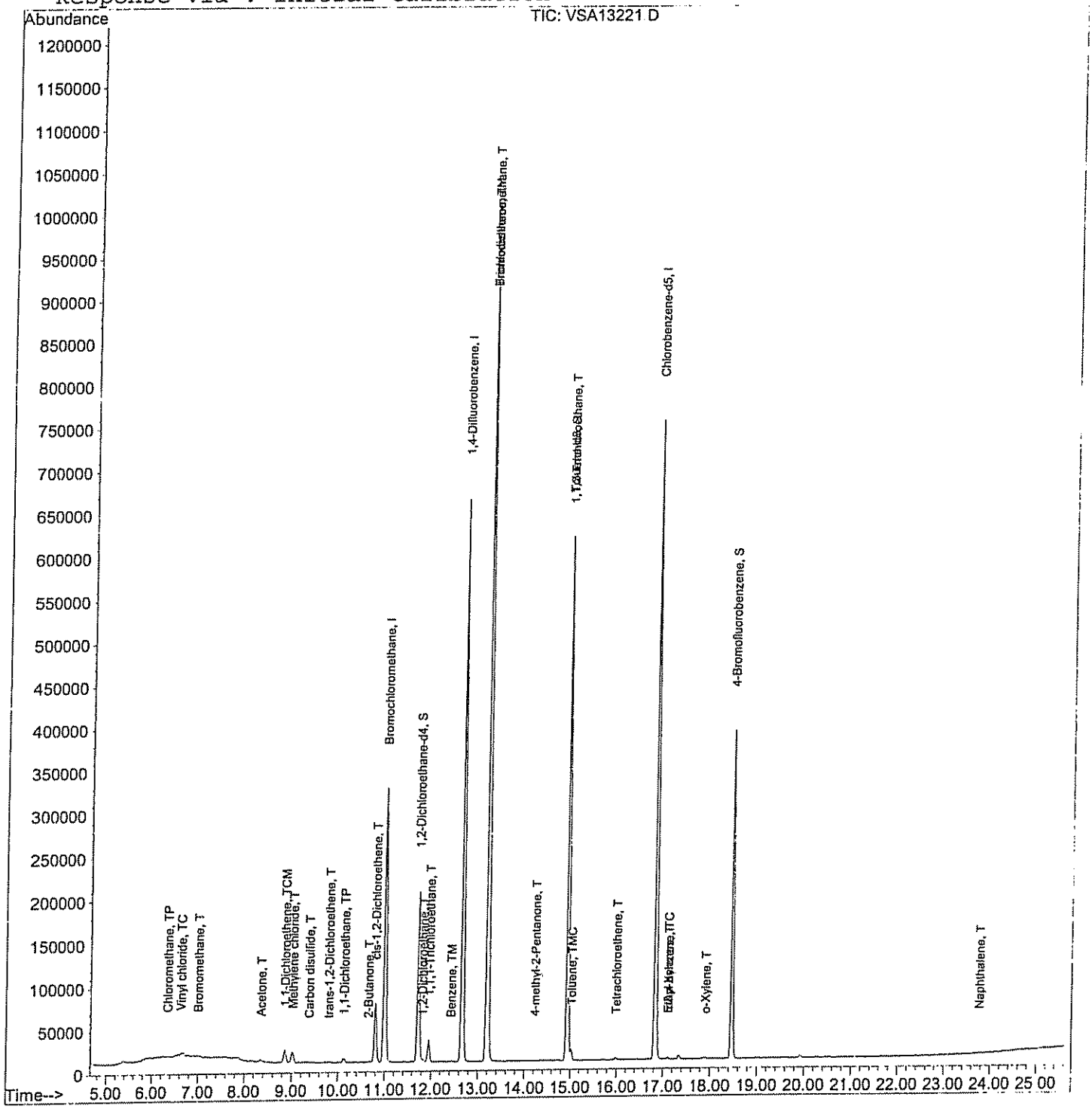
Data File : C:\HPCHEM\1\DATA\VSA13221.D
Acq On : 23 Dec 2004 3:24
Sample : P0412041-02A DF200 RE
Misc : WATER

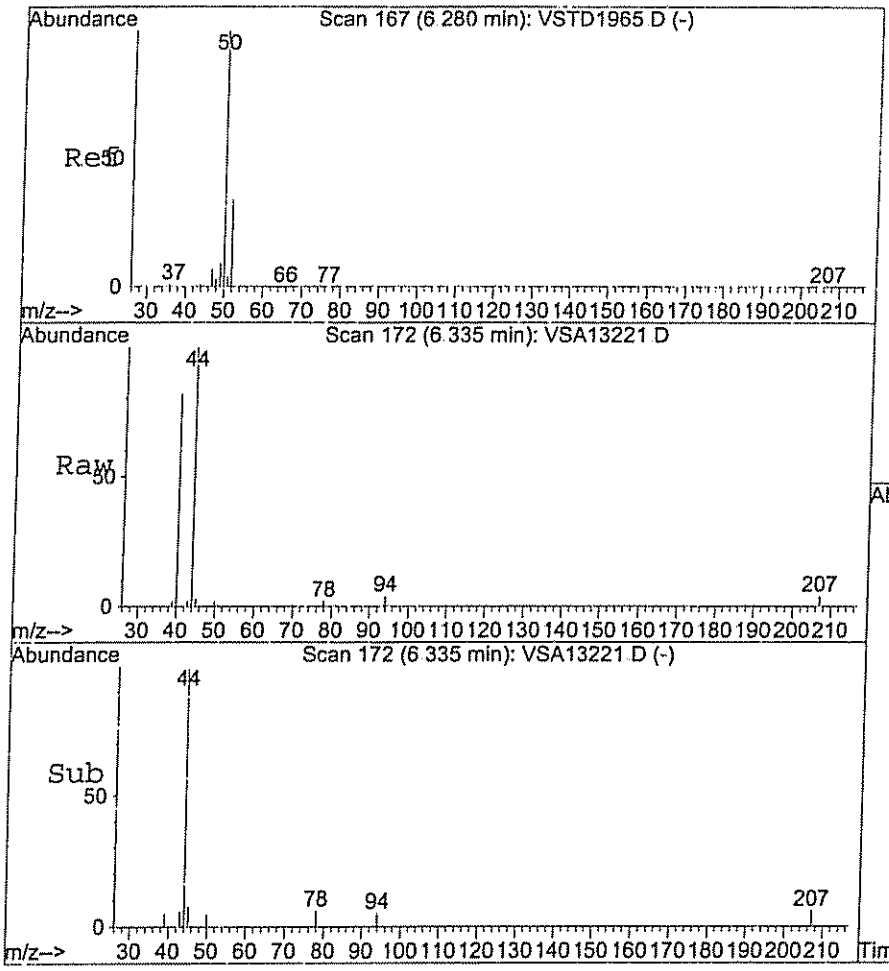
Vial: 24
Operator: hfg system B
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: RTEINT.P
Quant Time: Dec 28 11:32 2004

Quant Results File: TCL1.RES

Method : C:\HPCHEM\1\METHODS\TCL1.M (RTE Integrator)
Title : VOA Target Compound List method 8260
Last Update : Mon Dec 20 08:43:16 2004
Response via : Initial Calibration

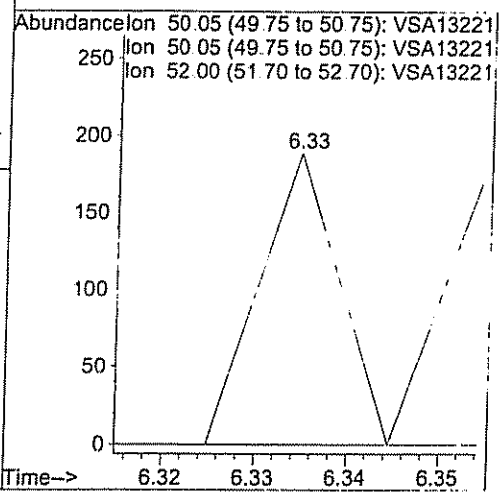


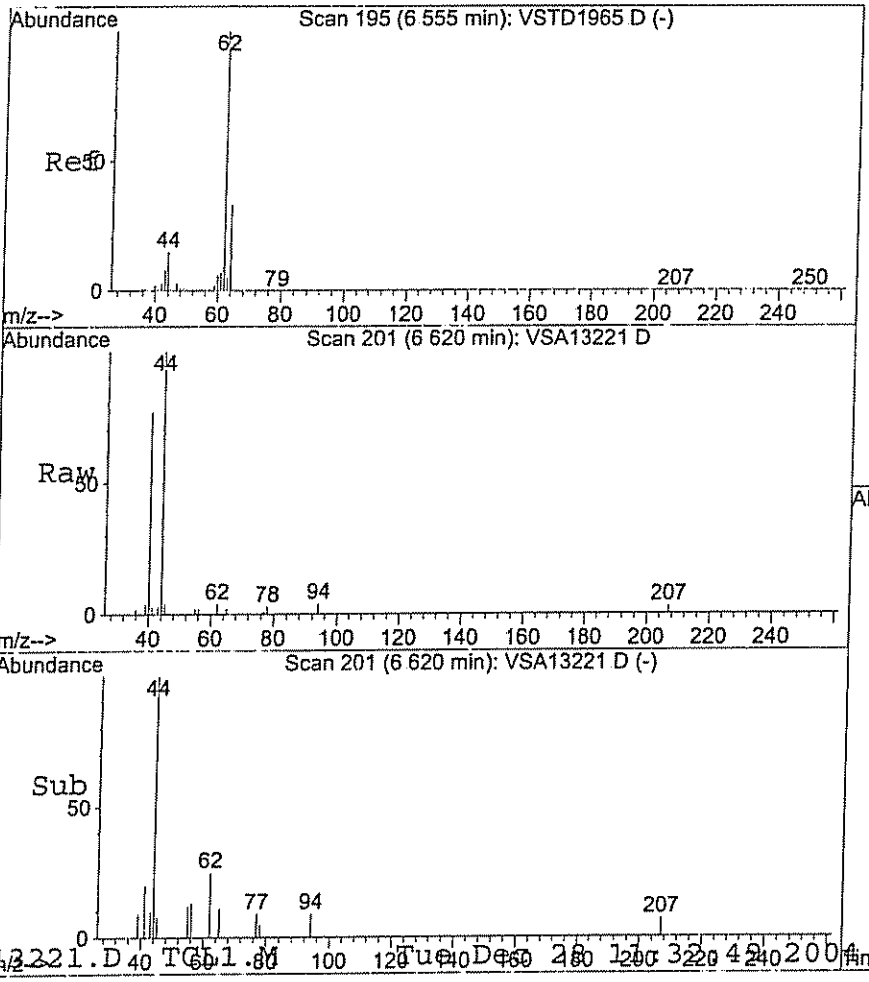


#2
Chloromethane
Concen: 0.02 ug/L
RT: 6.33 min Scan# 172
Delta R.T. 0.06 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 50 Resp: 112

Ion	Ratio	Lower	Upper
50	100		
50	100.0	70.0	130.0
52	0.0	3.9	63.9#

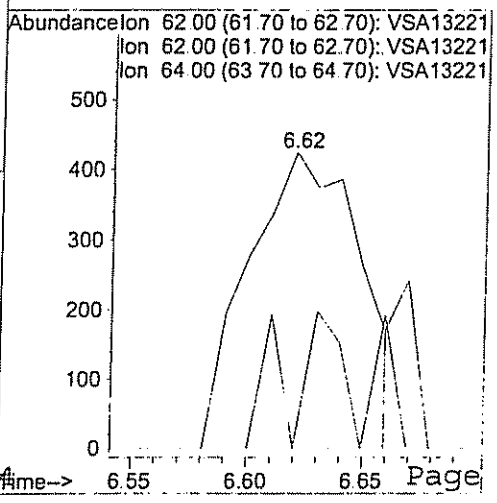


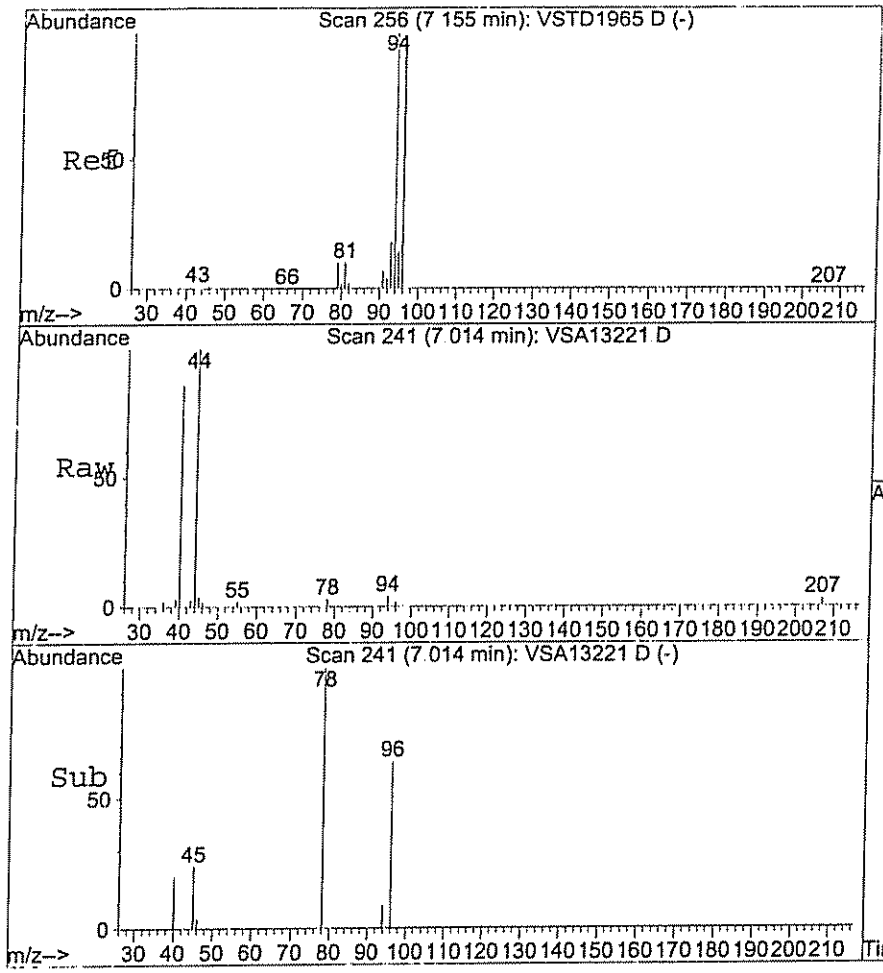


#3
Vinyl chloride
Concen: 0.30 ug/L
RT: 6.62 min Scan# 201
Delta R.T. 0.07 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 62 Resp: 1432

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	0.0	2.4	62.4#

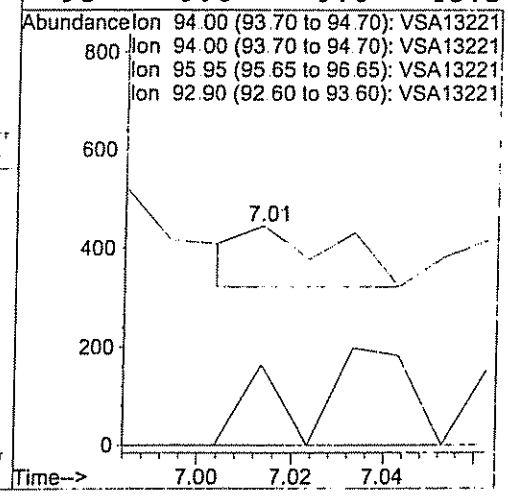


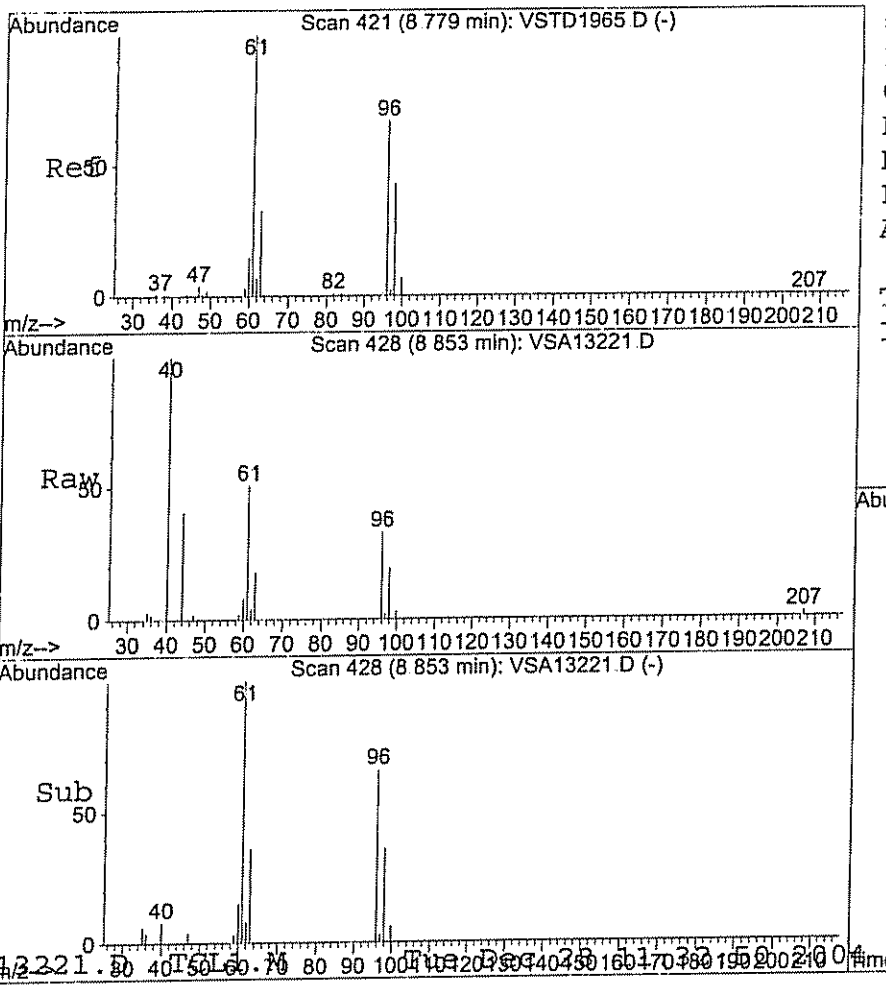


#4
Bromomethane
Concen: 0.06 ug/L
RT: 7.01 min Scan# 241
Delta R.T. -0.15 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 94 Resp: 169

Ion	Ratio	Lower	Upper
94	100		
94	100.0	70.0	130.0
96	91.2	63.6	123.6
93	0.0	0.0	48.5

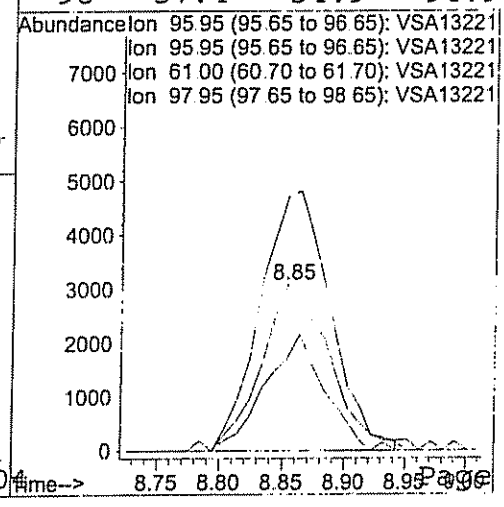


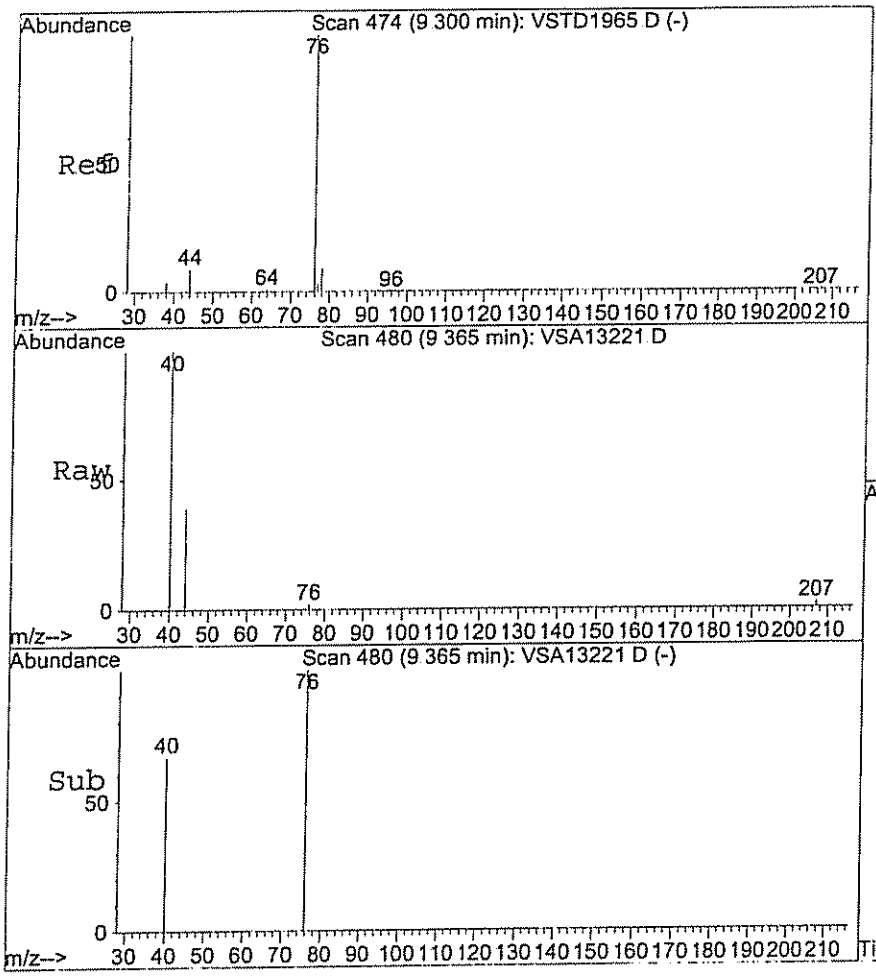


#6
1,1-Dichloroethene
Concen: 3.18 ug/L
RT: 8.85 min Scan# 428
Delta R.T. 0.08 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 96 Resp: 11588

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	154.5	118.9	178.9
98	57.4	34.9	94.9

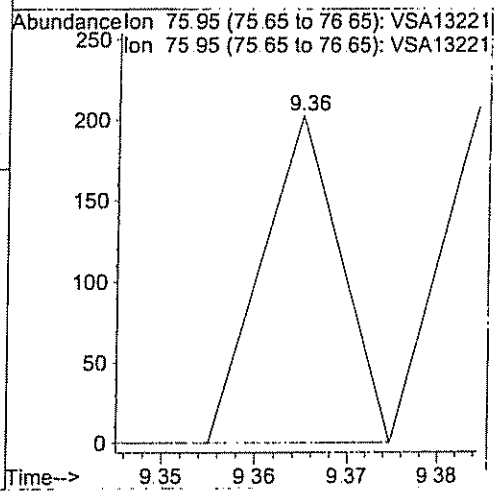


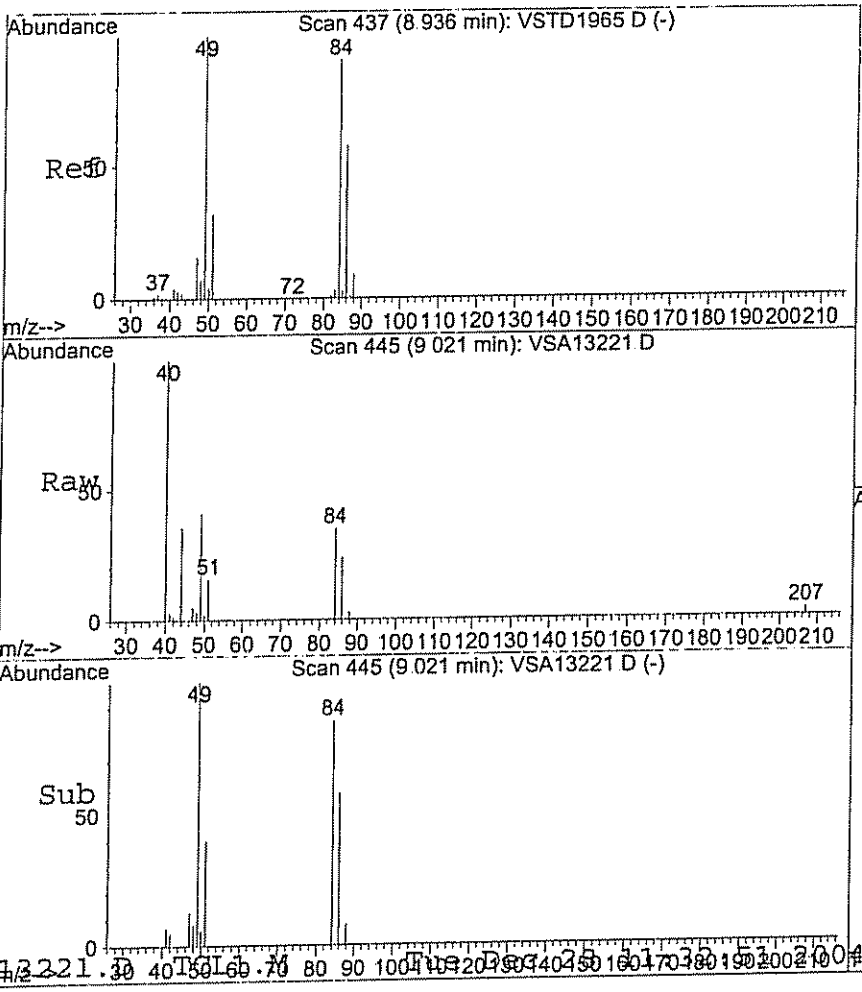


#7
Carbon disulfide
Concen: 0.01 ug/L
RT: 9.36 min Scan# 480
Delta R.T. 0.07 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 76 Resp: 120

Ion	Ratio	Lower	Upper
76	100		
76	100.0	70.0	130.0

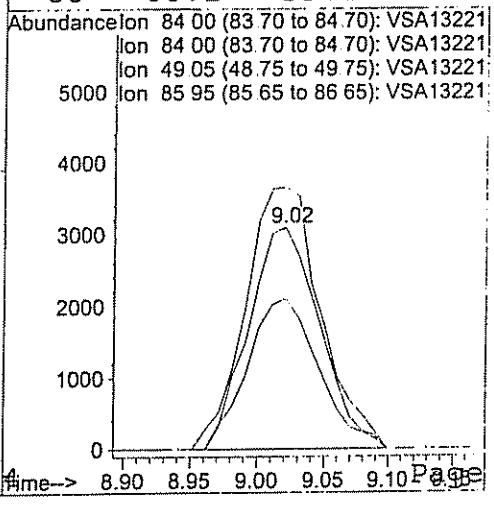


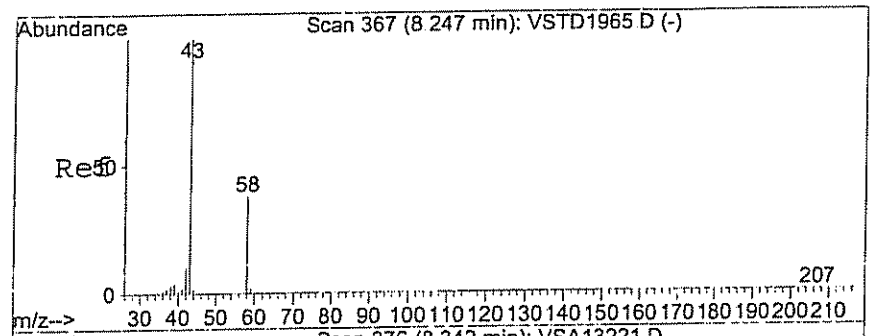


#8
Methylene chloride
Concen: 2.49 ug/L
RT: 9.02 min Scan# 445
Delta R.T. 0.08 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 84 Resp: 11509

Ion	Ratio	Lower	Upper
84	100		
84	100.0	70.0	130.0
49	113.6	80.0	140.0
86	68.1	33.4	93.4

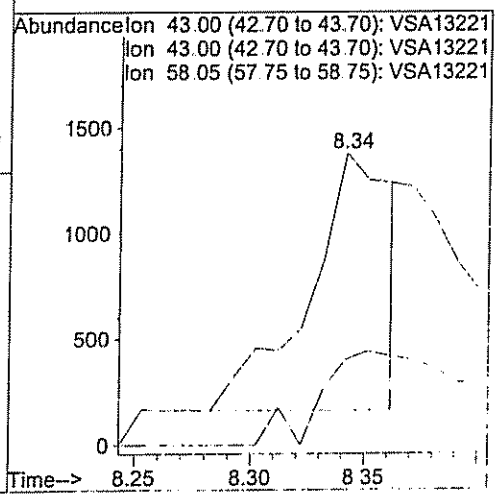


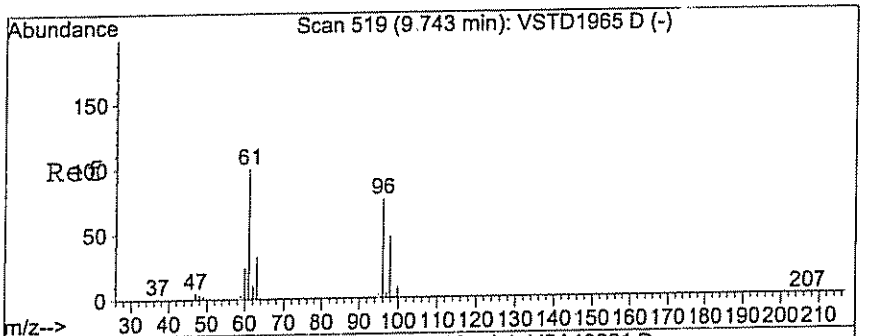


#9
Acetone
Concen: 2.46 ug/L
RT: 8.34 min Scan# 376
Delta R.T. 0.07 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 43 Resp: 3084

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	28.2	7.8	67.8

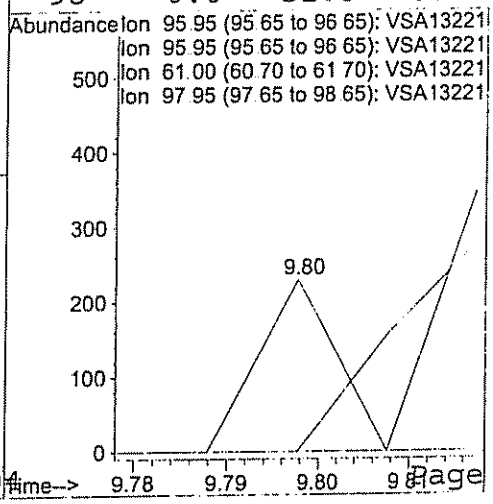


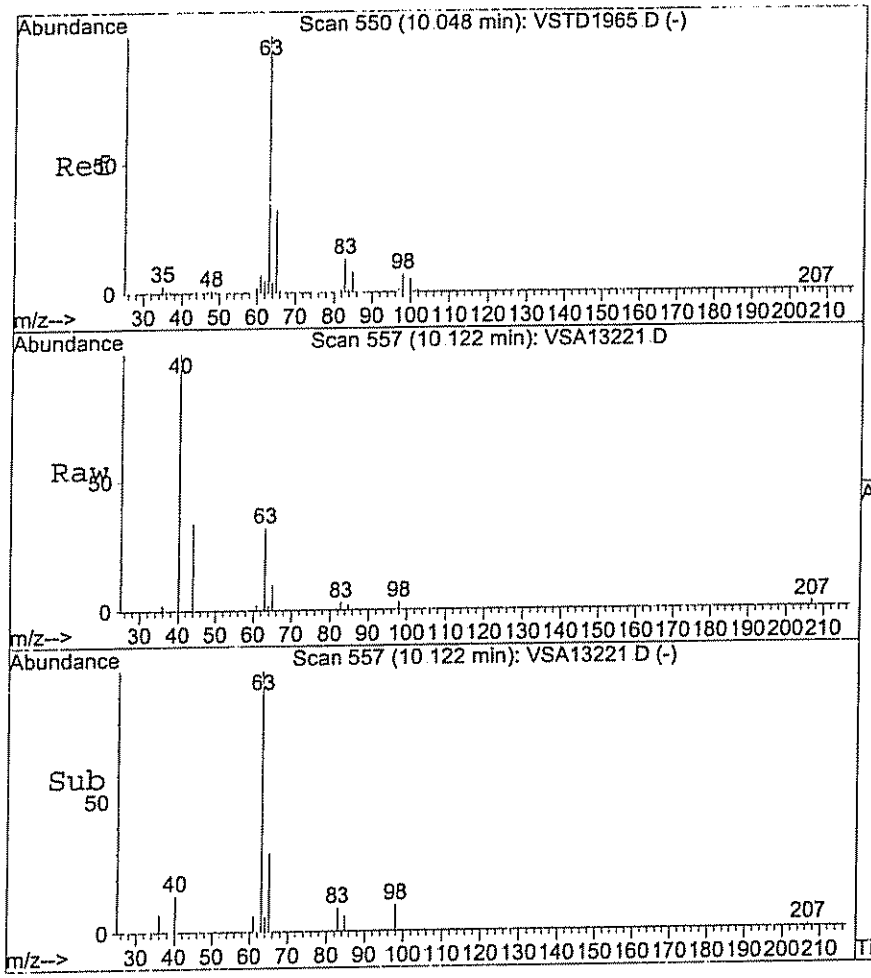


#10
trans-1,2-Dichloroethene
Concen: 0.03 ug/L
RT: 9.80 min Scan# 524
Delta R.T. 0.05 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 96 Resp: 136

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	0.0	102.4	162.4#
98	0.0	31.6	91.6#

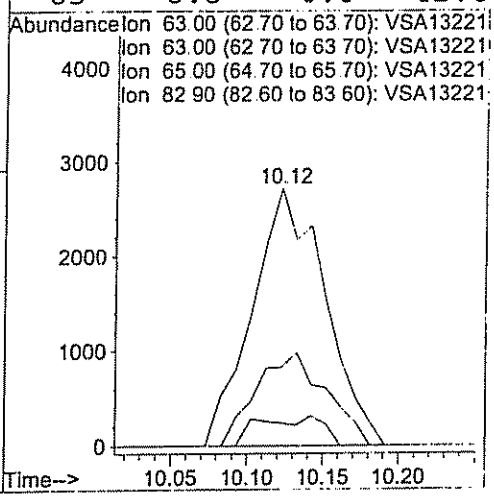


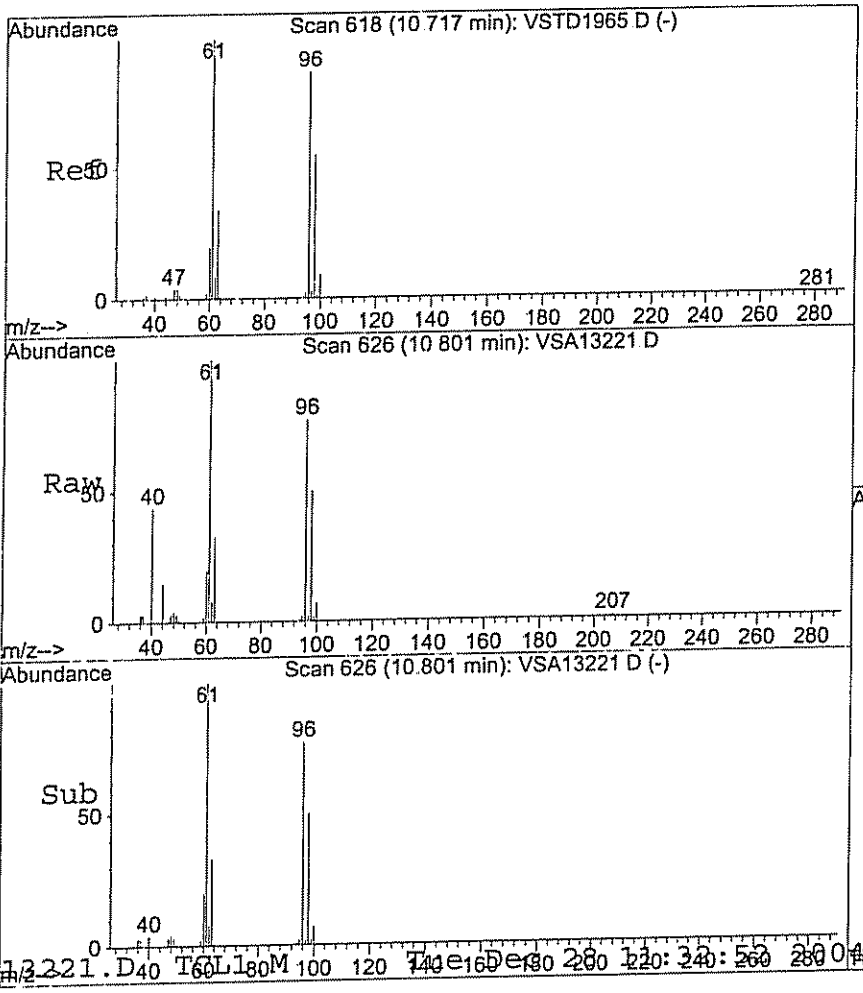


#12
1,1-Dichloroethane
Concen: 1.24 ug/L
RT: 10.12 min Scan# 557
Delta R.T. 0.07 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 63 Resp: 9022

Ion	Ratio	Lower	Upper
63	100		
63	100.0	70.0	130.0
65	30.2	2.1	62.1
83	8.8	0.0	42.6

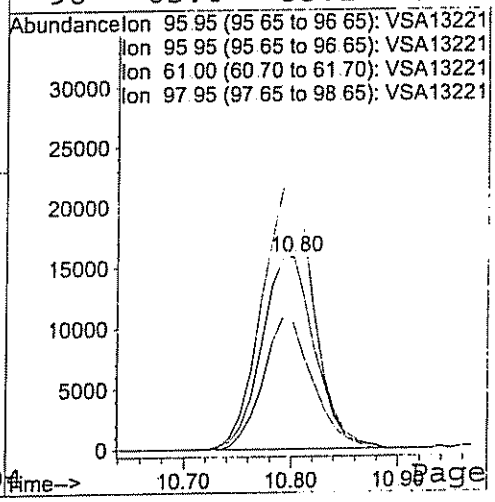


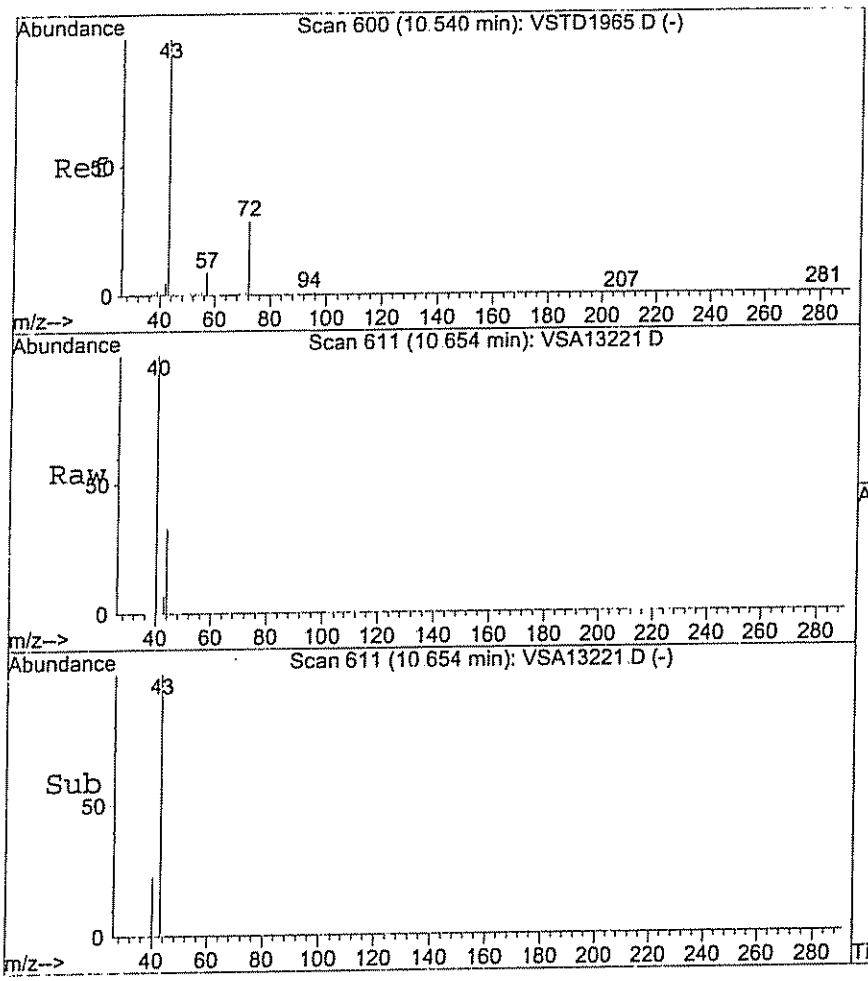


#13
cis-1,2-Dichloroethene
Concen: 10.72 ug/L
RT: 10.80 min Scan# 626
Delta R.T. 0.08 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 96 Resp: 54372

Ion	Ratio	Lower	Upper
96	100		
96	100.0	70.0	130.0
61	130.4	85.2	145.2
98	65.4	33.1	93.1

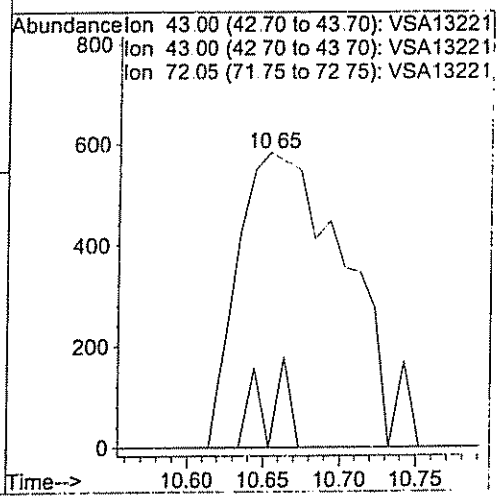


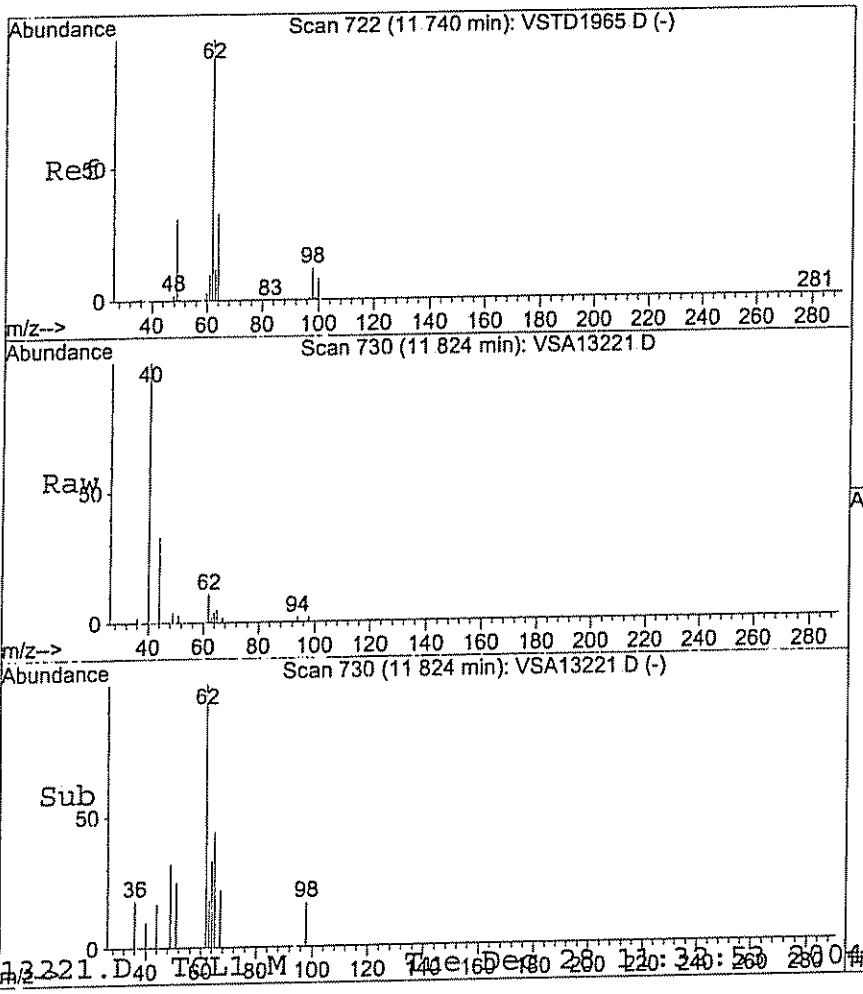


#15
2-Butanone
Concen: 1.42 ug/L
RT: 10.65 min Scan# 611
Delta R.T. 0.09 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 43 Resp: 2774

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
72	0.0	0.0	59.3

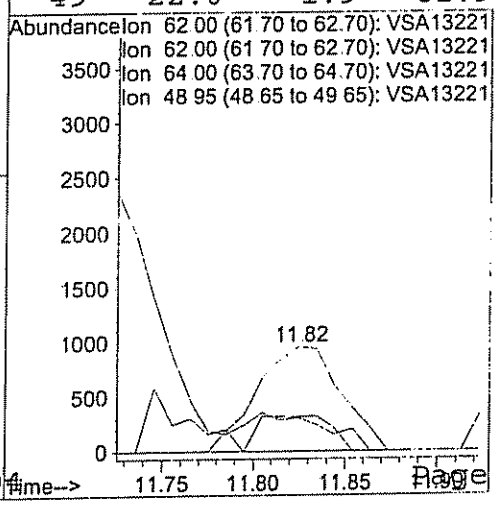


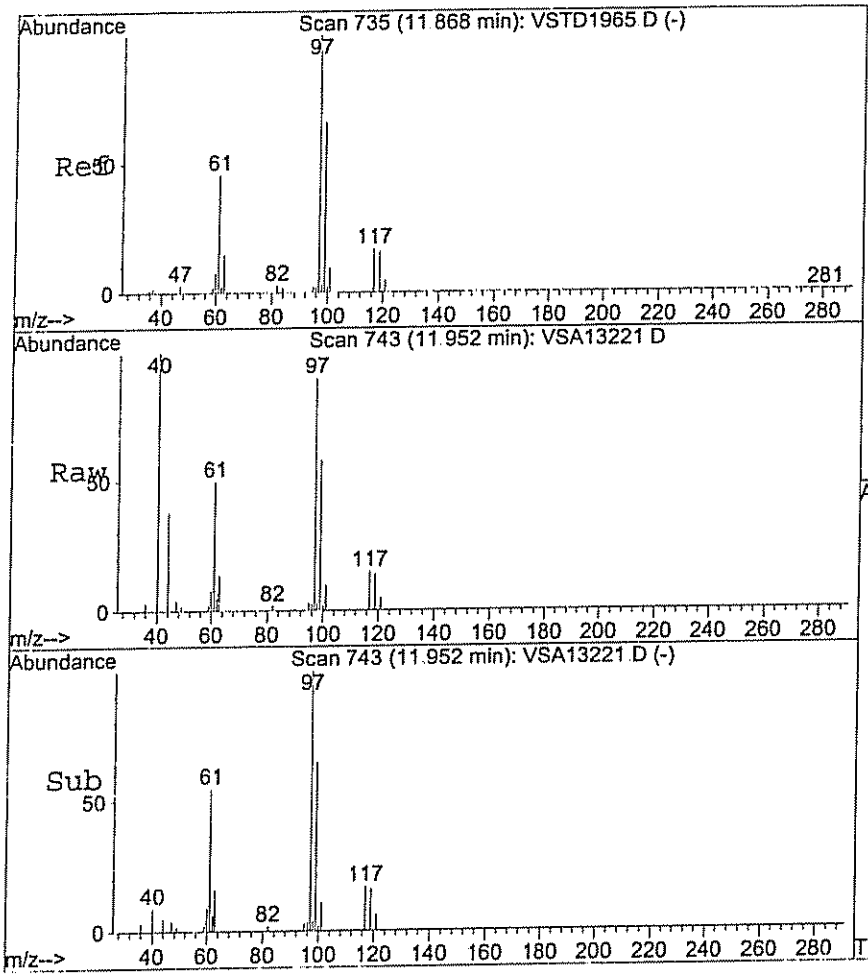


#17
1,2-Dichloroethane
Concen: 0.66 ug/L
RT: 11.82 min Scan# 730
Delta R.T. 0.08 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 62 Resp: 3027

Ion	Ratio	Lower	Upper
62	100		
62	100.0	70.0	130.0
64	24.7	2.9	62.9
49	22.0	1.9	61.9

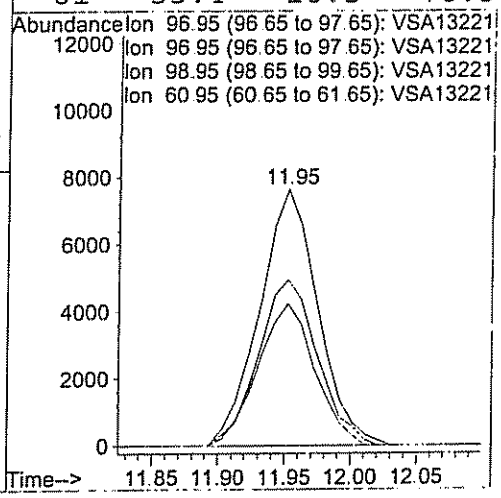


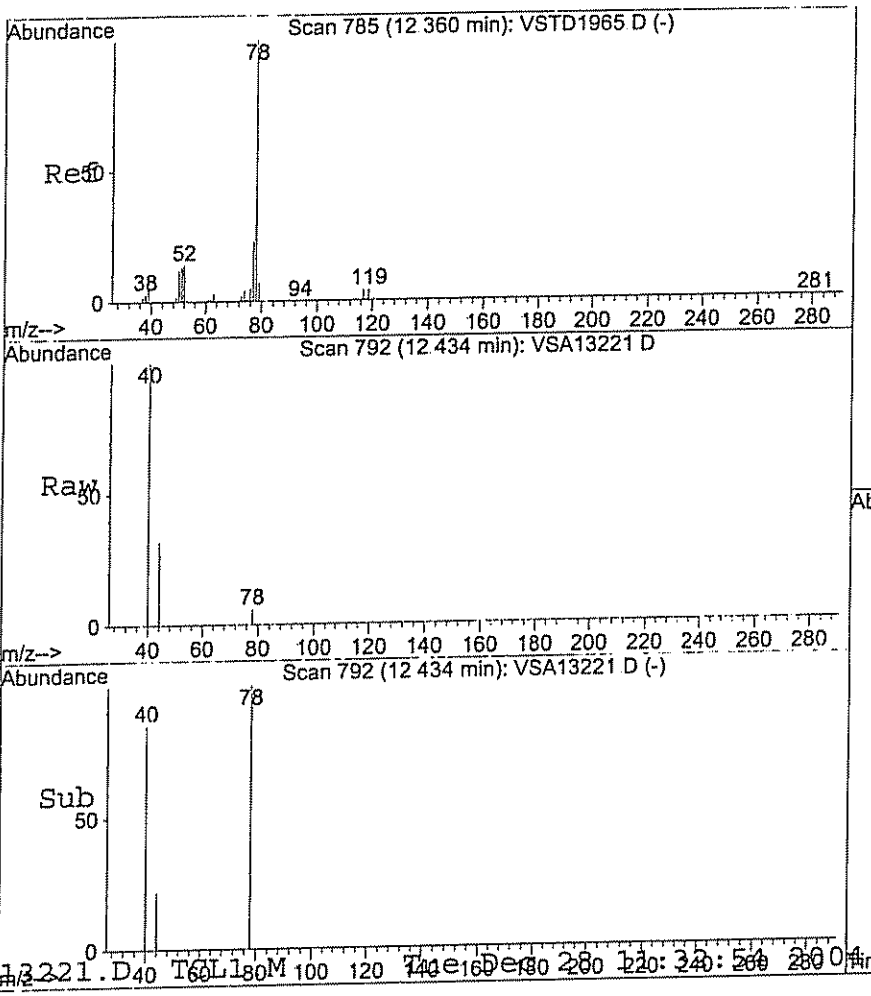


#20
1,1,1-Trichloroethane
Concen: 4.72 ug/L
RT: 11.95 min Scan# 743
Delta R.T. 0.08 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 97 Resp: 23377

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
99	64.7	35.6	95.6
61	55.4	16.5	76.5

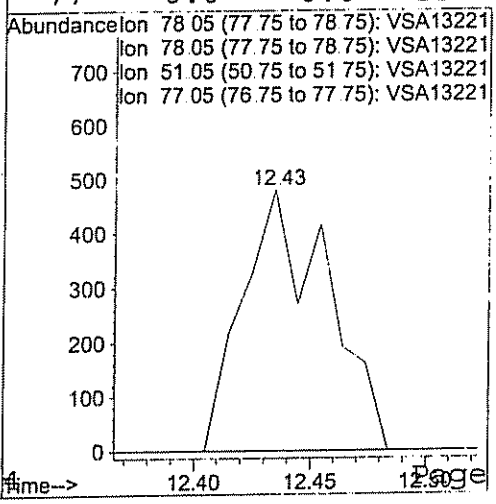


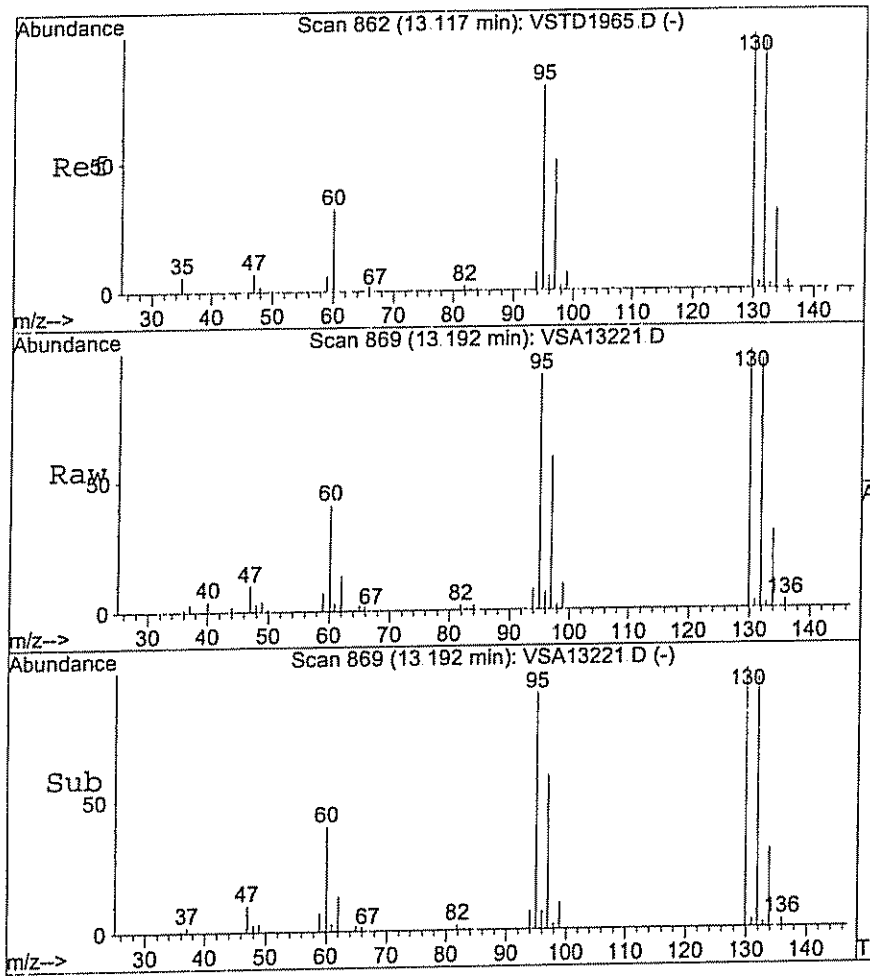


#21
Benzene
Concen: 0.07 ug/L
RT: 12.43 min Scan# 792
Delta R.T. 0.07 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 78 Resp: 1216

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	0.0	0.0	43.2
77	0.0	0.0	53.2

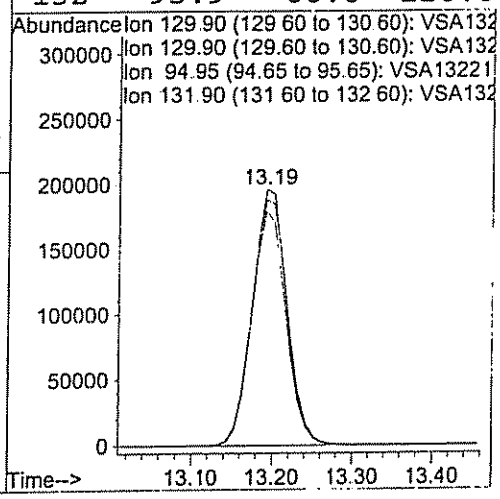


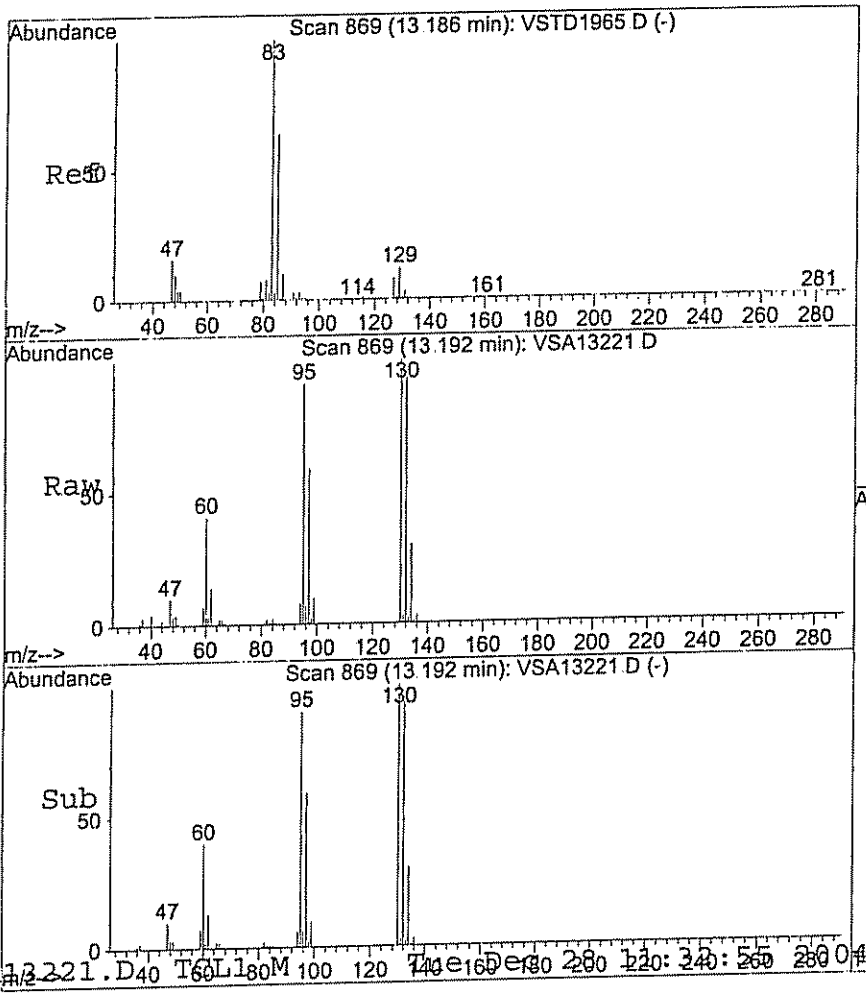


#22
Trichloroethene
Concen: 103.92 ug/L
RT: 13.19 min Scan# 869
Delta R.T. 0.07 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion:130 Resp: 585235

Ion	Ratio	Lower	Upper
130	100		
130	100.0	70.0	130.0
95	91.3	50.4	110.4
132	95.9	66.6	126.6

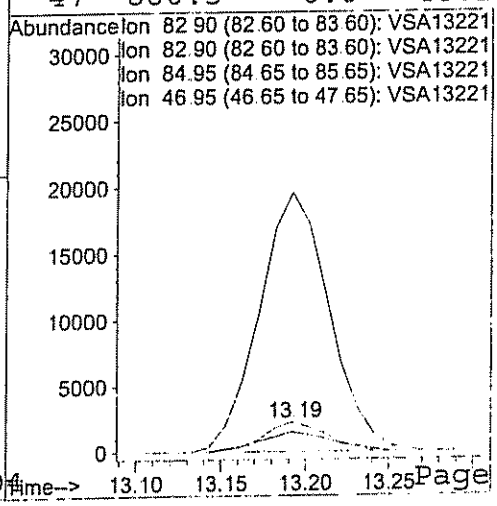


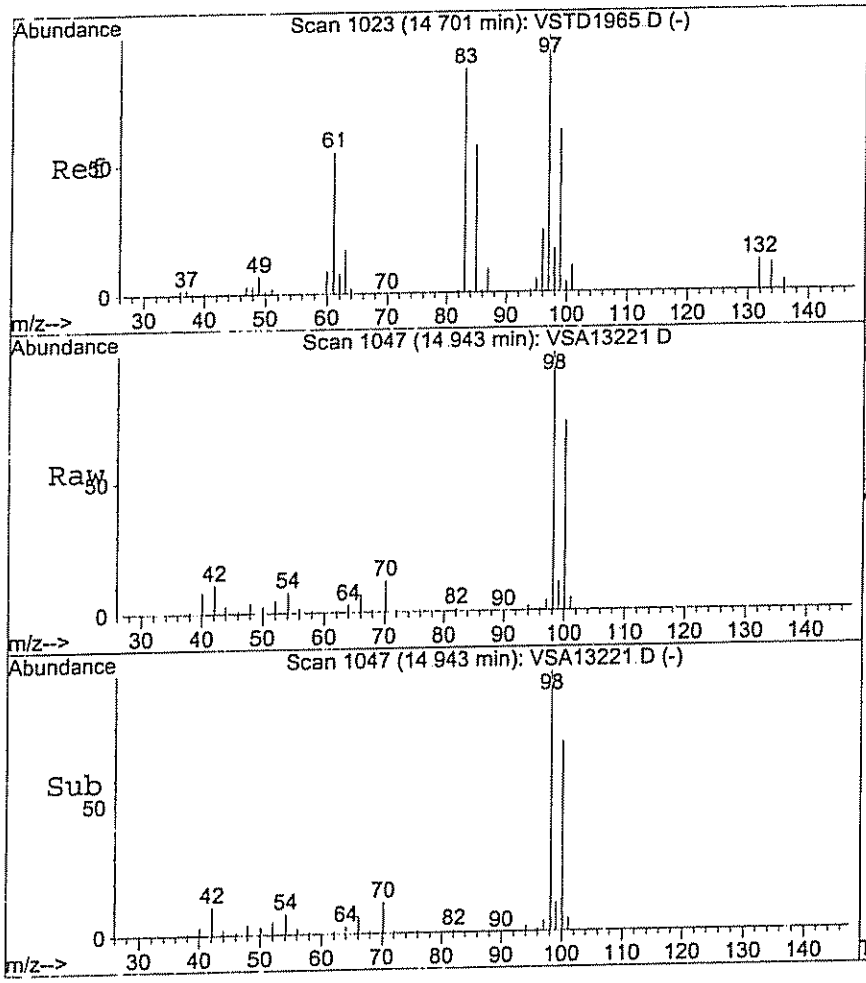


#24
Bromodichloromethane
Concen: 1.17 ug/L
RT: 13.19 min Scan# 869
Delta R.T. 0.01 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 83 Resp: 5940

Ion	Ratio	Lower	Upper
83	100		
83	100.0	70.0	130.0
85	66.4	33.9	93.9
47	860.5	0.0	46.1#

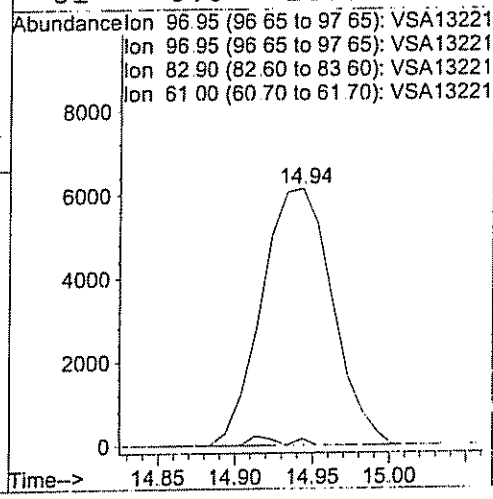


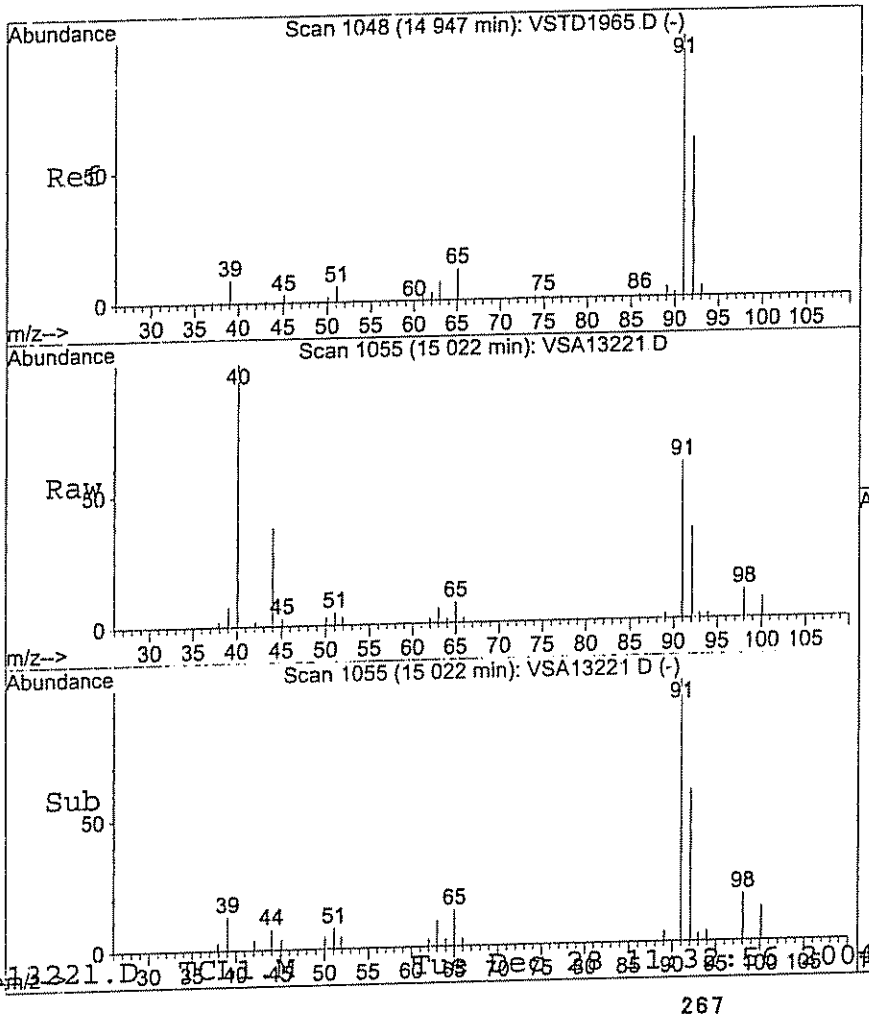


#27
1,1,2-Trichloroethane
Concen: 5.43 ug/L
RT: 14.94 min Scan# 1047
Delta R.T. 0.24 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 97 Resp: 19495

Ion	Ratio	Lower	Upper
97	100		
97	100.0	70.0	130.0
83	2.6	56.9	116.9#
61	0.0	24.6	84.6#

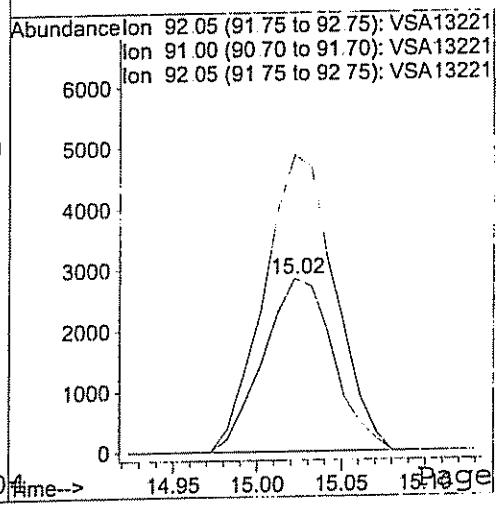


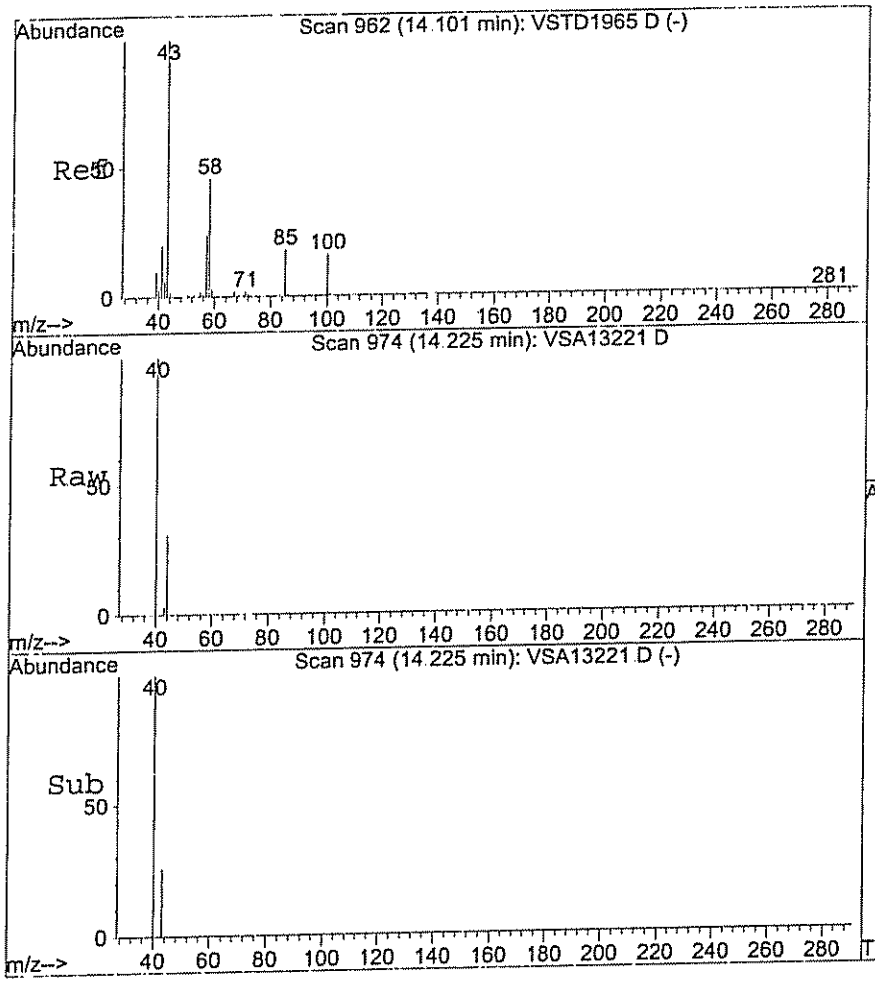


#33
Toluene
Concen: 0.90 ug/L
RT: 15.02 min Scan# 1055
Delta R.T. 0.07 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 92 Resp: 8156

Ion	Ratio	Lower	Upper
92	100		
91	171.3	132.6	192.6
92	100.0	70.0	130.0

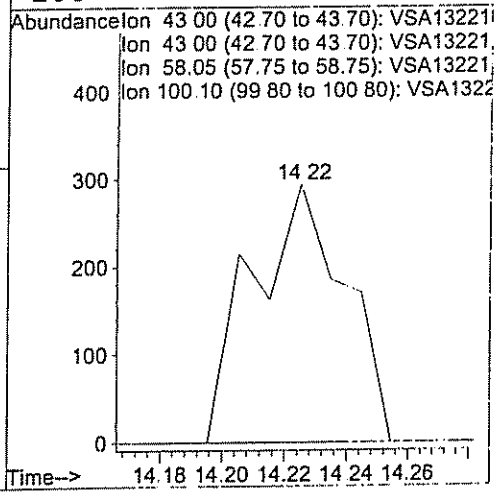


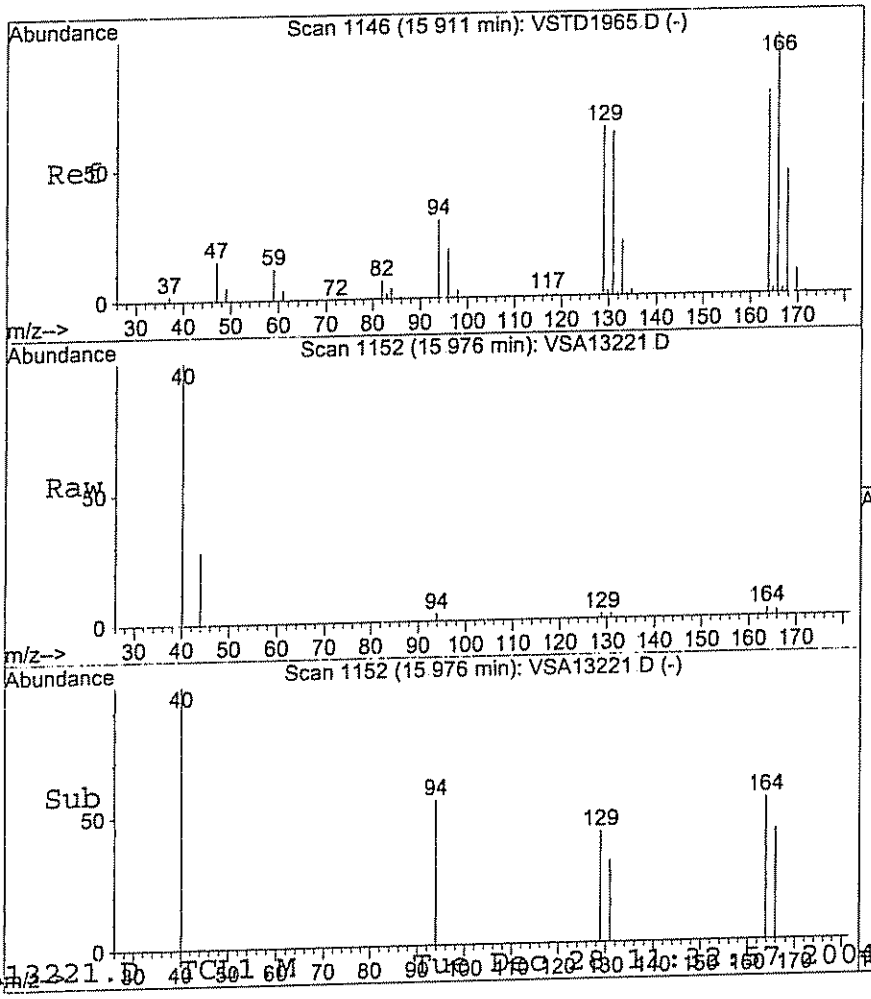


#34
4-methyl-2-Pentanone
Concen: 0.19 ug/L
RT: 14.22 min Scan# 974
Delta R.T. 0.10 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 43 Resp: 606

Ion	Ratio	Lower	Upper
43	100		
43	100.0	70.0	130.0
58	0.0	15.8	75.8#
100	0.0	0.0	46.4

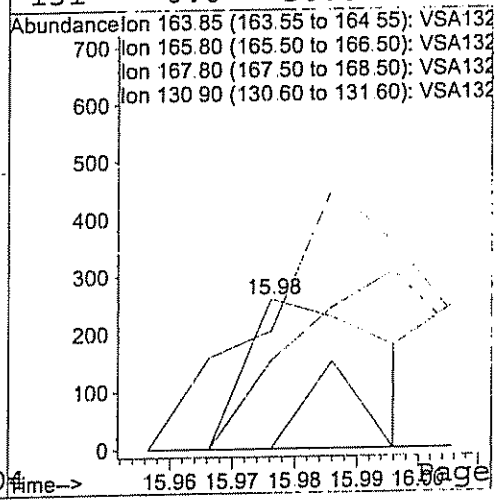


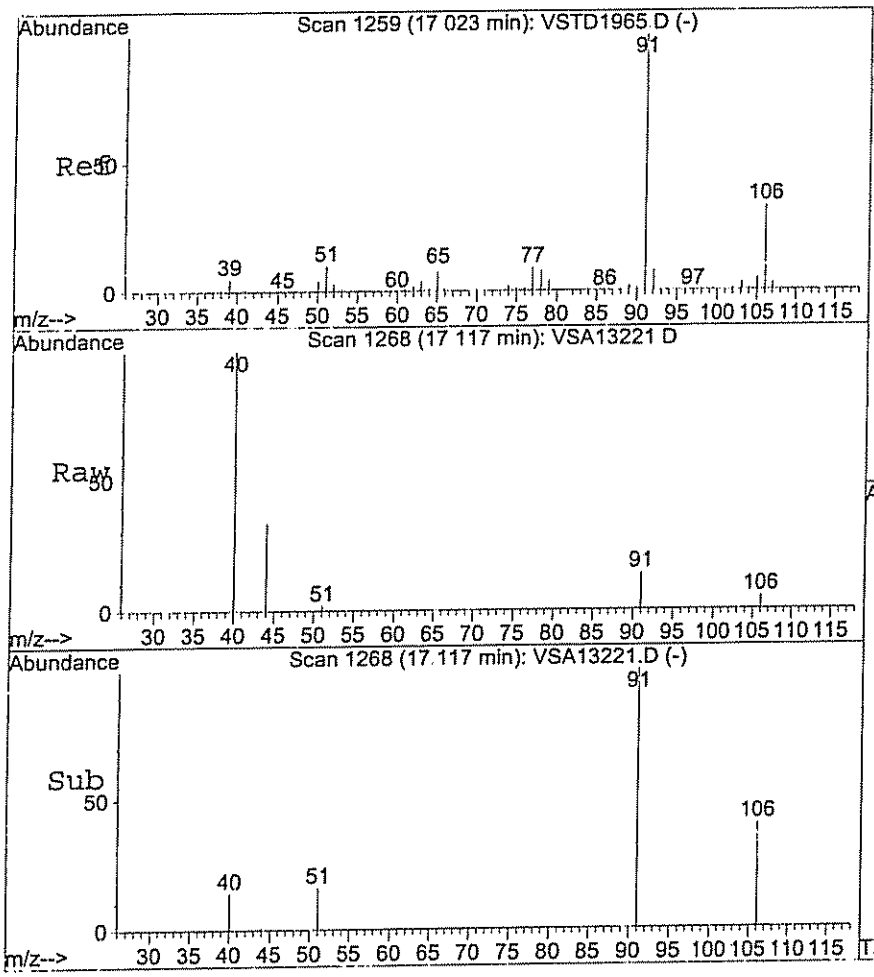


#35
Tetrachloroethene
Concen: 0.11 ug/L
RT: 15.98 min Scan# 1152
Delta R.T. 0.06 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion:164 Resp: 391

Ion	Ratio	Lower	Upper
164	100		
166	0.0	98.3	158.3#
168	0.0	30.5	90.5#
131	0.0	50.6	110.6#

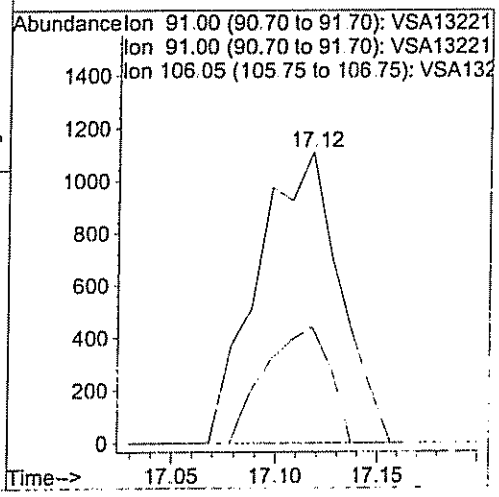


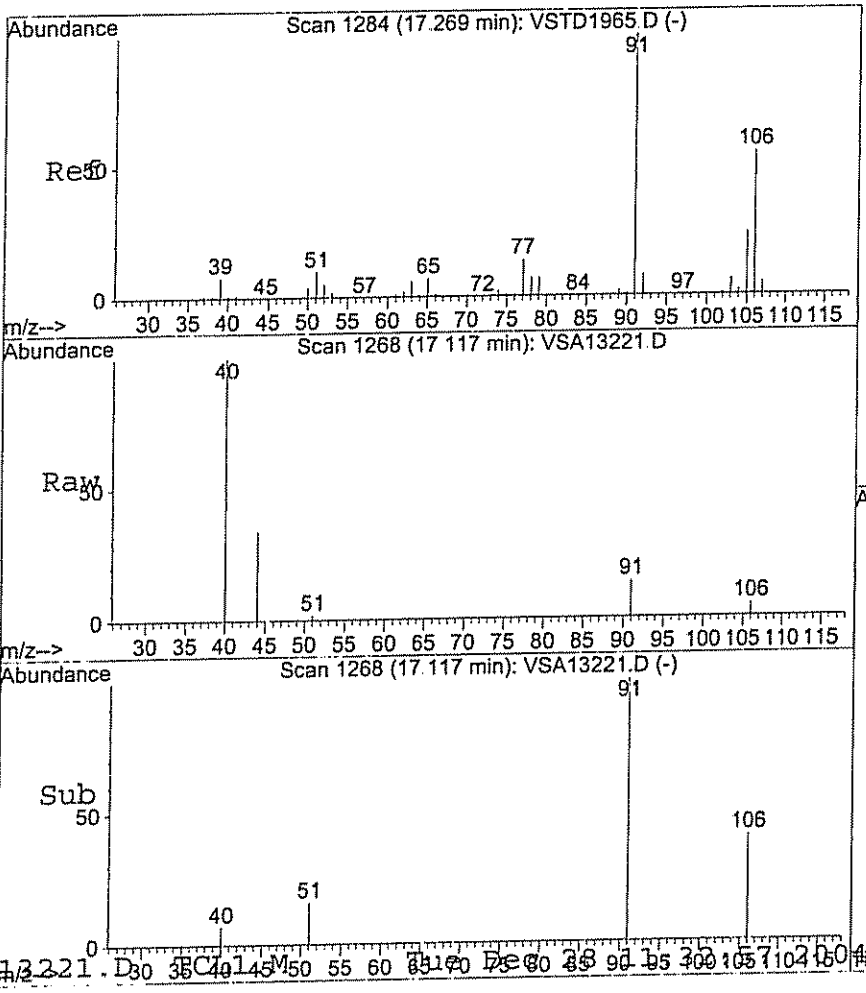


#37
Ethyl benzene
Concen: 0.19 ug/L
RT: 17.12 min Scan# 1268
Delta R.T. 0.09 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion: 91 Resp: 3075

Ion	Ratio	Lower	Upper
91	100		
91	100.0	70.0	130.0
106	39.7	2.9	62.9

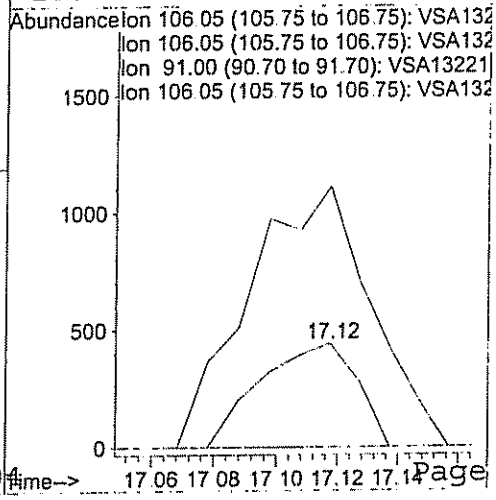


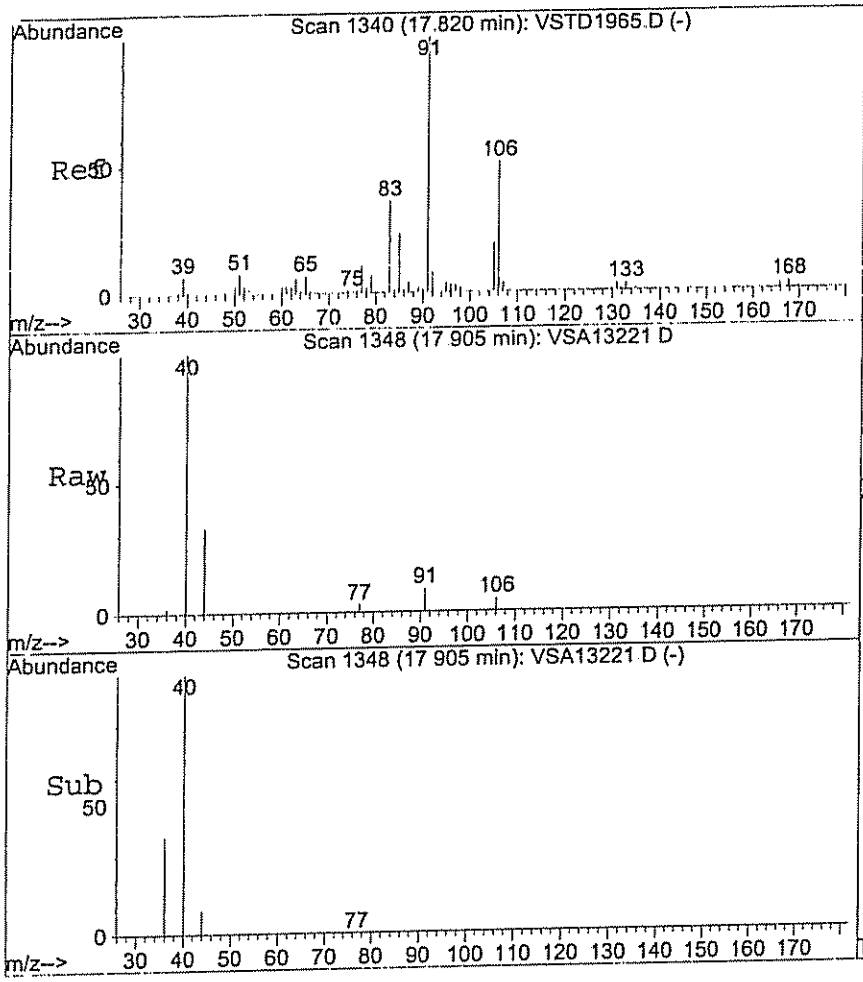


#39
m&p-Xylenes
Concen: 0.14 ug/L
RT: 17.12 min Scan# 1268
Delta R.T. -0.16 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion:106 Resp: 965

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	162.4	150.2	210.2
106	100.0	70.0	130.0

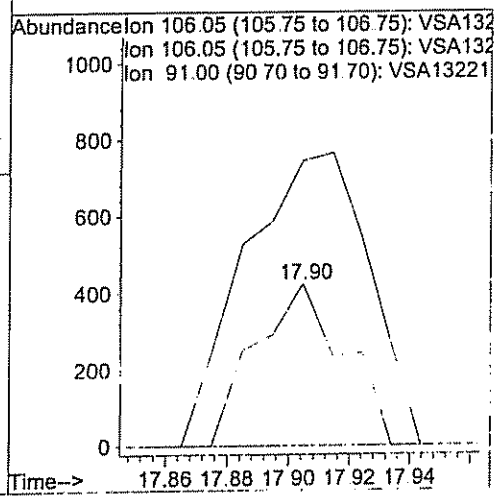


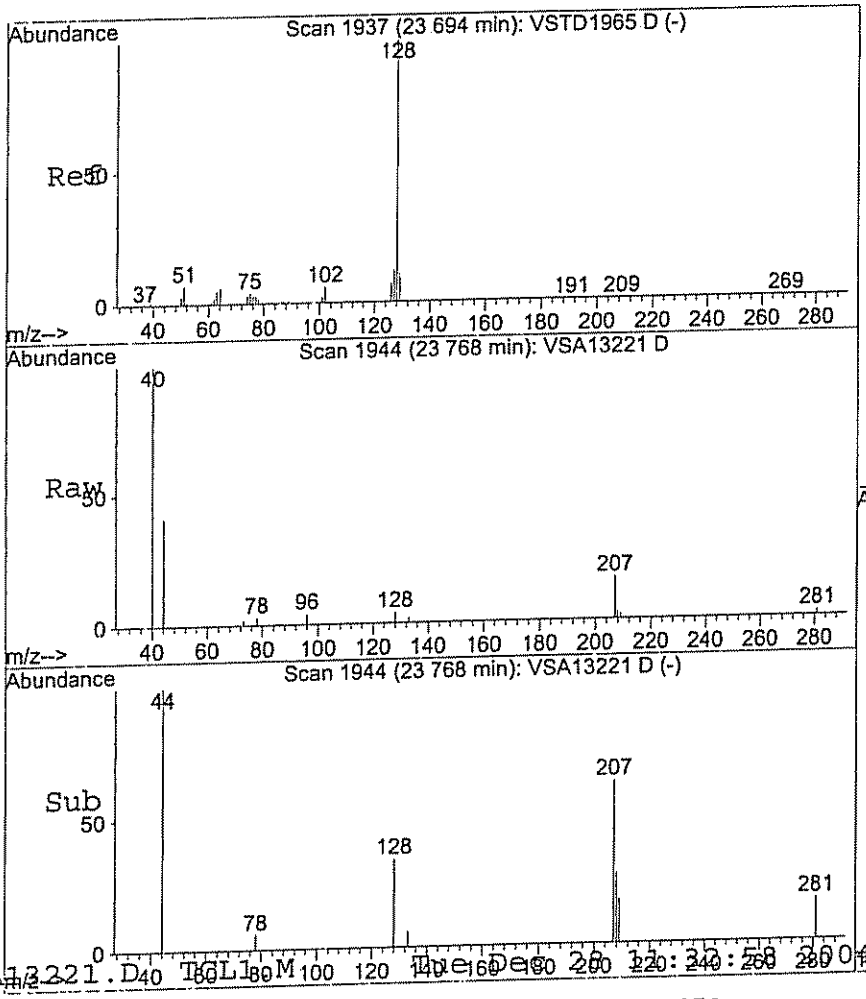


#40
o-Xylene
Concen: 0.13 ug/L
RT: 17.90 min Scan# 1348
Delta R.T. 0.08 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion:106 Resp: 852

Ion	Ratio	Lower	Upper
106	100		
106	100.0	70.0	130.0
91	116.2	164.9	224.9#

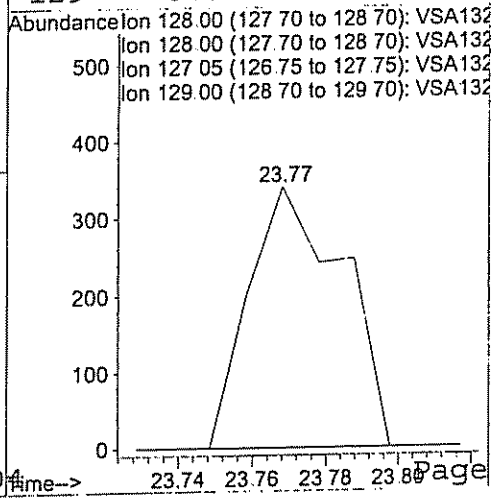




#45
Naphthalene
Concen: 0.04 ug/L
RT: 23.77 min Scan# 1944
Delta R.T. 0.07 min
Lab File: VSA13221.D
Acq: 23 Dec 2004 3:24

Tgt Ion:128 Resp: 607

Ion	Ratio	Lower	Upper
128	100		
128	100.0	70.0	130.0
127	0.0	0.0	30.0
129	0.0	0.0	40.8



Other Data

EPASampleNo: MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Matrix (soil / water): Water Lab Sample ID: P0412041-01A

Level (low/med): Date Received: 12/2/2004

% Solids:

Concentration Units :

CAS No.	Analyte	Concentration	Units	C	Q	M
16887-00-6	Chloride	250	mg/L		M	
14797-65-0	Nitrite	0.50	mg/L	U		
14797-55-8	Nitrate	240	mg/L			
14808-79-8	Sulfate	2400	mg/L			
14596-37-3	Phosphate	1.0	mg/L	U	M	
	Total Organic Carbon	18	mg/L			
18496-25-8	Sulfide	2.0	mg/L	U		T
74-82-8	Methane	60	ug/L			
74-85-1	Ethene	9400	ng/L			
74-84-0	Ethane	1800	ng/L			

OTHER ANALYSIS DATA SHEET

EPASampleNo: MWA-3

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Matrix (soil / water): Water Lab Sample ID: P0412041-02A

Level (low/med): Date Received: 12/2/2004

% Solids:

Concentration Units :

CAS No.	Analyte	Concentration	Units	C	Q	M
16887-00-6	Chloride	330	mg/L		M	
14797-65-0	Nitrite	0.50	mg/L	U		
14797-55-8	Nitrate	120	mg/L			
14808-79-8	Sulfate	2500	mg/L			
14596-37-3	Phosphate	1.0	mg/L	U	M	
	Total Organic Carbon	18	mg/L			
18496-25-8	Sulfide	2.6	mg/L			I
74-82-8	Methane	100	ug/L			
74-85-1	Ethene	13000	ng/L			
74-84-0	Ethane	410	ng/L			

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Initial Calibration Source: ERA
Continuing Calibration Source: ERA

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R	Continuing Calibration True	Found	%R	Found	%R	M
Chloride	10.0	10.78	108	10.0	10.49	105	10.64	106	
Nitrate	10.0	10.37	104	10.0	10.83	108	10.59	106	
Nitrite	10.0	10.02	100	10.0	10.65	106	10.97	110	
Phosphate	10.0	10.09	101	10.0	10.58	106	10.32	103	
Sulfate	10.0	10.98	110	10.0	10.62	106	10.47	105	

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Initial Calibration Source:
Continuing Calibration Source: ERA

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R	Continuing Calibration True	Found	%R	Found	%R	M
Total organic carbon				25.0	24.71	98.8	24.28	97.1	

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Initial Calibration Source: Scotty
Continuing Calibration Source: Spectra

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R	Continuing Calibration True	Found	%R	Found	%R	M
Methane	5.0	5.03	101	4.92	5.17	105			
Ethane	10000	9490	94.9	9420	9607	102			
Ethene	10000	10600	106	10580	10689	101			

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Preparation blank Matrix Water

Preparation Blank Concentration mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Sulfate	1.0	U	1.0	U	1.0	U			1.0	U	
Phosphate	1.0	U	0.72	B	1.0	U			0.96	B	
Chloride	1.0	U	1.0	U	1.0	U			1.0	U	
Nitrite	0.50	U	0.50	U	0.50	U			0.50	U	
Nitrate	0.50	U	0.50	U	0.50	U			0.50	U	

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Preparation blank Matrix: Water

Preparation Blank Concentration: mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Sulfide									2.0	U	T

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Preparation blank Matrix Water

Preparation Blank Concentration mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Total Organic Carbon	5.0	U	5.0	U	5.0	U			5.0	U	

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Preparation blank Matrix Water

Preparation Blank Concentration ug/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Methane	0.015	U	0.015	U					0.015	U	

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Preparation blank Matrix Water

Preparation Blank Concentration ng/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Ethene	5.0	U	5.0	U					5.0	U	
Ethane	5.0	U	5.0	U					5.0	U	

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA Sample No.
MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Matrix (soil/water): Water Level (low/med):

% Solids for Sample:

Concentration Units : mg/L

Analyte	Control Limit %R	Spike Sample Result	C	Sample Result	C	Spike Added	%R	Q	M
Total Organic Carbon	70-130	36.74		18.09		20	93.2		

Comments:

U.S. EPA - CLP
6
DUPLICATES

EPA Sample No.
MWB-4

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Matrix (soil/water): Water Level (low/med):
% Solids for Sample: % Solids for Duplicate:

Concentration Units : mg/L

Analyte	Control Limit	Sample	C	Duplicate	C	RPD	Q	M
Total Organic Carbon	0-20	18.09		16.84		7.16		

EPA Sample No.

Lab Name: Microseeps, Inc. Contract: 7464127E LCS

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Matrix (soil/water): Water Level (low/med):

% Solids for Sample: % Solids for Duplicate:

Concentration Units : ug/L

Analyte	Control Limit	Sample	C	Duplicate	C	RPD	Q	M
Methane	0-20	73.68		74.05		0.50		

U.S. EPA - CLP
6
DUPLICATES

EPA Sample No.
LCS

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Matrix (soil/water): Water Level (low/med):
% Solids for Sample: % Solids for Duplicate:

Concentration Units : ng/L

Analyte	Control Limit	Sample	C	Duplicate	C	RPD	Q	M
Ethane	0-20	50269		50465		0.40		
Ethene	0-20	55570		55750		0.30		

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Chloride	mg/L	10.0	11.24	112						
Nitrite	mg/L	10.0	11.88	119						
Nitrate	mg/L	10.0	11.47	115						
Sulfate	mg/L	10.0	10.54	105						
Phosphate	mg/L	10.0	10.39	104						

MWB-4

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Solid LCS Source:

Aqueous LCS Source: Fisher

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Sulfide	mg/L	34.0	24.0	70.6						

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous Units	True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Total Organic Carbon	mg/L	19.7	19.2	97.5						

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Solid LCS Source:

Aqueous LCS Source: Spectra

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Methane	ug/L	71.93	73.68	102						

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412041 Case No.: SAS No.: SDG No.: MWB-4

Solid LCS Source:

Aqueous LCS Source: Spectra

Analyte	Aqueous				Solid (mg/Kg)					
	Units	True	Found	%R	True	Found	C	Limits		%R
Ethene	ng/L	51975	55570	107						
Ethane	ng/L	47200	50269	106						

Sulfide

(Water)

Method : EPA 376.1 (Titration) Analyst's Name : Dan Somma

LIMS Batch Number: M041206031 Date of Analysis: 12-6-04

LCS Source : Sulfide Stock 680 ppm LCS Actual Value : 34

Iodine N = 0.0244 $Na_2S_2O_3$ N = 0.0250

Sample Identification	Analysis Time	Spl. Vol. (ml)	Iodine Soln. Added (ml)	Na2S2O3 Titrant Volumes (ml) Initial	Final	Titer	*Sulfide (mg/l)
PBW	10:45	125	25	0.00	24.3	24.3	0.32
LCSW % Rec: 70.59	11:00	100	25	0.00	18.4	18.4	24.00
P0412024-01AL	11:20	125	25	0.00	24.3	24.3	0.32
62.59% -01AK, MS	11:35	100	25	0.00	19.0	19.0	21.60
59.65% -01AI, MSD	11:40	100	25	0.00	19.25	19.25	20.60
-02AJ	12:50	125	25	0.00	24.2	24.2	0.64
-03AJ	12:55	125	25	0.00	24.1	24.1	0.96
P0412037-~~01AG~~-01AH	13:05	125	25	-0.00	23.8	23.8	1.92
-02AG	13:20	125	25	0.00	23.9	23.9	1.60
P0412041-01AI	13:35	125	25	0.00	24.0	24.0	1.28
-02AI	13:40	125	25	0.00	23.6	23.6	2.56
P0412042-01AH	13:50	125	25	0.00	23.7	23.7	2.24
-02AE	14:05	125	25	0.00	23.7	23.7	2.24
-03AE	14:10	125	25	0.00	23.5	23.5	2.88
-04AE	14:20	125	25	0.00	23.4	23.4	3.20
-05AF	14:30	125	25	0.00	23.6	23.6	2.56
-06AE	14:40	125	25	0.00	23.4	23.4	3.20
P0412055-01AH	14:50	125	25	0.00	23.5	23.5	2.88
-02AK	15:00	125	25	0.00	23.4	23.4	3.20
-03AK	15:15	125	25	0.00	23.3	23.3	3.52

MS/MSD RPD: 4.74%

Required QC:
- PBW: < 2 ppm (reporting limit)
- LCSW % Rec.: 50% - 87%
- MS/MSD % Rec.: 52% - 79%
- MS/MSD RPD: < or = 8%

Titrate to "clear" End Pt.

Record all calculation results (on this data sheet)

Your signature indicates that all data is within acceptance criteria or justified in a narrative form.

Data entered by : Daniel Somma Date : 12-6-04

Data reviewed & approved by : Maureen Conlin Date : 12-8-04

Calculation: mg/l Sulfide = { [(A x B) - (C x D)] x 16,000 } / Sample Vol.

Where: A = Vol. of Iodine Soln., B = N of Iodine Soln., C = Vol of Na2S2O3, D = N of Na2S2O3

Sequence: AN120304MD
Operator: mdonlin
Title:
Datasource: WETCHEM11_local
Location: Anions\Sequences\AN1004
Timebase: Anions
#Samples: 79

M0412070008 ✓
M0412180013 ✓

Created: 12/3/2004 9:57:11 AM by mdonlin
Last Update: 12/4/2004 8:19:12 AM by mdonlin

No.	Name	Inj. Date/Time	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
1	CCB	12/3/2004 9:58:37 AM	1.0000	1.0000	1.0000		01	
2	CCB	12/3/2004 10:20:37 AM	1.0000	1.0000	1.0000		01	
3	CCV 10ppm	12/3/2004 10:42:38 AM	1.0000	1.0000	1.0000		01	
4	CCV 10ppm	12/3/2004 11:04:39 AM	1.0000	1.0000	1.0000		01	
5	PBW	12/3/2004 11:26:39 AM	1.0000	1.0000	1.0000		01	
6	LCSW 10ppm	12/3/2004 11:48:40 AM	1.0000	1.0000	1.0000		01	
7	~~P0412044-01AA~~	12/3/2004 12:10:40 PM	1.0000	1.0000	1.0000		01	
8	~~P0412044-01AA DUP~~	12/3/2004 12:32:41 PM	1.0000	1.0000	1.0000		01	
9	~~P0412044-01AA MS~~	12/3/2004 12:54:42 PM	1.0000	1.0000	1.0000		01	
10	~~P0412044-01AA MSD~~	12/3/2004 1:16:42 PM	1.0000	1.0000	1.0000		01	
11	P0412037-01AA NO2NO3 SO4 ✓	12/3/2004 1:38:42 PM	1.0000	1.0000	1.0000		01	
12	P0412037-02AA	12/3/2004 2:00:43 PM	1.0000	1.0000	1.0000		01	
13	P0412035-01AA Cl SO4 NO2NO3 ✓	12/3/2004 2:22:44 PM	1.0000	1.0000	1.0000		01	
14	P0412035-02AA	12/3/2004 2:44:44 PM	1.0000	1.0000	1.0000		01	
15	CCB	12/3/2004 3:06:45 PM	1.0000	1.0000	1.0000		01	
16	CCV 10ppm	12/3/2004 3:28:46 PM	1.0000	1.0000	1.0000		01	
17	P0412035-03AA	12/3/2004 3:50:46 PM	1.0000	1.0000	1.0000		01	
18	P0412035-04AA	12/3/2004 4:12:47 PM	1.0000	1.0000	1.0000		01	
19	P0412042-01AA NO3SO4	12/3/2004 4:34:48 PM	1.0000	1.0000	1.0000		01	
20	P0412042-02AA	12/3/2004 4:56:48 PM	1.0000	1.0000	1.0000		01	
21	P0412042-03AA	12/3/2004 5:18:49 PM	1.0000	1.0000	1.0000		01	
22	P0412042-04AA	12/3/2004 5:40:49 PM	1.0000	1.0000	1.0000		01	
23	P0412042-04AA DUP	12/3/2004 6:02:50 PM	1.0000	1.0000	1.0000		01	
24	P0412042-04AA MS	12/3/2004 6:24:51 PM	1.0000	1.0000	1.0000		01	
25	P0412042-04AA MSD	12/3/2004 6:46:51 PM	1.0000	1.0000	1.0000		01	
26	P0412042-05AA	12/3/2004 7:08:52 PM	1.0000	1.0000	1.0000		01	
27	CCB	12/3/2004 7:30:52 PM	1.0000	1.0000	1.0000		01	
28	CCV 10ppm	12/3/2004 7:52:53 PM	1.0000	1.0000	1.0000		01	
29	PBW	12/3/2004 8:14:54 PM	1.0000	1.0000	1.0000		01	
30	LCSW 10ppm	12/3/2004 8:36:54 PM	1.0000	1.0000	1.0000		01	
31	P0412042-06AA	12/3/2004 8:58:55 PM	1.0000	1.0000	1.0000		01	
32	P0412041-01AE Cl SO4 NO2NO3 PO4	12/3/2004 9:20:56 PM	1.0000	1.0000	1.0000		01	
33	P0412041-02AE	12/3/2004 9:42:56 PM	1.0000	1.0000	1.0000		01	
34	P0412010-01AC DIL 1/5	12/3/2004 10:04:57 PM	1.0000	1.0000	1.0000		01	
35	P0412010-02AC DIL 1/2	12/3/2004 10:26:58 PM	1.0000	1.0000	1.0000		01	
36	~~P0412055-01AD~~	12/3/2004 10:48:58 PM	1.0000	1.0000	1.0000		01	
37	~~P0412055-03AC~~	12/3/2004 11:10:58 PM	1.0000	1.0000	1.0000		01	
38	~~P0412055-02AC~~	12/3/2004 11:32:59 PM	1.0000	1.0000	1.0000		01	
39	CCB	12/3/2004 11:55:00 PM	1.0000	1.0000	1.0000		01	
40	CCV 10ppm	12/4/2004 12:17:00 AM	1.0000	1.0000	1.0000		01	
41	P0412053-01AC ✓	12/4/2004 12:39:01 AM	1.0000	1.0000	1.0000		01	
42	P0412053-01AC DUP	12/4/2004 1:01:02 AM	1.0000	1.0000	1.0000		01	

AGM
AGM
AGM
Water tech D.P.
WDS RC
Cl SO4 NO2NO3

Sequence: AN120304MD
Operator: mdonlin

Title:
Datasource: WETCHEM11_local
Location: Anions\Sequences\AN1004
Timebase: Anions
#Samples: 79

Created: 12/3/2004 9:57:11 AM by mdonlin
Last Update: 12/4/2004 8:19:12 AM by mdonlin

No.	Name	Inj. Date/Time	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
43	P0412053-01AC MS	12/4/2004 1:23:02 AM	1.0000	1.0000	1.0000		01	
44	P0412053-01AC MSD	12/4/2004 1:45:03 AM	1.0000	1.0000	1.0000		01	
45	P0412053-02AC	12/4/2004 2:07:03 AM	1.0000	1.0000	1.0000		01	
46	P0412053-03AC	12/4/2004 2:29:04 AM	1.0000	1.0000	1.0000		01	
47	P0412053-04AC	12/4/2004 2:51:05 AM	1.0000	1.0000	1.0000		01	
48	P0412053-05AC	12/4/2004 3:13:05 AM	1.0000	1.0000	1.0000		01	
49	P0412053-06AC	12/4/2004 3:35:06 AM	1.0000	1.0000	1.0000		01	
50	CCB	12/4/2004 3:57:07 AM	1.0000	1.0000	1.0000		01	
51	CCV 10ppm	12/4/2004 4:19:07 AM	1.0000	1.0000	1.0000		01	
52	PBW	12/4/2004 4:41:08 AM	1.0000	1.0000	1.0000		01	
53	LCSW 10ppm	12/4/2004 5:03:08 AM	1.0000	1.0000	1.0000		01	
54	P0412062-01AC	12/4/2004 5:25:09 AM	1.0000	1.0000	1.0000		01	
55	P0412062-01AC DUP	12/4/2004 5:47:10 AM	1.0000	1.0000	1.0000		01	
56	P0412062-01AC MS	12/4/2004 6:09:10 AM	1.0000	1.0000	1.0000		01	
57	P0412062-01AC MSD	12/4/2004 6:31:11 AM	1.0000	1.0000	1.0000		01	
58	P0412062-02AC	12/4/2004 6:53:11 AM	1.0000	1.0000	1.0000		01	
59	P0412062-03AC	12/4/2004 7:15:12 AM	1.0000	1.0000	1.0000		01	
60	P0412062-04AC	12/4/2004 7:37:13 AM	1.0000	1.0000	1.0000		01	
61	P0412062-05AC	12/4/2004 7:59:13 AM	1.0000	1.0000	1.0000		01	
62	CCB	12/4/2004 8:21:14 AM	1.0000	1.0000	1.0000		01	
63	CCV 10ppm	12/4/2004 8:43:15 AM	1.0000	1.0000	1.0000		01	
64	P0412062-06AC	12/4/2004 9:05:15 AM	1.0000	1.0000	1.0000		01	
65	P0412065-01AA	12/4/2004 9:27:16 AM	1.0000	1.0000	1.0000		01	
66	P0412065-02AA	12/4/2004 9:49:17 AM	1.0000	1.0000	1.0000		01	
67	P0412065-03AA	12/4/2004 10:11:17 AM	1.0000	1.0000	1.0000		01	
68	CCB	12/4/2004 10:33:18 AM	1.0000	1.0000	1.0000		01	
69	CCV 10ppm	12/4/2004 10:55:18 AM	1.0000	1.0000	1.0000		01	
70	CCB	12/4/2004 11:17:19 AM	1.0000	1.0000	1.0000		01	
71	anion shutdown	12/4/2004 11:39:20 AM	1.0000	1.0000	1.0000		01	
72	0.1ppm anion std	11/18/2004 4:19:20 PM	1.0000	1.0000	1.0000		01	
73	1.0ppm anion std	11/18/2004 4:41:21 PM	1.0000	1.0000	1.0000		01	
74	5.0ppm anion std	11/18/2004 5:03:22 PM	1.0000	1.0000	1.0000		01	
75	10ppm anion std	11/18/2004 5:25:22 PM	1.0000	1.0000	1.0000		01	
76	20ppm anion std	11/18/2004 5:47:23 PM	1.0000	1.0000	1.0000		01	
77	50ppm anion std	11/18/2004 6:09:23 PM	1.0000	1.0000	1.0000		01	
78	100ppm CL+SO4 std	11/18/2004 6:31:24 PM	1.0000	1.0000	1.0000		01	
79	200ppm CL+SO4 std	11/18/2004 6:53:25 PM	1.0000	1.0000	1.0000		01	

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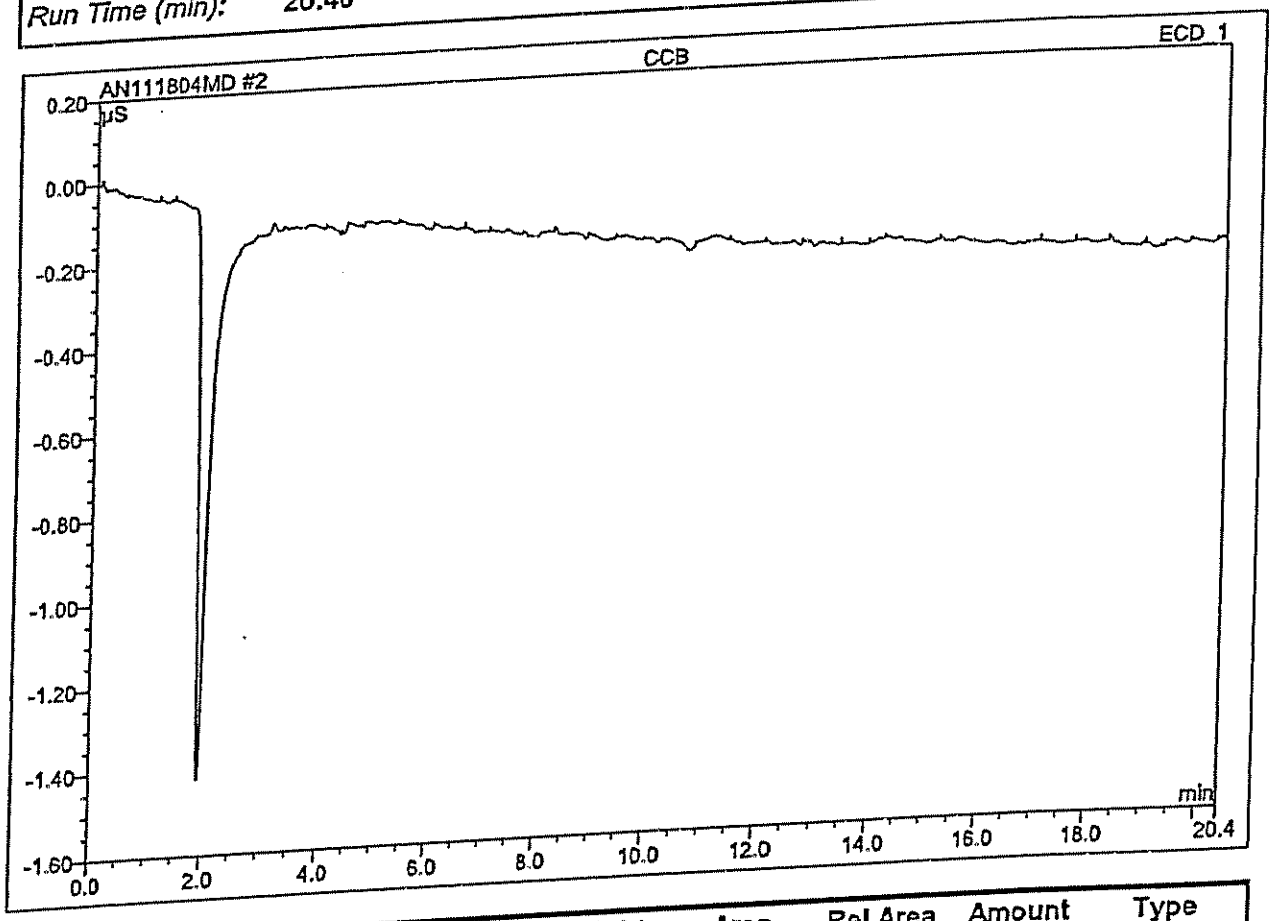
2 CCB

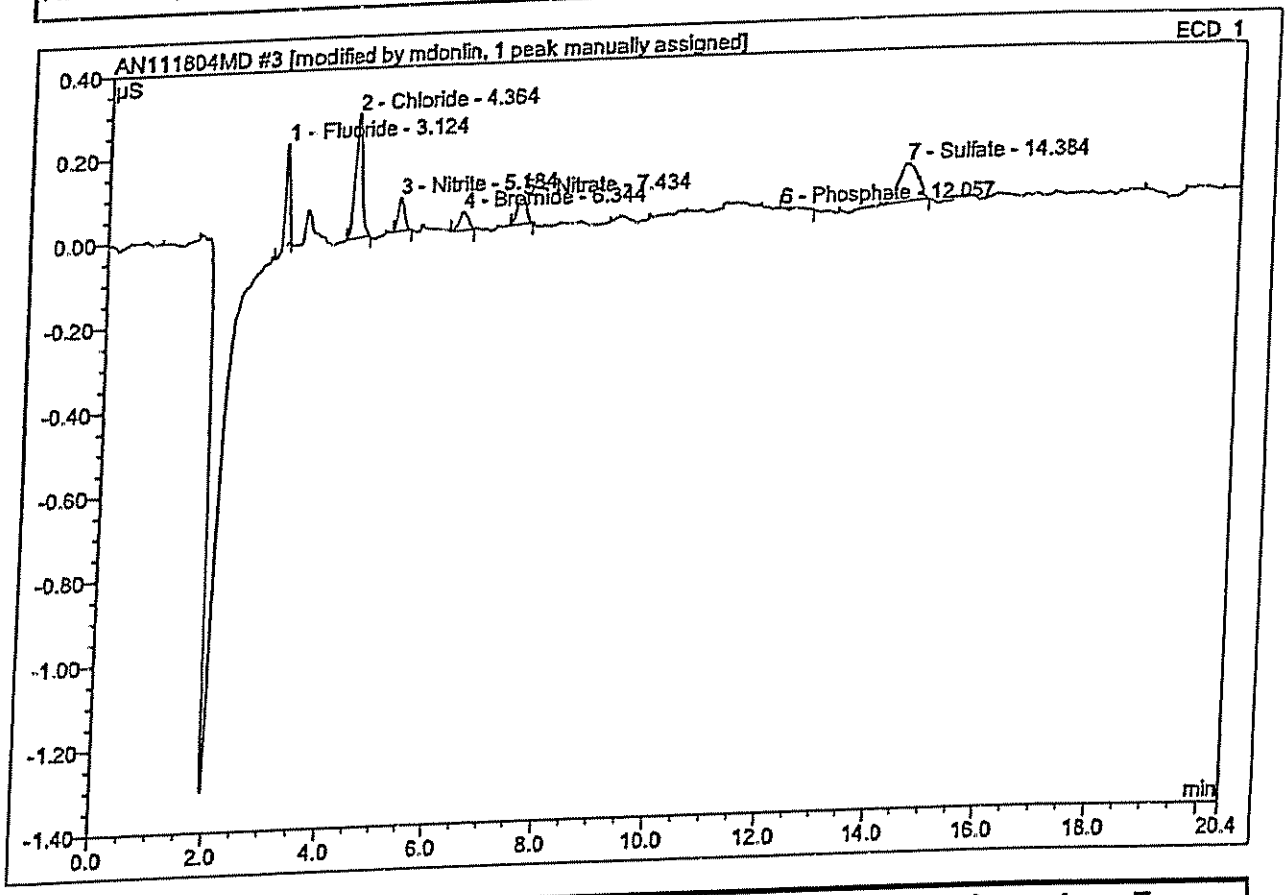
Sample Name:	CCB	*Injection Volume:*	1.0
Vial Number:	53	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 15:57	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

3 0.1ppm anion std

Sample Name:	0.1ppm anion std	*Injection Volume:*	1.0
Vial Number:	53	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 16:19	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



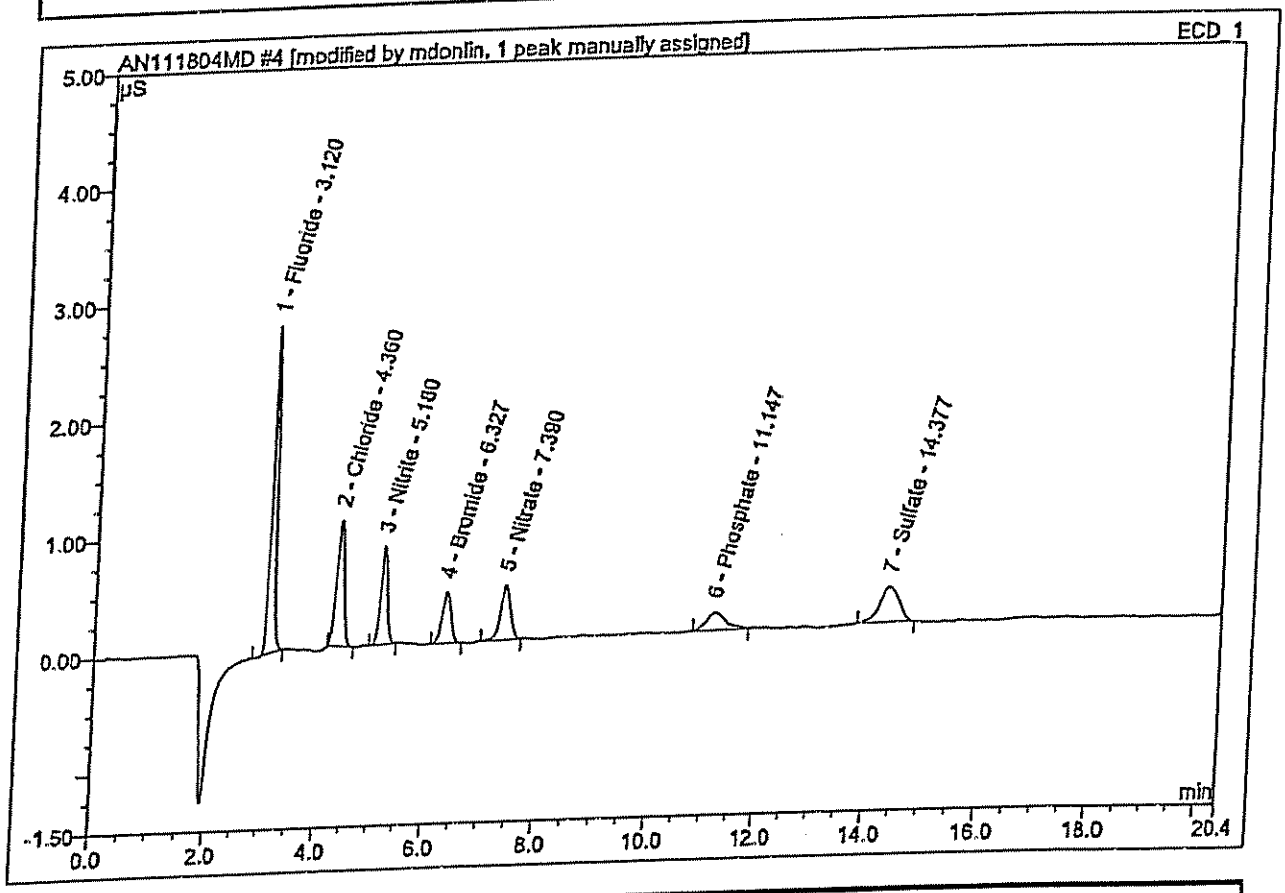
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	0.244	0.021	15.53	0.370	BMB*
2	4.36	Chloride	0.297	0.046	34.04	4.218	BMB*
3	5.18	Nitrite	0.079	0.011	8.16	0.770	BMB^
4	6.34	Bromide	0.045	0.009	6.70	1.273	BMB
5	7.43	Nitrate	0.061	0.012	8.89	1.331	BMB
6	12.06	Phosphate	0.000	0.000	0.08	0.653	BMB*
7	14.38	Sulfate	0.091	0.036	26.59	3.812	BMB*
Total:			0.817	0.134	100.00	12.426	

Chromeleon (c) Dionex 1996-2001
Version 6.60 Build 1428

default_letter/Integration

4 1.0ppm anion std

Sample Name:	1.0ppm anion std	*Injection Volume:*	1.0
Vial Number:	54	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 16:41	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	2.790	0.267	28.99	1.000	BMB*
2	4.36	Chloride	1.070	0.169	18.35	1.000	BMB*
3	5.18	Nitrite	0.834	0.121	13.15	0.898	BMB
4	6.33	Bromide	0.436	0.078	8.44	1.885	BMB
5	7.39	Nitrate	0.466	0.099	10.70	1.458	BMB
6	11.15	Phosphate	0.158	0.065	7.09	1.478	BMB^
7	14.38	Sulfate	0.304	0.122	13.28	4.196	BMB
Total:			6.057	0.921	100.00	11.915	

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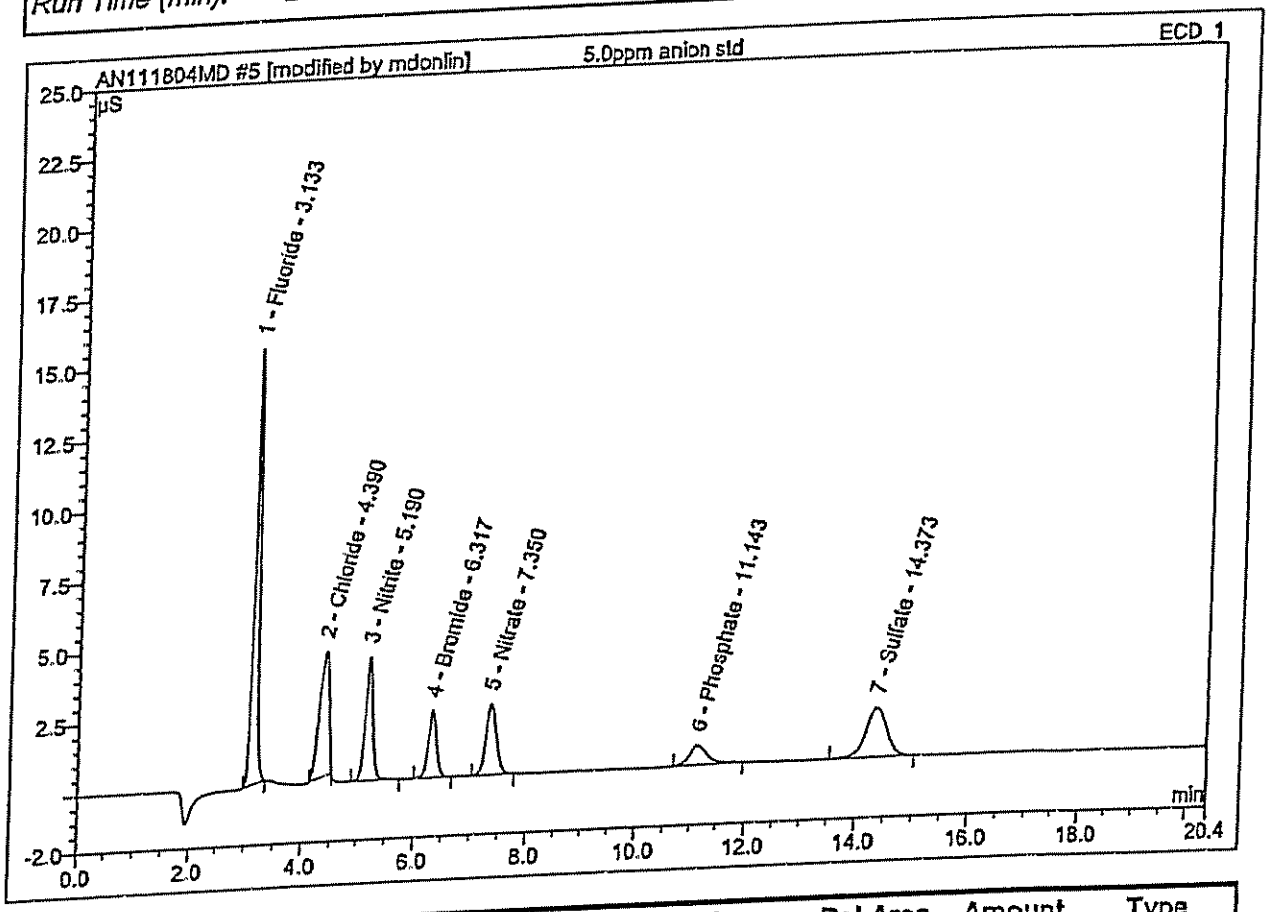
Version 6.60 Build 1428

default_letter/Integration

5 5.0ppm anion std

Sample Name:	5.0ppm anion std	*Injection Volume:*	1.0
Vial Number:	56	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 17:03	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.13	Fluoride	15.388	1.461	29.59	5.007	BMB*
2	4.39	Chloride	4.391	0.872	17.65	5.018	BMB*
3	5.19	Nitrite	4.336	0.651	13.19	4.481	BMB
4	6.32	Bromide	2.338	0.408	8.26	4.825	BMB
5	7.35	Nitrate	2.468	0.523	10.60	4.381	BMB
6	11.14	Phosphate	0.694	0.283	5.73	4.717	BMB
7	14.37	Sulfate	1.730	0.740	14.98	6.929	BMB
Total:			31.344	4.938	100.00	35.358	

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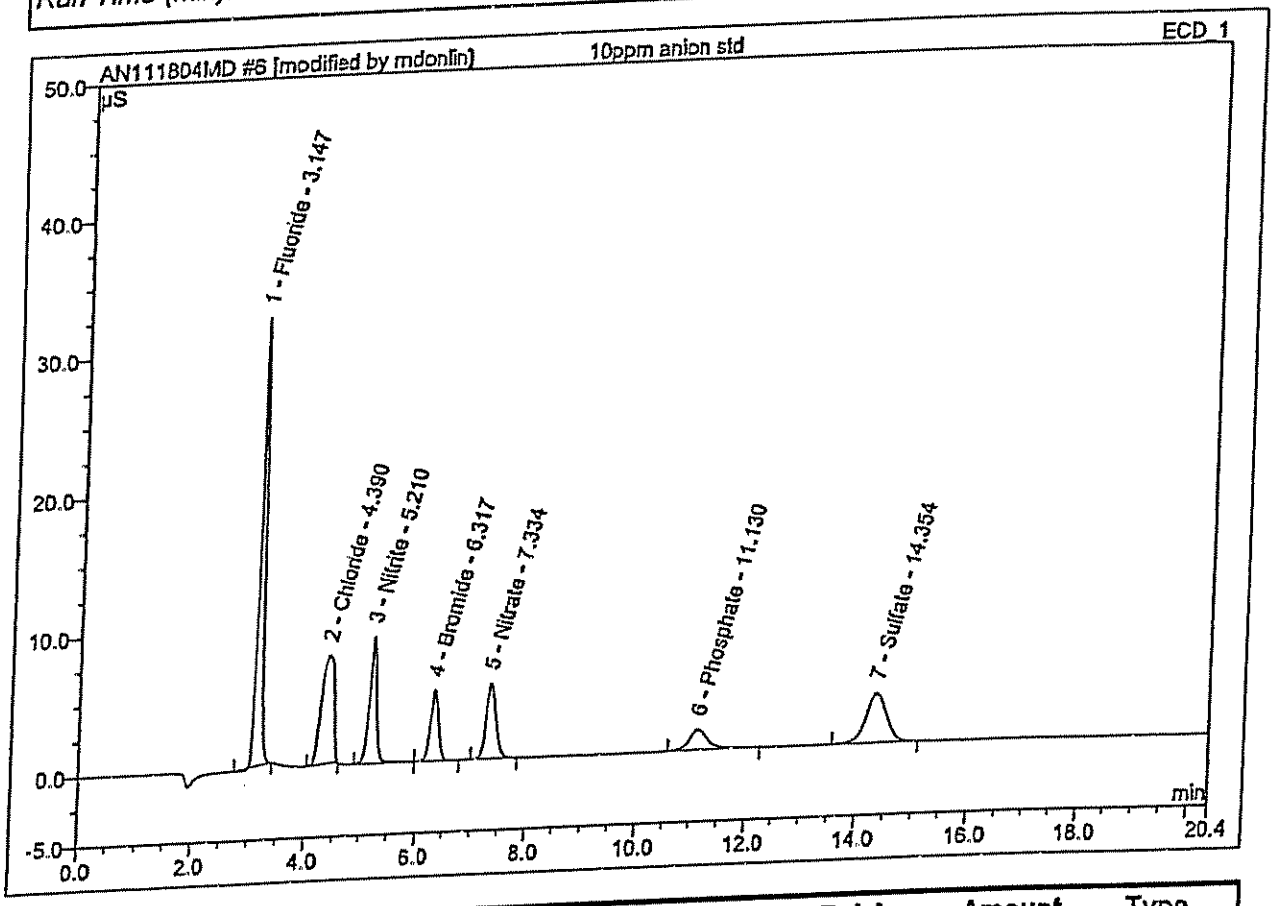
Version 6.60 Build 1428

6 10ppm anion std

Sample Name:	10ppm anion std	*Injection Volume:*	1.0
Vial Number:	59	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 17:25	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.15	Fluoride	32.208	3.182	29.86	10.129	BMB*
2	4.39	Chloride	7.736	1.975	18.53	10.216	BMB*
3	5.21	Nitrite	9.078	1.408	13.21	9.411	BMB
4	6.32	Bromide	5.072	0.875	8.21	8.982	BMB
5	7.33	Nitrate	5.387	1.130	10.61	8.560	BMB
6	11.13	Phosphate	1.464	0.598	5.61	9.409	BMB
7	14.35	Sulfate	3.535	1.489	13.97	10.245	BMB
Total:			64.481	10.658	100.00	66.952	

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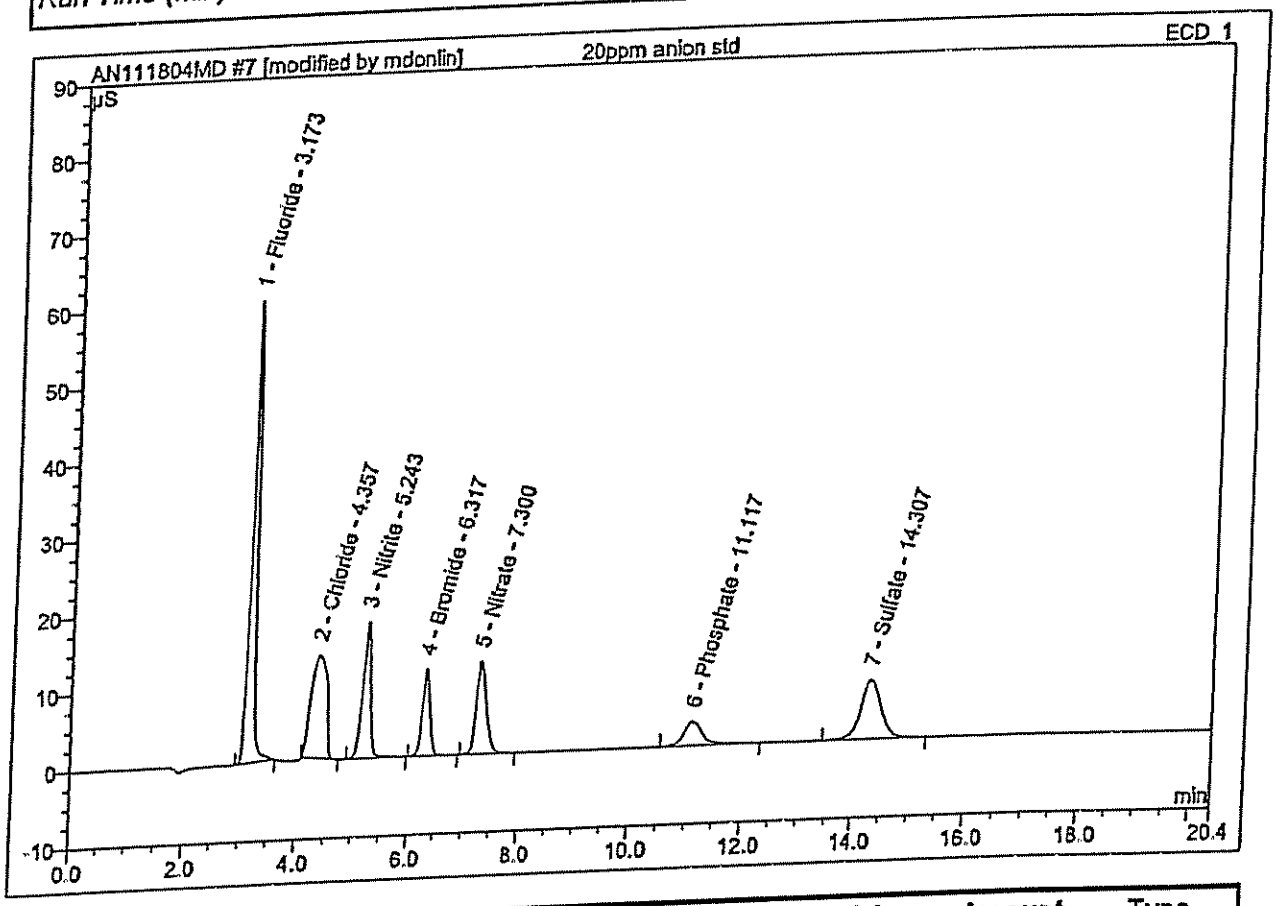
Version 6.60 Build 1428

default_letter/Integration

7 20ppm anion std

Sample Name:	20ppm anion std	*Injection Volume:*	1.0
Vial Number:	60	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 17:47	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.17	Fluoride	60.364	7.066	30.57	20.380	BMB*
2	4.36	Chloride	13.392	4.291	18.56	20.346	BMB*
3	5.24	Nitrite	17.706	2.874	12.43	18.897	BMB
4	6.32	Bromide	11.295	1.913	8.27	18.222	BMB
5	7.30	Nitrate	12.011	2.494	10.79	17.946	BMB
6	11.12	Phosphate	3.158	1.234	5.34	18.877	BMB
7	14.31	Sulfate	7.701	3.243	14.03	18.011	BMB
Total:			125.628	23.114	100.00	132.680	

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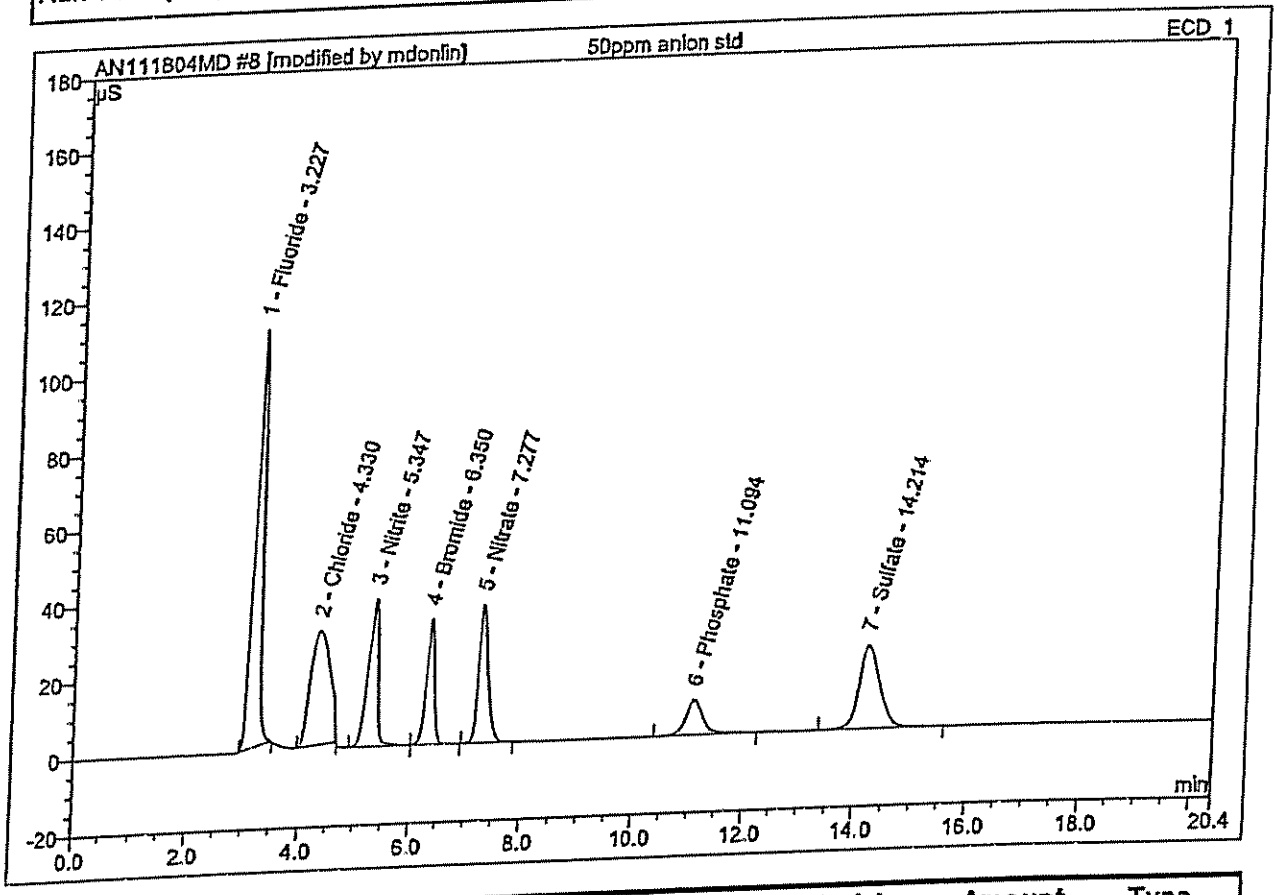
Version 6.60 Build 1428

8 50ppm anion std

Sample Name:	50ppm anion std	*Injection Volume:*	1.0
Vial Number:	61	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 18:09	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000

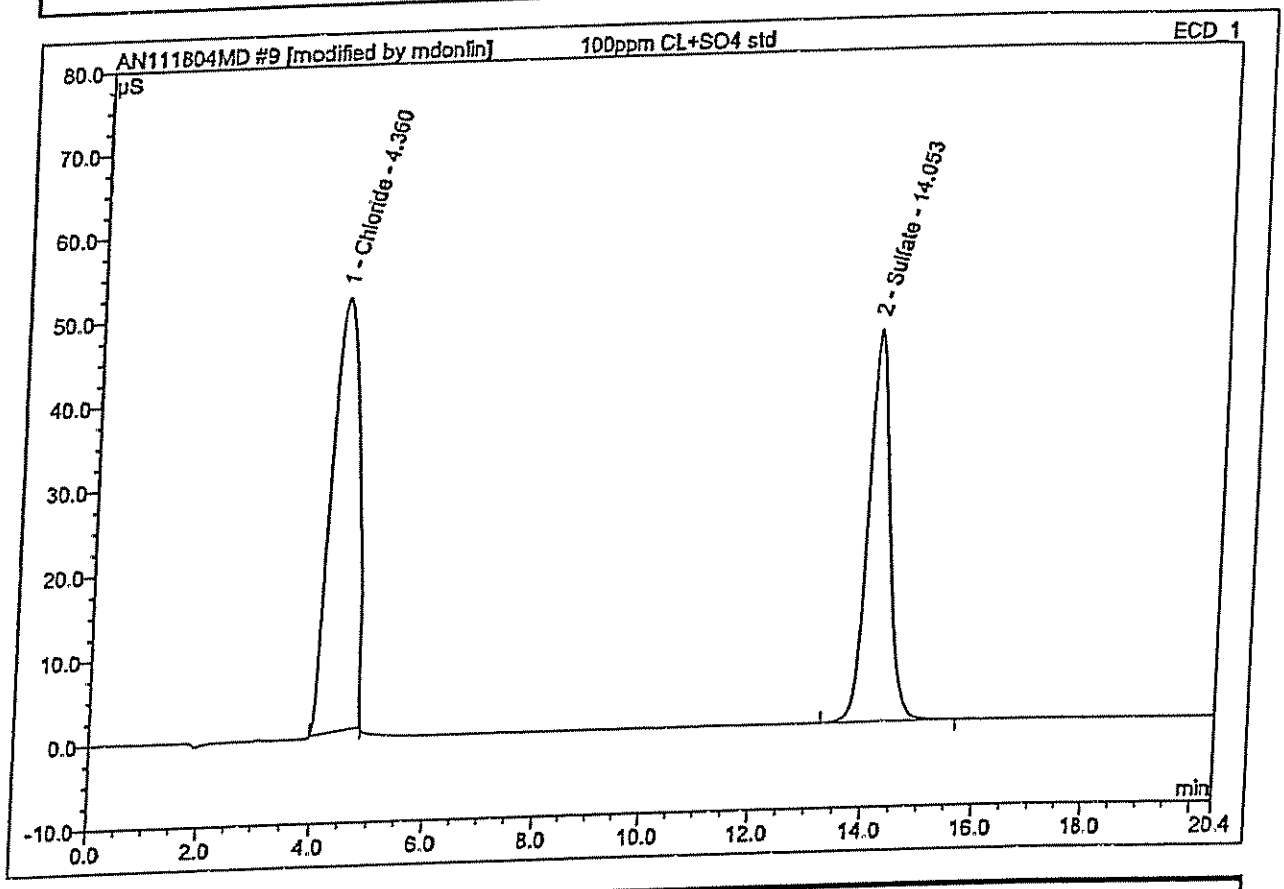


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.23	Fluoride	109.721	17.118	27.31	49.839	BMB*
2	4.33	Chloride	29.982	12.262	19.57	50.801	BMB*
3	5.35	Nitrite	38.722	7.868	12.55	50.525	BMB
4	6.35	Bromide	32.934	5.584	8.91	50.912	BMB
5	7.28	Nitrate	36.184	7.320	11.68	51.161	BMB
6	11.09	Phosphate	9.144	3.364	5.37	50.585	BMB
7	14.21	Sulfate	21.875	9.154	14.61	44.179	BMB
Total:			278.561	62.671	100.00	348.002	

Chromeleon (c) Dionex 1996-2001
Version 6.60 Build 1428

9 100ppm CL+SO4 std

Sample Name:	100ppm CL+SO4 std	*Injection Volume:*	1.0
Vial Number:	62	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 18:31	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



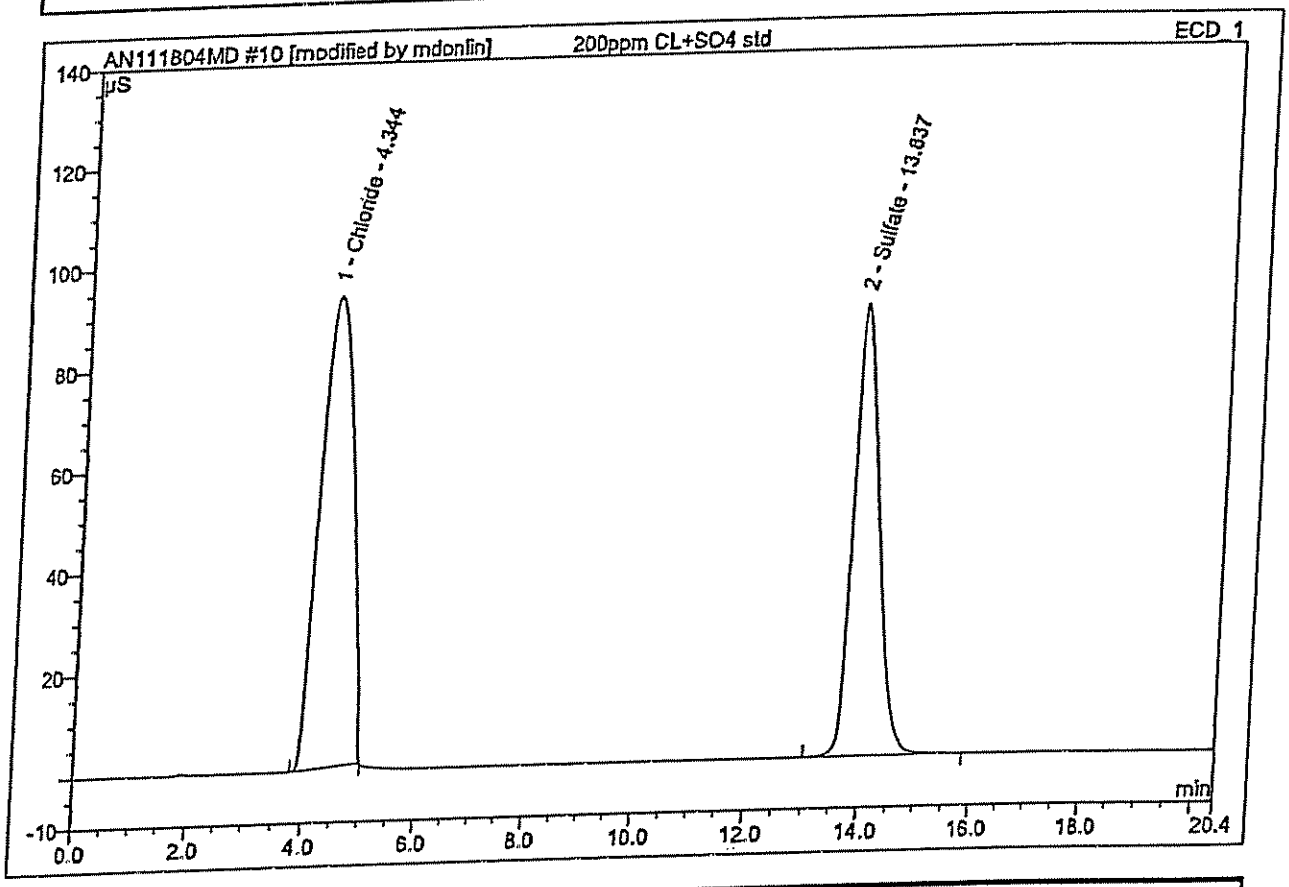
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.36	Chloride	51.247	27.599	57.41	102.203	BMB*
2	14.05	Sulfate	46.348	20.476	42.59	94.304	BMB
Total:			97.594	48.076	100.00	196.508	

Chromeleon (c) Dionex 1996-2001
Version 6.60 Build 1428

default_letter/Integration

10 200ppm CL+SO4 std

Sample Name:	200ppm CL+SO4 std	*Injection Volume:*	1.0
Vial Number:	63	*Channel:*	ECD_1
Sample Type:	standard	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 18:53	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000

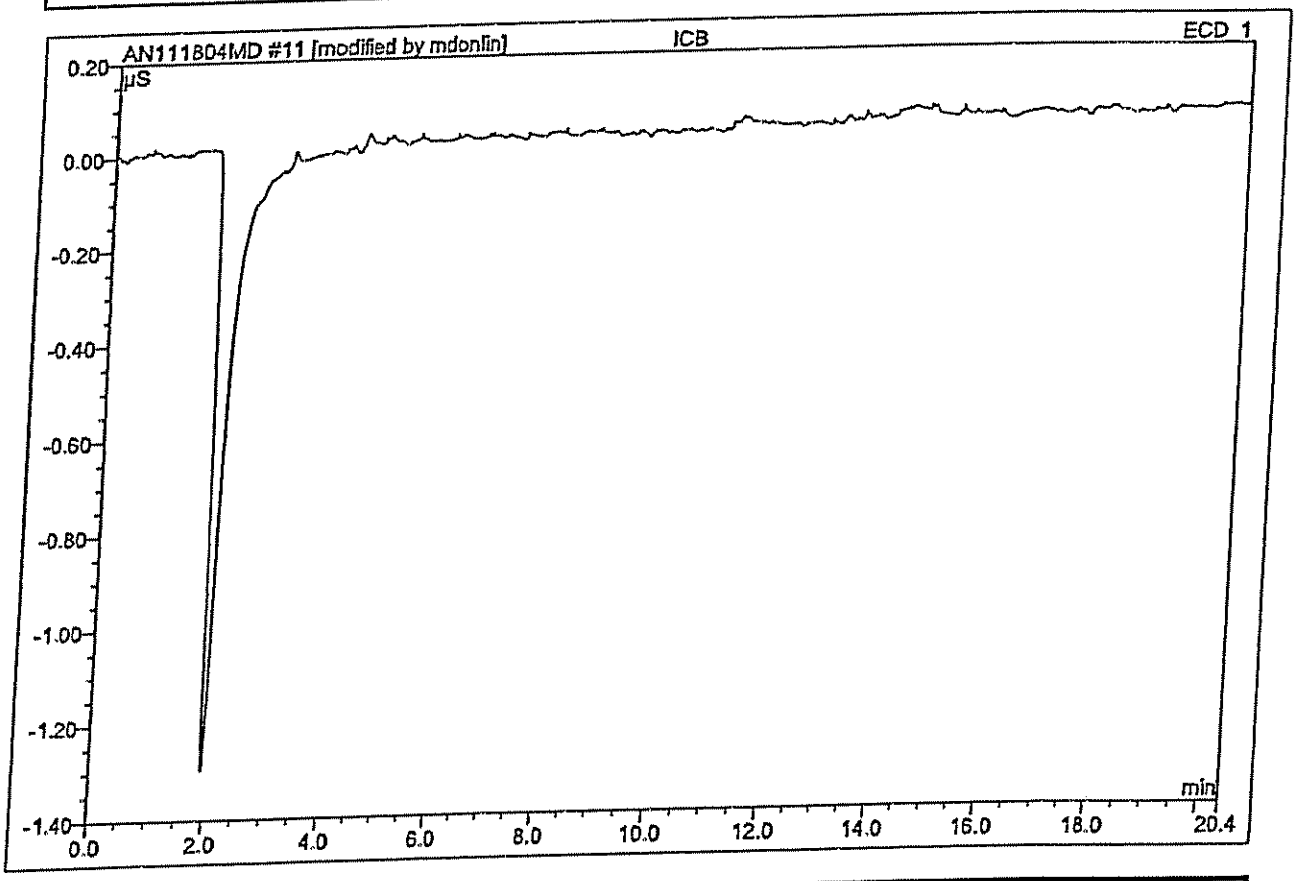


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.34	Chloride	92.991	62.222	57.84	205.081	BMB*
2	13.84	Sulfate	89.072	45.351	42.16	204.424	BMB
Total:			182.063	107.573	100.00	409.505	

Chromeleon (c) Dionex 1996-2001
Version 6.60 Build 1428

11 ICB

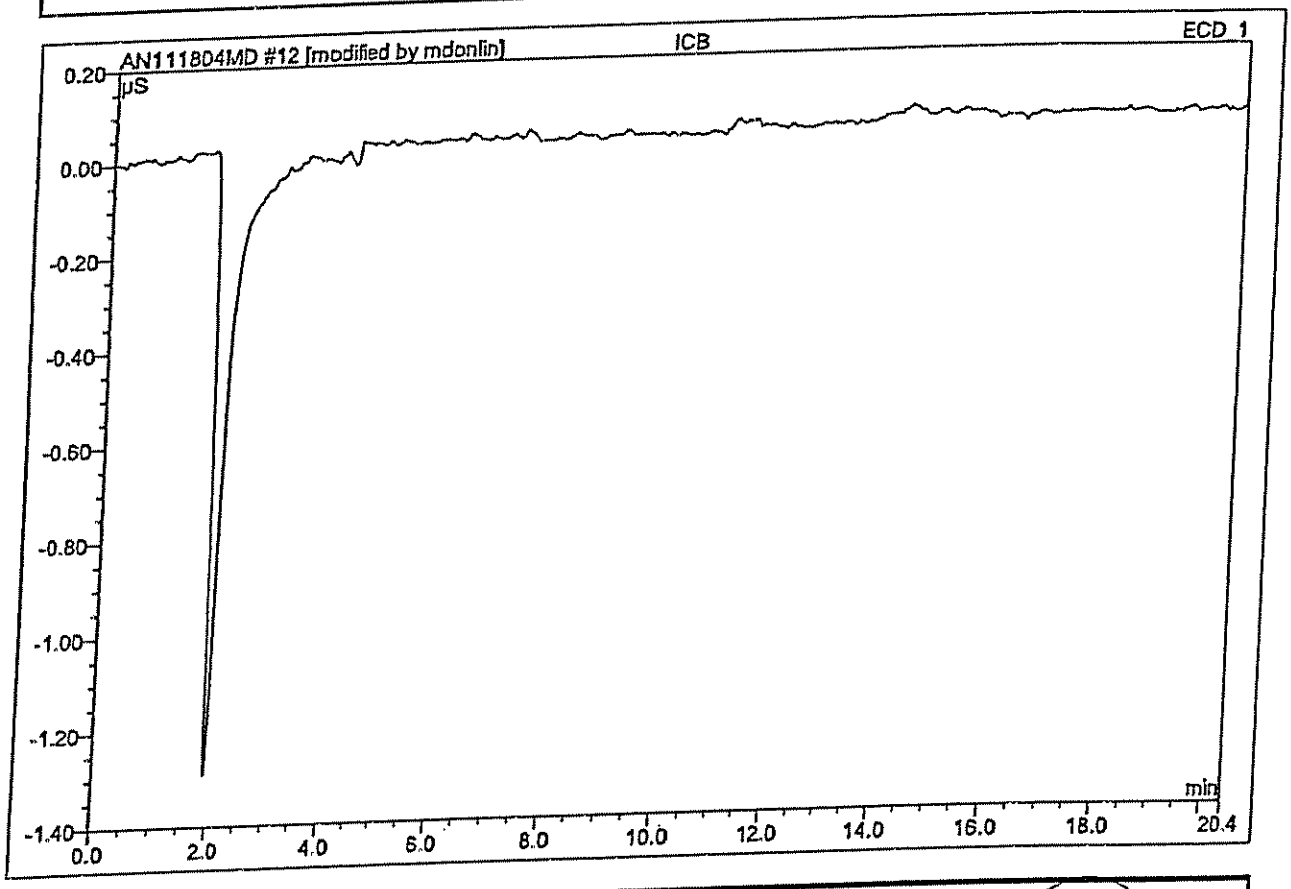
Sample Name:	ICB	*Injection Volume:*	1.0
Vial Number:	64	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 19:15	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

12 ICB

Sample Name:	ICB	*Injection Volume:*	1.0
Vial Number:	65	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 19:37	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



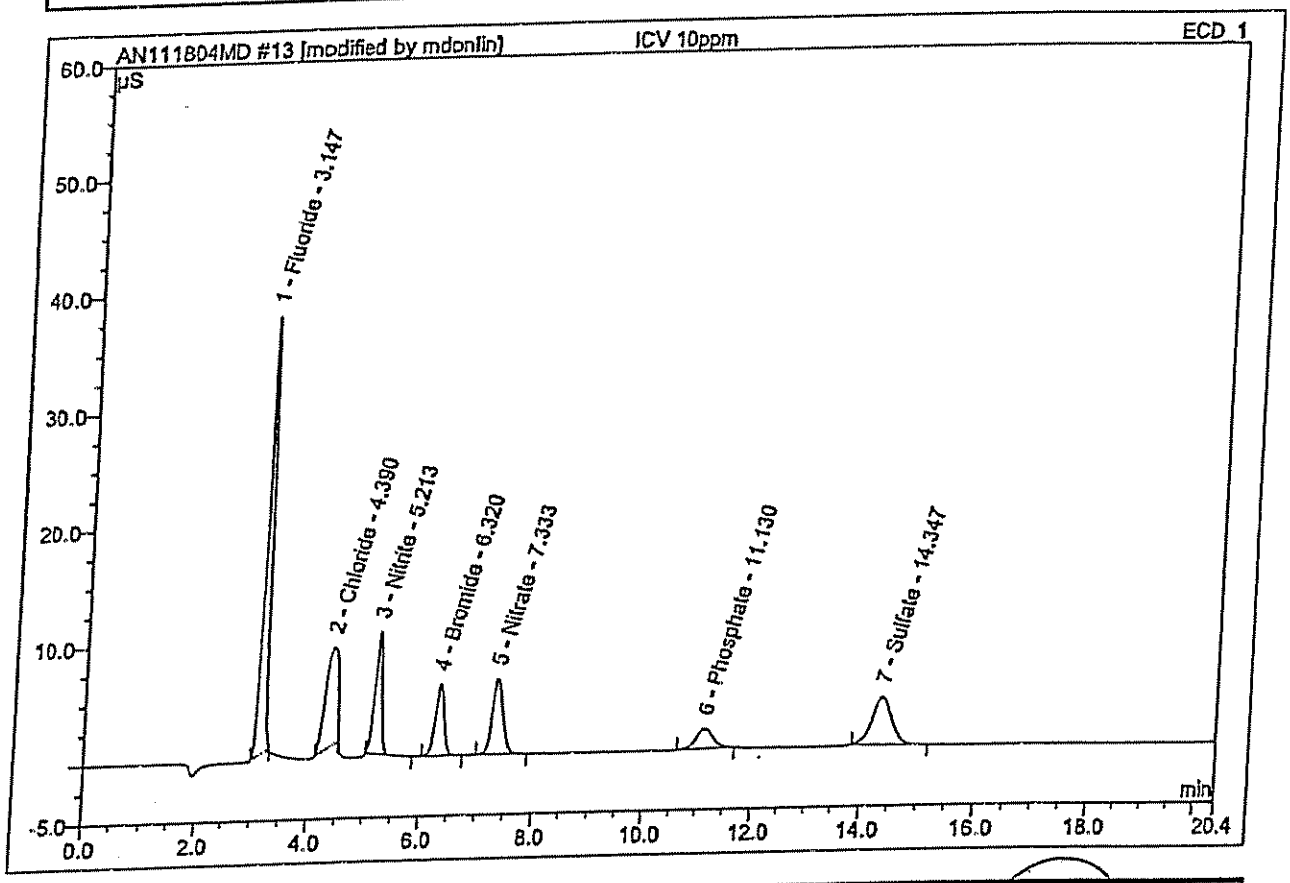
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Chromeleon (c) Dionex 1996-2001
Version 6.60 Build 1428

default_letter/integration

13 ICV 10ppm

Sample Name:	ICV 10ppm	*Injection Volume:*	1.0
Vial Number:	66	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 19:59	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000

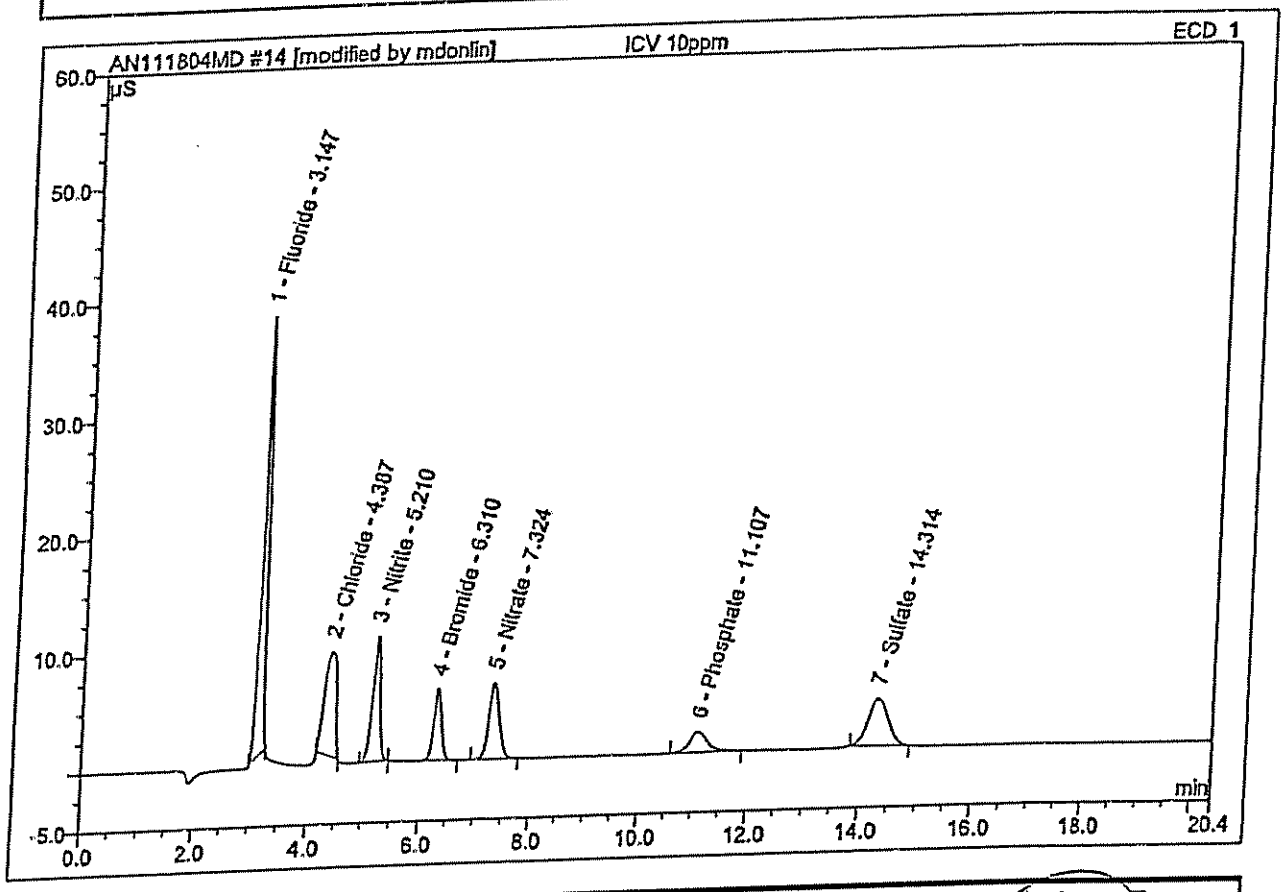


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.15	Fluoride	37.424	3.692	30.98	10.992	BMB*
2	4.39	Chloride	8.406	2.075	17.41	10.775	BMB*
3	5.21	Nitrite	10.361	1.471	12.35	10.017	BMB*
4	6.32	Bromide	6.074	1.043	8.75	10.478	BMB
5	7.33	Nitrate	6.412	1.344	11.28	10.373	BMB
6	11.13	Phosphate	1.714	0.637	5.34	10.093	BMB*
7	14.35	Sulfate	4.061	1.655	13.89	10.982	BMB*
Total:			74.452	11.918	100.00	73.711	

Chromeleon (c) Dionex 1996-2001
Version 6.60 Build 1428

14 ICV 10ppm

Sample Name:	ICV 10ppm	*Injection Volume:*	1.0
Vial Number:	67	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 20:21	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



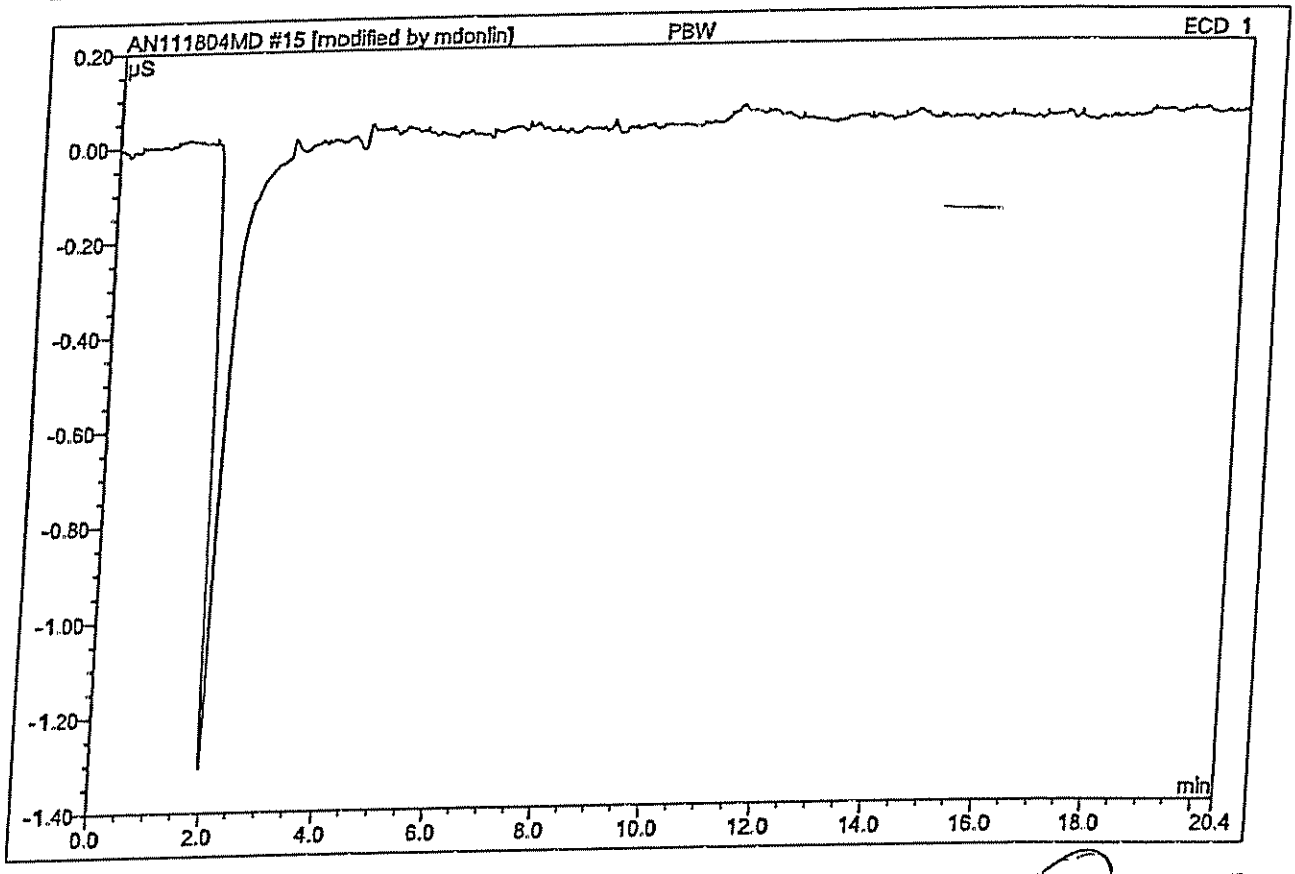
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.15	Fluoride	37.454	3.608	30.20	10.750	BMB*
2	4.39	Chloride	8.895	2.132	17.84	10.957	BMB*
3	5.21	Nitrite	10.685	1.572	13.15	10.652	BMb*
4	6.31	Bromide	6.085	0.977	8.18	9.891	bMB*
5	7.32	Nitrate	6.494	1.354	11.33	10.438	BMB*
6	11.11	Phosphate	1.771	0.690	5.77	10.874	BMB
7	14.31	Sulfate	4.034	1.615	13.52	10.806	BMB*
Total:			75.418	11.947	100.00	74.369	

Chromeleon (c) Dionex 1996-2001
Version 6.60 Build 1428

default_letter/Integration

15 PBW

Sample Name:	PBW	*Injection Volume:*	1.0
Vial Number:	68	*Channel:*	ECD_1
Sample Type:	unknown	*Wavelength:*	n.a.
Control Program:	as14PN5_v2	*Bandwidth:*	n.a.
Quantif. Method:	as14PN5	*Dilution Factor:*	1.0000
Recording Time:	11/18/2004 20:43	*Sample Weight:*	1.0000
Run Time (min):	20.40	*Sample Amount:*	1.0000



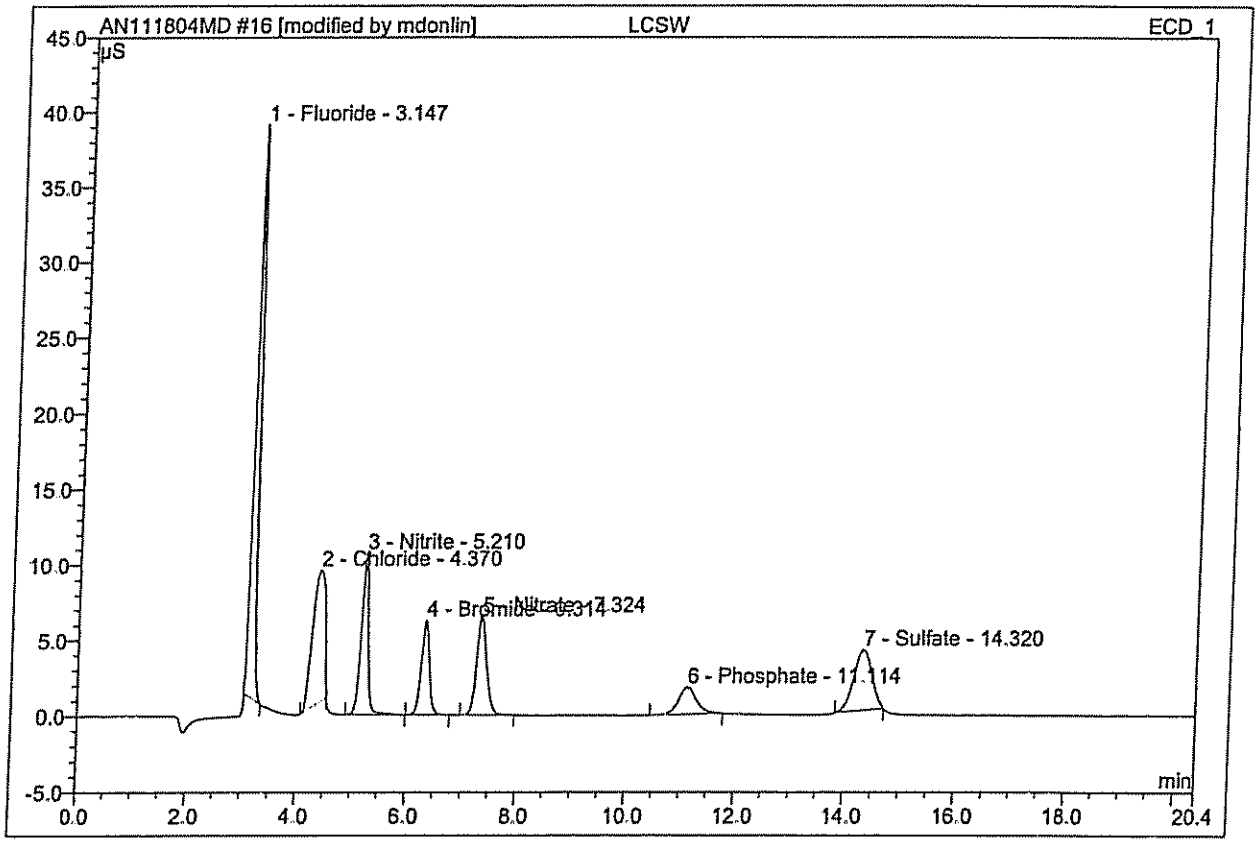
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

Chromeleon (c) Dionex 1996-2001
Version 6.60 Build 1428

default_letter/Integration

16 LCSW

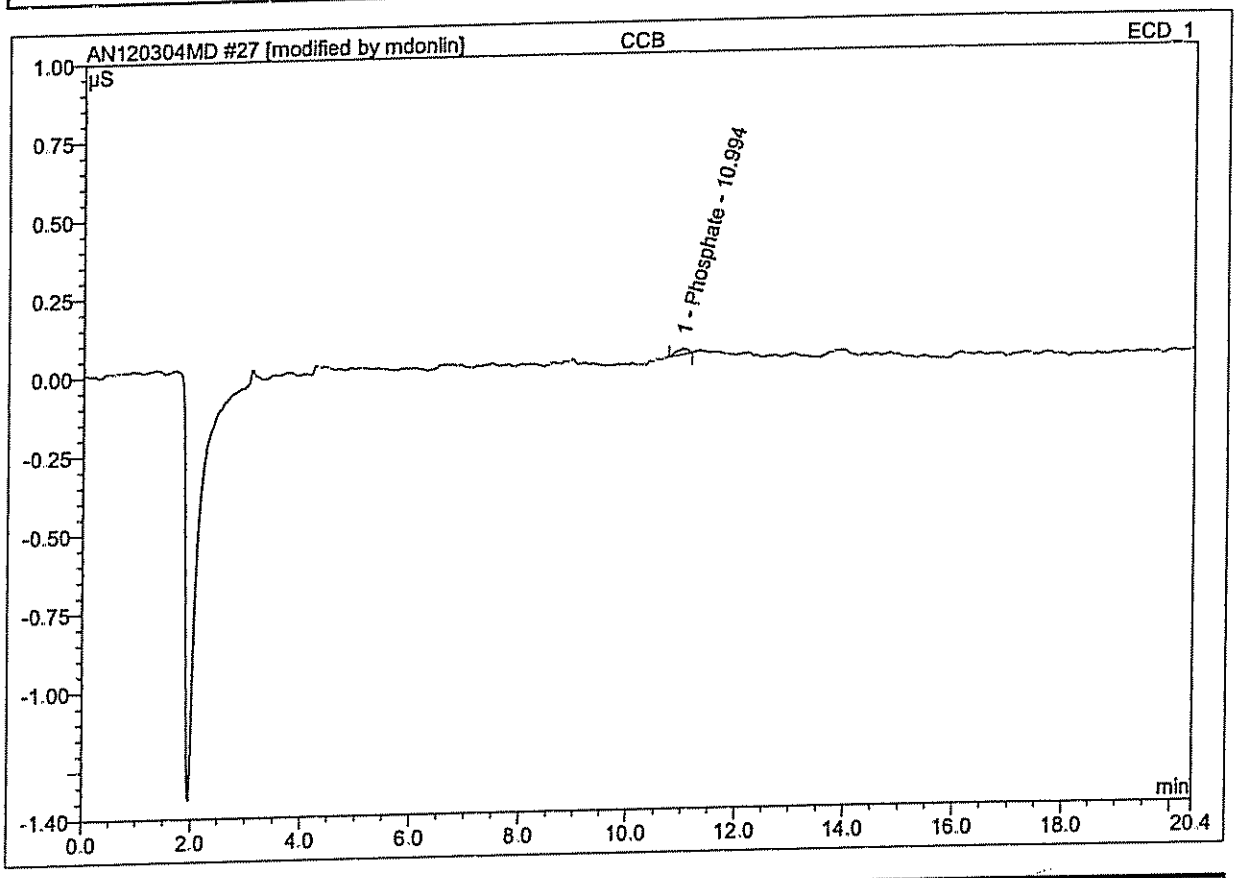
Sample Name:	**LCSW**	*Injection Volume:*	**1.0**
Vial Number:	**69**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/18/2004 21:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.15	Fluoride	37.934	3.659	29.99	10.896	BMB*
2	4.37	Chloride	8.840	2.252	18.46	11.345	BMB*
3	5.21	Nitrite	10.705	1.641	13.45	11.092	BMB
4	6.31	Bromide	6.260	1.069	8.76	10.713	BMB
5	7.32	Nitrate	6.531	1.367	11.21	10.533	BMB
6	11.11	Phosphate	1.790	0.692	5.67	10.914	BMB*
7	14.32	Sulfate	4.024	1.520	12.46	10.383	BMB*
Total:			76.083	12.200	100.00	75.876	

27 CCB

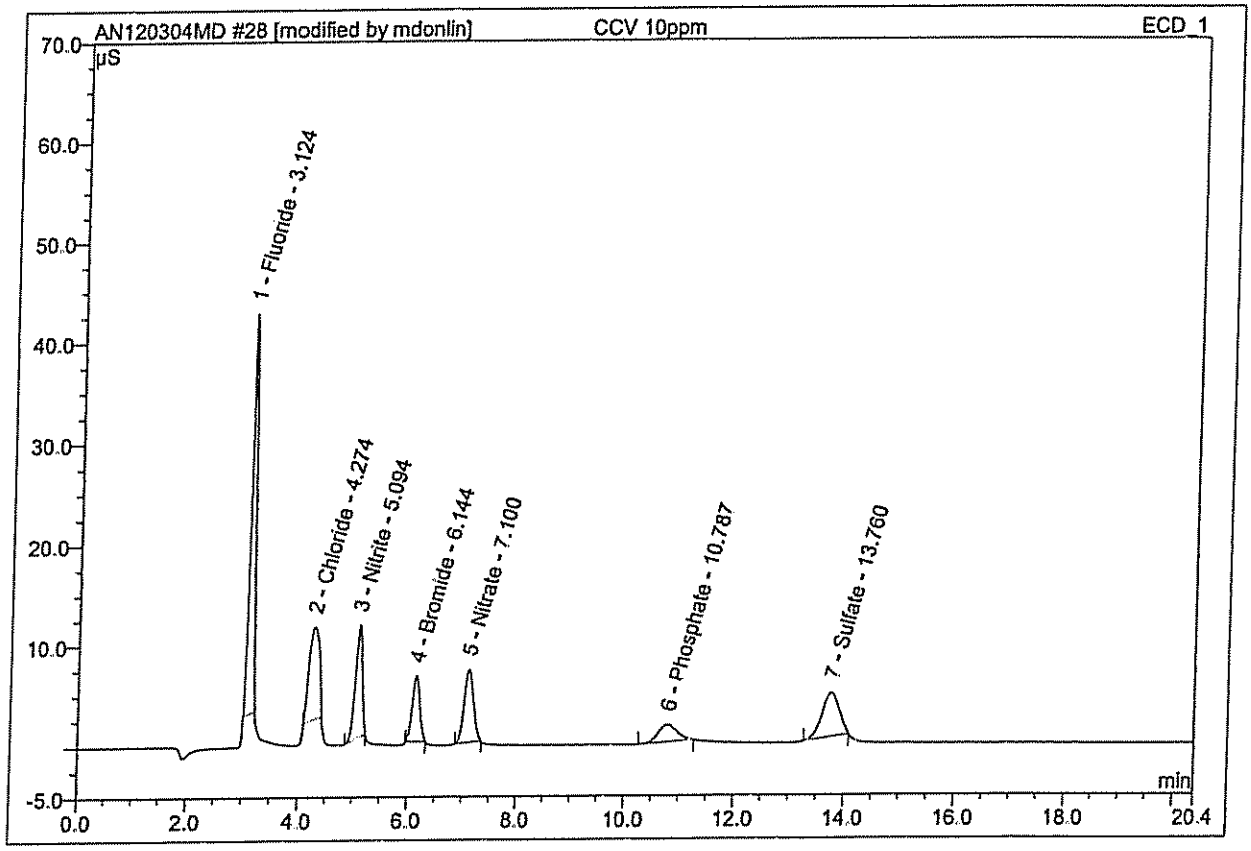
Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**80**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/3/2004 19:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	10.99	Phosphate	0.020	0.005	100.00	0.721	BMB
Total:			0.020	0.005	100.00	0.721	

28 CCV 10ppm

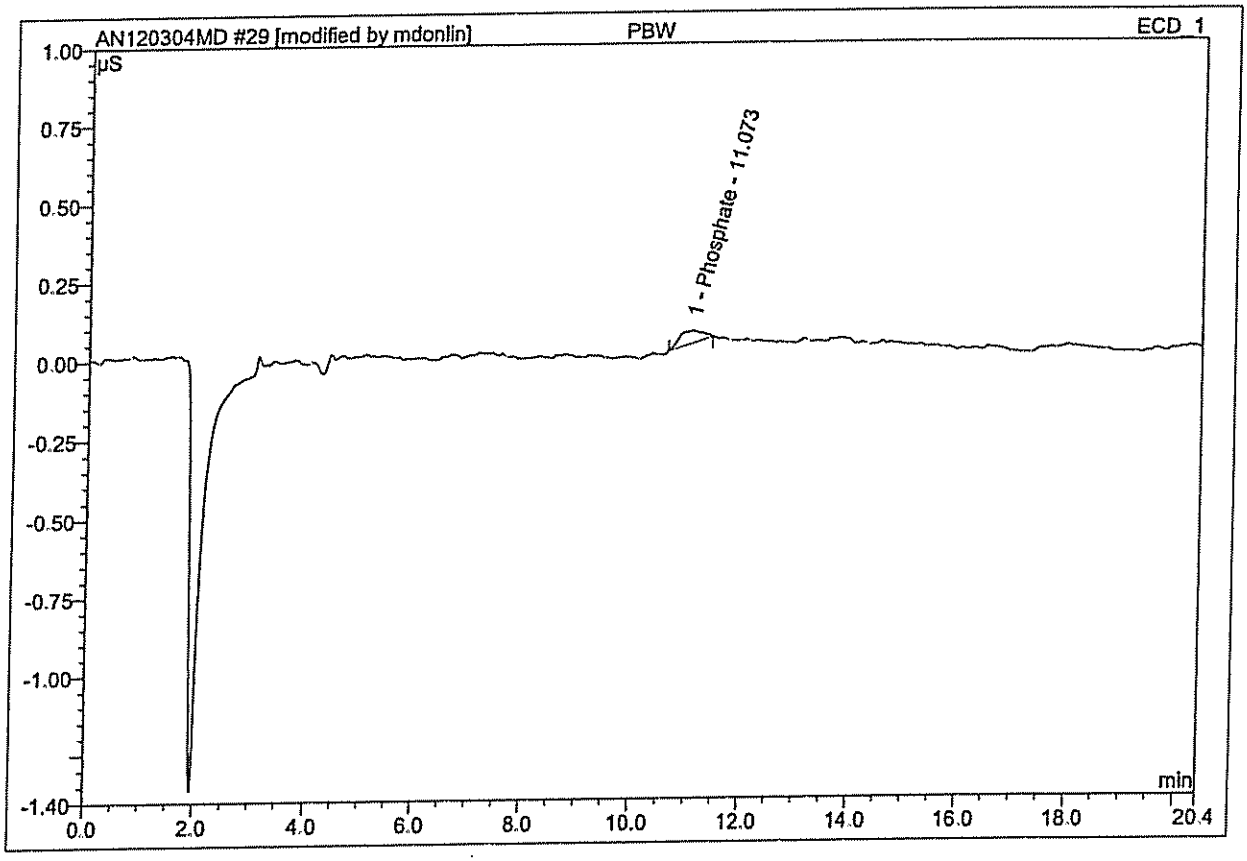
Sample Name:	**CCV 10ppm**	*Injection Volume:*	**1.0**
Vial Number:	**81**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/3/2004 19:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	39.558	3.671	30.80	10.932	MB*
2	4.27	Chloride	9.258	1.987	16.67	10.490	BMB*
3	5.09	Nitrite	11.168	1.572	13.19	10.654	BMB*
4	6.14	Bromide	6.482	1.035	8.68	10.404	BMB*
5	7.10	Nitrate	7.204	1.412	11.84	10.834	BMB*
6	10.79	Phosphate	1.705	0.670	5.62	10.584	BMB*
7	13.76	Sulfate	4.344	1.573	13.19	10.617	BMB*
Total:			79.720	11.919	100.00	74.514	

29 PBW

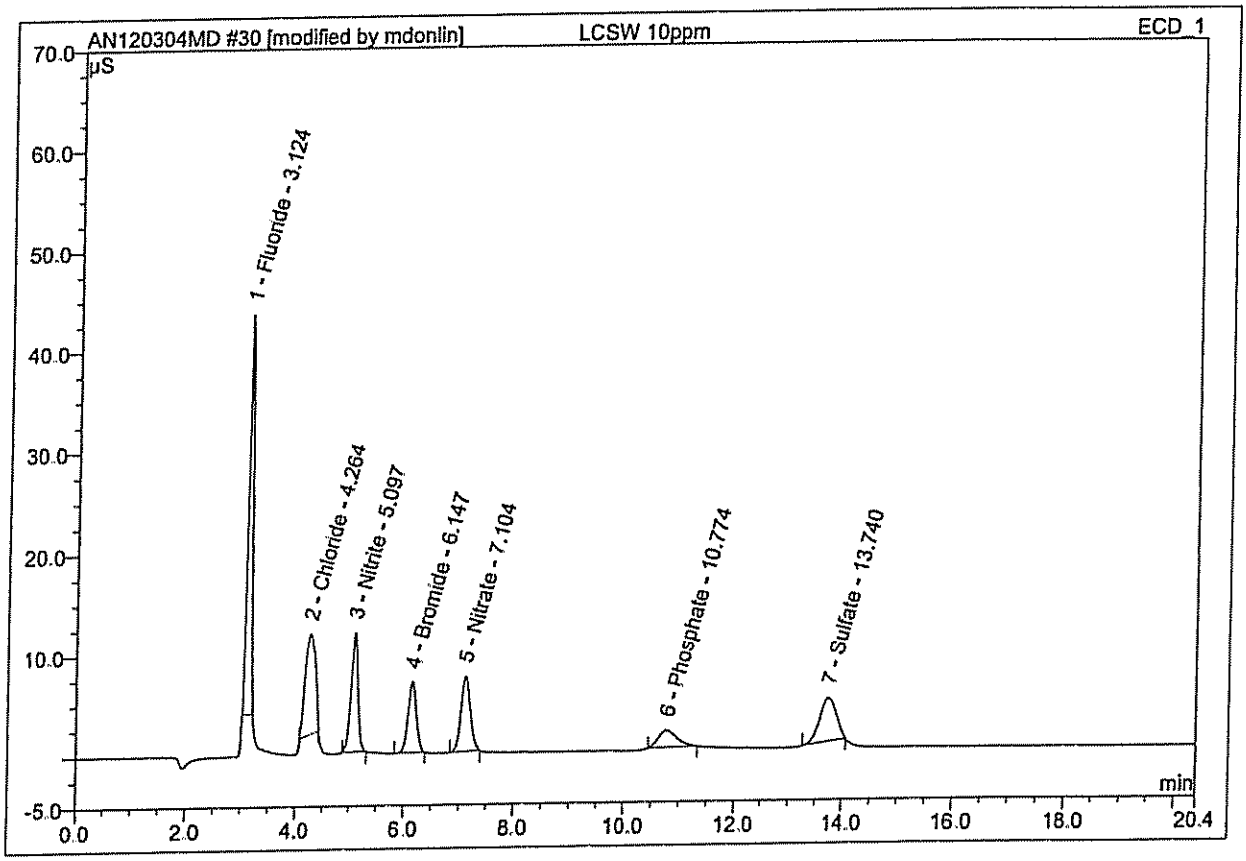
Sample Name:	**PBW**	*Injection Volume:*	**1.0**
Vial Number:	**82**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/3/2004 20:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	11.07	Phosphate	0.040	0.021	100.00	0.964	BMB
Total:			0.040	0.021	100.00	0.964	

30 LCSW 10ppm

Sample Name:	**LCSW 10ppm**	*Injection Volume:*	**1.0**
Vial Number:	**83**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/3/2004 20:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**

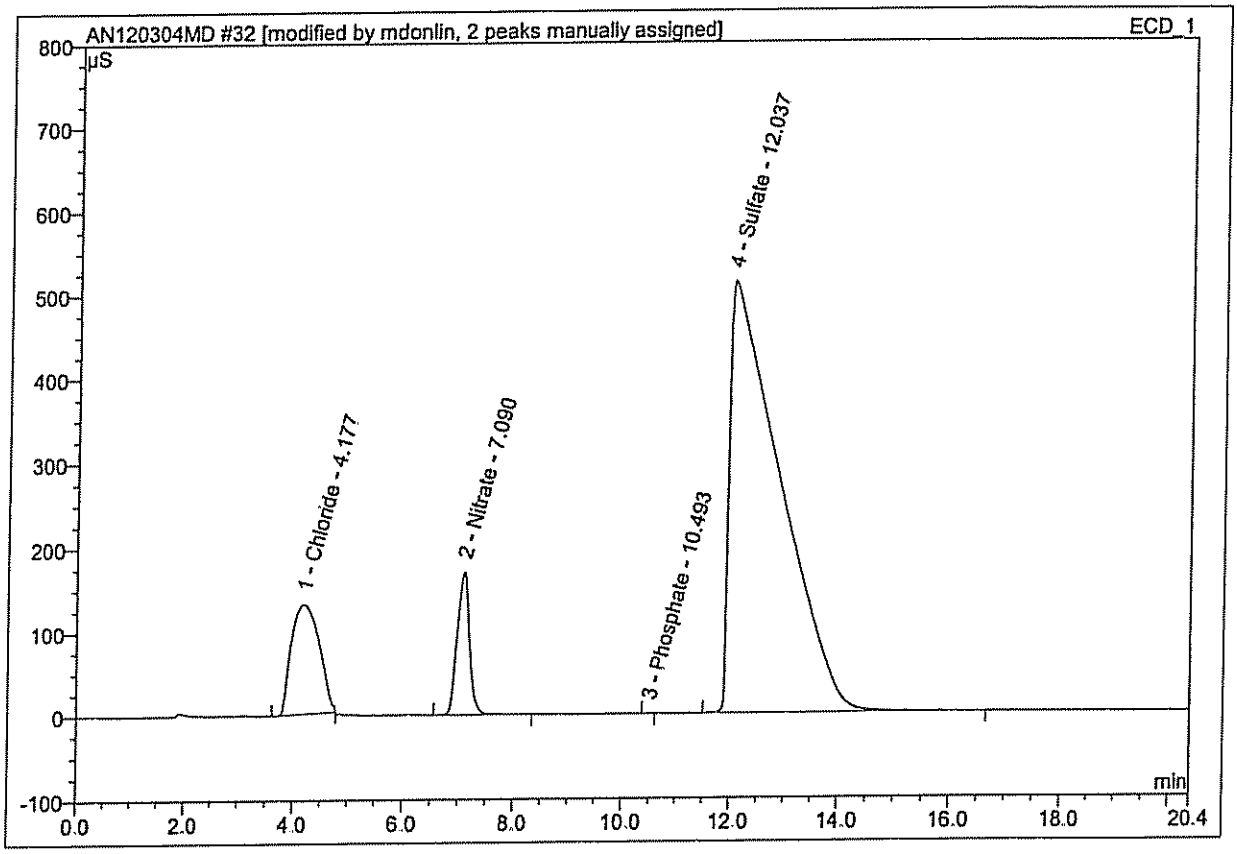


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	39.517	3.576	28.67	10.658	MB*
2	4.26	Chloride	10.061	2.220	17.80	11.242	BMB*
3	5.10	Nitrite	11.824	1.765	14.15	11.880	BMB*
4	6.15	Bromide	7.000	1.193	9.56	11.814	BMB*
5	7.10	Nitrate	7.437	1.506	12.07	11.472	BMB*
6	10.77	Phosphate	1.683	0.657	5.27	10.391	BMB*
7	13.74	Sulfate	4.310	1.557	12.48	10.545	BMB*
Total:			81.832	12.474	100.00	~~78.002~~	

106.6%
112%
119%
118%
115%
104%
105%

32 P0412041-01AE

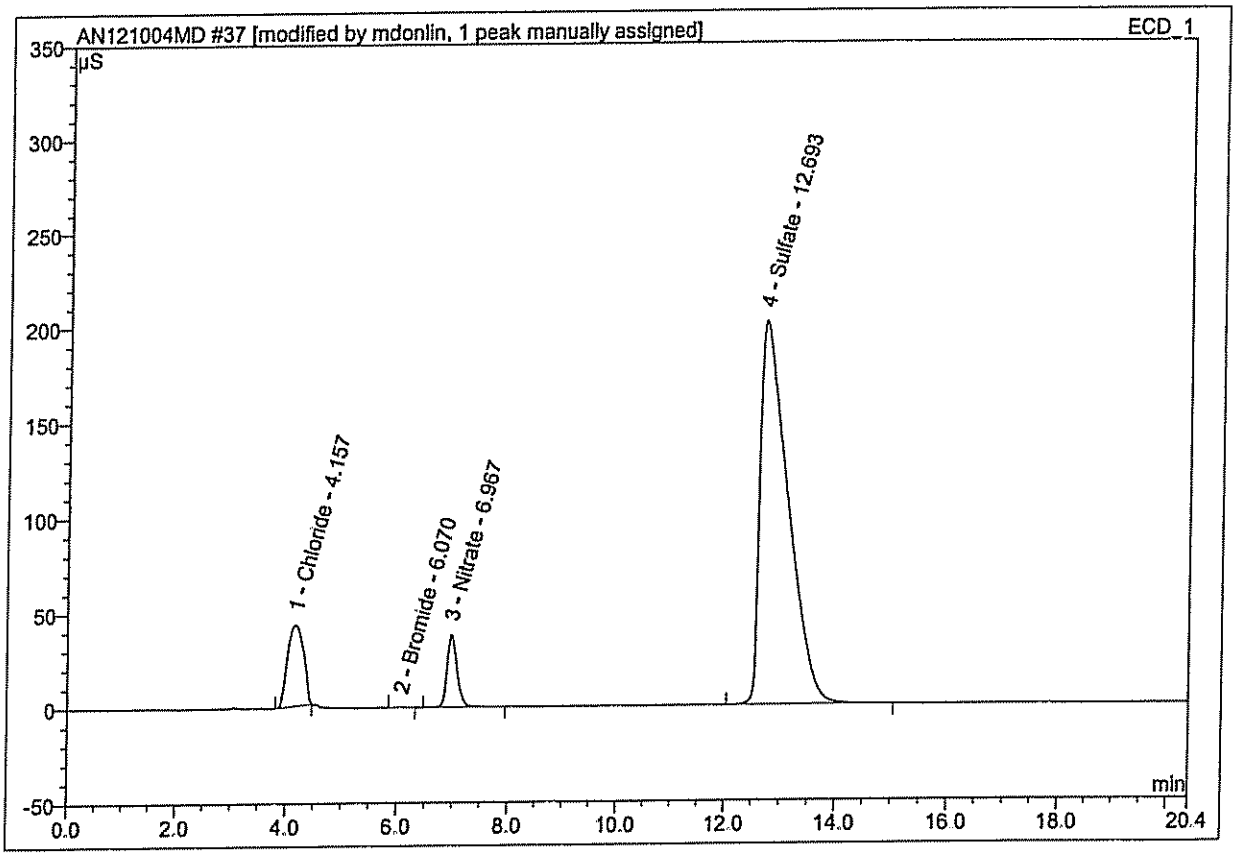
Sample Name:	**P0412041-01AE**	*Injection Volume:*	**1.0**
Vial Number:	**85**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/3/2004 21:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type	
1	4.18	Chloride	131.625	78.187	11.59	256.656	BMB*^	See DF 1/5
2	7.09	Nitrate	170.628	44.761	6.63	305.105	BMB*	See DF 1/10
3	10.49	Phosphate	0.011	0.001	0.00	0.672	BMB	
4	12.04	Sulfate	513.363	551.673	81.78	2445.928	BMB*^	See DF 1/25
Total:			815.628	674.623	100.00	3008.361		

37 P0412041-01A dil 1/5

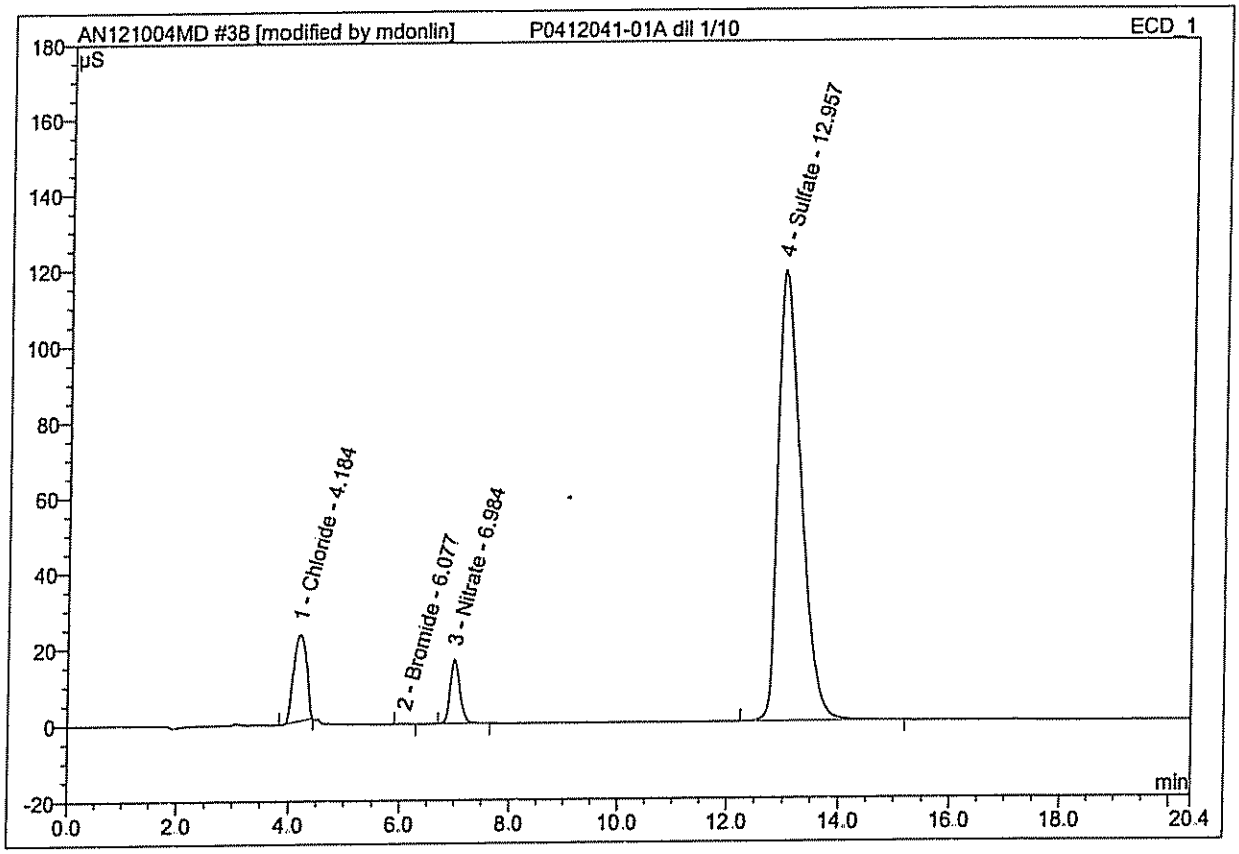
Sample Name:	**P0412041-01A dil 1/5**	*Injection Volume:*	**1.0**
Vial Number:	**90**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/11/2004 6:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.16	Chloride	42.903	14.220	10.11	50.010	BMB*
2	6.07	Bromide	0.183	0.034	0.02	1.492	BMB
3	6.97	Nitrate	38.205	8.017	5.70	55.676	BMB
4	12.69	Sulfate	201.786	118.395	84.17	527.793	BMB*^
Total:			283.077	140.666	100.00	634.971	

38 P0412041-01A dil 1/10

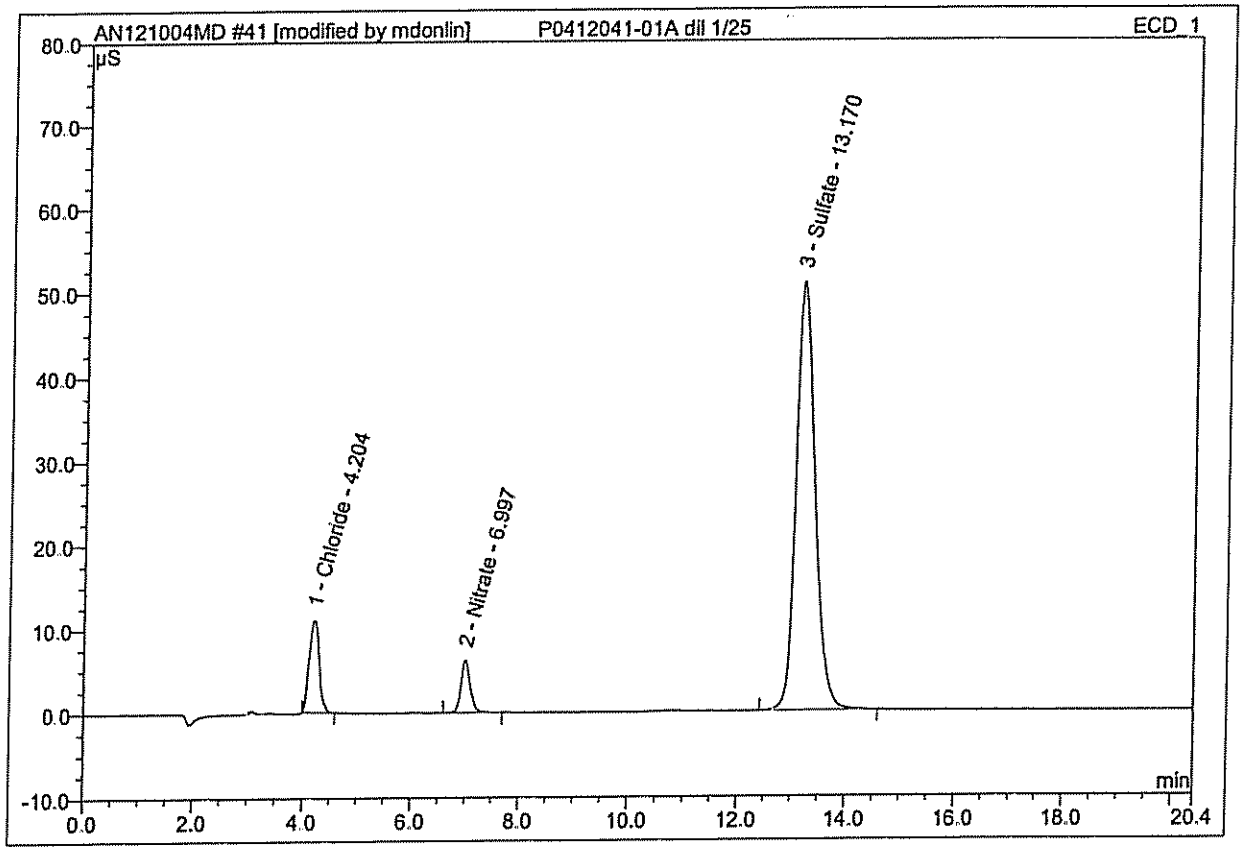
Sample Name:	**P0412041-01A dil 1/10**	*Injection Volume:*	**1.0**
Vial Number:	**91**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/11/2004 6:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.18	Chloride	22.701	6.065	9.14	23.665	BMB*
2	6.08	Bromide	0.097	0.017	0.03	1.347	BMB
3	6.98	Nitrate	16.712	3.404	5.13	24.357	BMB
4	12.96	Sulfate	118.747	56.877	85.71	255.452	BMB
Total:			158.257	66.364	100.00	304.820	

41 P0412041-01A dil 1/25

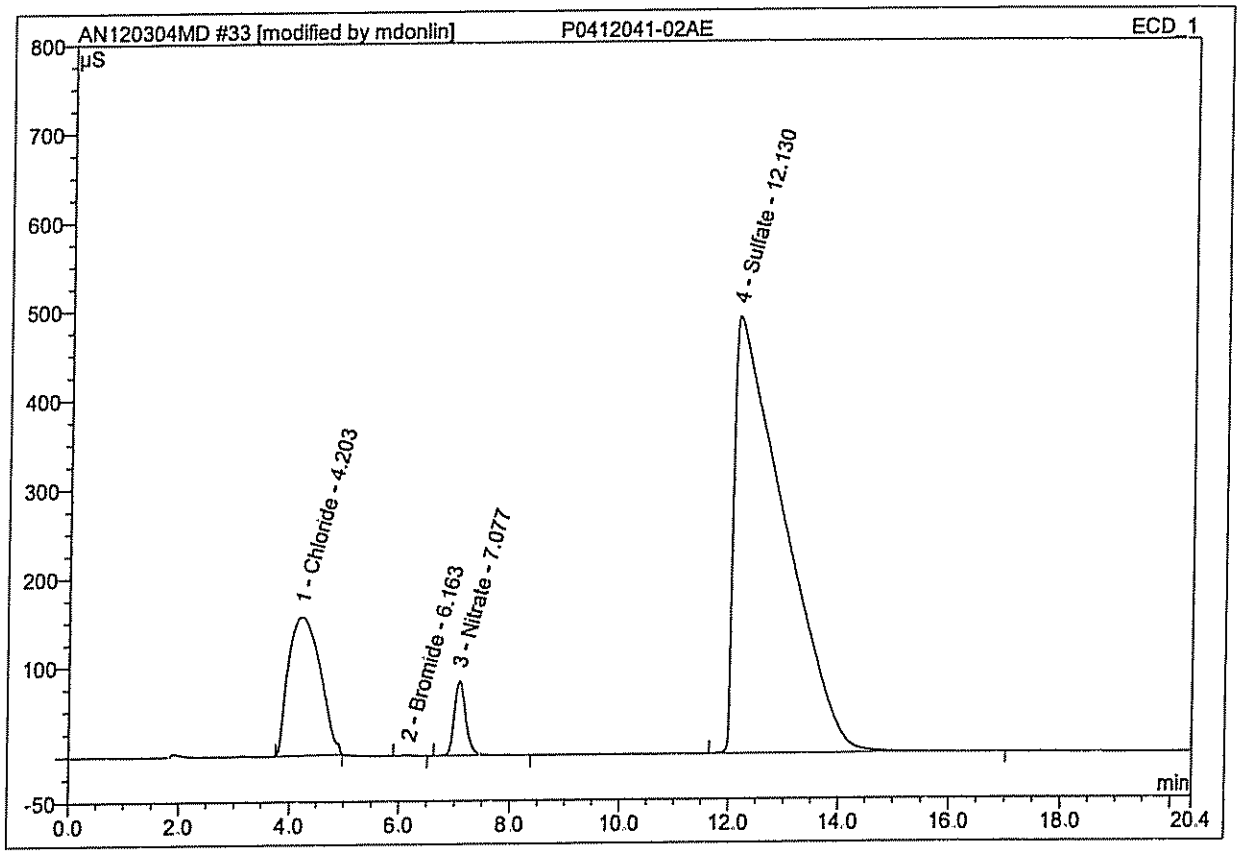
Sample Name:	**P0412041-01A dil 1/25**	*Injection Volume:*	**1.0**
Vial Number:	**94**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/11/2004 7:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.20	Chloride	10.960	2.417	9.90	11.880	BMB*
2	7.00	Nitrate	6.173	1.270	5.20	9.872	BMB*
3	13.17	Sulfate	50.877	20.720	84.89	95.381	BMB
Total:			68.011	24.407	100.00	117.133	

33 P0412041-02AE

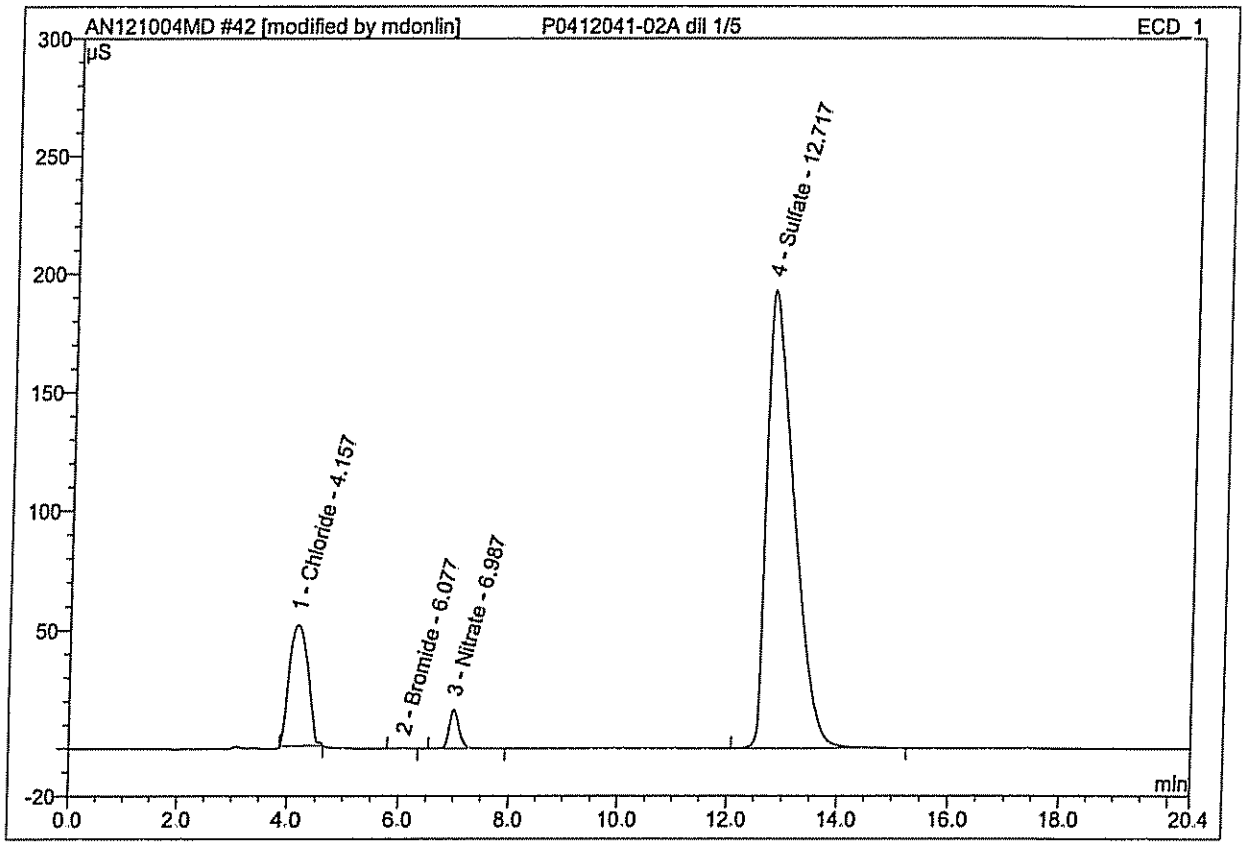
Sample Name:	**P0412041-02AE**	*Injection Volume:*	**1.0**
Vial Number:	**86**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/3/2004 21:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type	
1	4.20	Chloride	155.072	105.350	16.55	344.406	BMB*	) See DF 1/5
2	6.16	Bromide	0.801	0.173	0.03	2.732	BMB	
3	7.08	Nitrate	82.401	20.085	3.15	137.594	BMB	
4	12.13	Sulfate	489.349	511.075	80.27	2266.200	BMB*	See DF 1/25
Total:			727.623	636.683	100.00	2750.932		

42 P0412041-02A dil 1/5

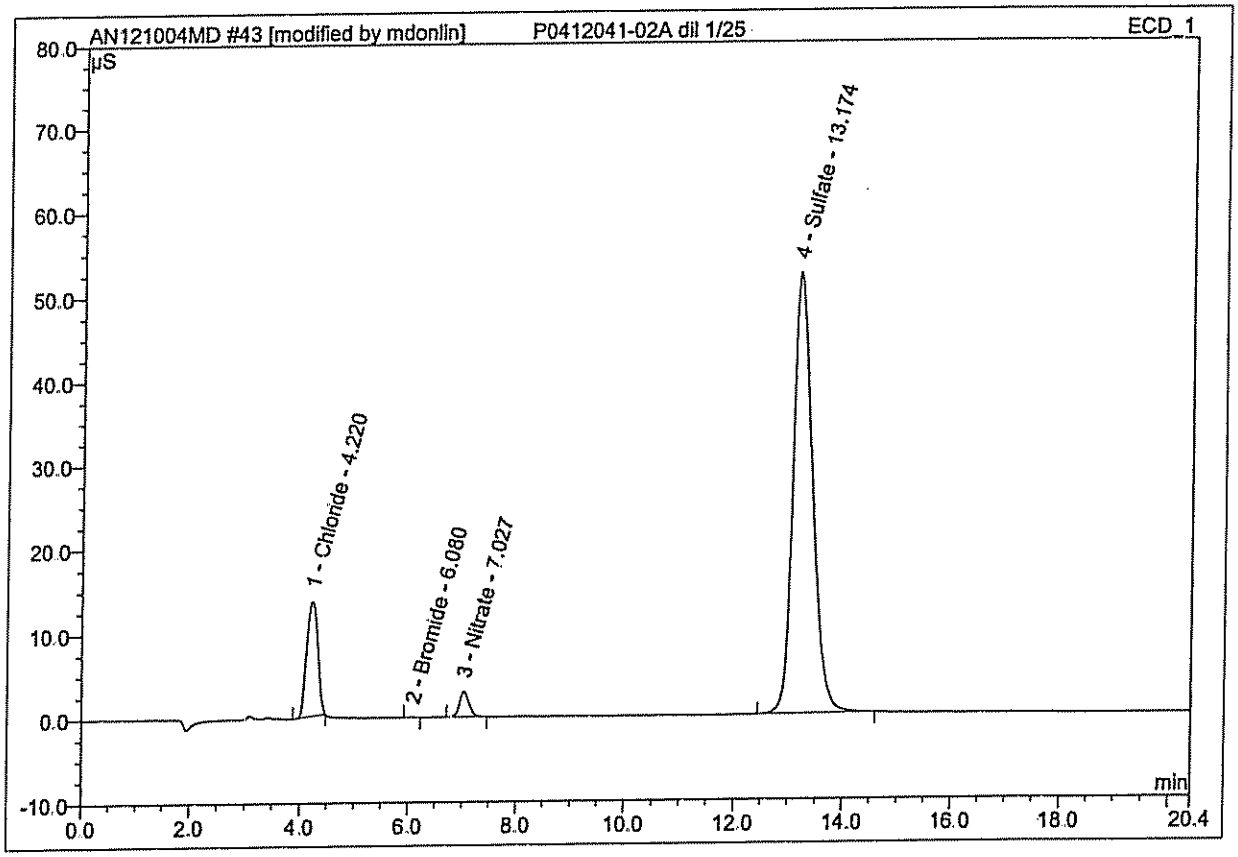
Sample Name:	**P0412041-02A dil 1/5**	*Injection Volume:*	**1.0**
Vial Number:	**95**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/11/2004 8:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.16	Chloride	51.117	19.261	14.40	66.294	BMB*
2	6.08	Bromide	0.214	0.040	0.03	1.553	BMB
3	6.99	Nitrate	16.445	3.479	2.60	24.869	BMB
4	12.72	Sulfate	193.086	110.940	82.96	494.790	BMB
Total:			260.862	133.721	100.00	587.506	

43 P0412041-02A dil 1/25

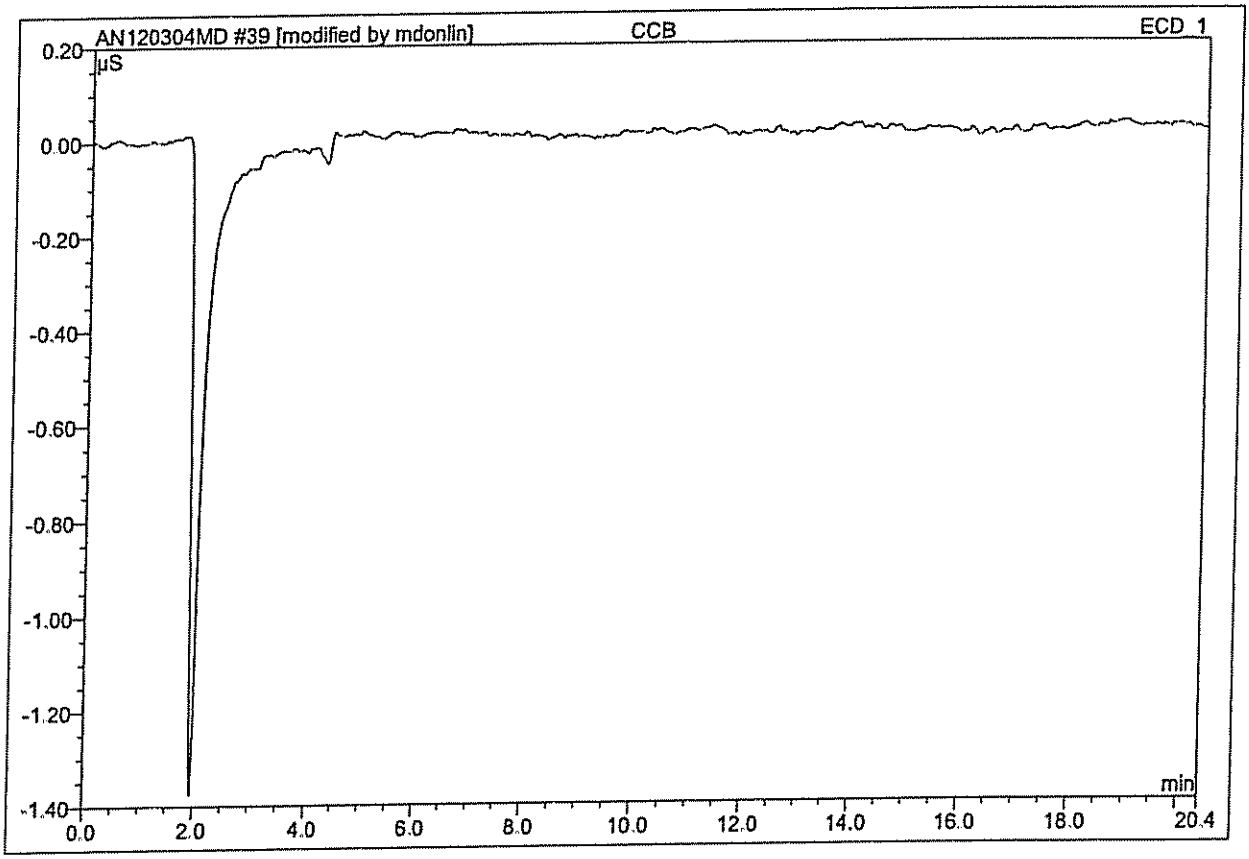
Sample Name:	**P0412041-02A dil 1/25**	*Injection Volume:*	**1.0**
Vial Number:	**96**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/11/2004 8:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.22	Chloride	13.522	3.267	12.88	14.623	BMB*
2	6.08	Bromide	0.043	0.006	0.03	1.251	BMB
3	7.03	Nitrate	3.000	0.614	2.42	5.419	BMB
4	13.17	Sulfate	52.350	21.484	84.68	98.765	BMB*
Total:			68.915	25.371	100.00	120.059	

39 CCB

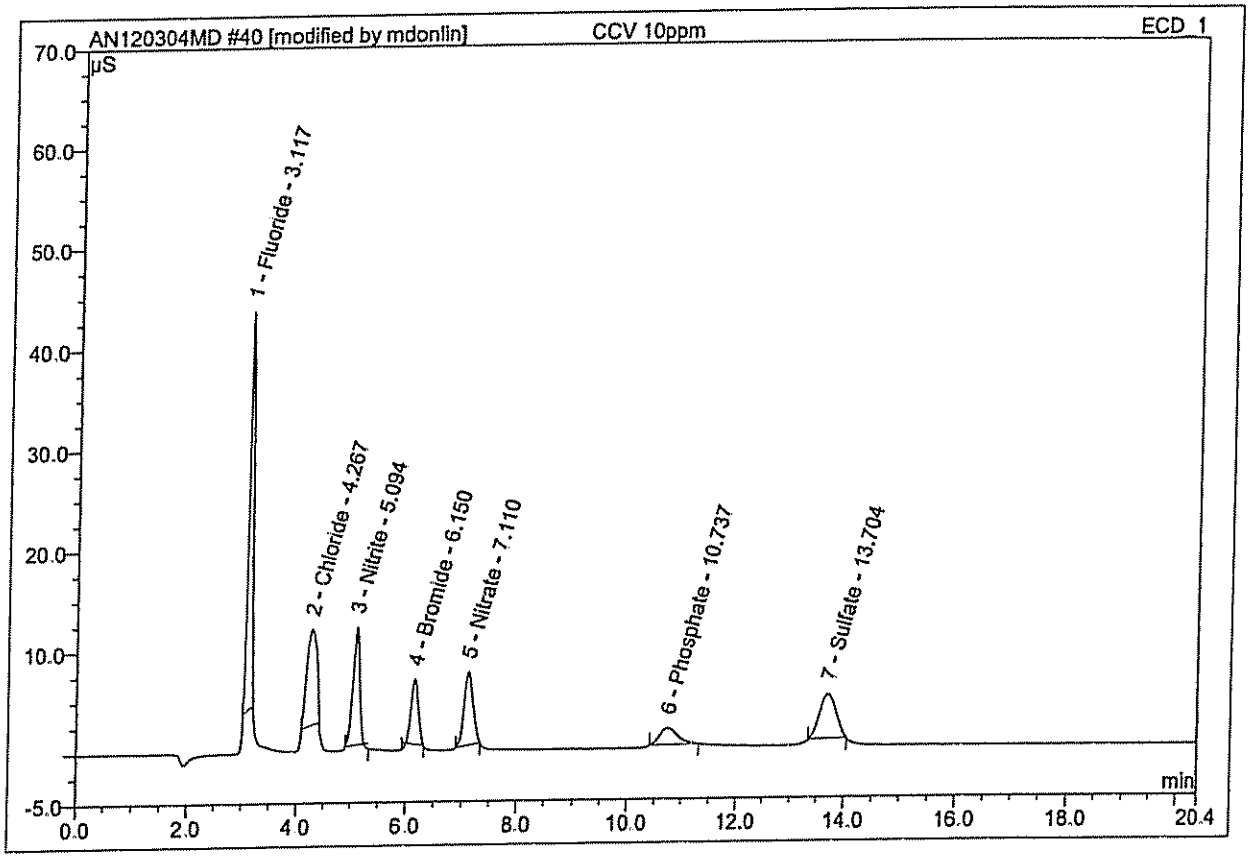
Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**92**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/3/2004 23:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

40 CCV 10ppm

Sample Name:	**CCV 10ppm**	*Injection Volume:*	**1.0**
Vial Number:	**93**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**as14PN5_v2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**as14PN5**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/4/2004 0:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.40**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	3.12	Fluoride	39.424	3.573	30.41	10.648	BMB*
2	4.27	Chloride	9.505	2.035	17.32	10.644	BMB*
3	5.09	Nitrite	11.643	1.622	13.80	10.970	BM *
4	6.15	Bromide	6.381	0.952	8.10	9.668	MB*
5	7.11	Nitrate	7.210	1.375	11.71	10.586	BMB*
6	10.74	Phosphate	1.658	0.652	5.55	10.321	BMB*
7	13.70	Sulfate	4.356	1.540	13.11	10.471	BMB*
Total:			80.177	11.748	100.00	73.306	

MWB-4
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M041210008
P0411515-2

M041210009
P0412041-1+2 + DP?

Queue report.
Maureen Donlin
12-10-04

Signal : 1 (C)

120904MD

P0412010-1+2
P0412024-1+3
P0412035-1+4
P0412037-1+2
P0412035-1+3

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
1	blank	fault	1000	µL	33.14	0	mg/L	1349.1			UV Sparge	LOW-112404 cal 0-50	1	1	1	12/9/2004 12:07:5
2	blank	fault	1000	µL	3.47	0	mg/L	277.7			UV Replicate	LOW-112404 cal 0-50	1	1	1	12/9/2004 12:10:1
3	blank	fault	1000	µL	3.00	0	mg/L	260.8			UV Replicate	LOW-112404 cal 0-50	1	1	1	12/9/2004 12:12:3
4	blank	fault	1000	µL	2.19	0	mg/L	231.7			UV Replicate	LOW-112404 cal 0-50	1	1	1	12/9/2004 12:14:4
5	blank	fault	1000	µL	1.05	0	mg/L	190.4			UV Replicate	LOW-112404 cal 0-50	1	1	1	12/9/2004 12:17:0
6	CCB	fault	1000	µL	-1.46	0	mg/L	99.9			UV Sparge	LOW-112404 cal 0-50	2	1	1	12/9/2004 12:26:0
7	CCB	sample	1000	µL	-1.73	0	mg/L	90.0			UV Replicate	LOW-112404 cal 0-50	2	1	1	12/9/2004 12:28:2
8	CCB	sample	1000	µL	-1.96	0	mg/L	81.8			UV Replicate	LOW-112404 cal 0-50	2	1	1	12/9/2004 12:30:4
9	CCB	sample	1000	µL	-1.80	0	mg/L	87.4			UV Replicate	LOW-112404 cal 0-50	2	1	1	12/9/2004 12:32:5
10	CCB	sample	1000	µL	-1.96	0	mg/L	81.8	-1.86	6.09	UV Replicate	LOW-112404 cal 0-50	2	1	1	12/9/2004 12:35:1
11	CCV 25ppm	fault	1000	µL	26.67	0	mg/L	1115.5			UV Sparge	LOW-112404 cal 0-50	3	1	1	12/9/2004 12:44:3
12	CCV 25ppm	sample	1000	µL	25.02	0	mg/L	1055.6			UV Replicate	LOW-112404 cal 0-50	3	1	1	12/9/2004 12:46:4
13	CCV 25ppm	sample	1000	µL	24.57	0	mg/L	1039.6			UV Replicate	LOW-112404 cal 0-50	3	1	1	12/9/2004 12:49:0
14	CCV 25ppm	sample	1000	µL	24.76	0	mg/L	1046.7		98.8%	UV Replicate	LOW-112404 cal 0-50	3	1	1	12/9/2004 12:51:2
15	CCV 25ppm	sample	1000	µL	24.60	0	mg/L	1037.3	24.71	0.94	UV Replicate	LOW-112404 cal 0-50	3	1	1	12/9/2004 12:53:3
16	PBW	fault	1000	µL	-1.87	0	mg/L	85.0			UV Sparge	LOW-112404 cal 0-50	4	1	1	12/9/2004 1:02:5
17	PBW	sample	1000	µL	-1.78	0	mg/L	88.3			UV Replicate	LOW-112404 cal 0-50	4	1	1	12/9/2004 1:05:1
18	PBW	sample	1000	µL	-2.35	0	mg/L	67.6			UV Replicate	LOW-112404 cal 0-50	4	1	1	12/9/2004 1:07:3
19	PBW	sample	1000	µL	-2.09	0	mg/L	77.1			UV Replicate	LOW-112404 cal 0-50	4	1	1	12/9/2004 1:09:4
20	PBW	sample	1000	µL	-2.05	0	mg/L	78.4	-2.07	11.30	UV Replicate	LOW-112404 cal 0-50	4	1	1	12/9/2004 1:12:0
21	LCSW 19.7	fault	1000	µL	20.67	0	mg/L	898.8			UV Sparge	LOW-112404 cal 0-50	5	1	1	12/9/2004 1:21:2
22	LCSW 19.7	sample	1000	µL	19.37	0	mg/L	852.0			UV Replicate	LOW-112404 cal 0-50	5	1	1	12/9/2004 1:23:4
23	LCSW 19.7	sample	1000	µL	19.26	0	mg/L	848.7			UV Replicate	LOW-112404 cal 0-50	5	1	1	12/9/2004 1:26:0
24	LCSW 19.7	sample	1000	µL	19.43	0	mg/L	854.1		97.5%	UV Replicate	LOW-112404 cal 0-50	5	1	1	12/9/2004 1:28:1
25	LCSW 19.7	sample	1000	µL	18.73	0	mg/L	828.8	19.20	1.68	UV Replicate	LOW-112404 cal 0-50	5	1	1	12/9/2004 1:30:3
26	P0411515-02A dil 1/5	fault	1000	µL	81.94	0	mg/L	3110.9			UV Sparge	LOW-112404 cal 0-50	6	1	1	12/9/2004 1:40:0
27	P0411515-02A dil 1/5	sample	1000	µL	78.58	0	mg/L	2989.8			UV Replicate	LOW-112404 cal 0-50	6	1	1	12/9/2004 1:42:1
28	P0411515-02A dil 1/5	sample	1000	µL	78.37	0	mg/L	2982.3			UV Replicate	LOW-112404 cal 0-50	6	1	1	12/9/2004 1:44:3

322

Analyst name : Maureen Donlin
Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

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Queue report

Signal : 1 (C)

120904MD

18

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
29	P0411515-02A dil 1/5	sample	1000	µL	78.30	0	mg/L	2979.8			UV Replicate	LOW-112404 cal 0-50	6	1	1	12/9/2004 1:46:5
30	P0411515-02A dil 1/5	sample	1000	µL	78.16	0	mg/L	2974.4	78.85	0.23	UV Replicate	LOW-112404 cal 0-50	6	1	1	12/9/2004 1:49:0
31	P0411515-02A dil 1/10	fault	1000	µL	41.53	0	mg/L	1652.1			UV Sparge	LOW-112404 cal 0-50	7	1	1	12/9/2004 1:58:2
32	P0411515-02A dil 1/10	sample	1000	µL	40.72	0	mg/L	1622.6			UV Replicate	LOW-112404 cal 0-50	7	1	1	12/9/2004 2:00:4
33	P0411515-02A dil 1/10	sample	1000	µL	39.86	0	mg/L	1591.7			UV Replicate	LOW-112404 cal 0-50	7	1	1	12/9/2004 2:03:0
34	P0411515-02A dil 1/10	sample	1000	µL	39.94	0	mg/L	1594.7			UV Replicate	LOW-112404 cal 0-50	7	1	1	12/9/2004 2:05:1
35	P0411515-02A dil 1/10	sample	1000	µL	39.54	0	mg/L	1580.3	40.02	1.24	UV Replicate	LOW-112404 cal 0-50	7	1	1	12/9/2004 2:07:3
36	P0412041-01A	fault	1000	µL	18.93	0	mg/L	836.1			UV Sparge	LOW-112404 cal 0-50	8	1	1	12/9/2004 2:16:4
37	P0412041-01A	sample	1000	µL	17.87	0	mg/L	797.7			UV Replicate	LOW-112404 cal 0-50	8	1	1	12/9/2004 2:18:5
38	P0412041-01A	sample	1000	µL	18.07	0	mg/L	805.0			UV Replicate	LOW-112404 cal 0-50	8	1	1	12/9/2004 2:21:1
39	P0412041-01A	sample	1000	µL	18.22	0	mg/L	810.3			UV Replicate	LOW-112404 cal 0-50	8	1	1	12/9/2004 2:23:3
40	P0412041-01A	sample	1000	µL	18.19	0	mg/L	809.5	18.09	0.88	UV Replicate	LOW-112404 cal 0-50	8	1	1	12/9/2004 2:25:5
41	P0412041-01A DUP	fault	1000	µL	18.02	0	mg/L	803.3			UV Sparge	LOW-112404 cal 0-50	9	1	1	12/9/2004 2:35:0
42	P0412041-01A DUP	sample	1000	µL	17.12	0	mg/L	770.5			UV Replicate	LOW-112404 cal 0-50	9	1	1	12/9/2004 2:37:1
43	P0412041-01A DUP	sample	1000	µL	16.70	0	mg/L	755.7			UV Replicate	LOW-112404 cal 0-50	9	1	1	12/9/2004 2:39:3
44	P0412041-01A DUP	sample	1000	µL	16.76	0	mg/L	757.7			UV Replicate	LOW-112404 cal 0-50	9	1	1	12/9/2004 2:41:5
45	P0412041-01A DUP	sample	1000	µL	16.78	0	mg/L	758.4	16.84	1.11	UV Replicate	LOW-112404 cal 0-50	9	1	1	12/9/2004 2:44:0
46	P0412041-01A MS 20ppm	fault	1000	µL	39.85	0	mg/L	1591.5			UV Sparge	LOW-112404 cal 0-50	10	1	1	12/9/2004 2:53:2
47	P0412041-01A MS 20ppm	sample	1000	µL	36.66	0	mg/L	1476.0			UV Replicate	LOW-112404 cal 0-50	10	1	1	12/9/2004 2:55:4
48	P0412041-01A MS 20ppm	sample	1000	µL	36.71	0	mg/L	1477.8			UV Replicate	LOW-112404 cal 0-50	10	1	1	12/9/2004 2:57:5
49	P0412041-01A MS 20ppm	sample	1000	µL	36.34	0	mg/L	1464.5			UV Replicate	LOW-112404 cal 0-50	10	1	1	12/9/2004 3:00:1
50	P0412041-01A MS 20ppm	sample	1000	µL	37.27	0	mg/L	1498.2	36.74	1.06	UV Replicate	LOW-112404 cal 0-50	10	1	1	12/9/2004 3:02:3
51	P0412041-01A MSD 20ppm	fault	1000	µL	39.73	0	mg/L	1587.0			UV Sparge	LOW-112404 cal 0-50	11	1	1	12/9/2004 3:11:5
52	P0412041-01A MSD 20ppm	sample	1000	µL	38.35	0	mg/L	1537.3			UV Replicate	LOW-112404 cal 0-50	11	1	1	12/9/2004 3:14:0
53	P0412041-01A MSD 20ppm	sample	1000	µL	38.05	0	mg/L	1526.3			UV Replicate	LOW-112404 cal 0-50	11	1	1	12/9/2004 3:16:2
54	P0412041-01A MSD 20ppm	sample	1000	µL	38.23	0	mg/L	1532.9			UV Replicate	LOW-112404 cal 0-50	11	1	1	12/9/2004 3:18:4
55	P0412041-01A MSD 20ppm	sample	1000	µL	38.12	0	mg/L	1528.8	38.19	0.35	UV Replicate	LOW-112404 cal 0-50	11	1	1	12/9/2004 3:20:5
56	P0412041-02A	fault	1000	µL	19.24	0	mg/L	847.1			UV Sparge	LOW-112404 cal 0-50	12	1	1	12/9/2004 3:30:1

323

Analyst name : Maureen Donlin

Print date : 12/10/2004

Sample blanco : 0

Calibration blanco : 0

Yield (%) : 100

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Queue report

Signal : 1 (C)

120904MD



Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
57	P0412041-02A	sample	1000	µL	18.17	0	mg/L	808.7			UV Replicate	LOW-112404 cal 0-50	12	1	1	12/9/2004 3:32:
58	P0412041-02A	sample	1000	µL	18.03	0	mg/L	803.6			UV Replicate	LOW-112404 cal 0-50	12	1	1	12/9/2004 3:34:
59	P0412041-02A	sample	1000	µL	18.27	0	mg/L	812.2			UV Replicate	LOW-112404 cal 0-50	12	1	1	12/9/2004 3:37:
60	P0412041-02A	sample	1000	µL	18.22	0	mg/L	810.3	18.17	0.56	UV Replicate	LOW-112404 cal 0-50	12	1	1	12/9/2004 3:39:
61	P0412010-01A	fault	1000	µL	27.49	0	mg/L	1145.0			UV Sparge	LOW-112404 cal 0-50	13	1	1	12/9/2004 3:48:
62	P0412010-01A	sample	1000	µL	26.59	0	mg/L	1112.7			UV Replicate	LOW-112404 cal 0-50	13	1	1	12/9/2004 3:51:
63	P0412010-01A	sample	1000	µL	26.74	0	mg/L	1117.8			UV Replicate	LOW-112404 cal 0-50	13	1	1	12/9/2004 3:53:
64	P0412010-01A	sample	1000	µL	26.38	0	mg/L	1105.0			UV Replicate	LOW-112404 cal 0-50	13	1	1	12/9/2004 3:55:
65	P0412010-01A	sample	1000	µL	26.11	0	mg/L	1095.2	26.45	1.03	UV Replicate	LOW-112404 cal 0-50	13	1	1	12/9/2004 3:57:
66	CCB	fault	1000	µL	-1.45	0	mg/L	100.2			UV Sparge	LOW-112404 cal 0-50	14	1	1	12/9/2004 4:07:1
67	CCB	sample	1000	µL	-1.59	0	mg/L	95.0			UV Replicate	LOW-112404 cal 0-50	14	1	1	12/9/2004 4:09:
68	CCB	sample	1000	µL	-1.84	0	mg/L	86.1			UV Replicate	LOW-112404 cal 0-50	14	1	1	12/9/2004 4:11:
69	CCB	sample	1000	µL	-1.87	0	mg/L	85.2			UV Replicate	LOW-112404 cal 0-50	14	1	1	12/9/2004 4:14:
70	CCB	sample	1000	µL	-1.95	0	mg/L	82.2	-1.81	8.41	UV Replicate	LOW-112404 cal 0-50	14	1	1	12/9/2004 4:16:
71	CCV 25ppm	fault	1000	µL	25.66	0	mg/L	1079.0			UV Sparge	LOW-112404 cal 0-50	15	1	1	12/9/2004 4:25:
72	CCV 25ppm	sample	1000	µL	24.87	0	mg/L	1043.3			UV Replicate	LOW-112404 cal 0-50	15	1	1	12/9/2004 4:27:
73	CCV 25ppm	sample	1000	µL	24.24	0	mg/L	1027.7			UV Replicate	LOW-112404 cal 0-50	15	1	1	12/9/2004 4:30:1
74	CCV 25ppm	sample	1000	µL	23.91	0	mg/L	1016.0			UV Replicate	LOW-112404 cal 0-50	15	1	1	12/9/2004 4:32:
75	CCV 25ppm	sample	1000	µL	24.28	0	mg/L	1029.3	24.28	1.28	UV Replicate	LOW-112404 cal 0-50	15	1	1	12/9/2004 4:34:
76	PBW	fault	1000	µL	-1.99	0	mg/L	80.7			UV Sparge	LOW-112404 cal 0-50	16	1	1	12/9/2004 4:43:
77	PBW	sample	1000	µL	-1.96	0	mg/L	81.9			UV Replicate	LOW-112404 cal 0-50	16	1	1	12/9/2004 4:46:1
78	PBW	sample	1000	µL	-1.78	0	mg/L	88.4			UV Replicate	LOW-112404 cal 0-50	16	1	1	12/9/2004 4:48:
79	PBW	sample	1000	µL	-1.98	0	mg/L	80.9			UV Replicate	LOW-112404 cal 0-50	16	1	1	12/9/2004 4:50:
80	PBW	sample	1000	µL	-1.94	0	mg/L	82.5	-1.91	4.85	UV Replicate	LOW-112404 cal 0-50	16	1	1	12/9/2004 4:53:
81	LCSW 19.7	fault	1000	µL	20.68	0	mg/L	899.2			UV Sparge	LOW-112404 cal 0-50	17	1	1	12/9/2004 5:02:
82	LCSW 19.7	sample	1000	µL	19.33	0	mg/L	850.5			UV Replicate	LOW-112404 cal 0-50	17	1	1	12/9/2004 5:04:
83	LCSW 19.7	sample	1000	µL	19.63	0	mg/L	861.3			UV Replicate	LOW-112404 cal 0-50	17	1	1	12/9/2004 5:06:
84	LCSW 19.7	sample	1000	µL	18.74	0	mg/L	829.2			UV Replicate	LOW-112404 cal 0-50	17	1	1	12/9/2004 5:09:1

97.1%

Analyst name : Maureen Donlin

Print date : 12/10/2004

Sample blanco : 0

Calibration blanco : 0

Yield (%) : 100

MWB-4

Thermo
ELECTRON CORPORATION

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2627 BC Delft
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+31 (0) 15 257 1314
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www.thermo.com
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Queue report

Signal : 1 (C)

112404 cal 0-50



Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
1	Blank	fault	1000	µL	2.32	0	mg/L	236.3			UV Sparge	Low-112404 cal 0-50	1	1	1	11/24/2004 2:12:
2	Blank	fault	1000	µL	-0.50	0	mg/L	134.3			UV Replicate	Low-112404 cal 0-50	1	1	1	11/24/2004 2:14:
3	Blank	fault	1000	µL	-1.11	0	mg/L	112.4			UV Replicate	Low-112404 cal 0-50	1	1	1	11/24/2004 2:17:1
4	Blank	fault	1000	µL	-0.82	0	mg/L	122.8			UV Replicate	Low-112404 cal 0-50	1	1	1	11/24/2004 2:19:
5	Blank	fault	1000	µL	-0.89	0	mg/L	120.6			UV Replicate	Low-112404 cal 0-50	1	1	1	11/24/2004 2:21:
6	0 PPM	fault	1000	µL	-1.30	0	mg/L	105.6			UV Sparge	Low-112404 cal 0-50	2	1	1	11/24/2004 2:31:(
7	0 PPM	calibration	1000	µL	-1.34	0	mg/L	104.0			UV Replicate	Low-112404 cal 0-50	2	1	1	11/24/2004 2:33:1
8	0 PPM	calibration	1000	µL	-1.16	0	mg/L	110.5			UV Replicate	Low-112404 cal 0-50	2	1	1	11/24/2004 2:35:
9	0 PPM	calibration	1000	µL	-1.23	0	mg/L	108.3			UV Replicate	Low-112404 cal 0-50	2	1	1	11/24/2004 2:37:
10	0 PPM	calibration	1000	µL	-1.33	0	mg/L	104.4	-1.27	6.85	UV Replicate	Low-112404 cal 0-50	2	1	1	11/24/2004 2:40:1
11	0.5 PPM	calibration	1000	µL	0.61	0.50	mg/L	174.6			UV Sparge	Low-112404 cal 0-50	3	1	1	11/24/2004 2:49:
12	0.5 PPM	calibration	1000	µL	0.33	0.50	mg/L	164.4			UV Replicate	Low-112404 cal 0-50	3	1	1	11/24/2004 2:51:
13	0.5 PPM	calibration	1000	µL	0.47	0.50	mg/L	169.4			UV Replicate	Low-112404 cal 0-50	3	1	1	11/24/2004 2:54:(
14	0.5 PPM	calibration	1000	µL	0.09	0.50	mg/L	155.8			UV Replicate	Low-112404 cal 0-50	3	1	1	11/24/2004 2:56:1
15	0.5 PPM	calibration	1000	µL	0.31	0.50	mg/L	163.9	0.36	53.39	UV Replicate	Low-112404 cal 0-50	3	1	1	11/24/2004 2:58:3
16	1 PPM	fault	1000	µL	1.14	1.00	mg/L	193.8			UV Sparge	Low-112404 cal 0-50	4	1	1	11/24/2004 3:07:5
17	1 PPM	calibration	1000	µL	0.92	1.00	mg/L	185.7			UV Replicate	Low-112404 cal 0-50	4	1	1	11/24/2004 3:10:(
18	1 PPM	calibration	1000	µL	1.22	1.00	mg/L	196.7			UV Replicate	Low-112404 cal 0-50	4	1	1	11/24/2004 3:12:2
19	1 PPM	calibration	1000	µL	1.23	1.00	mg/L	196.8			UV Replicate	Low-112404 cal 0-50	4	1	1	11/24/2004 3:14:4
20	1 PPM	calibration	1000	µL	1.11	1.00	mg/L	192.7	1.12	12.90	UV Replicate	Low-112404 cal 0-50	4	1	1	11/24/2004 3:16:5
21	5 PPM	fault	1000	µL	5.75	5.00	mg/L	360.1			UV Sparge	Low-112404 cal 0-50	5	1	1	11/24/2004 3:26:1
22	5 PPM	calibration	1000	µL	5.48	5.00	mg/L	350.4			UV Replicate	Low-112404 cal 0-50	5	1	1	11/24/2004 3:28:3
23	5 PPM	calibration	1000	µL	5.66	5.00	mg/L	357.5			UV Replicate	Low-112404 cal 0-50	5	1	1	11/24/2004 3:30:5
24	5 PPM	calibration	1000	µL	5.47	5.00	mg/L	350.0			UV Replicate	Low-112404 cal 0-50	5	1	1	11/24/2004 3:33:(
25	5 PPM	calibration	1000	µL	5.46	5.00	mg/L	349.8	5.52	1.86	UV Replicate	Low-112404 cal 0-50	5	1	1	11/24/2004 3:35:2
26	10PPM	fault	1000	µL	11.24	10.00	mg/L	558.5			UV Sparge	Low-112404 cal 0-50	6	1	1	11/24/2004 3:44:4
27	10PPM	calibration	1000	µL	11.04	10.00	mg/L	551.2			UV Replicate	Low-112404 cal 0-50	6	1	1	11/24/2004 3:47:(
28	10PPM	calibration	1000	µL	10.80	10.00	mg/L	542.5			UV Replicate	Low-112404 cal 0-50	6	1	1	11/24/2004 3:49:2

325

Analyst name : Maureen Donlin

Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

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MWB-4

Queue report

Signal : 1 (C)

112404 cal 0-50

1

Nr.	Name	Type	Size	Unit	Conc.	Cal. Conc.	Unit	Area	Mean	RSD %	Method	Cal. line	Pos.	Dil.	Dens.	Date
29	10PPM	calibration	1000	µL	10.35	10.00	mg/L	526.1			UV Replicate	Low-112404 cal 0-50	6	1	1	11/24/2004 3:51:
30	10PPM	calibration	1000	µL	10.88	10.00	mg/L	545.3	10.77	2.76	UV Replicate	Low-112404 cal 0-50	6	1	1	11/24/2004 3:53:
31	25PPM	fault	1000	µL	26.88	25.00	mg/L	1123.2			UV Sparge	Low-112404 cal 0-50	7	1	1	11/24/2004 4:03:
32	25PPM	calibration	1000	µL	25.42	25.00	mg/L	1070.5			UV Replicate	Low-112404 cal 0-50	7	1	1	11/24/2004 4:05:
33	25PPM	calibration	1000	µL	25.64	25.00	mg/L	1078.2			UV Replicate	Low-112404 cal 0-50	7	1	1	11/24/2004 4:07:
34	25PPM	calibration	1000	µL	25.34	25.00	mg/L	1067.5			UV Replicate	Low-112404 cal 0-50	7	1	1	11/24/2004 4:10:
35	25PPM	calibration	1000	µL	25.50	25.00	mg/L	1073.3	25.48	0.49	UV Replicate	Low-112404 cal 0-50	7	1	1	11/24/2004 4:12:
36	50PPM	fault	1000	µL	51.81	50.00	mg/L	2023.2			UV Sparge	Low-112404 cal 0-50	8	1	1	11/24/2004 4:21:
37	50PPM	calibration	1000	µL	49.79	50.00	mg/L	1950.4			UV Replicate	Low-112404 cal 0-50	8	1	1	11/24/2004 4:23:
38	50PPM	calibration	1000	µL	49.77	50.00	mg/L	1949.4			UV Replicate	Low-112404 cal 0-50	8	1	1	11/24/2004 4:26:
39	50PPM	calibration	1000	µL	49.65	50.00	mg/L	1945.3			UV Replicate	Low-112404 cal 0-50	8	1	1	11/24/2004 4:28:
40	50PPM	calibration	1000	µL	49.01	50.00	mg/L	1922.1	49.56	0.74	UV Replicate	Low-112404 cal 0-50	8	1	1	11/24/2004 4:30:

326

End of queue

Analyst name : Maureen Donlin
Print date : 12/10/2004

Sample blanco : 0
Calibration blanco : 0
Yield (%) : 100

Method File: H20
Operator: bcarnicelli
Printed: 11/16/2004 10:31:05 AM

Title:
Datasource: BIOREM11_local
Location: BIOREM14\NOV, 2004 H2O.SEQ
Created: 5/6/2004 3:13:36 PM by bcarnicelli
(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Ret.Time FID	Ret.Time TCD	Ret.Time RGD	Resp.Fact.	Amount STD X 2500X 050404
1	Methane	0.660 min	0.660 min			1.000000	
2	Ethane	0.920 min	0.920 min			1.000000	
3	Ethene	1.180 min	1.180 min			1.000000	
4	Propane	1.790 min	1.790 min			1.000000	
5	Propene	3.280 min	3.280 min			1.000000	
6	Hydrogen	3.360 min			3.360 min	1.000000	0.077000
7	iso-Butane	4.410 min	4.410 min			1.000000	
8	Carbon Dioxide	4.600 min		4.600 min		1.000000	
9	n-Butane	5.050 min	5.050 min			1.000000	
10	Oxygen	6.400 min		6.400 min		1.000000	
11	Acetylene	6.550 min	6.550 min			1.000000	
12	Nitrogen	7.200 min		7.200 min		1.000000	
13	Methane	9.400 min		9.400 min		1.000000	
14	Carbon Monoxide	10.900 min		10.900 min		1.000000	

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Method File: H20
Operator: bcarnicelli
Printed: 11/16/2004 10:31:05 AM

Title:
Datasource: BIOREM11_local
Location: BIOREM14\NOV, 2004 H2O.SEQ
Created: 5/6/2004 3:13:36 PM by bcarnicelli
(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Amount STD X 25X 050404	Amount STD X 10X 050404	Amount STD 237 100X 050504	Amount STD 237 10X 050504
1	Methane	0.660 min				
2	Ethane	0.920 min				
3	Ethene	1.180 min				
4	Propane	1.790 min				
5	Propene	3.280 min				
6	Hydrogen	3.360 min	6.700000	16.750000		
7	iso-Butane	4.410 min				
8	Carbon Dioxide	4.600 min			3.200000	31.990000
9	n-Butane	5.050 min				
10	Oxygen	6.400 min			0.340000	3.400000
11	Acetylene	6.550 min				
12	Nitrogen	7.200 min			2.700000	26.990000
13	Methane	9.400 min			109.350000	1093.500000
14	Carbon Monoxide	10.900 min			0.295000	2.952000

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Method File: H20
Operator: bcarnicelli
Printed: 11/16/2004 10:31:05 AM

Title:
Datasource: BIOREM11_local
Location: BIOREM14\NOV, 2004 H2O.SEQ
Created: 5/6/2004 3:13:36 PM by bcarnicelli
(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Amount STD 237 2X 050504	Amount STD 237 050504	Amount STD X 2500X 050704	Amount STD X 250X 050704
1	Methane	0.660 min			0.049400	0.494000
2	Ethane	0.920 min			94.400000	944.000000
3	Ethene	1.180 min			105.840000	1058.400000
4	Propane	1.790 min			134.940000	1349.400000
5	Propene	3.280 min			156.400000	1564.000000
6	Hydrogen	3.360 min				
7	iso-Butane	4.410 min			170.800000	1708.000000
8	Carbon Dioxide	4.600 min	159.970000	319.300000		
9	n-Butane	5.050 min			174.380000	1743.840000
10	Oxygen	6.400 min	17.000000	34.000000		
11	Acetylene	6.550 min				
12	Nitrogen	7.200 min	134.950000	269.910000		
13	Methane	9.400 min	5467.000000	10935.000000		
14	Carbon Monoxide	10.900 min	14.760000	29.520000		

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Method File: H20
Operator: bcarnicelli
Printed: 11/16/2004 10:31:05 AM

Title:
Datasource: BIOREM11_local
Location: BIOREM14\NOV, 2004 H2O SEQ
Created: 5/6/2004 3:13:36 PM by bcarnicelli
(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Amount STD X 25X 050704	Amount STD X	Amount ACETYLENE 2000X	Amount ACETYLENE 200X	Amount ACETYLENE 20X
1	Methane	0.660 min	4.940000	123.440000			
2	Ethane	0.920 min	9440.000000	236000.000000			
3	Ethene	1.180 min	10584.000000	264600.000000			
4	Propane	1.790 min	13493.800000	337344.000000			
5	Propene	3.280 min	15640.000000	391000.000000			
6	Hydrogen	3.360 min					
7	iso-Butane	4.410 min	17080.000000	427000.000000			
8	Carbon Dioxide	4.600 min					
9	n-Butane	5.050 min	17438.400000	435960.000000			
10	Oxygen	6.400 min					
11	Acetylene	6.550 min			742.000000	7420.000000	74200.000000
12	Nitrogen	7.200 min					
13	Methane	9.400 min					
14	Carbon Monoxide	10.900 min					

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Method File: H20
Operator: bcarnicelli
Printed: 11/16/2004 10:31:05 AM

Title:
Datasource: BIOREM11_local
Location: BIOREM14\NOV, 2004 H2O SEQ
Created: 5/6/2004 3:13:36 PM by bcarnicelli
(Modified, not saved)

Amount Table:

Dimension of Amounts:
Reference volume for amounts: Use inject volume of first standard
Number of Amount Columns: 15
Sample column used for amount column assignment: Sample Name

No.	Peak Name	Ret.Time	Amount ACETYLENE 2X
1	Methane	0.660 min	
2	Ethane	0.920 min	
3	Ethene	1.180 min	
4	Propane	1.790 min	
5	Propene	3.280 min	
6	Hydrogen	3.360 min	
7	iso-Butane	4.410 min	
8	Carbon Dioxide	4.600 min	
9	n-Butane	5.050 min	
10	Oxygen	6.400 min	
11	Acetylene	6.550 min	742000.000000
12	Nitrogen	7.200 min	
13	Methane	9.400 min	
14	Carbon Monoxide	10.900 min	

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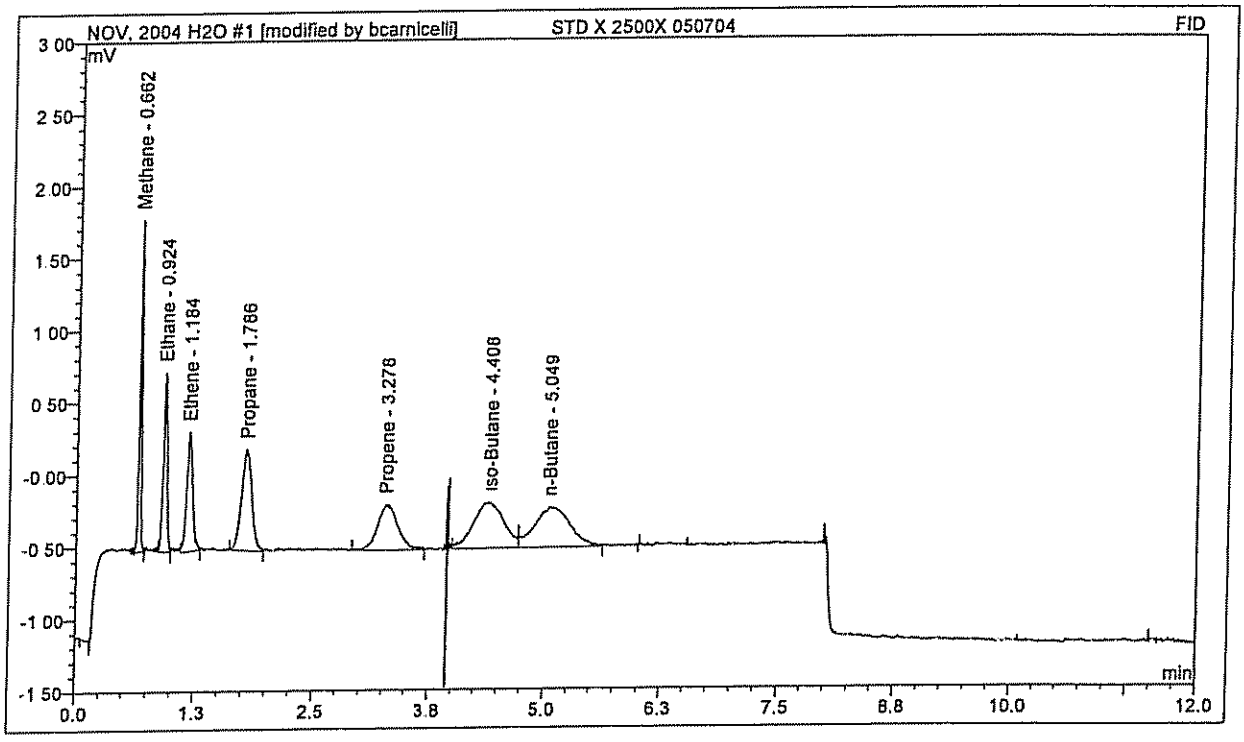
LIGHT HYDROCARBONS

5/7/2004

Peak Name	Area	Height	Cal.Type	Slope	#Points	Rel.Std.Dev.	Corr.Coeff.
	mV*min	mV				%	%
Methane	0.063	2.305	Lin	0.661	4	0.279	100.000
Ethane	0.060	1.241	Lin	0.001	4	0.133	100.000
Ethene	0.059	0.827	Lin	0.001	4	0.122	100.000
Propane	0.088	0.700	Lin	0.001	4	0.105	100.000
Propene	0.082	0.316	Lin	0.001	4	0.066	100.000
iso-Butane	0.120	0.320	Lin	0.001	4	0.047	100.000
n-Butane	0.123	0.279	Lin	0.001	4	0.032	100.000

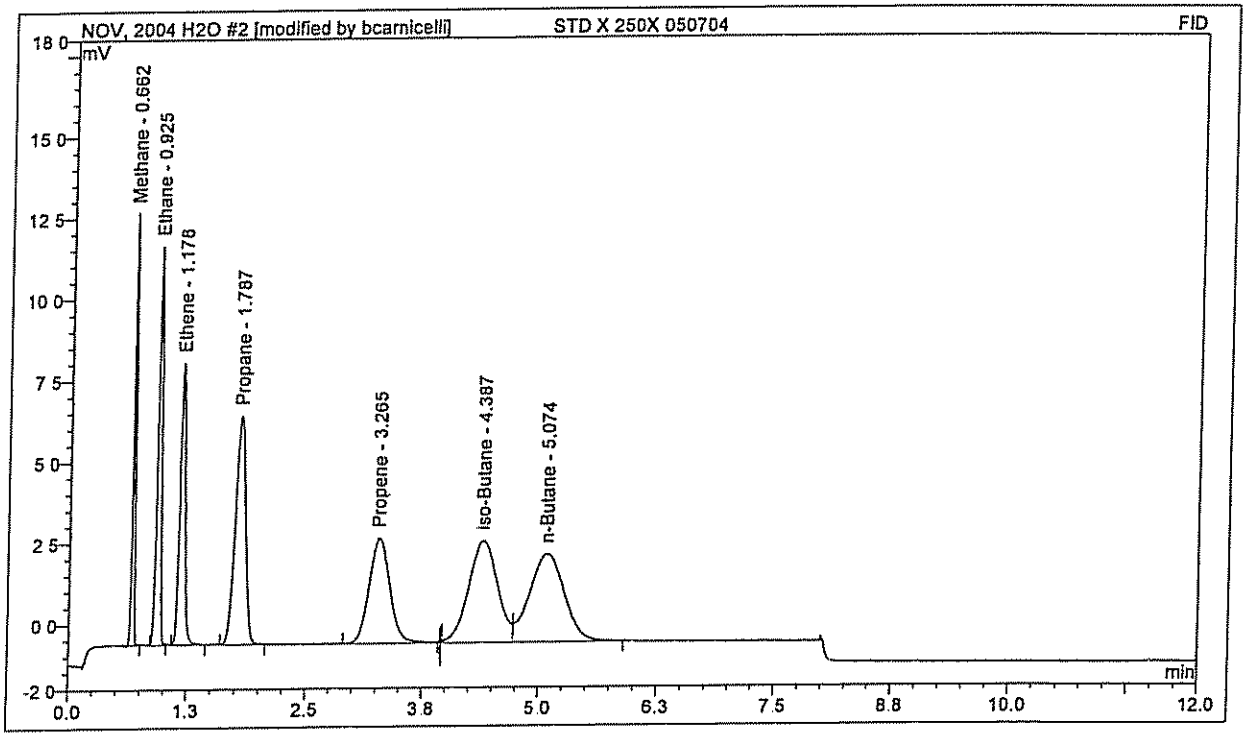
Sample Name:	STD X 2500X 050704
Sample Type:	standard
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 11:02
Run Time (min):	12.00

FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	0.063	2.3050	0.09449
Ethane	0.924	0.060	1.2406	93.85325
Ethene	1.184	0.059	0.8270	102.93003
Propane	1.786	0.088	0.6995	132.51576
Propene	3.278	0.082	0.3163	149.54618
iso-Butane	4.408	0.120	0.3198	175.70545
n-Butane	5.049	0.123	0.2791	177.96491

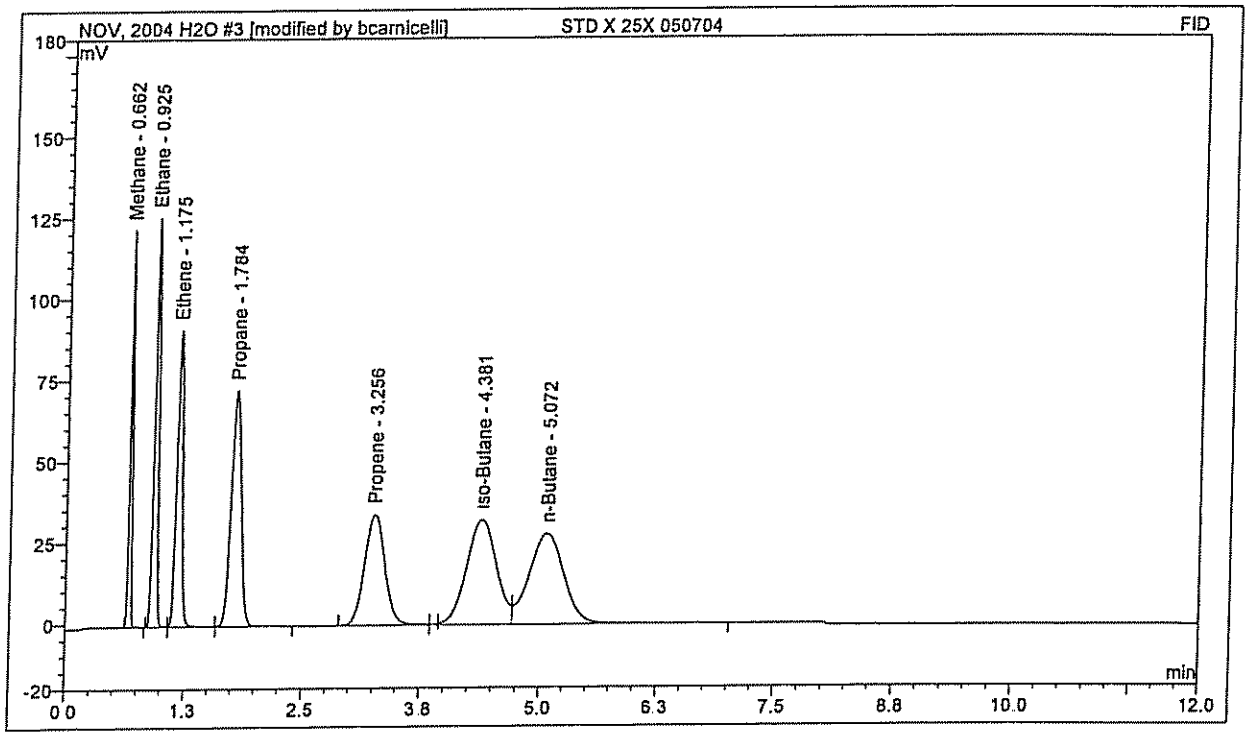
Sample Name:	STD X 250X 050704	FID UNITS (ug/L&ng/L) TCD UNITS (ug/L&mg/L) RGD UNITS (nM)
Sample Type:	standard	
Control Program:	BIOREM14	
Quantif. Method:	WATER NOV04	
Recording Time:	5/7/2004 11:15	
Run Time (min):	12.00	



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	0.364	13.3112	0.54973
Ethane	0.925	0.592	12.2719	933.43070
Ethene	1.178	0.595	8.6789	1039.55261
Propane	1.787	0.877	7.0357	1324.06539
Propene	3.265	0.840	3.2483	1537.21262
iso-Butane	4.387	1.150	3.1436	1687.38716
n-Butane	5.074	1.167	2.7139	1689.84081

Sample Name:	STD X 25X 050704
Sample Type:	standard
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 11:27
Run Time (min):	12.00

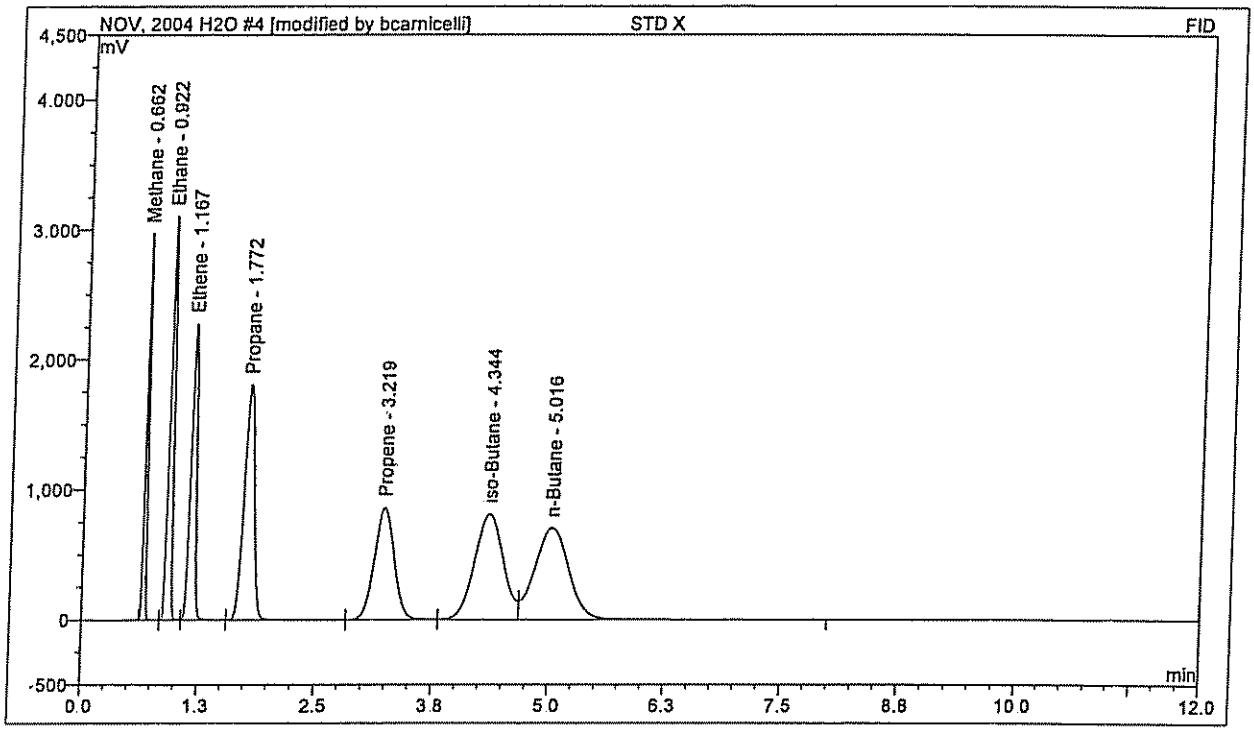
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	3.359	122.2935	5.07821
Ethane	0.925	6.075	125.9177	9581.00770
Ethene	1.175	6.136	91.1611	10728.78954
Propane	1.784	9.045	72.5459	13652.26203
Propene	3.256	8.606	34.0597	15753.28496
iso-Butane	4.381	11.700	32.2272	17169.14090
n-Butane	5.072	12.024	27.8701	17404.76654

Sample Name:	STD X
Sample Type:	standard
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 11:48
Run Time (min):	12.00

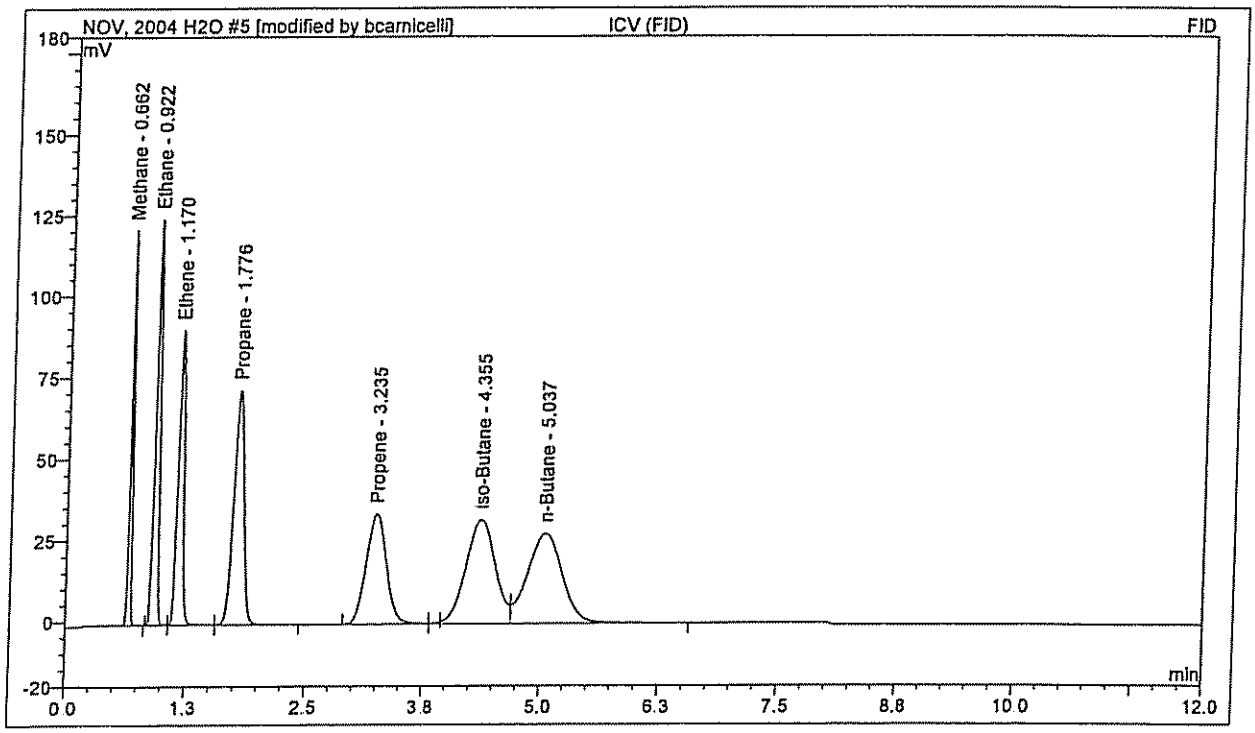
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	81.647	2978.6935	123.43423
Ethane	0.922	149.637	3109.2074	235994.40219
Ethene	1.167	151.331	2280.6065	264594.28497
Propane	1.772	223.506	1809.5373	337337.76381
Propene	3.219	213.594	862.8061	390995.57849
iso-Butane	4.344	290.986	813.4911	426996.51485
n-Butane	5.016	301.189	706.0781	435961.55990

Sample Name:	ICV (FID)
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 12:02
Run Time (min):	12.00

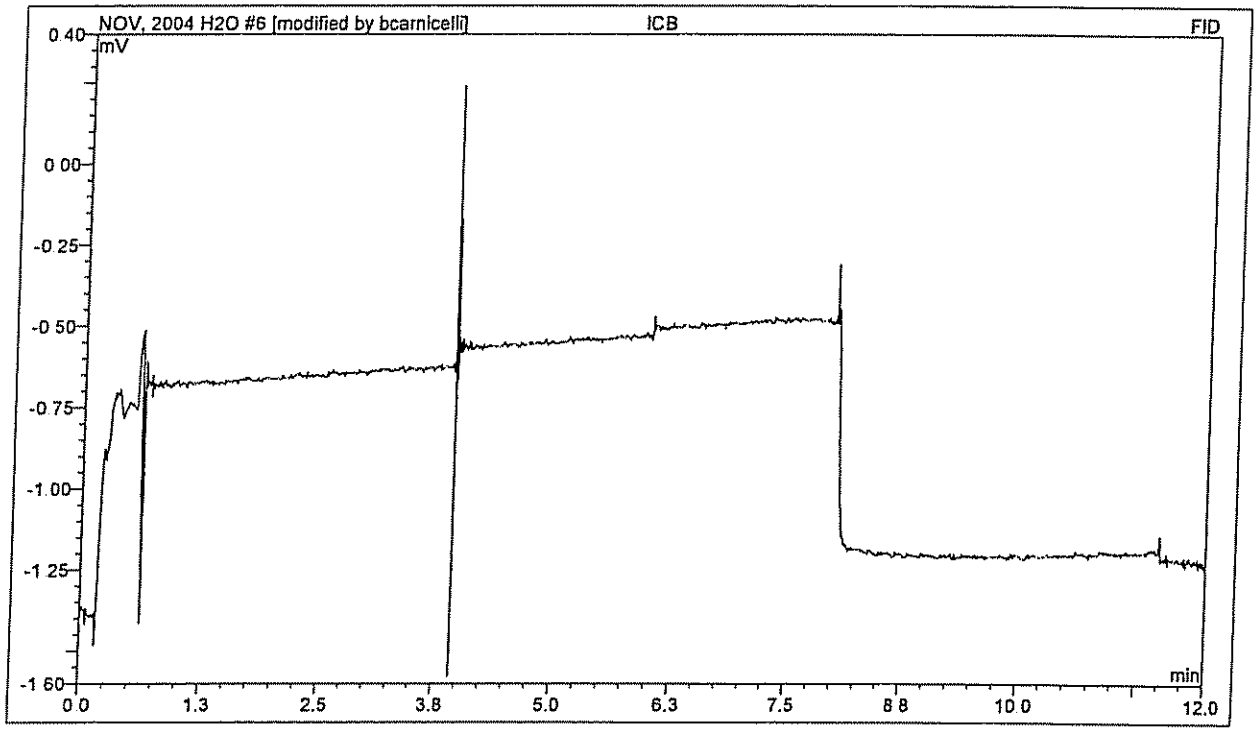
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.662	3.329	121.6079	5.03308
Ethane	0.922	6.020	124.9217	9493.76281
Ethene	1.170	6.072	90.4753	10616.14282
Propane	1.776	8.954	72.0116	13513.69737
Propene	3.235	8.522	33.9495	15599.36577
Iso-Butane	4.355	11.602	31.9690	17025.66575
n-Butane	5.037	11.859	27.7210	17165.89150

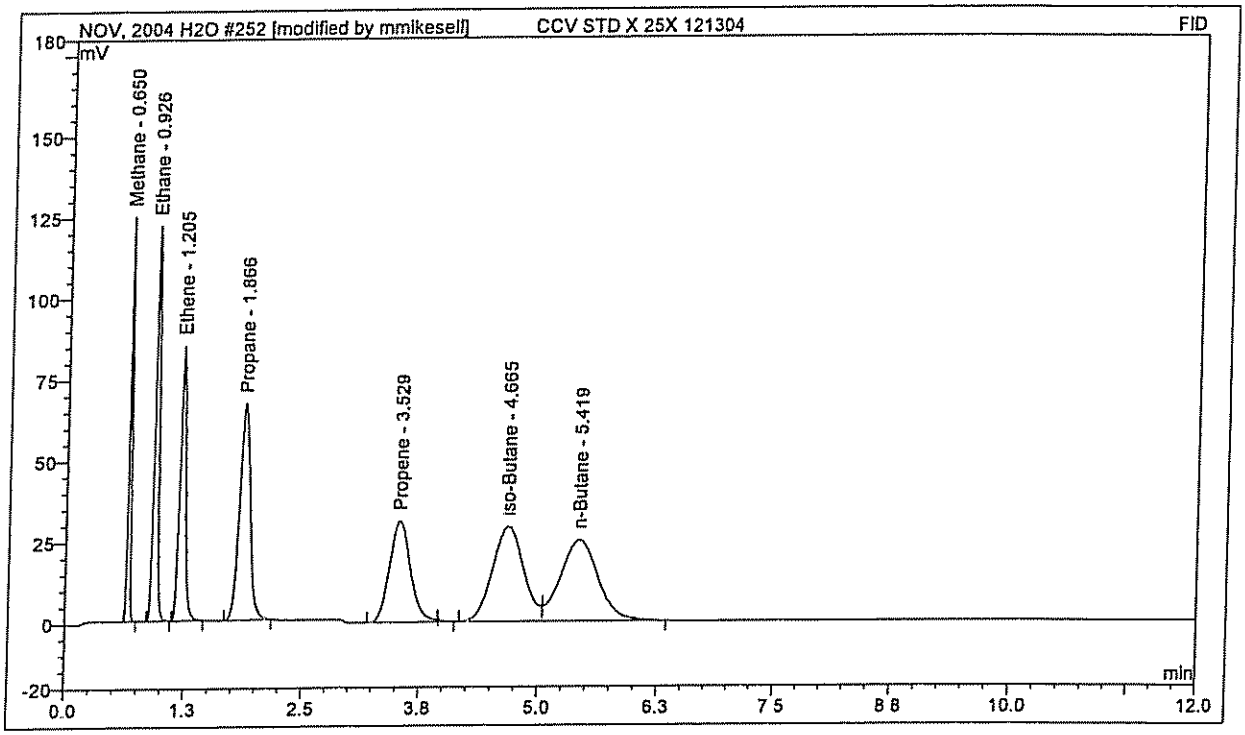
Sample Name:	ICB
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	5/7/2004 12:15
Run Time (min):	12.00

FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	

Sample Name:	CCV STD X 25X 121304	FID UNITS (ug/L&ng/L) TCD UNITS (ug/L&mg/L.) RGD UNITS (nM)
Sample Type:	unknown	
Control Program:	BIOREM14	
Quantif. Method:	WATER NOV04	
Recording Time:	12/13/2004 9:20	
Run Time (min):	12.00	

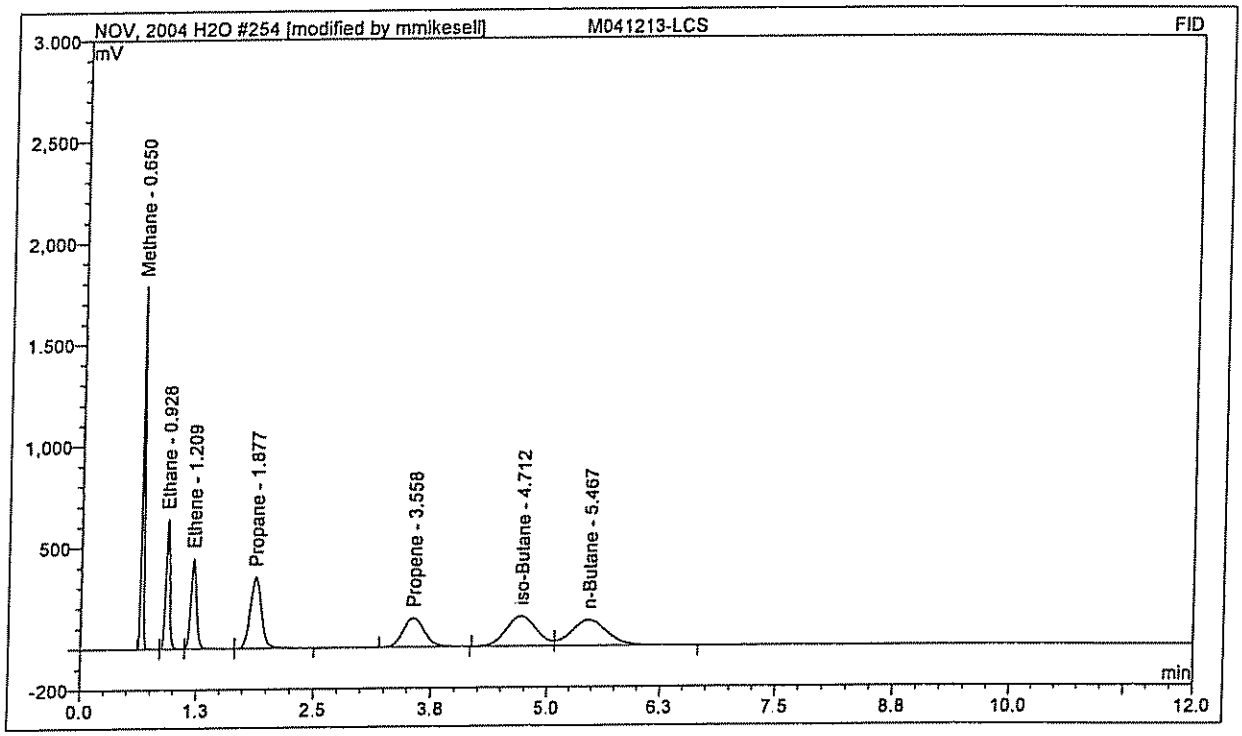


Peak Name	Ret.Time	Area	Height	Amount	
	min	mV*min	mV		
Methane	0.650	3.421	124.6814	5.17170	105%R.
Ethane	0.926	6.092	121.6993	9607.67074	102
Ethene	1.205	6.114	84.7018	10689.39067	101
Propane	1.866	8.970	66.7216	13537.83076	100
Propene	3.529	8.141	31.1422	14902.06483	95
iso-Butane	4.665	10.927	29.1170	16034.24762	94
n-Butane	5.419	11.431	24.9693	16546.26123	95

ccv. 121304

Sample Name:	M041213-LCS
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 9:45
Run Time (min):	12.00

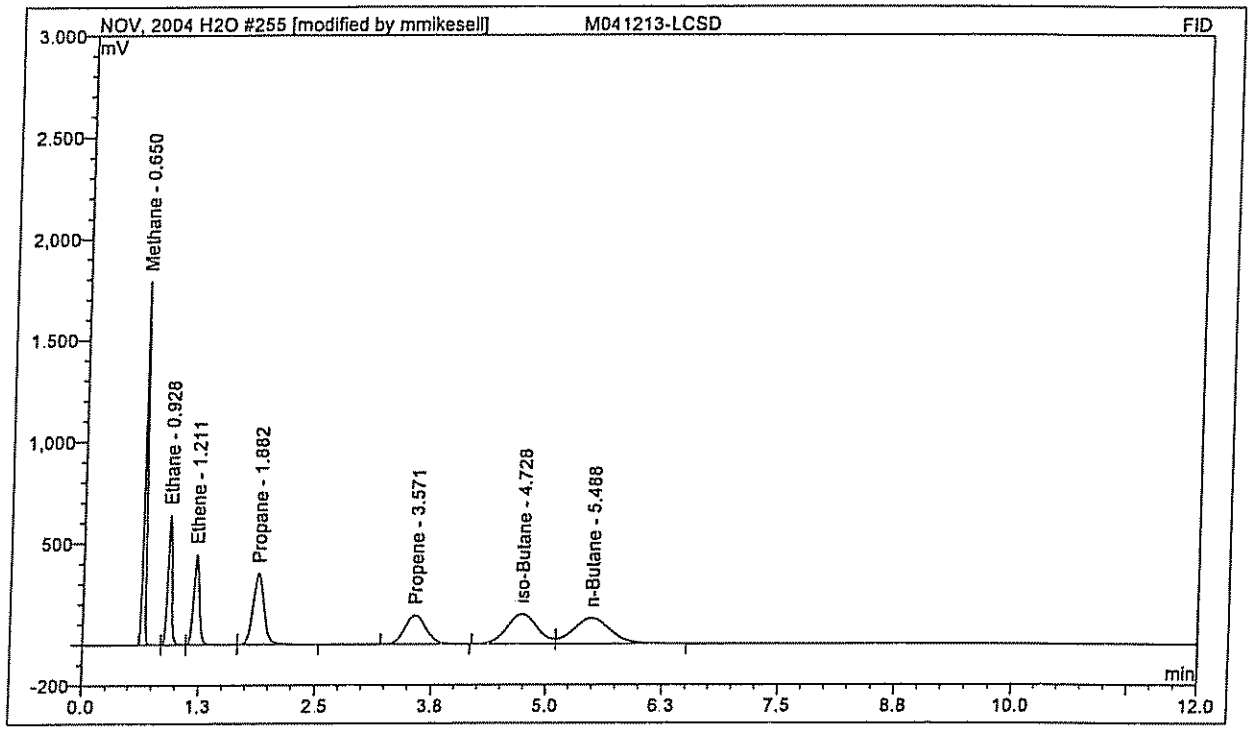
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.650	48.738	1785.4481	73.68301
Ethane	0.928	31.875	636.1278	50269.77873
Ethene	1.209	31.783	442.6502	55570.15711
Propane	1.877	47.746	350.1099	72063.09632
Propene	3.558	37.615	142.8272	68855.80065
iso-Butane	4.712	56.050	147.9151	82248.01134
n-Butane	5.467	59.224	127.0662	85725.48259

Sample Name:	M041213-LCSD
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 9:58
Run Time (min):	12.00

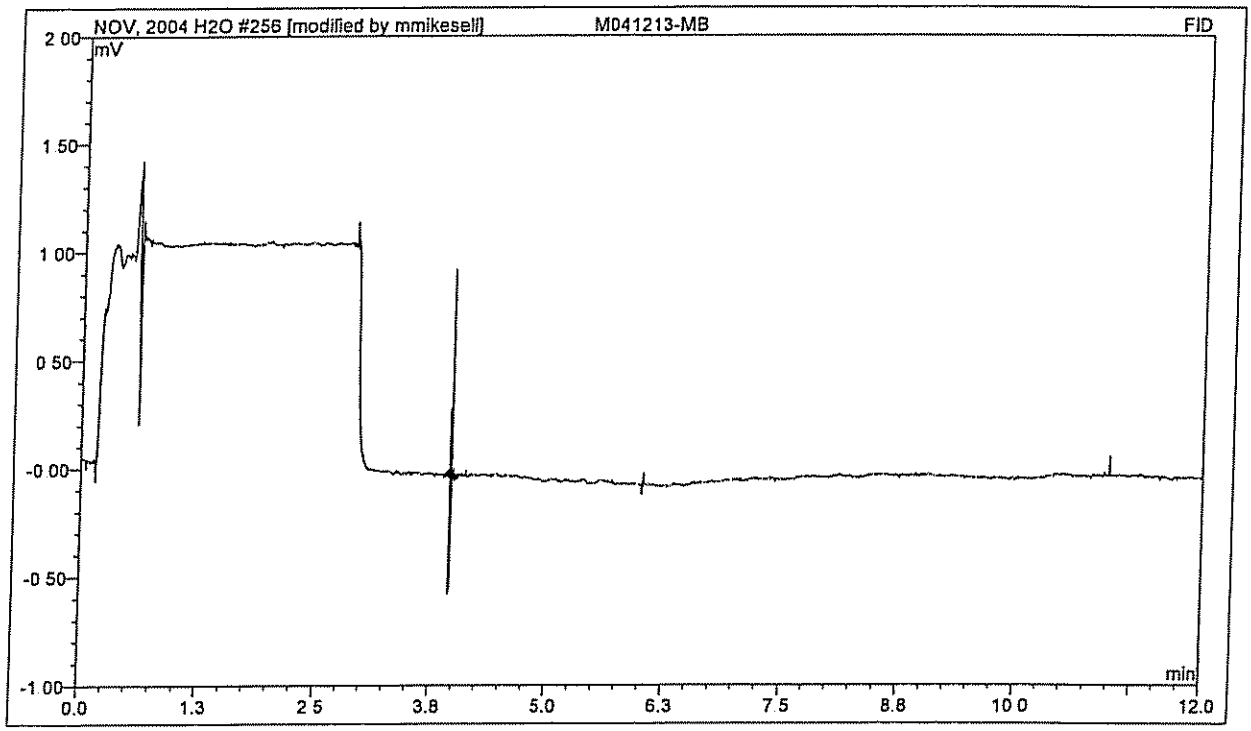
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.650	48.984	1790.5123	74.05380
Ethane	0.928	31.999	637.4244	50465.26144
Ethene	1.211	31.886	443.0349	55750.57813
Propane	1.882	47.904	350.1703	72302.04133
Propene	3.571	37.717	142.3715	69043.11317
Iso-Butane	4.728	56.189	147.3190	82452.62566
n-Butane	5.488	58.982	126.7641	85374.01374

Sample Name:	M041213-MB
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 10:10
Run Time (min):	12.00

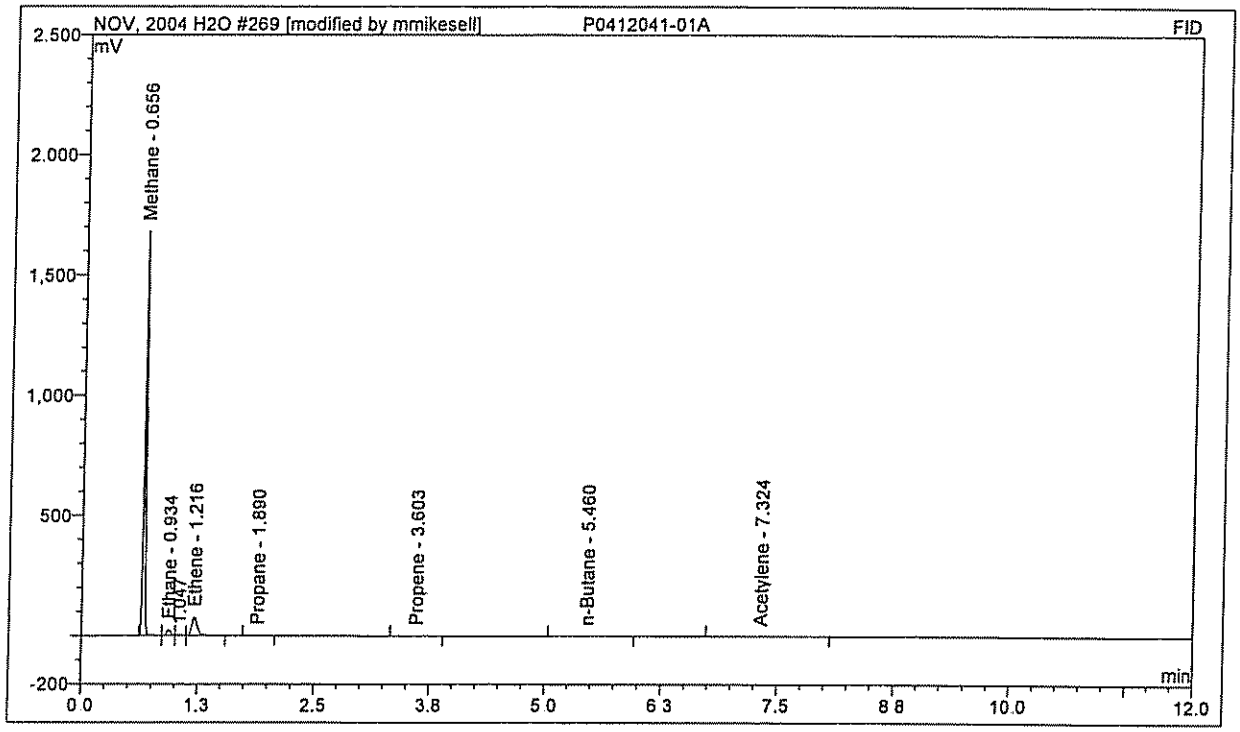
FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	

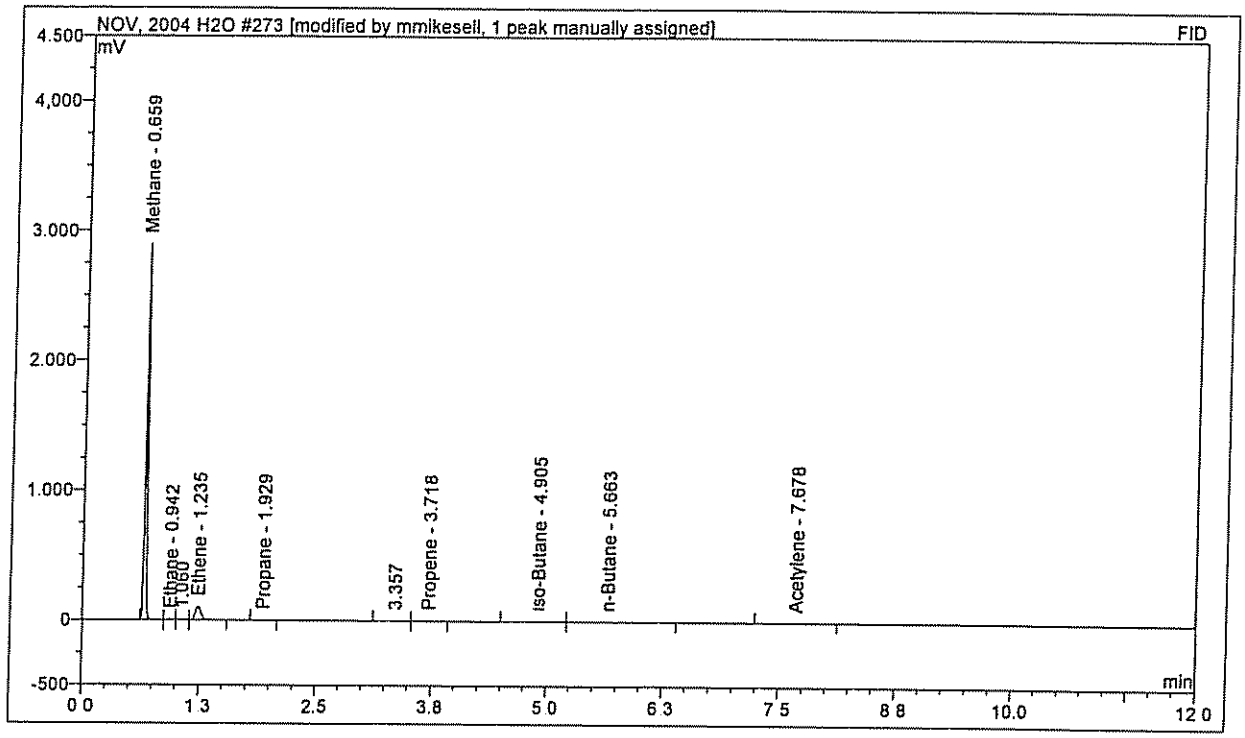
Sample Name:	P0412041-01A
Sample Type:	unknown
Control Program:	BIOREM14
Quantif. Method:	WATER NOV04
Recording Time:	12/13/2004 13:00
Run Time (min):	12.00

FID UNITS (ug/L&ng/L)
TCD UNITS (ug/L&mg/L)
RGD UNITS (nM)



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.656	40.029	1681.3775	60.51605
Ethane	0.934	1.177	24.3098	1856.47628
Ethene	1.216	5.384	75.4614	9414.23927
Propane	1.890	0.041	0.3097	61.27107
Propene	3.603	0.064	0.2529	118.00030
n-Butane	5.460	0.055	0.1272	79.28589
Acetylene	7.324	0.212	0.3692	1079.69032

Sample Name:	P0412041-02A	FID UNITS (ug/L&ng/L) TCD UNITS (ug/L&mg/L) RGD UNITS (nM)
Sample Type:	unknown	
Control Program:	BIOREM14	
Quantif. Method:	WATER NOV04	
Recording Time:	12/13/2004 13:50	
Run Time (min):	12.00	



Peak Name	Ret.Time	Area	Height	Amount
	min	mV*min	mV	
Methane	0.659	69.715	2897.8784	105.39531
Ethane	0.942	0.258	5.4224	407.27996
Ethene	1.235	7.536	103.1194	13176.26248
Propane	1.929	0.068	0.5248	102.22141
Propene	3.718	0.054	0.2366	99.52007
iso-Butane	4.905	0.030	0.0870	44.22609
n-Butane	5.663	0.260	0.5677	376.46095
Acetylene	7.678	0.038	0.0789	195.39850

MICROSEEPS

Case Narrative
Tetra Tech NUS, Incorporated

Date: January 20, 2005

Project Number:	7464127E
Project Manager:	Mr. Keith Henn/Nisha Bansal
Site Name:	Martin State Airport
Laboratory Project Manager:	Rebecca Hans
SDG:	MWA-4

Sample Name	Lab ID	Date Sampled	Date Received
TB120204	P0412077-01		12/3/04
MWA-4	P0412077-02	12/2/04	12/3/04
MWA-2	P0412077-03	12/2/04	12/3/04
MWA-1	P0412077-04	12/2/04	12/3/04
MWC-1	P0412077-05	12/2/04	12/3/04

Samples in MWB-4 were received at Microseeps on December 2, 2004. COC records indicated that the samples were to be analyzed for TCL Volatiles, Phosphate, Light Hydrocarbons TOC, Anions, Sulfide, Total and Dissolved Iron and Cadmium.

Sample Receiving

A metals bottle was mislabeled for sample MWA-4. A bottle was shipped with the label marked as MWB-4.Per Walt Pryor, the sample was to be logged in as MWA-4.

Metals

Metal results are reported in mg/L rather than ug/L on all metals forms. This is due to the constraints of Microseeps' LIM system.

Form 11a was not used in the metals data package. The ICP instrument that Microseeps employs for this method does not produce the information needed for the ICP Interelement Correction Factor form.

Volatiles

The percent recovery for TCE was outside of control limits for the LCSD. The recovery for TCE in the LCS, as well as the RPD for both analyses were within limits. Therefore no further action was taken.

The surrogate Toluene-d8 was outside of control limits on samples P0412044-04(MWA-1) and P0412077-05(MWC-1) due to a matrix interference.

Wet Chemistry

The anion analyses were initially started on 12/4/04. The samples required reanalysis because of failed QC criteria. The reanalyses were performed outside of the sample holding time.

Risk Analysis

No anomalies were encountered.

Chain-of-Custody Forms

P0412077 2217 B

CHAIN - OF - CUSTODY RECORD

Phone: (412) 826-5245 **Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238** Fax No. : (412) 826-3433

Company : Tetra Tech NUS
Co. Address : Pittsburgh, PA
Proj. Manager: Nisha Bansal (916-276-7846
Proj. Location: Martin State Airport
Proj. Number: 7464127E
Phone # : (626) 351-4664 **Fax # :** (626) 351-5291

Sampler's signature :

Results to :

Invoice to :

Cooler ID	Cooler Temp.

Parameters Requested

Sample ID	Sample Description	Date	Time	Comp.	Grab	# Cont.	VFA	Total Iron	Dissolved Iron	Hydrogen					Remarks
MWA-4	Monitoring Well	12-2-04	0901		G		2								
MWA-2	Monitor Well	12-2-04	1133		G		2	1	1						
MWA-1	Monitor Well	12-2-04	1438		G					X					

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Walter [illegible]	TtNUS	12-2-04	1900	[illegible]	Micro	12/3/04	1220
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

MWA-4

P0412077 2217 A

CHAIN - OF - CUSTODY RECORD

Phone: (412) 826-5245 **Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238** Fax No. : (412) 826-3433

Company : Tetra Tech NUS
Co. Address : Pittsburgh PA
Proj. Manager: Nisha Bansal (916-276-7846
Proj. Location: Mather State Airport
Proj. Number: 7464127E
Phone # : (626) 351-4664 **Fax # :** (626) 351-5291

Sampler's signature : Walter E Pugh

Parameters Requested

Sample ID	Sample Description	Date	Time	Comp.	Grab	# Cont.	VOCs	Ortho Phosphate	LT. Hydrocarbon	TOC	Anions	Sulfide	Total cd + Iron	Dissolved cd + Iron	Remarks
TB120204	Monitoring Well	12-2-04	0000		X	2	2								
MWA-4	Monitoring Well	12-2-04	0901		X	16	4	1	2	1	2	4	1	1	
MWA-2	Monitoring Well	12-2-04	1133		X	~~15~~ 14	4	1	2	1	2	4			
MWA-1	Monitoring Well	12-2-04	1319		X	16	4	1	2	1	2	4	1	1	
MWC-1	Monitoring Well	12-2-04	1530		X	16	4	1	2	1	2	4	1	1	

01
02 on
03
04
05

Results to :

Invoice to :

Cooler ID	Cooler Temp.

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Walter E Pugh	Tetra	12-2-04	1500		Micro	12/3/04	12:20
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

MWA-4

NON-CONFORMANCE FORM

Date: 12-3-04 Receiver: David Palle Time of Receipt: 1220

Client: _____ Number of Samples out of Conformance: _____

REASONS FOR NON-CONFORMANCE

- ☐ Samples received past holding time
- ☐ Broken bottles
- ☐ Incorrect containers
- ☐ Incorrect preservative
- ☐ Sample ID different from COC
- ☐ Labels missing or unreadable
- ☐ Analysis not written on COC
- ☐ Sample received not on COC
- ☐ Sample on COC not received
- ☐ Hold time not observed internally

Description: Missing the sample for the Dissolved Cd and Fe test for Sample I.D @ MWA-4

☆ Recieved Sample MW3-4 Bottle for dissolved Cd and Fe test

Remarks: _____

(See other side for resolution)

(Customer Service to complete below)

Microseeps Project Number: P0412077

Action Taken:

☐ Client Contacted Date: Time:

Contact Name:

Result: Keith Hinn 412-999-5920
Walt Pryor 301-991-3914

SAMPLE BOTTLE LABELED INCORRECTLY PER WALT PRYOR.
LOG IN AS MWA-4

☐ Attempted Contact Date: Time:

Message:

☐ Not necessary to contact client

Take the following action:

Customer Service Initials: Date:

Sample Log-In Forms

Lab Project Summary

MWA-4

Lab Project Num: P0412077 **Received:** 12/3/2004 **Report Due:** 12/17/2004 **Lab** 12/16/200

Client: TetraTech NUS Inc.
661 Anderson Drive
Pittsburgh, PA 15220
Phone: 412-921-7090
Fax: 412-921-4040
E-mail:
Client Project Martin State Airport

Report Level: Standard QC Level 1
Quote #: Q04120001
Proj Mgr Amy Thomson

Lab Project Comment: CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format.

Client Sample Name: TB120204
Sample Number: P0412077-01A
Sample Date/Time: 12/2/2004 12:00:00AM
Sampled By:
Container Description: 125 ml
Container Color: Amber
Container Composition: Glass
Container Volume: 80 00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/12/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:
Comment CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format.

Test Pkg Name	Method	Lab	Subcontract(or)
VTCL	5030B/8260B	Pittsburgh	None

Client Sample Name: MWA-4
Sample Number: P0412077-02A
Sample Date/Time: 12/2/2004 9:01:00AM
Sampled By:
Container Description: 125 ml
Container Color: Amber
Container Composition: Glass
Container Volume: 4,000 00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/12/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:
Comment CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format

Test Pkg Name	Method	Lab	Subcontract(or)
Anions by IC	9056	Pittsburgh	None
Dissolved TAL Metals	3010/6010B	Pittsburgh	None
RA LHC Plus in Water	PM01G/AM20GAX	Pittsburgh	None
RA Methane in water	PM01G/AM20GAX	Pittsburgh	None
Sulfide	376 1	Pittsburgh	None
TAL Metals	3010/6010B	Pittsburgh	None
TOC	9060	Pittsburgh	None
Volatile Fatty Acid Expanded	AM23G	Pittsburgh	None
VTCL	5030B/8260B	Pittsburgh	None

Lab Project Summary

Lab Project Num: P0412077 **Received:** 12/3/2004 **Report Due:** 12/17/2004 **Lab** 12/16/200

Client Sample Name: MWA-2
Sample Number: P0412077-03A
Sample Date/Time: 12/2/2004 11:33:00AM
Sampled By:
Container Description: 125 ml
Container Color: Amber
Container Composition: Glass
Container Volume: 4,000 00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/12/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:
Comment CLP-like data package with CLP forms All raw data and calibration data is required EDD in Tetra Tech Erpims-like format

Test Pkg Name	Method	Lab	Subcontract(or)
Anions by IC	9056	Pittsburgh	None
Dissolved TAL Metals	3010/6010B	Pittsburgh	None
RA LHC Plus in Water	PM01G/AM20GAX	Pittsburgh	None
RA Methane in water	PM01G/AM20GAX	Pittsburgh	None
Sulfide	376.1	Pittsburgh	None
TAL Metals	3010/6010B	Pittsburgh	None
TOC	9060	Pittsburgh	None
Volatile Fatty Acid Expanded	AM23G	Pittsburgh	None
VTCL	5030B/8260B	Pittsburgh	None

Client Sample Name: MWA-1
Sample Number: P0412077-04A
Sample Date/Time: 12/2/2004 1:19:00PM
Sampled By:
Container Description: 125 ml
Container Color: Amber
Container Composition: Glass
Container Volume: 4,000 00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/12/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:
Comment CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format.

Test Pkg Name	Method	Lab	Subcontract(or)
Anions by IC	9056	Pittsburgh	None
Dissolved TAL Metals	3010/6010B	Pittsburgh	None
Sulfide	376.1	Pittsburgh	None
TAL Metals	3010/6010B	Pittsburgh	None
TOC	9060	Pittsburgh	None
VTCL	5030B/8260B	Pittsburgh	None

Lab Project Summary

Lab Project Num: P0412077 **Received:** 12/3/2004 **Report Due:** 12/17/2004 **Lab** 12/16/200

Client Sample Name: MWA-1
Sample Number: P0412077-04B
Sample Date/Time: 12/2/2004 ~~4:19:00~~1436PM
Sampled By:
Container Description: 125 ml
Container Color: Amber
Container Composition: Glass
Container Volume: 4,000 00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/12/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:
Comment CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format.

Test Pkg Name	Method	Lab	Subcontract(or)
RA Hydrogen by Bubble Strip	AM20GAX	Pittsburgh	None
RA Light(C2-C4) Hydrocarbons by Bubble Strip	AM20GAX	Pittsburgh	None
RA Methane (C1) by Bubble Strip	AM20GAX	Pittsburgh	None

Client Sample Name: MWC-1
Sample Number: P0412077-05A
Sample Date/Time: 12/2/2004 3:50:00PM
Sampled By:
Container Description: 125 ml
Container Color: Amber
Container Composition: Glass
Container Volume: 4,000 00 ml
Container Preservative: NONE
Proposed Disposal Date: 1/12/2005
Fraction Lab Created? No
Client Spike Requested? No
PH:
Comment CLP-like data package with CLP forms. All raw data and calibration data is required EDD in Tetra Tech Erpims-like format.

Test Pkg Name	Method	Lab	Subcontract(or)
Anions by IC	9056	Pittsburgh	None
Dissolved TAL Metals	3010/6010B	Pittsburgh	None
RA LHC Plus in Water	PM01G/AM20GAX	Pittsburgh	None
RA Methane in water	PM01G/AM20GAX	Pittsburgh	None
Sulfide	376.1	Pittsburgh	None
TAL Metals	3010/6010B	Pittsburgh	None
TOC	9060	Pittsburgh	None
VTCL	5030B/8260B	Pittsburgh	None

Metals Data

INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWA-4

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Matrix (soil / water): Water Lab Sample ID: P0412077-02A

Level (low/med): Date Received: 12/3/2004

% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.022			P
7439-89-6	Iron	7.8			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

EPASampleNo: MWA-4

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Matrix (soil / water): Water Lab Sample ID: P0412077-02A

Level (low/med): Date Received: 12/3/2004

% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium-dissolved	0.022			P
7439-89-6	Iron-dissolved	7.8			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

MWA-4

INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWA-2

Lab Name: Microseeps, Inc Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Matrix (soil / water): Water Lab Sample ID: P0412077-03A

Level (low/med): Date Received: 12/3/2004

% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.013			P
7439-89-6	Iron	20			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

EPASampleNo: MWA-2

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Matrix (soil / water): Water Lab Sample ID: P0412077-03A

Level (low/med): Date Received: 12/3/2004

% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium-dissolved	0.013			P
7439-89-6	Iron-dissolved	20			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWA-1

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Matrix (soil / water): Water Lab Sample ID: P0412077-04A

Level (low/med): Date Received: 12/3/2004

% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.024			P
7439-89-6	Iron	82			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

MWA-4

INORGANIC ANALYSIS DATA SHEET

EPASampleNo: MWA-1

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Matrix (soil / water): Water Lab Sample ID: P0412077-04A

Level (low/med): Date Received: 12/3/2004

% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium-dissolved	0.023			P
7439-89-6	Iron-dissolved	80			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

EPASampleNo: MWC-1

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Matrix (soil / water): Water Lab Sample ID: P0412077-05A

Level (low/med): Date Received: 12/3/2004

% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.0016	J		P
7439-89-6	Iron	56			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

EPASampleNo: MWC-1

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Matrix (soil / water): Water Lab Sample ID: P0412077-05A

Level (low/med): Date Received: 12/3/2004

% Solids:

Concentration Units: mg/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium-dissolved	0.0015	J		P
7439-89-6	Iron-dissolved	54			P

ColorBefore: ClarityBefore: Texture:

ColorAfter: ClarityAfter: Artifacts:

Comments:

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Initial Calibration Source: SCP Sci
Continuing Calibration SCP Sci

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Cadmium	0.500	0.517	103	0.625	0.631	101	0.611	97.8	P
Iron	1.00	1.06	106	12.50	13.02	104	12.64	101	P

(1) Control Limits: Mercury 80-120; other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Initial Calibration Source:

Continuing Calibration SCP Sci

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Cadmium				0.625	0.611	97.8			P
Iron				12.50	12.74	102			P

(1) Control Limits: Mercury 80-120; other Metals 90-110; Cyanide 85-115

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Initial Calibration Source: SCP Sci

Continuing Calibration Source SCP Sci

Concentration Units: mg/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cadmium-dissolved	0.500	0.517	103	0.625	0.611	97.8	0.606	97.0	P
Iron-dissolved	1.00	1.06	106	12.50	12.74	102	12.61	101	P

(1) Control Limits: Mercury 80-120; other Metals 90-110; Cyanide 85-115

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Initial Calibration Source:

Continuing Calibration SCP Sci

Concentration Units: mg/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Cadmium-dissolved				0.625	0.597	95.5	0.585	93.6	P
Iron-dissolved				12.50	12.48	99.8	12.27	98.2	P

(1) Control Limits: Mercury 80-120; other Metals 90-110; Cyanide 85-115

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

AA CRDL Standard Source:

ICP CRDL Standard Source: SCP Sci

Concentration Units mg/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Cadmium				0.010	0.0107	107		
Iron								

Control Limits: no limits have been established by EPA at this time

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

AA CRDL Standard Source:

ICP CRDL Standard Source: SCP Sci

Concentration Units mg/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Cadmium-dissolved				0.0100	0.0107	107		
Iron-dissolved								

Control Limits: no limits have been established by EPA at this time

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	P
Iron	0.0015	U	0.0019	B	0.0015	U	0.0021	B	0.0020	B	P

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium-dissolved	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0000	U	P
Iron-dissolved	0.0015	U	0.0021	B	0.0020	U	0.0030	U	0.0061	B	P

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Preparation Blank Matrix (soil/water): Water

Preparation Blank Concentration Units : mg/L

Analyte	Init Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium-dissolved			0.0001	U							P
Iron-dissolved			0.0011	U							P

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

ICP ID Number: EL99063568 ICS Source: SCP Sci

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Cadmium		0.9930	0.0021	0.9107	91.7			
Iron	200		216	218	109			

MWA-4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

ICP ID Number: EL99063568 ICS Source: SCP Sci

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Cadmium-dissolved		0.9930	0.0021	0.9107	91.7			
Iron-dissolved	200		216	218	109			

MWA-4

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (mg/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Cadmium	0.500	0.507	101						
Iron	5.00	5.26	105						

MWA-4

LABORATORY CONTROL SAMPLE

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No : SAS No.: SDG No.: MWA-4

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (mg/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Cadmium-dissolved	0.500	0.490	98.0						
Iron-dissolved	5.00	5.02	100						

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Method: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (ml)
PBW	12/6/04		50
LCSW	12/6/04		50
ZZZZZZ	12/6/04		50
ZZZZZZ	12/6/04		50
ZZZZZZ	12/6/04		50
ZZZZZZ	12/6/04		50
ZZZZZZ	12/6/04		50
ZZZZZZ	12/6/04		50
ZZZZZZ	12/6/04		50
ZZZZZZ	12/6/04		50
ZZZZZZ			50
MWA-4	12/6/04		50
MWA-2	12/6/04		50
MWA-1	12/6/04		50
MWC-1	12/6/04		50

MWA-4

PREPARATION LOG

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Method: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (ml)
PBW DISS	12/6/04		50
LCSW DISS	12/6/04		50
ZZZZZZ	12/6/04		50
ZZZZZZ	12/6/04		50
MWA-4 DISS	12/6/04		50
MWA-2 DISS	12/6/04		50
MWA-1 DISS	12/6/04		50
MWC-1 DISS	12/6/04		50

U.S. EPA - CLP
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ANALYSIS RUN LOG

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Instrument ID Number: EL99063568 Method: P

Start Date: 12/7/04 End Date: 12/7/04

EPA Sample No.	D/F	Time	%R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
BLK	1	08:20							X					X	X		X													
STD 1	1	08:23							X					X	X		X													
STD 2	1	08:26							X					X	X		X													
STD 3	1	08:29							X					X	X		X													
ICV	1	08:31							X					X	X		X													
ICB	1	08:34							X					X	X		X													
CRI	1	08:37							X								X													
ICSA	1	08:40							X						X		X													
ICSAB	1	08:43							X						X		X													
ICSA	20	08:46												X																
ICSAB	20	08:49												X																
CCV	1	08:52							X					X	X		X													
CCB	1	08:54							X					X	X		X													
CCV	1	10:01							X					X	X		X													
CCB	1	10:04							X					X	X		X													
PBW	1	10:12							X					X	X		X													
LCSW	1	10:15							X					X	X		X													
ZZZZZZ	1	10:18							X					X	X		X													
ZZZZZZ	1	10:21							X					X	X		X													
ZZZZZZ	1	10:24							X					X	X		X													
ZZZZZZ	1	10:27												X			X													
ZZZZZZ	1	10:30							X					X																
ZZZZZZ	1	10:33							X					X																
CCV	1	10:36							X					X	X		X													
CCB	1	10:38							X					X	X		X													
ZZZZZZ	1	10:41							X																					
ZZZZZZ	1	10:44							X					X																
ZZZZZZ	1	10:47							X																					
ZZZZZZ	1	10:50													X															
ZZZZZZ	1	10:53													X															
ZZZZZZ	1	10:56													X															
MWA-4	1	10:59							X					X																
MWA-2	1	11:02							X					X																

MWA-4

ANALYSIS RUN LOG

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Instrument ID Number: EL99063568 Method: P

Start Date: 12/7/04 End Date: 12/7/04

EPA Sample No.	D/F	Time	%R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	IL	V	ZN	CN			
MWA-1	1	11:05							X					X																
MWC-1	1	11:07							X					X																
CCV	1	11:10							X					X	X		X													
CCB	1	11:13							X					X	X		X													
ZZZZZZ	1	11:16												X																
ZZZZZZ	1	11:19												X																
ZZZZZZ	1	11:22												X																
ZZZZZZ	1	11:25												X																
ZZZZZZ	1	11:28												X																
ZZZZZZ	1	11:31											X	X																
PBW DISS	1	11:34							X					X	X															
LCSW DISS	1	11:37							X					X	X															
ZZZZZZ	1	11:40															X													
ZZZZZZ	1	11:42							X					X			X													
CCV	1	11:45							X					X	X		X													
CCB	1	11:48							X					X	X		X													
ZZZZZZ	1	11:51							X					X			X													
ZZZZZZ	1	11:54							X					X			X													
ZZZZZZ	1	11:57							X					X																
ZZZZZZ	1	12:00							X					X																
ZZZZZZ	1	12:03							X																					
ZZZZZZ	1	12:06							X					X																
ZZZZZZ	1	12:09							X																					
MWA-4 DISS	1	12:11							X					X																
MWA-2 DISS	1	12:14							X					X																
MWA-1 DISS	1	12:17							X					X																
CCV	1	12:20							X					X	X		X													
CCB	1	12:23							X					X	X		X													
MWC-1 DISS	1	12:26							X					X																
ZZZZZZ	1	12:29															X													
ZZZZZZ	1	12:32															X													
ZZZZZZ	1	12:35															X													
ZZZZZZ	1	12:37											X																	

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: SAS No.: SDG No.: MWA-4

Instrument ID Number: EL99063568 Method: P

Start Date: 12/7/04 End Date: 12/7/04

EPA Sample No.	D/F	Time	%R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
ZZZZZZ	1	12:40												X																
ZZZZZZ	1	12:43												X																
ZZZZZZ	1	12:46												X																
ZZZZZZ	1	12:49												X																
ZZZZZZ	1	12:52												X																
CCV	1	12:55							X					X	X		X													
CCB	1	12:58							X					X	X		X													

2-6-04 Method: SOP-BS Flame AK Time: 09.15 Temp:

Sample#	Volume	Batch#
PBW	50mls	
LCSW		
412066-01:		4120607
2I:		4120607
412063-1C:		4120602S
412057-1A:		
412080-1C:		
412081-1C:		
412082-1C:		
412076-SB:		
412064-1A:		41206025
412077-2M:		4120607
3M:		
4M:		
5M:		4120607
412063-1BD		4208002
412082-1BD		4208002
412077-2ND:		4120608
3ND:		
4ND:		
5ND:		4120608
412074-1S		4120803
2S		
3S		
4S		
5S		4120803
PBW		4120804
LCSW		
12067-1D		
2D		
3D		
4D		
5D		
6D		
7D		
2074-1ND		
2ND		
3ND		
2090-1LD		

Sample#	Volume	Batch#
PBW	50mls	4120800S
LCSW Furn		
LCSW Furn Rep		
412074-3B		
SB	50mls	4120800S

ANALYST: ARK FILE: ICP120704

12/7/2004 8:18:29 AM	Analysis started.
12/7/2004 8:20:28 AM	Measured Blank
12/7/2004 8:23:20 AM	Measured Standard 1(I2-121-6)
12/7/2004 8:26:11 AM	Measured Standard 2(I2-121-5)
12/7/2004 8:29:02 AM	Measured Standard 3(I2-121-4)
12/7/2004 8:31:53 AM	Measured Initial Calib Verif(I2-121-8)
12/7/2004 8:34:45 AM	Measured Initial Calib Blank
12/7/2004 8:37:40 AM	Measured CRI(I2-121-9)
12/7/2004 8:40:31 AM	Measured Interf Check A(I2-120-9)
12/7/2004 8:43:23 AM	Measured Interf Check AB(I2-121-1)
12/7/2004 8:46:15 AM	Measured ICSA 1/20
12/7/2004 8:49:07 AM	Measured ICSAB 1/20
12/7/2004 8:52:00 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 8:54:52 AM	Measured Cont Calib Blank
12/7/2004 8:57:44 AM	Measured PBW
12/7/2004 9:00:37 AM	Measured LCS-W(I2-102-2)
12/7/2004 9:03:29 AM	Measured P0412012-02A
12/7/2004 9:06:22 AM	Measured P0412012-02A - DUP
12/7/2004 9:09:14 AM	Measured P0412012-02A - MSPK(I2-107-5)
12/7/2004 9:12:07 AM	Measured P0412049-01A
12/7/2004 9:14:59 AM	Measured P0412050-01A
12/7/2004 9:17:53 AM	Measured P0412057-01A
12/7/2004 9:20:45 AM	Measured P0412080-01A
12/7/2004 9:23:53 AM	Measured P0412081-01A
12/7/2004 9:26:44 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 9:29:36 AM	Measured Cont Calib Blank
12/7/2004 9:32:28 AM	Measured P0412082-01A
12/7/2004 9:35:20 AM	Measured P0412007-01A
12/7/2004 9:38:12 AM	Measured P0412007-02A
12/7/2004 9:41:05 AM	Measured P0412033-01A
12/7/2004 9:44:02 AM	Measured P0412033-02A
12/7/2004 9:46:58 AM	Measured P0412054-01A
12/7/2004 9:49:49 AM	Measured P0412054-02A
12/7/2004 9:52:40 AM	Measured P0412054-03A
12/7/2004 9:55:33 AM	Measured P0412054-04A
12/7/2004 9:58:26 AM	Measured P0412076-05A
12/7/2004 10:01:20 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 10:04:13 AM	Measured Cont Calib Blank
12/7/2004 10:07:07 AM	Measured P0412063-01A
12/7/2004 10:10:00 AM	Measured P0412064-01A
12/7/2004 10:12:53 AM	Measured PBW
12/7/2004 10:15:46 AM	Measured LCS-W(I2-102-2)
12/7/2004 10:18:38 AM	Measured P0412010-01T
12/7/2004 10:21:33 AM	Measured P0412010-01T - DUP
12/7/2004 10:24:27 AM	Measured P0412010-01T - MSPK(I2-107-5)
12/7/2004 10:27:21 AM	Measured P0412010-02T
12/7/2004 10:30:15 AM	Measured P0412041-01T
12/7/2004 10:33:08 AM	Measured P0412041-02T
12/7/2004 10:36:03 AM	Measured Cont Calib Verif(I2-121-7)
12/7/2004 10:38:58 AM	Measured Cont Calib Blank
12/7/2004 10:41:53 AM	Measured P0412024-01T
12/7/2004 10:44:48 AM	Measured P0412024-02T
12/7/2004 10:47:40 AM	Measured P0412024-03T
12/7/2004 10:50:33 AM	Measured P0412044-01T
12/7/2004 10:53:28 AM	Measured P0412066-01A

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12/7/2004 10:56:23 AM   Measured P0412066-02A
12/7/2004 10:59:18 AM   Measured P0412077-02A
12/7/2004 11:02:12 AM   Measured P0412077-03A
12/7/2004 11:05:06 AM   Measured P0412077-04A
12/7/2004 11:07:59 AM   Measured P0412077-05A
12/7/2004 11:10:54 AM   Measured Cont Calib Verif(I2-121-7)
12/7/2004 11:13:48 AM   Measured Cont Calib Blank
12/7/2004 11:16:44 AM   Measured P0411587-01A
12/7/2004 11:19:37 AM   Measured P0411587-02A
12/7/2004 11:22:33 AM   Measured P0411587-03A
12/7/2004 11:25:25 AM   Measured P0411587-04A
12/7/2004 11:28:33 AM   Measured P0411587-05A
12/7/2004 11:31:26 AM   Measured P0411587-06A
12/7/2004 11:34:18 AM   Measured PBW
12/7/2004 11:37:11 AM   Measured LCS-W(I2-102-2)
12/7/2004 11:40:04 AM   Measured P0412010-02D
12/7/2004 11:42:58 AM   Measured P0412010-01D
12/7/2004 11:45:55 AM   Measured Cont Calib Verif(I2-121-7)
12/7/2004 11:48:49 AM   Measured Cont Calib Blank
12/7/2004 11:51:44 AM   Measured P0412010-01D - DUP
12/7/2004 11:54:37 AM   Measured P0412010-01D - MSPK(I2-107-5)
12/7/2004 11:57:30 AM   Measured P0412041-01D
12/7/2004 12:00:23 PM   Measured P0412041-02D
12/7/2004 12:03:15 PM   Measured P0412024-01D
12/7/2004 12:06:08 PM   Measured P0412024-02D
12/7/2004 12:09:00 PM   Measured P0412024-03D
12/7/2004 12:11:54 PM   Measured P0412077-02D
12/7/2004 12:14:48 PM   Measured P0412077-03D
12/7/2004 12:17:42 PM   Measured P0412077-04D
12/7/2004 12:20:36 PM   Measured Cont Calib Verif(I2-121-7)
12/7/2004 12:23:30 PM   Measured Cont Calib Blank
12/7/2004 12:26:24 PM   Measured P0412077-05D
12/7/2004 12:29:17 PM   Measured P0412022-01D
12/7/2004 12:32:10 PM   Measured P0412037-01D
12/7/2004 12:35:04 PM   Measured P0412037-02D
12/7/2004 12:37:58 PM   Measured P0412042-01D
12/7/2004 12:40:53 PM   Measured P0412042-02D
12/7/2004 12:43:47 PM   Measured P0412042-03D
12/7/2004 12:46:41 PM   Measured P0412042-04D
12/7/2004 12:49:35 PM   Measured P0412042-05D
12/7/2004 12:52:29 PM   Measured P0412042-06D
12/7/2004 12:55:23 PM   Measured Cont Calib Verif(I2-121-7)
12/7/2004 12:58:17 PM   Measured Cont Calib Blank
12/7/2004 12:59:35 PM   Analysis stopped by user.
```

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Blank (Blk) **12/7/2004, 8:20:28 AM** **Rack 2, Tube 1**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	0.0000	ppm	1.597	90.3	1.770
Fe 261.187	0.0000	ppm	4.843	12.8	37.76
Mn 257.610	0.0000	ppm	2.635	3.6	72.47
Pb 220.353	0.0000	ppm	1.906	27.1	7.024

Standard 1 (Std) **12/7/2004, 8:23:20 AM** **Rack 2, Tube 2**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	0.2500	ppm	10.505	0.2	5904
Fe 261.187	5.000	ppm	334.673	0.5	69269
Mn 257.610	0.6000	ppm	628.001	0.5	136307
Pb 220.353	0.2500	ppm	3.167	0.9	371.8

Standard 2 (Std) **12/7/2004, 8:26:11 AM** **Rack 2, Tube 3**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	1.250	ppm	217.299	0.8	28382
Fe 261.187	25.00	ppm	3036.185	0.9	334132
Mn 257.610	3.000	ppm	3387.777	0.5	657778
Pb 220.353	1.250	ppm	11.944	0.7	1802

Standard 3 (Std) **12/7/2004, 8:29:02 AM** **Rack 2, Tube 4**

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Cd 214.439	2.500	ppm	82.866	0.2	54710
Fe 261.187	50.00	ppm	1800.540	0.3	630388
Mn 257.610	6.000	ppm	2208.623	0.2	1268680
Pb 220.353	2.500	ppm	12.894	0.4	3457

Cd 214.439 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999809**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		1.770	0.0000	0.0000	-	-
Standard 1		5904	0.2500	0.2618	0.0118	4.7
Standard 2		28382	1.250	1.259	0.0086	0.7
Standard 3		54710	2.500	2.426	-0.0738	-3.0

Curve Type: Linear Equation: y = 22548.8 x + 1.76956

Fe 261.187 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999516**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		37.76	0.0000	0.0000	-	-
Standard 1		69269	5.000	5.360	0.3603	7.2
Standard 2		334132	25.00	25.87	0.8672	3.5
Standard 3		630388	50.00	48.80	-1.195	-2.4

Curve Type: Linear Equation: y = 12915.8 x + 37.758

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Mn 257.610 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999816**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		72.47	0.0000	0.0000	-	-
Standard 1		136307	0.6000	0.6376	0.0376	6.3
Standard 2		657778	3.000	3.078	0.0780	2.6
Standard 3		1268680	6.000	5.937	-0.0630	-1.1

Curve Type: Linear Equation: y = 213680 x + 72.4732

Pb 220.353 Calibration (ppm) **12/7/2004, 8:29:02 AM** **Correlation Coefficient: 0.999775**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		7.024	0.0000	0.0000	-	-
Standard 1		371.8	0.2500	0.2605	0.0105	4.2
Standard 2		1802	1.250	1.282	0.0322	2.6
Standard 3		3457	2.500	2.464	-0.0362	-1.4

Curve Type: Linear Equation: y = 1400.26 x + 7.02428

Initial Calib Verif (ICV) **12/7/2004, 8:31:53 AM** **Rack 2, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5172	ppm	0.0056	1.1	11664	103,4
Fe 261.187	1.065	ppm	0.0060	0.6	13790	106,5
Mn 257.610	1.058	ppm	0.0050	0.5	226175	105,8
Pb 220.353	1.061	ppm	0.0074	0.7	1492	106,1

Initial Calib Blank (ICB) **12/7/2004, 8:34:45 AM** **Rack 2, Tube 6**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	17.1	4.950	-
Fe 261.187	0.0015	ppm	0.0003	20.5	56.77	-
Mn 257.610	0.0000uv	ppm	0.0000	765.4	73.65	-
Pb 220.353	-0.0023uv	ppm	0.0003	11.9	3.754	-

CRI (CRI) **12/7/2004, 8:37:40 AM** **Rack 2, Tube 7**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0107	ppm	0.0000	0.2	243.1	107,0
Fe 261.187	0.0006	ppm	0.0003	42.2	45.54	-
Mn 257.610	0.0330	ppm	0.0001	0.4	7120	110,0
Pb 220.353	-0.0012uv	ppm	0.0028	231.0	5.297	-

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Interf Check A (ICSA) **12/7/2004, 8:40:31 AM** **Rack 2, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0021	ppm	0.0002	11.5	48.37	-
Fe 261.187	181.2x	ppm	0.7506	0.4	2340351	-
Mn 257.610	0.0096	ppm	0.0001	1.2	2123	-
Pb 220.353	0.0177	ppm	0.0034	19.0	31.82	-

Interf Check AB (ICSAB) **12/7/2004, 8:43:23 AM** **Rack 2, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.9107	ppm	0.0099	1.1	20536	91.1 -
Fe 261.187	179.9x	ppm	0.3053	0.2	2323328	-
Mn 257.610	0.4822	ppm	0.0005	0.1	103108	96.4 -
Pb 220.353	0.9222	ppm	0.0023	0.2	1298	92.2 -

ICSA 1/20 (Samp) **12/7/2004, 8:46:15 AM** **Rack 1, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	-0.0001uv	ppm	0.0001	80.7	0.1897
Fe 261.187	10.78	ppm	0.0449	0.4	139267
Mn 257.610	0.0004	ppm	0.0000	3.0	156.1
Pb 220.353	-0.0025uv	ppm	0.0009	37.1	3.573

ICSAB 1/20 (Samp) **12/7/2004, 8:49:07 AM** **Rack 1, Tube 2**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0533	ppm	0.0004	0.7	1204
Fe 261.187	10.90	ppm	0.0934	0.9	140780
Mn 257.610	0.0272	ppm	0.0002	0.8	5880
Pb 220.353	0.0521	ppm	0.0019	3.6	79.93

Cont Calib Verif (CCV) **12/7/2004, 8:52:00 AM** **Rack 1, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6549	ppm	0.0106	1.6	14770	104.8 -
Fe 261.187	13.28	ppm	0.3155	2.4	171577	106.2 -
Mn 257.610	1.612	ppm	0.0394	2.4	344599	107.5 -
Pb 220.353	0.6599	ppm	0.0123	1.9	931.1	105.6 -

Cont Calib Blank (CCB) **12/7/2004, 8:54:52 AM** **Rack 1, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	59.3	3.309	-
Fe 261.187	0.0015	ppm	0.0004	29.9	57.19	-
Mn 257.610	-0.0000uv	ppm	0.0000	28.5	64.90	-

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Pb 220.353	-0.0018uv	ppm	0.0009	50.4	4.477	-

Cont Calib Verif (CCV) **12/7/2004, 10:01:20 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6307	ppm	0.0029	0.5	14222	100.9 -
Fe 261.187	13.02	ppm	0.0495	0.4	168160	104.2 -
Mn 257.610	1.595	ppm	0.0062	0.4	340925	106.3 -
Pb 220.353	0.6389	ppm	0.0034	0.5	901.7	102.2 -

Cont Calib Blank (CCB) **12/7/2004, 10:04:13 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001uv	ppm	0.0001	116.9	3.993	-
Fe 261.187	0.0019	ppm	0.0009	48.7	62.93	-
Mn 257.610	0.0000	ppm	0.0000	104.7	80.08	-
Pb 220.353	-0.0013uv	ppm	0.0015	121.3	5.253	-

PBW (PBLK) **12/7/2004, 10:12:53 AM** **Rack 3, Tube 15**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001uv	ppm	0.0001	102.4	3.616	-
Fe 261.187	0.0020	ppm	0.0005	25.0	63.91	-
Mn 257.610	-0.0000uv	ppm	0.0000	124.3	67.93	-
Pb 220.353	-0.0016uv	ppm	0.0008	50.6	4.843	-

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LCS-W (LCS) **12/7/2004, 10:15:46 AM** **Rack 3, Tube 16**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5071	ppm	0.0017	0.3	11437	101.4 -
Fe 261.187	5.256	ppm	0.0164	0.3	67924	105.1 -
Mn 257.610	2.571	ppm	0.0048	0.2	549363	102.8 -
Pb 220.353	0.5009	ppm	0.0027	0.5	708.4	100.2 -

P0412010-01T (Samp) **12/7/2004, 10:18:38 AM** **Rack 3, Tube 17**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0004	ppm	0.0001	26.8	10.30
Fe 261.187	24.59	ppm	0.0821	0.3	317653
Mn 257.610	0.6932	ppm	0.0022	0.3	148187
Pb 220.353	0.3878	ppm	0.0034	0.9	550.1

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P0412010-01T - DUP (DUP) **12/7/2004, 10:21:33 AM** **Rack 3, Tube 18**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0002	ppm	0.0001	68.8	5.991	-*
Fe 261.187	24.43	ppm	0.1255	0.5	315599	-
Mn 257.610	0.6882	ppm	0.0033	0.5	147131	-
Pb 220.353	0.3854	ppm	0.0010	0.3	546.7	-

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P0412010-01T - MSPK (MSPK) **12/7/2004, 10:24:27 AM** **Rack 3, Tube 19**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0485	ppm	0.0002	0.4	1096	96.2 -
Fe 261.187	25.38	ppm	0.0889	0.4	327791	99.0 -
Mn 257.610	1.203	ppm	0.0042	0.3	257135	102.0 -
Pb 220.353	0.8850	ppm	0.0069	0.8	1246	99.4 -

P0412010-02T (Samp) **12/7/2004, 10:27:21 AM** **Rack 3, Tube 20**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0003	ppm	0.0001	28.2	9.041
Fe 261.187	22.88	ppm	0.0510	0.2	295581
Mn 257.610	0.6226	ppm	0.0018	0.3	133119
Pb 220.353	-0.0000uv	ppm	0.0010	7204.6	7.005

P0412041-01T (Samp) **12/7/2004, 10:30:15 AM** **Rack 3, Tube 21**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0131	ppm	0.0002	1.4	296.1
Fe 261.187	47.64	ppm	0.0640	0.1	615324
Mn 257.610	15.71x	ppm	0.0270	0.2	3356739
Pb 220.353	0.0197	ppm	0.0010	5.0	34.60

P0412041-02T (Samp) **12/7/2004, 10:33:08 AM** **Rack 3, Tube 22**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0321	ppm	0.0001	0.2	726.3
Fe 261.187	41.57	ppm	0.1723	0.4	536925
Mn 257.610	16.14x	ppm	0.0475	0.3	3449306
Pb 220.353	0.0131	ppm	0.0032	24.6	25.35

Cont Calib Verif (CCV) **12/7/2004, 10:36:03 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6107	ppm	0.0042	0.7	13772	97.7 -
Fe 261.187	12.64	ppm	0.0678	0.5	163344	101.1 -
Mn 257.610	1.557	ppm	0.0068	0.4	332788	103.8 -

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Pb 220.353	0.6178	ppm	0.0068	1.1	872.1	97.8

Cont Calib Blank (CCB) **12/7/2004, 10:38:58 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	54.2	3.689	-
Fe 261.187	0.0015	ppm	0.0002	15.8	57.77	-
Mn 257.610	-0.0000uv	ppm	0.0000	861.7	71.57	-
Pb 220.353	-0.0012uv	ppm	0.0013	109.3	5.312	-

P0412024-01T (Samp) **12/7/2004, 10:41:53 AM** **Rack 3, Tube 23**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0108	ppm	0.0002	1.7	245.5
Fe 261.187	123.9x	ppm	0.6602	0.5	1599864
Mn 257.610	23.05x	ppm	0.1064	0.5	4925836
Pb 220.353	0.0246	ppm	0.0024	9.8	41.53

P0412024-02T (Samp) **12/7/2004, 10:44:48 AM** **Rack 3, Tube 24**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0107	ppm	0.0001	0.9	242.8
Fe 261.187	84.07	ppm	0.2907	0.3	1085818
Mn 257.610	13.55x	ppm	0.0243	0.2	2895115
Pb 220.353	0.0169	ppm	0.0023	13.7	30.63

P0412024-03T (Samp) **12/7/2004, 10:47:40 AM** **Rack 3, Tube 25**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0069	ppm	0.0001	2.1	157.2
Fe 261.187	174.5x	ppm	0.8062	0.5	2254104
Mn 257.610	28.65x	ppm	0.0635	0.2	6122326
Pb 220.353	0.0450	ppm	0.0020	4.5	70.08

P0412044-01T (Samp) **12/7/2004, 10:50:33 AM** **Rack 3, Tube 26**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	41.7	6.729
Fe 261.187	9.082	ppm	0.0304	0.3	117336
Mn 257.610	0.0437	ppm	0.0002	0.4	9418
Pb 220.353	0.0140	ppm	0.0019	13.4	26.58

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P0412066-01A (Samp) **12/7/2004, 10:53:28 AM** **Rack 3, Tube 27**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0023	ppm	0.0005	22.2	53.66
Fe 261.187	196.5x	ppm	1.159	0.6	2538113
Mn 257.610	1.251	ppm	0.0066	0.5	267394
Pb 220.353	0.3516	ppm	0.0045	1.3	499.4

P0412066-02A (Samp) **12/7/2004, 10:56:23 AM** **Rack 3, Tube 28**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0031	ppm	0.0003	10.8	70.77
Fe 261.187	253.0x	ppm	0.1243	0.0	3267483
Mn 257.610	0.2695	ppm	0.0002	0.1	57666
Pb 220.353	0.2020	ppm	0.0054	2.7	289.9

P0412077-02A (Samp) **12/7/2004, 10:59:18 AM** **Rack 3, Tube 29**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0221	ppm	0.0001	0.3	499.4
Fe 261.187	7.752	ppm	0.0132	0.2	100156
Mn 257.610	12.89x	ppm	0.0273	0.2	2754059
Pb 220.353	0.0116	ppm	0.0016	13 8	23.26

P0412077-03A (Samp) **12/7/2004, 11:02:12 AM** **Rack 3, Tube 30**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0134	ppm	0.0001	0.8	304.1
Fe 261.187	19.84	ppm	0.0588	0.3	256262
Mn 257.610	12.17x	ppm	0.0674	0.6	2599689
Pb 220.353	0.0094	ppm	0.0018	19.2	20 23

P0412077-04A (Samp) **12/7/2004, 11:05:06 AM** **Rack 3, Tube 31**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0237	ppm	0.0003	1.3	537.0
Fe 261.187	81.66	ppm	0.1723	0.2	1054685
Mn 257.610	12.61x	ppm	0.0468	0.4	2693596
Pb 220.353	0.0186	ppm	0.0020	10.7	33.04

P0412077-05A (Samp) **12/7/2004, 11:07:59 AM** **Rack 3, Tube 32**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0016	ppm	0.0006	37.2	38.22
Fe 261.187	55.91	ppm	0.1819	0.3	722174
Mn 257.610	4.863	ppm	0.0190	0.4	1039187

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	0.0078	ppm	0.0011	13.8	18.00

Cont Calib Verif (CCV) **12/7/2004, 11:10:54 AM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6111	ppm	0.0021	0.3	13780	97.8 -
Fe 261.187	12.74	ppm	0.0117	0.1	164542	101.9 -
Mn 257.610	1.568	ppm	0.0026	0.2	335204	104.5 -
Pb 220.353	0.6208	ppm	0.0015	0.2	876.4	99.3 -

Cont Calib Blank (CCB) **12/7/2004, 11:13:48 AM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0001	81.9	3.447	-
Fe 261.187	0.0021	ppm	0.0004	17.8	64.77	-
Mn 257.610	-0.0000uv	ppm	0.0000	745.0	71.11	-
Pb 220.353	-0.0016uv	ppm	0.0017	101.8	4.752	-

P0411587-01A (Samp) **12/7/2004, 11:16:44 AM** **Rack 3, Tube 33**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	105.2	3.456
Fe 261.187	2.207	ppm	0.0066	0.3	28544
Mn 257.610	0.0042	ppm	0.0000	0.4	968.3
Pb 220.353	0.0011uv	ppm	0.0021	186.2	8.566

P0411587-02A (Samp) **12/7/2004, 11:19:37 AM** **Rack 3, Tube 34**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	63.8	3.693
Fe 261.187	3.017	ppm	0.0238	0.8	39002
Mn 257.610	0.0037	ppm	0.0001	1.3	873.3
Pb 220.353	0.0007	ppm	0.0001	10.6	7.935

P0411587-03A (Samp) **12/7/2004, 11:22:33 AM** **Rack 3, Tube 35**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	58.8	3.885
Fe 261.187	1.592	ppm	0.0085	0.5	20595
Mn 257.610	0.0094	ppm	0.0001	0.7	2087
Pb 220.353	0.0025	ppm	0.0009	35.3	10.50

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P0411587-04A (Samp) **12/7/2004, 11:25:25 AM** **Rack 3, Tube 36**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	75.7	6.145
Fe 261.187	0.4276	ppm	0.0032	0.7	5560
Mn 257.610	0.0035	ppm	0.0001	1.8	824.2
Pb 220.353	0.0010uv	ppm	0.0009	90.5	8.426

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P0411587-05A (Samp) **12/7/2004, 11:28:33 AM** **Rack 3, Tube 37**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	83.7	5.573
Fe 261.187	24.21	ppm	0.1311	0.5	312700
Mn 257.610	0.0616	ppm	0.0003	0.5	13241
Pb 220.353	0.0002uv	ppm	0.0009	582.7	7.245

P0411587-06A (Samp) **12/7/2004, 11:31:26 AM** **Rack 3, Tube 38**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	-0.0001uv	ppm	0.0001	91.5	-0.1624
Fe 261.187	16.12	ppm	0.0539	0.3	208186
Mn 257.610	0.0102	ppm	0.0000	0.3	2260
Pb 220.353	-0.0006uv	ppm	0.0017	267.8	6.115

PBW (PBLK) **12/7/2004, 11:34:18 AM** **Rack 3, Tube 39**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0000uv	ppm	0.0001	379.4	2.072	-
Fe 261.187	0.0061	ppm	0.0003	5.4	116.2	-
Mn 257.610	0.0000uv	ppm	0.0000	193.1	76.79	-
Pb 220.353	-0.0022uv	ppm	0.0016	71.8	3.982	-

4120628

LCS-W (LCS) **12/7/2004, 11:37:11 AM** **Rack 3, Tube 40**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.4899	ppm	0.0004	0.1	11049	98.0 -
Fe 261.187	5.024	ppm	0.0135	0.3	64932	100.5 -
Mn 257.610	2.480	ppm	0.0031	0.1	529915	99.2 -
Pb 220.353	0.4821	ppm	0.0010	0.2	682.1	96.4 -

P0412010-02D (Samp) **12/7/2004, 11:40:04 AM** **Rack 3, Tube 41**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0002	ppm	0.0001	42.8	5.164
Fe 261.187	21.91	ppm	0.1378	0.6	283009
Mn 257.610	0.6151	ppm	0.0031	0.5	131508

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	0.0008uv	ppm	0.0024	318.4	8.095

P0412010-01D (Samp) 12/7/2004, 11:42:58 AM Rack 3, Tube 42
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	23.5	3.020
Fe 261.187	21.31	ppm	0.0746	0.4	275334
Mn 257.610	0.6846	ppm	0.0016	0.2	146360
Pb 220.353	0.4346	ppm	0.0050	1.2	615.5

4120628

Cont Calib Verif (CCV) 12/7/2004, 11:45:55 AM Rack 2, Tube 10
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.6058	ppm	0.0035	0.6	13663	96.2 -
Fe 261.187	12.61	ppm	0.0626	0.5	162965	100.5 -
Mn 257.610	1.563	ppm	0.0071	0.5	334147	104.2 -
Pb 220.353	0.6169	ppm	0.0037	0.6	870.8	98.1 -

Cont Calib Blank (CCB) 12/7/2004, 11:48:49 AM Rack 2, Tube 11
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0001	85.6	3.679	-
Fe 261.187	0.0020	ppm	0.0002	8.1	63.37	-
Mn 257.610	-0.0000uv	ppm	0.0000	598.8	71.34	-
Pb 220.353	-0.0025uv	ppm	0.0010	40.5	3.540	-

P0412010-01D - DUP (DUP) 12/7/2004, 11:51:44 AM Rack 3, Tube 43
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0004	ppm	0.0001	21.9	10.40	-*
Fe 261.187	21.39	ppm	0.0071	0.0	276317	-
Mn 257.610	0.6874	ppm	0.0007	0.1	146946	-
Pb 220.353	0.4364	ppm	0.0019	0.4	618.1	-

4120628

P0412010-01D - MSPK (MSPK) 12/7/2004, 11:54:37 AM Rack 3, Tube 44
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0474	ppm	0.0003	0.6	1070	94.6 -
Fe 261.187	22.30	ppm	0.0619	0.3	288099	97.0 -
Mn 257.610	1.195	ppm	0.0029	0.2	255371	102.1 -
Pb 220.353	0.9253	ppm	0.0008	0.1	1303	99.1 -

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

P0412041-01D (Samp) **12/7/2004, 11:57:30 AM** **Rack 3, Tube 45**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0134	ppm	0.0001	0.9	304.5
Fe 261.187	50.48	ppm	0.0581	0.1	652054
Mn 257.610	16.75x	ppm	0.0248	0.1	3578507
Pb 220.353	0.0189	ppm	0.0006	3.4	33.46

P0412041-02D (Samp) **12/7/2004, 12:00:23 PM** **Rack 3, Tube 46**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0310	ppm	0.0009	2.8	700.2
Fe 261.187	42.12	ppm	1.026	2.4	544028
Mn 257.610	16.30x	ppm	0.3855	2.4	3483912
Pb 220.353	0.0168	ppm	0.0010	6.1	30.49

P0412024-01D (Samp) **12/7/2004, 12:03:15 PM** **Rack 3, Tube 47**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0106	ppm	0.0000	0.4	240.1
Fe 261.187	121.5x	ppm	0.1803	0.1	1569831
Mn 257.610	22.99x	ppm	0.0473	0.2	4913516
Pb 220.353	0.0269	ppm	0.0034	12.8	44.65

P0412024-02D (Samp) **12/7/2004, 12:06:08 PM** **Rack 3, Tube 48**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0109	ppm	0.0002	2.1	248.7
Fe 261.187	87.50	ppm	0.1736	0.2	1130141
Mn 257.610	14.20x	ppm	0.0230	0.2	3035024
Pb 220.353	0.0168	ppm	0.0025	15.0	30.53

P0412024-03D (Samp) **12/7/2004, 12:09:00 PM** **Rack 3, Tube 49**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0067	ppm	0.0001	1.4	153.4
Fe 261.187	182.4x	ppm	0.5599	0.3	2355763
Mn 257.610	30.33x	ppm	0.0429	0.1	6481053
Pb 220.353	0.0461	ppm	0.0041	8.8	71.61

P0412077-02D (Samp) **12/7/2004, 12:11:54 PM** **Rack 3, Tube 50**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0224	ppm	0.0002	0.7	506.4
Fe 261.187	7.817	ppm	0.0347	0.4	101001
Mn 257.610	13.06x	ppm	0.0688	0.5	2791446

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ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	0.0081	ppm	0.0013	15.9	18.33

P0412077-03D (Samp) **12/7/2004, 12:14:48 PM** **Rack 3, Tube 51**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0133	ppm	0.0000	0.2	302.4
Fe 261.187	20.25	ppm	0.0178	0.1	261530
Mn 257.610	12.29x	ppm	0.0523	0.4	2625840
Pb 220.353	0.0096	ppm	0.0005	4.9	20.49

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P0412077-04D (Samp) **12/7/2004, 12:17:42 PM** **Rack 3, Tube 52**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0231	ppm	0.0001	0.2	523.5
Fe 261.187	79.54	ppm	0.2843	0.4	1027345
Mn 257.610	12.48x	ppm	0.0403	0.3	2666137
Pb 220.353	0.0182	ppm	0.0028	15.3	32.57

J

Cont Calib Verif (CCV) **12/7/2004, 12:20:36 PM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5972	ppm	0.0022	0.4	13467	95.6 -
Fe 261.187	12.48	ppm	0.0439	0.4	161220	99.8 -
Mn 257.610	1.546	ppm	0.0072	0.5	330445	103.1 -
Pb 220.353	0.6114	ppm	0.0055	0.9	863.1	97.8 -

Cont Calib Blank (CCB) **12/7/2004, 12:23:30 PM** **Rack 2, Tube 11**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	48.2	3.028	-
Fe 261.187	0.0030	ppm	0.0006	20.0	76.61	-
Mn 257.610	0.0002	ppm	0.0000	16.6	118.7	-
Pb 220.353	-0.0030uv	ppm	0.0006	20.2	2.869	-

P0412077-05D (Samp) **12/7/2004, 12:26:24 PM** **Rack 3, Tube 53**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0015	ppm	0.0004	25.6	36.44
Fe 261.187	53.95	ppm	0.4048	0.8	696821
Mn 257.610	4.739	ppm	0.0344	0.7	1012625
Pb 220.353	0.0041	ppm	0.0019	45.2	12.81

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ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

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P0412022-01D (Samp) **12/7/2004, 12:29:17 PM** **Rack 3, Tube 54**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	-0.0000uv	ppm	0.0001	3848.4	1.739
Fe 261.187	0.0427	ppm	0.0014	3.2	589.2
Mn 257.610	0.7984	ppm	0.0085	1.1	170679
Pb 220.353	-0.0009uv	ppm	0.0005	52.7	5.772

P0412037-01D (Samp) **12/7/2004, 12:32:10 PM** **Rack 3, Tube 55**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0010	ppm	0.0006	62.7	24.90
Fe 261.187	45.35	ppm	0.4254	0.9	585800
Mn 257.610	0.7293	ppm	0.0079	1.1	155911
Pb 220.353	0.0080	ppm	0.0007	8.2	18.26

P0412037-02D (Samp) **12/7/2004, 12:35:04 PM** **Rack 3, Tube 56**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	57.7	3.681
Fe 261.187	0.0307	ppm	0.0005	1.7	433.8
Mn 257.610	0.0543	ppm	0.0009	1.6	11673
Pb 220.353	0.0590	ppm	0.0008	1.4	89.62

P0412042-01D (Samp) **12/7/2004, 12:37:58 PM** **Rack 3, Tube 57**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	52.2	3.739
Fe 261.187	7.196	ppm	0.0272	0.4	92979
Mn 257.610	0.7796	ppm	0.0022	0.3	166661
Pb 220.353	0.0005uv	ppm	0.0034	716.4	7.681

P0412042-02D (Samp) **12/7/2004, 12:40:53 PM** **Rack 3, Tube 58**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	19.8	3.353
Fe 261.187	0.0150	ppm	0.0005	3.6	230.9
Mn 257.610	0.0040	ppm	0.0000	0.3	933.6
Pb 220.353	-0.0009uv	ppm	0.0019	211.4	5.776

P0412042-03D (Samp) **12/7/2004, 12:43:47 PM** **Rack 3, Tube 59**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0000	4.7	5.021
Fe 261.187	0.0187	ppm	0.0002	1.1	278.8
Mn 257.610	0.0037	ppm	0.0001	1.9	859.4

ICP120704. All Data Report 12/7/2004, 1:28:52 PM, Method: 6010B, Instrument ID: EL99063568

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Pb 220.353	-0.0008uv	ppm	0.0027	336.5	5.921

P0412042-04D (Samp) 12/7/2004, 12:46:41 PM Rack 3, Tube 60
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001uv	ppm	0.0001	91.6	3.597
Fe 261.187	2.325	ppm	0.0096	0.4	30071
Mn 257.610	0.1347	ppm	0.0007	0.5	28856
Pb 220.353	0.0001uv	ppm	0.0010	920.6	7.183

P0412042-05D (Samp) 12/7/2004, 12:49:35 PM Rack 1, Tube 1
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0001	ppm	0.0001	97.7	4.353
Fe 261.187	6.950	ppm	0.0219	0.3	89805
Mn 257.610	0.3719	ppm	0.0011	0.3	79547
Pb 220.353	0.0019uv	ppm	0.0018	94.3	9.745

P0412042-06D (Samp) 12/7/2004, 12:52:29 PM Rack 1, Tube 2
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Cd 214.439	0.0000	ppm	0.0000	64.7	2.838
Fe 261.187	0.3454	ppm	0.0011	0.3	4499
Mn 257.610	0.3677	ppm	0.0032	0.9	78634
Pb 220.353	-0.0025uv	ppm	0.0008	33.8	3.548

Cont Calib Verif (CCV) 12/7/2004, 12:55:23 PM Rack 2, Tube 10
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.5853	ppm	0.0028	0.5	13200	93.6 -
Fe 261.187	12.27	ppm	0.0250	0.2	158524	98.2 -
Mn 257.610	1.527	ppm	0.0055	0.4	326356	101.8 -
Pb 220.353	0.5988	ppm	0.0002	0.0	845.5	95.8 -

Cont Calib Blank (CCB) 12/7/2004, 12:58:17 PM Rack 2, Tube 11
Weight: 1 Volume: 1 Dilution: 1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Cd 214.439	0.0001	ppm	0.0000	28.0	3.664	-
Fe 261.187	0.0011	ppm	0.0005	47.2	51.71	-
Mn 257.610	-0.0000uv	ppm	0.0000	42.8	69.36	-
Pb 220.353	-0.0009uv	ppm	0.0039	451.6	5.808	-

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Organics Data

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: TB120204

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: Mod Ref No : SDG No : MWA-4

Matrix (soil / sed / water): Water Lab Sample ID: P0412077-01A

Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13119

Level (Trace or low/med) Date Received: 12/3/2004

% Moisture: not dec Date Analyzed: 12/14/2004

GC Column: ID: (mm) Dilution Factor: 1

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

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	0.48	J
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl-t-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.2	J
78-93-3	2-Butanone		
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U

1B - Form I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: TB120204

Lab Name: Microseeps, Inc. Contract: 7464127E
Lab Code: P0412077 Case No.: Mod.Ref No.: SDG No.: MWA-4
Matrix (soil / sed / water): Water Lab Sample ID: P0412077-01A
Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13119
Level (Trace or low/med) Date Received: 12/3/2004
% Moisture: not dec Date Analyzed: 12/14/2004
GC Column: ID: (mm) Dilution Factor: 1
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
79-01-6	Trichloroethene	0.60	J
108-87-2	Methylcyclohexane		
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone		
108-88-3	Toluene	0.90	J
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone		
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
	m & p-Xylene	10	U
100-42-5	Styrene		
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene		
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		
120-82-1	1,2,4-Trichlorobenzene		
87-61-6	1,2,3-Trichlorobenzene		
110-75-8	2-Chloroethyl vinyl ether	20	U

1A - Form I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPASampleNo: MWA-4

Lab Name: Microseeps, Inc. Contract: 7464127E

Lab Code: P0412077 Case No.: Mod.Ref No.: SDG No.: MWA-4

Matrix (soil / sed / water): Water Lab Sample ID: P0412077-02A

Sample wt/vol: 5 (g/ml): ml Lab File ID: VSA13125

Level (Trace or low/med) Date Received: 12/3/2004

% Moisture: not dec Date Analyzed: 12/14/2004

GC Column: ID: (mm) Dilution Factor: 1

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

Concentration Units: ug/L

CAS No.	Compound	Concentration	Q
75-71-8	Dichlorodifluoromethane		
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	110	
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane		
75-35-4	1,1-Dichloroethene	1100	E
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
79-20-9	Methyl Acetate		
75-09-2	Methylene Chloride	400	E
156-60-5	trans-1,2-Dichloroethene	120	
1634-04-4	Methyl-t-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	620	E
156-59-2	cis-1,2-Dichloroethene	5700	E
78-93-3	2-Butanone		
67-66-3	Chloroform	14	
71-55-6	1,1,1-Trichloroethane	1300	E
110-82-7	Cyclohexane		
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	18	
107-06-2	1,2-Dichloroethane	130	