# Groundwater Monitoring Summary Report
# March 2008 (First Quarter)
# American Chemical Service, Inc. National Priorities List Site
# Griffith, Indiana

PREPARED FOR:

ACS RD/RA EXECUTIVE COMMITTEE

PREPARED BY:

MWH AMERICAS, INC.
175 W. JACKSON BLVD., SUITE 1900
CHICAGO, ILLINOIS 60604

OCTOBER 2008

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Sample Delivery Group ME0803A55 - VOCs
Data Validation Narrative – VOCs
Data Validation Narrative – Form 1s

SDG ME0803A91 – VOCs, SVOCs, and Inorganics
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Data Validation Narrative – VOCs
Data Validation Narrative – SVOCs
Data Validation Narrative – Inorganics

SDG ME0803B85 – VOCs and SVOCs
Data Validation Narrative – Form 1s
Data Validation Narrative – VOCs
Data Validation Narrative – SVOCs

SDG ME0803C07 – VOCs, SVOCs, and Inorganics
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Data Validation Narrative – VOCs
Data Validation Narrative – SVOCs
Data Validation Narrative – Inorganics

Precision, Accuracy, Representativeness, Comparability, Completeness (PARCC) Review - SDG ME0803A55, SDG ME0803A91, SDG ME0803B85, and SDG ME0803C07

SDG ME0807691 - VOCs
Data Validation Narrative – VOCs
Data Validation Narrative – Form 1s

PARCC Review - SDG ME0807691

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# SECTION 1.0 – EXECUTIVE SUMMARY

MWH Americas, Inc. (MWH) has prepared this Groundwater Monitoring Summary Report to present the results from the March 2008 groundwater sampling event at the American Chemical Service, Inc. (ACS) National Priorities List (NPL) Site in Griffith, Indiana. In general, the wells in the monitoring network are sampled twice a year. The standard sampling routine is to collect groundwater samples and analyze them for several indicator parameters. These activities were performed in accordance with the revised Long-Term Groundwater Monitoring Plan (LTGMP) and the November 2001 United States Environmental Protection Agency (U.S. EPA) approved Quality Assurance Project Plan (QAPP). The U.S. EPA and Indiana Department of Environmental Management (IDEM) approved the revised LTGMP in a letter dated June 26, 2002. In April 2007, MWH submitted a QAPP Addendum (Addendum No. 1) to the U.S. EPA for approval. The QAPP Addendum changed the primary analytical laboratory from Compuchem to Microbac of Merrillville, Indiana. The U.S. EPA approved the Addendum in November 2007. This sampling event represents the second round of groundwater samples analyzed by Microbac.

Water level measurements were collected at 77 upper and lower aquifer wells, piezometers, and surface water staff gauges on March 24, 2008. Water level measurements could not be collected at several locations. The water level could not be measured at MW10C because the well contains a dedicated pump and associated piping that prevented water level measurement. Monitoring well MW44, located west of the farmer's field is damaged. The property owner has graded the land surface near this well. MW44 appears to have been struck by heavy equipment and the well riser is bent to a 45 degree angle. Similarly, piezometer P17 located in the Town of Griffith Landfill has been missing since October 2007 and is believed to have been destroyed by vehicular traffic. Water levels were not measured at piezometers P31, P32, and P36 because they were dry. In addition, a water level was not collected at piezometer P25 because the cap could not be opened. MWH does not recommend replacement of monitoring well MW44 or piezometer P17. The LTGMP will be revised to include recommendations for future long-term monitoring requirements. MWH will submit a revised LTGMP, including recommendations to abandon monitoring wells that are no longer needed, to the Agencies for review prior to the March 2009 monitoring event.

March 2008 groundwater elevations in the upper and lower aquifers were generally higher than those measured during the previous sampling event conducted

in October 2007. In the lower aquifer, contour lines north of the Site are influenced (bent to the south and west) by the lower aquifer extraction system near MW53. Hydraulic gradients remained consistent with those recorded during previous sampling rounds.

Groundwater samples were collected at 15 upper aquifer wells and 18 lower aquifer wells in the monitoring network. One upper aquifer well, MW44, was not sampled due to the aforementioned damage. The groundwater samples were analyzed for indicator volatile organic compounds (VOCs).

Groundwater samples collected from 15 upper aquifer monitoring wells indicate that groundwater plumes to the north and south of the Site are not expanding, and that concentrations within the plumes are decreasing. There were no exceedances of maximum baseline concentrations in groundwater samples collected from the upper aquifer during March 2008.

Benzene was not detected in the sample collected from downgradient well MW06 during this monitoring event. Benzene concentrations were below the detection limit in both the spring and fall of 2007, making this the third consecutive round of no detections for this compound. These results confirm that the ISCO treatments have been effective in treating the source area, since VOCs have historically been at their peak concentrations during spring sampling events. MWH will continue to monitor MW06 to see if overall decreasing trends continue from the ISCO remediation conducted upgradient of this well.

The decreasing trends in the upper aquifer are likely a combined result of the barrier wall, the perimeter groundwater containment system, the ISCO treatments near Colfax Street and Reder Road, as well as natural attenuation.

Groundwater sample results from the 18 lower aquifer wells continue to show variability. Indicator VOCs were detected in nine of the 18 lower aquifer wells.

Benzene, cis-1, 2-dichlorethene, and trichloroehtene (TCE) were detected in the sample collected from MW33. TCE was also detected in the sample from this well in September 2006. Benzene has been detected at trace concentrations in samples from this well during the past two monitoring events. Prior to the October 2007 and March 2008 sampling events benzene had not been detected in this well since December 1998. Prior to April 2007, cis-1, 2-dichloroethene had not been detected in samples from this well. Cis-1, 2-dichloroethane has been detected at trace concentrations in samples from this well over the past three monitoring events. MWH will continue to monitor this well for indicator VOCs according to the LTGMP.

In the past, chloroethane concentrations have been detected at increasing concentrations in samples from MW29. The increase in chloroethane concentrations in samples from MW29 was likely due to diffusion of a

concentration gradient between this well and MW09R. Monitoring shows chloroethane concentrations decreasing over the past four rounds of monitoring at MW29. These results suggest the effects of the diffusion gradient between MW29 and MW09R are diminishing since the abandonment and replacement of MW09.

Benzene and chloroethane were detected in the sample collected from MW10C during March 2008. The concentration of benzene exceeded its maximum baseline concentration of 150 µg/l for this well; however, benzene concentrations in samples from MW10C show an overall decreasing trend. Chloroethane was detected below its maximum baseline value for this well. MWH will continue to extract groundwater for treatment at this location and collect samples during the regular monitoring events.

In March 2008, TCE was detected at a trace, estimated concentration of 1.2 µg/l in the sample collected from downgradient well MW32. TCE was not detected in samples from this well in the past. MWH will continue to monitor this well according to the LTGMP.

The concentration of benzene in the sample collected from MW56 in March 2008 is consistent with the previous concentrations in October 2007 and April 2007. Chloroethane was not detected in the sample from MW56 in March 2008. MWH will continue to monitor this well according to the LTGMP.

In March 2008, TCE was detected in samples from sentinel wells MW58 and MW59 at 8.7 and 7.6 µg/l, respectively. As soon as the data was validated, MWH notified the U.S. EPA and proposed to re-sample to determine if the results were false positives or real. MWH collected confirmation VOC samples from the sentinel wells on July 16, 2008. TCE was not detected in the confirmation samples which indicate that the detections in March were not likely representative of Site conditions, but rather the result of cross-contamination.

Benzene was not detected in the samples collected from the sentinel wells in March. These results confirm that the lower aquifer extraction system near MW53 is effective in capturing and treating benzene in the lower aquifer. MWH will continue sampling these wells to monitor groundwater quality in the lower aquifer at this downgradient boundary.

A pumping system designed to capture groundwater near MW53 was turned on in September 2007. In March 2008, the concentration of benzene was lower than it has been at this well over the past few sampling events. Additionally, benzene was not detected in samples collected from sentinel wells MW58 and MW59. These results indicate that the benzene identified near MW53 has not migrated off-site to this point in the lower aquifer. MWH recommends continuing to sample MW58 and MW59 along with the other lower aquifer wells, as part of the LTGMP.

The most likely source(s) of contamination in the lower aquifer is one of the six production wells which ACS constructed and used in the past. MWH properly abandoned these six production wells in 1998; thus, removing these potential sources of contamination. Pumping systems have been installed in wells MW10C, MW30, MW56, and near MW53 to capture and treat areas where VOCs have been detected in the lower aquifer.

The existing monitoring well network, with the sentinel wells downgradient of MW53, will provide adequate coverage to monitor the lower aquifer downgradient of the Site. This monitoring network will continue to be sampled to verify that contaminants in the lower aquifer are not migrating off-site to the North.

The next groundwater sampling event is scheduled to occur in September 2008. It will consist of monitoring for indicator VOCs at lower and upper aquifer wells specified in the LTGMP. In addition, five residential wells will be sampled for “full-scan” analysis

# SECTION 2.0 – MARCH 2008 DATA COLLECTION ACTIVITIES

The groundwater monitoring activities conducted at the ACS Site during March 2008 included measuring water levels and collecting and analyzing samples from monitoring wells.

## 2.1 WATER LEVEL MEASUREMENTS

Water level measurements were collected at 77 upper and lower aquifer wells, piezometers, and surface water staff gauges on March 24, 2008. Water level measurements could not be collected at several locations. The water level could not be measured at MW10C because the well contains a dedicated pump and associated piping that prevents water level measurement. Monitoring well MW44, located west of the farmer's field is damaged. The property owner has graded the land surface near this well. MW44 appears to have been struck by heavy equipment and the well riser is bent to a 45 degree angle. Similarly, piezometer P17 located in the Town of Griffith Landfill has been missing since October 2007 and is believed to have been destroyed by vehicular traffic. Water levels were not measured at piezometers P31, P32, and P36 because they were dry. In addition, a water level was not collected at piezometer P25 because the cap could not be opened.

MWH does not recommend the replacement of piezometer P17 or monitoring well MW44. The groundwater flow regime in the upper aquifer is well understood and water level data is regularly collected from many measuring points. MWH plans to revise the LTGMP to include a revised list of water level collection locations. The LTGMP, including recommendations to abandon water level collection locations that are no longer needed, will be submitted to U.S. EPA and IDEM for review and approval prior to the March 2009 monitoring event.

**Table 1** contains the water level measurements, map coordinates (reference points), top of well casing elevations, and calculated groundwater elevations for the measurement points.

## 2.2 GROUNDWATER SAMPLING

Groundwater sampling activities were conducted from March 25 through 31, 2008. Each monitoring well was sampled using low-flow methods in accordance with the Groundwater Sampling Standard Operating Procedure (SOP) developed for the revised LTGMP. Field parameters (pH, specific conductivity, temperature, dissolved oxygen [DO], oxidation-reduction potential [ORP], and turbidity) were measured during well purging,

and the values recorded upon stabilization are presented in **Table 2**.

The groundwater samples were transported under chain-of-custody to Microbac Laboratory in Merrillville, Indiana where they were analyzed for the parameters summarized in **Table 3**. The table lists the upper and lower aquifer monitoring wells in the monitoring well network and the parameters analyzed in the samples collected from each well during the March 2008 event.

In accordance with the revised LTGMP, the analytical results were compared to the 1997 maximum baseline concentrations. The comparison tables are provided in **Appendix A**.

MWH collected confirmation VOC samples from sentinel wells MW58 and MW59 on July 16, 2008. Confirmation samples were collected from these wells to verify if detections of TCE in samples collected in March were false positives or real. The U.S. EPA approved this action prior to MWH initiating the field activity.

# SECTION 3.0 – MARCH 2008 GROUNDWATER DATA EVALUATION

## 3.1 GROUNDWATER FLOW SYSTEM DATA

The groundwater elevations listed in **Table 1** were used to develop a water table contour map (**Figure 1**) for the upper aquifer and a potentiometric surface contour map for the lower aquifer (**Figure 2**).

In March 2008, the groundwater elevations in upper aquifer wells and piezometers were on average 1.1 feet higher than the levels in September 2007, and 0.5 feet lower than water levels in April 2007. These fluctuations in groundwater elevations are likely related to annual variability in the regional hydrograph.

The groundwater flow pattern in the upper aquifer measured during March 2008 was consistent with previous monitoring events. Regional groundwater flow is generally east to west, but as it approaches the Site it is diverted to the north and south by the barrier wall. The gradient northwest of the Site is relatively flat due to the effects of the Perimeter Groundwater Containment System (PGCS) trench, barrier wall, and discharge points from the groundwater treatment plant. Groundwater to the south of the Site flows to the south and southeast.

Groundwater elevations measured in lower aquifer wells in March 2008 were approximately 1.5 feet higher than elevations in September 2007, and approximately 1.6 feet lower than those in April 2007. The groundwater flow pattern in the lower aquifer is northward at a relatively low hydraulic gradient. The contour lines north of the Site are influenced (bent to the south and west) by the lower aquifer extraction system near MW53.

The hydraulic gradient across the Site from south to north (calculated between wells MW50 and MW52) was 0.00058 feet per foot (ft/ft) during March 2008. The average hydraulic gradient calculated between the two wells in the lower aquifer since 1995 is 0.00043 ft/ft.

The groundwater elevations measured inside and outside of the barrier wall and near the PGCS are discussed in the *Quarterly Monitoring Report for Active Treatment Systems – First Quarter 2008*. The groundwater elevations show that the groundwater extraction system is maintaining an inward gradient.

## 3.2 MONITORING WELL ANALYTICAL DATA

During the March 2008 sampling round, samples from 15 wells in the upper aquifer and 18 wells in the lower aquifer were analyzed for indicator parameters, which include benzene, chloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, cis-1,2-dichloro-

ethene, trans-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride. Samples from wells MW06, MW19, and MW09R were analyzed for the indicator semi-volatile organic compound (SVOC) bis (2-chloroethyl) ether, and samples from wells MW06, MW15, and MW43 were analyzed for the indicator metal arsenic.

In accordance with the LTGMP, the analytical results from the upper and lower aquifer monitoring wells were compared to the 1997 maximum baseline concentrations (**Appendix A**). This comparison is primarily useful for wells located in the plume areas (interior wells) or those with a history of VOC detections. However, no VOCs were detected in samples from most of the upgradient and downgradient monitoring wells during the baseline sampling activities. In those cases, the detection limit (typically 10 µg/l) was selected as the maximum baseline concentration for these wells. Because detections of indicator compounds at concentrations below their maximum baseline concentrations can still be significant, current sample results are also compared to previous sampling data to determine if an increasing or decreasing trend may be occurring.

### 3.2.1 Upper Aquifer Results

**Table 4** summarizes the indicator parameter results in samples from 15 upper aquifer wells collected during March 2008. **Figure 3** shows the well locations and detected indicator compounds on a map of the Site. Graphs presenting the concentrations of benzene and chloroethane versus time for the upper aquifer monitoring wells are presented in **Appendix B**. The validation narrative and laboratory analytical reports for samples from the upper aquifer are provided in **Appendix C**.

**VOC Results**

Benzene and chloroethane impacts have been observed outside of the barrier wall in two areas of the upper aquifer. North of the Site, these detections have consistently occurred in samples collected from wells MW48 and MW49. South of the Site, benzene and chloroethane have been detected in samples from MW06, MW19, and MW45. The groundwater monitoring program in the upper aquifer has focused on monitoring concentrations upgradient, within, and downgradient of these impacted areas. The plots in **Appendix B** are useful in observing concentration trends at each monitoring well.

Upgradient wells

Indicator VOCs were not detected in samples collected from upgradient monitoring wells MW11, MW12, or MW17. Tetrachloroethene, which has occasionally been detected at trace concentrations in previous samples from MW17, was not detected in the sample from MW17 in March 2008.

Interior wells

Benzene and chloroethane were detected in samples collected from several wells identified inside the originally delineated plume area (interior wells). No samples collected from the upper aquifer interior wells showed concentrations above their respective maximum baseline concentrations for benzene or chloroethane.

- Benzene was not detected in the sample collected from MW06.
- Concentrations of benzene in the samples collected from wells MW48 and MW49 were detected at 130 µg/l and 40 µg/l, respectively. These results are significantly below the maximum baseline concentrations for these wells (9,500 µg/l and 6,750 µg/l, respectively).
- Benzene was detected in the sample collected at well MW19 at a concentration of 6.5 µg/l. Monitoring well MW19 is located downgradient of MW06. However, benzene was not detected in the sample collected from MW45, which is located further downgradient from MW06 and MW19.
- Chloroethane was detected in the samples collected from MW06, MW19 and MW48. No detections of chloroethane in samples from these interior wells exceeded maximum baseline concentrations.

Downgradient wells

Indicator VOCs were detected in samples from two downgradient wells. Benzene was detected at 1.0 µg/l in the sample from well MW15, which is downgradient from the Town of Griffith Landfill. TCE was detected in the sample collected from MW14 at 1.3 µg/l.

Tentatively Identified Compounds

Tentatively identified compounds (TICs) were detected in the samples from several upper aquifer wells. Ether was detected in samples from MW06 (1.42 µg/l), MW13 (1.9 µg/l), and MW19 (3.09 µg/l). Other TICs included sulfur dioxide, 1-chloropropane, bis (2-chloroisopropyl) ether, chlorodifluoromethane, isobutane, chlorodi-fluoromethane, 4-ethenyl-cyclohexene, and various benzene related compounds. The analytical results for TICs are provided in **Appendix C** – Laboratory Analytical Reports.

**SVOC Results**

In March 2008, indicator compound bis (2-chloroethyl)-ether was detected in the sample collected from upper aquifer monitoring well MW19 at an estimated concentration of 6.0 µg/l. This concentration is below the maximum baseline concentration (12 µg/l) for this well. Bis (2-chloroethyl) ether was not detected in the sample collected from MW06.

**Inorganic Results**

Arsenic was detected in samples collected from MW06 (7.5 µg/l) and MW15 (32 µg/l), but was not detected in the sample from MW43. Arsenic was detected in a method blank associated with sample MW06 and therefore this result is qualified as not detected at the reported concentration.

The concentration of arsenic in the sample collected from MW15 (32 µg/l), located downgradient of the Town of Griffith Landfill, exceeded the U.S. EPA MCL of 10 µg/l. However, this concentration did not exceed the maximum baseline concentration for this well.

### 3.2.2 Lower Aquifer Results

**Table 5** summarizes the indicator parameter results in samples collected during March 2008 from 18 lower aquifer monitoring wells. **Figure 4** shows the well locations and detected indicator compounds on a map of the Site. Graphs presenting the concentrations of benzene and chloroethane versus time for the lower aquifer monitoring wells are presented in **Appendix B**. The validation narrative and laboratory analytical reports for samples from the lower aquifer are provided in **Appendix C**.

**VOC Results**

In the past, benzene and chloroethane have been detected in the samples collected from lower aquifer monitoring wells MW09, ATMW4D, MW10C, and MW53. Failure of the surface seal at MW09 and ATMW4D probably provided the path, which allowed benzene and chloroethane to migrate locally into the lower aquifer at these two locations. These wells have been properly abandoned and replaced by MW09R and MW56.

It is unclear if detections in samples from MW10C and MW53 are a downgradient indication of the migration from MW09 or ATMW4D or if another source is responsible. The most likely source(s) of contamination in the lower aquifer are the six production wells that ACS constructed and used in the past. MWH properly abandoned these six production wells in 1998; thus, removing these potential sources of contamination. Additionally, MWH has completed a lower aquifer investigation that defined the distribution of benzene in the lower aquifer near MW53. MWH has installed an extraction system capable of capturing benzene in the lower aquifer near MW53 that began operating in September 2007.

Upgradient well

No VOCs were detected in the sample collected from lower aquifer monitoring well MW28, located south of the Site.

Interior wells

Benzene and chloroethene were the only indicator VOCs detected in samples collected from interior wells MW09R, MW10C, MW29, and MW56. Benzene was detected below maximum baseline concentrations in samples from MW09R (4.4 µg/l) and MW56 (240 µg/l). The concentration of benzene in the sample collected from MW10C (330 µg/l) exceeded the maximum baseline concentration of 150 µg/l for this compound. However, this concentration is significantly lower than the sample results from MW10C collected in October 2007 when benzene was detected at 670 µg/l.

The concentration of chloroethane in the sample collected from MW29 (39 µg/l) exceeded the maximum baseline concentration of 10 µg/l for this compound. MW29 is nested with MW09R and screened approximately 25 feet deeper in the lower aquifer at this location. No other benzene or chloroethane concentrations exceeded maximum baseline values.

Downgradient wells

VOCs were detected in samples collected from three downgradient monitoring wells during March 2008.

- Benzene was detected in the sample collected from MW53 at 3.2 µg/l, a concentration below the maximum baseline concentration of 10 µg/l for this well.

- Benzene (2.8 µg/l), cis-1, 2-dichloroethene (1.3 µg/l), and TCE (3.9 µg/l) were detected at estimated concentrations in the sample collected from MW33. None of these concentrations exceeded maximum baseline values for these compounds.

- TCE was detected at a trace, estimated concentration (1.2 µg/l) in the sample collected from MW32.

- TCE was detected in samples collected from sentinel wells MW58 and MW59 at 8.7 µg/l and 7.6 µg/l, respectively. TCE has not been detected in samples collected from these wells in the past.

  Since TCE had not previously been detected in samples collected from these wells and since the sentinel wells are specifically placed down gradient of the lower aquifer extraction system, the wells were re-sampled in July 2008 to test if the detections were false positives or real. The re-sampling showed no detections of TCE.

Tentatively Identified Compounds

TICs were detected in the samples from several lower aquifer wells. Ether was detected in samples from MW09R (1.17 µg/l), MW10C (13.94 µg/l), MW23 (10.27 µg/l), MW30 (3.87 µg/l), MW51 (10 µg/l), and MW52 (10 µg/l). Ether has been detected in the lower aquifer during most of the previous sampling rounds. Other TICs included 1, 4-dioxane, 1, 3-dioxolane, tetrahydrofuran, propiolonitrile, flourotrimethlsilane, amylene hydrate, 2-methyl-2-propanol, 1, 3-dioxolane, 4-methyl-2-propanol, 4-methyl-1, 3-dioxolane, and various ether related compounds.

**SVOC Results**

The indicator compound bis (2-chloroethyl) ether was detected at 4.7 µg/l in the sample collected from lower aquifer well MW09R in March 2008. This concentration is below the maximum baseline concentration of 50 µg/l for this constituent in this well.

### 3.2.3 Discussion

The Site source areas are currently contained within the barrier wall which is limiting migration of contaminants to adjacent areas in the upper aquifer. The groundwater monitoring program is structured specifically to monitor groundwater outside the barrier wall. The concentration trends over time shown on plots contained in **Appendix B** are discussed below.

**Upper Aquifer**

VOCs

Historically, monitoring data from the upper aquifer has shown seasonal variability. This pattern has been evident in samples collected from interior wells, located to the north and south of the Site.

In the north, monitoring wells MW48 and MW49 have historically shown variability with higher concentrations in the fall and lower concentrations in spring. This was a spring monitoring event so we would expect to see lower concentrations in samples from these wells than the samples collected in October 2007. However, benzene was detected in the sample collected from MW48 at 130 µg/l, which is higher than detected in the fall of 2007 (46 µg/l). Chloroethane was detected in the sample

from this well at a concentration of 8.4 µg/l which is slightly higher than detected during the October 2007 event. Overall, concentrations of benzene and chloroethane have decreased significantly in samples collected from MW48 (**Appendix B**).

Benzene was detected in the sample from MW49 at 40 µg/l which is lower than detected in both October 2007 (550 µg/l) and April 2007 (190 µg/l). Chloroethane was not detected in the sample from this well in March 2008. Previously, chloroethane was detected at a concentration of 10 µg/l in October 2007.

Since the monitoring program was started in 1997, interior wells MW48 and MW49 continue to show decreasing concentration trends. The decreasing concentrations of benzene and chloroethane north of the Site can be attributed to source containment and natural attenuation.

South of the Site, monitoring well MW06 has historically shown seasonal variability with higher concentrations in the spring and lower concentrations in the fall. From 2004 to 2006, MWH completed four rounds of in-situ chemical oxidation (ISCO) treatments near the intersection of Colfax Street and Reder Road. Monitoring well MW06 is located downgradient of the ISCO treatment area and is an indicator of remediation progress in this area.

In March 2008, benzene was not detected in the sample collected from MW06. Benzene concentrations were below the detection limit in both the spring and fall of 2007, so the March 2008 result is the third consecutive round of no detections for this compound. These results confirm that the ISCO treatments have been effective in treating the source area since VOCs have historically been at their peak concentrations in spring sampling events.

In March 2008, chloroethane was detected at a trace, estimated concentration of 3.1 µg/l in the sample collected from MW06. The chloroethane concentration in the sample collected from this well in October 2007 was below 1 µg/l. Overall chloroethane concentrations show a decreasing trend and are significantly below its baseline value of 720 µg/l for this compound. MWH will continue to monitor MW06 to see if overall decreasing trends of benzene and chloroethane continue.

Benzene and chloroethane concentrations in the sample from MW19, located 500 feet downgradient of MW06, were detected at 6.5 µg/l and 8.4 µg/l, respectively. Similar to MW06, monitoring well MW19 has seasonal variability with higher concentrations in the spring and lower concentrations in the fall. Benzene concentrations in the March 2008 sample are higher than the sample collected in October 2007 (1.6 µg/l) and similar to the concentration detected in April 2007 (6.3 µg/l).

The chloroethane concentration in the sample from MW19 is higher than the concentration detected in April 2007 (3.4 µg/l) and October 2007 (7.6 µg/l); however, chloroethane concentrations were at or above the maximum baseline concentration in samples at this well from March 2003 to September 2004. The decreasing concentration trend for chloroethane at MW19 is evident in the graph in **Appendix B.**

Decreasing concentrations of benzene and chloroethane have been reported in samples collected from interior well MW45, located 1,000 feet downgradient of MW06. The benzene and chloroethane concentrations in samples from this well have remained below 5 µg/l for the past several years. The decreasing concentration trend for benzene and chloroethane at MW45 is evident in the graph in **Appendix B**.

Trace VOCs have occasionally been detected in samples collected from downgradient wells MW14, MW15, MW39, MW42, MW43, and MW44. Monitoring well MW44 was not sampled because of the damage it sustained. MWH does not recommend replacing MW44. MW44 was installed outside the original groundwater plume in the upper aquifer, south of the Site. The groundwater plume to the south is not expanding and benzene has only been detected once (at a trace concentration in March 2003) in samples from this well. MWH will be revising the LTGMP to include future monitoring requirements for downgradient monitoring wells.

The sample collected from downgradient well, MW15, contained a trace, estimated concentration of benzene at 1.0 µg/l. MW15 is located downgradient of the Town of Griffith Landfill. Benzene has been detected at concentrations as high as 9.6 µg/l in samples collected from this well as recently as September 2005. Chloroethane concentrations in samples from MW15 have been below the reporting limit for the past five monitoring events. Concentrations of benzene and chloroethane in samples from well MW15 show decreasing concentration trends over the last several sampling events.

Data from upper aquifer monitoring wells indicate that VOC contamination has not spread beyond historical limits. Perimeter monitoring wells have been generally free of benzene and chloroethane detections and concentrations within the plume have been decreasing.

In April 2006, MWH completed the fourth application of ISCO treatment to residual hydrocarbons south of the Site near the intersection of Colfax Street and Reder Road. These residual hydrocarbons appear to have been feeding the groundwater plume observed south of the Site in samples collected from wells MW06, MW19, and MW45.

The decreasing concentrations of benzene and chloroethene in the samples from wells MW06, MW19, and MW45 are likely related to the ISCO treatments and natural attenuation. In addition, this round was the third

consecutive sample in which benzene was not detected in samples from MW06. These results confirm that the ISCO treatments have been effective in treating the source area since VOCs have historically been at their peak concentrations in spring sampling events. MWH will continue to monitor MW06 to evaluate remediation progress in this area.

SVOCs

The LTGMP requires that upper aquifer monitoring wells MW06 and MW19 be analyzed annually for bis (2-chloroethyl) ether. The concentration of bis (2-chloroethyl) ether in the sample collected from MW19 in March 2008 (6.0 µg/l) is lower than previous sampling events where concentrations have fluctuated between 12 µg/l and 20 µg/l. Bis (2-chloroethyl) ether was not detected in the sample from MW06 where recent concentrations continue to show a slowly decreasing trend.

Inorganics

The LTGMP requires that samples from monitoring wells MW06, MW15, and MW43 be analyzed annually for arsenic. Arsenic was not detected in the sample collected from MW43 in March 2008. Arsenic was detected in samples collected from MW06 and MW15 at concentrations of 7.5 µg/l and 32 µg/l, respectively. The concentration of arsenic detected in MW06 was flagged "UB" which means arsenic was not detected at the indicated concentration because arsenic was also found in an associated laboratory blank. The detected concentration of arsenic in the sample from MW15 is above the U.S. EPA MCL of 10 µg/l but below the maximum baseline concentration of 59 µg/l for this well. The concentrations of arsenic in samples collected from MW06 and MW43 are variable but overall exhibit decreasing concentration trends over the past several years.

**Lower Aquifer**

VOCs

Several lower aquifer wells continue to show detections of VOCs. Before MW09 was replaced, samples collected from it contained concentrations of benzene and chloroethane as high as 290 and 2,900 µg/l, respectively. Since MW09R replaced MW09, the benzene and chloroethane concentrations have decreased. The most recent sample collected from MW09R in March 2008, detected benzene at a concentration of 4.4 µg/l. Chloroethane was not detected in the samples from this well over the past six sampling events.

Nested with well MW09R are MW29 and MW34. MW09R is screened in the upper portion of the lower aquifer, and MW29 and MW34 are screened in the middle and lower part of the lower aquifer, respectively.

Benzene has not been detected in samples from MW29 over the past nine rounds of sampling. In the past,

chloroethane concentrations have been detected at increasing concentrations in samples from MW29. Chloroethane has been detected as high as 680 µg/l in samples from MW09R as recently as September 2001. The increase in chloroethane concentrations in samples from MW29 was likely due to diffusion of a concentration gradient between this well and MW09R. Sample results over the past four rounds of monitoring show chloroethane concentrations decreasing (from 100 µg/l to 39 µg/l). These results suggest the effects of the diffusion gradient between this well and MW09R are diminishing (chloroethane concentrations at this location are decreasing by diffusion, natural attenuation, and dilution) since the abandonment and replacement of MW09.

Samples are not required to be collected from MW34 (screened in the bottom of the lower aquifer) as part of the LTGMP. In the past, benzene and chloroethane have not been detected in samples from well MW34.

The concentration of benzene in the sample collected from MW10C during March 2008 (330 µg/l) is lower than the previous sampling event in October 2007 (670 µg/l); however, this concentration exceeds maximum baseline concentration of 150 µg/l for this well. Benzene concentrations in samples from MW10C show an overall decrease since March 2003. The sample from MW10C contained benzene concentrations as high as 4,800 µg/l in March 2003.

Chloroethane was detected at a concentration of 230 µg/l in the sample collected from MW10C, which is lower than the concentration detected during the October 2007 sampling event (260 µg/l). Both of these concentrations are below the maximum baseline concentration of 420 µg/l for this well. The pump inside MW10C did not operate between July 2005 and September 2007 due to a malfunction. The pump in MW10C was replaced and brought back online with the rest of the lower aquifer pumping system in September 2007. MWH will continue to extract groundwater from this location for treatment and collect samples during the regular monitoring events.

The concentration of benzene in the sample collected from MW56 (240 µg/l) is consistent with the previous concentrations in October 2007 and April 2007 (220 µg/l and 210 µg/l, respectively). Chloroethane was not detected in the sample from MW56 in March 2008. MWH will continue to extract groundwater for treatment at this location and collect samples during the regular monitoring events.

MW53 is screened in the lower aquifer at the downgradient edge of the ACS Site. Benzene concentrations in samples from MW53 had increased gradually from below detection limits in 1997 to 12 µg/l in April 2007. The concentration of benzene (3.2 µg/l) in the sample collected from MW53 in March 2008 indicates that the lower aquifer extraction system has reversed the trend. Cis-1, 2-dichlorethene was detected in the sample

collected from MW53 in April 2007, but was not detected in the sample collected from this well in March 2008.

MWH performed a multi-phased investigation to address the extent of benzene-impacted groundwater near MW53. This included installing temporary lower aquifer wells (LA12 through LA15) to delineate the groundwater with benzene in the vicinity of MW53. Additionally, a three-day pumping test was performed in November 2005 to provide site specific hydraulic data.

The results of the investigation indicated that an area of groundwater impacted with benzene approximately 225 feet wide is located near MW53 at the bottom of the lower aquifer. The pumping test data was used to design a pumping system capable of capturing this benzene-impacted groundwater in the vicinity of MW53.

Groundwater extraction pumps have been installed in four lower aquifer wells (MW53, LA12, LA13, and LA14) in this area. MWH has the option of activating one or more of these pumps as necessary. Currently, the pumps are extracting groundwater from MW53 and LA14, each at a rate of two to five gallons per minute. This extraction system transfers groundwater back to the Groundwater Treatment Plant (GWTP) for treatment. The extraction system near MW53 was brought on-line in September 2007.

The final phase of the lower aquifer investigation included the installation and sampling of two sentinel wells (MW58 and MW59), north of MW53. These wells were installed with 10 foot screens situated at the bottom of the lower aquifer. They are screened across the same elevation as monitoring well MW53 which has documented the lower aquifer benzene plume. The two new monitoring wells were sampled in September 2006, April 2007, October 2007 and again for this sampling event (March 2008). Benzene and chloroethane were not detected in the samples collected from these wells during any of these events. These results indicate that benzene has not migrated in the lower aquifer to the sentinel well locations, which are located approximately 250 feet north of MW53.

In March 2008, TCE was detected in both samples from sentinel wells MW58 and MW59. TCE was detected at 8.7 µg/l and 7.6 µg/l respectively in samples from MW58 and MW59. The compound TCE has not been detected in samples from these wells in the past.

MWH notified the U.S. EPA of the TCE detections as soon as the laboratory results were validated. MWH recommended re-sampling these wells in July prior to the September 2008 groundwater sampling event.

Confirmation sampling was performed on July 16, 2008. TCE was not detected in the confirmation samples collected from these wells. These results suggest that the TCE detections in these wells were anamolous or false positives. It is likely that the TCE detections were introduced into the spring samples by cross-

contamination from sampling equipment. The sentinel wells are the first wells sampled during monitoring events. The rental pumps may have contained detectible concentrations of TCE from a previous site, even though MWH personnel decontaminated all equipment prior to sampling. Validated laboratory data sheets for the confirmation samples are included in **Appendix C.**

Historically, tetrachloroehtene (PCE) has been detected at low but increasing concentrations in samples from MW30. PCE has been detected as high as 11 µg/l in September 2006. PCE has not been detected in the samples collected from MW30 during the October 2007 or March 2008 sampling events. A plot of PCE concentrations for MW30 is included in **Appendix B**.

MWH installed a low-rate extraction pump in MW30 to capture the impacted groundwater near this well. The extraction system pumps groundwater at a rate of 2 gallons per minute (similar to the removal rates at MW10C and MW56). The design of the pumping system is similar to the system installed near MW53, as well as that of MW10C and MW56. The extracted groundwater is pumped to the GWTP and after treatment, discharged to the wetlands. Underground piping transfers groundwater from MW30 and the MW53 system to the GWTP. This system was turned on in September 2007.

The absence of measurable PCE in the sample from MW30 over the past two monitoring events is probably because the system is pumping out water faster than the natural flow and therefore we are not detecting the PCE.

Totalizers installed at the wellheads of lower aquifer wells (MW10C, MW30, MW53, MW56, and LA14) are recorded regularly to provide a measure of the gallons pumped. As of June 2008, the system pumped a total of 10,423,100 gallons of groundwater from these wells (**Appendix D**).

MW33 and MW51 are nested with well MW30. MW30 is screened in the middle part of the lower aquifer. MW33 is screened in the deepest part of the lower aquifer and MW51 is screened in the uppermost portion of the lower aquifer. PCE has not been detected in the uppermost (MW51) or deepest (MW33) portions of the lower aquifer at this location. The concentrations of PCE appear to be localized in the middle of the lower aquifer near MW30.

TCE (3.9 µg/l), benzene (2.8 µg/l), and cis-1, 2-dichlorethene (1.3 µg/l) were detected in the sample collected from MW33 in March 2008. TCE was detected at 1 µg/l in the sample from this well in September 2006. Benzene has been detected at trace concentrations in samples from this well during the past two monitoring events. Prior to the October 2007 and March 2008 sampling events, benzene had not been detected in this well since December 1998. Prior to April 2007, cis-1, 2-dichloroethene had not been detected in samples from

this well. Cis-1, 2-dichloroethene has been detected at trace concentrations in samples from this well over the past three monitoring events. MWH will continue to monitor this well for indicator VOCs according to the LTGMP.

In March 2008, TCE was detected at a trace, estimated concentration of 1.2 µg/l in the sample collected from downgradient well MW32. TCE was not detected in samples from this well in the past. The sample from this well was collected on the first day of the monitoring event. It is possible that this detection may be a result of cross-contamination from the rental pump. MWH will continue to monitor this well according to the LTGMP.

The most likely source(s) of contamination in the lower aquifer is one of the six production wells, which ACS constructed and used in the past. MWH properly abandoned these six production wells in 1998; thus, removing these potential sources of contamination.

The existing monitoring well network, with the new sentinel wells downgradient of MW53, will provide adequate coverage to monitor the lower aquifer downgradient of the Site. The monitoring network will verify that contaminants in the lower aquifer are not migrating off-site to the North.

SVOC Results

The LTGMP requires that samples from lower aquifer monitoring well MW09R be analyzed annually for bis (2-chloroethyl) ether. During March 2008, the concentration in the sample collected from MW09R (4.7 µg/l) was below its maximum baseline concentration. Concentrations of this compound in samples collected from MW09R have remained relatively constant over the last several years.

**Corrective Actions**

According to the LTGMP, MWH is to propose corrective actions for analytical results that exceed maximum baseline concentrations or that demonstrate increasing trends. The following lists the exceedances (underlined) and the corrective action taken:

- Baseline exceedance of benzene in samples collected from MW10C: MWH installed an extraction system in MW10C in 2002. The pump inside MW10C did not operate between July 2005 and September 2007 due to a malfunction. The pump in MW10C was replaced and brought back online with the rest of the lower aquifer pumping system in September 2007. Benzene concentrations are decreasing since the pumping system was brought back online in September 2007, as shown by the decrease in benzene concentrations from October 2007 to March 2008. MWH will continue extracting groundwater from this well

and proposes continued monitoring of the concentrations in this well.

- Baseline exceedance of chloroethane in samples collected from MW29: These concentrations are most likely caused by a diffusion gradient between MW09 and MW29. With the replacement of MW09, the source of chloroethane has been removed and the concentrations of chloroethane in MW29 are decreasing with time, just as they have at MW09R. MWH will continue to monitor concentrations in this well according to the LTGMP.

- Detected concentrations of TCE in samples collected from sentinel wells MW58 and MW59: Confirmation samples were collected from these wells in July 2008. TCE was not detected in the confirmation samples. These results suggest that the detections of TCE in these wells were anomalous or false positives.

- Variable concentrations of VOCs in samples collected from monitoring well MW33: MWH will continue to monitor concentrations in this well according to the LTGMP.

# SECTION 4.0 – CONCLUSIONS

The March 2008 water levels and groundwater samples were collected from wells at the Site to meet the following objectives from the revised LTGMP:

1. **Collect water level data to confirm that groundwater flow regimes in the upper and lower aquifers are consistent with historical flow patterns.**

   The groundwater flow regimes determined from March 2008 data are consistent with past conditions in the upper aquifer. In the lower aquifer, the contour lines north of the Site are influenced (bent to the south and west) by the lower aquifer extraction system near MW53.

2. **Collect water level data to confirm that the Barrier Wall Extraction System (BWES) and Perimeter Groundwater Containment System (PGCS) are affecting the upper aquifer hydraulic gradients as planned.**

   The data indicate that the barrier wall is containing the groundwater enclosed within the wall. The regional groundwater flow from the east is diverted toward the north and south around the barrier wall. The groundwater diverted to the north is collected in the PGCS extraction trench. Groundwater diverted south flows along the barrier wall and continues to the south and southeast. These results are consistent with previous observations.

3. **Collect and analyze groundwater samples from upgradient monitoring wells in the upper and lower aquifers to confirm background ground-water quality.**

   There were no detections of benzene, chloroethane, or any other indicator VOCs in samples from upgradient monitoring wells in either the upper or lower aquifer wells.

4. **Collect and analyze groundwater samples from upper and lower aquifer monitoring wells to provide indication of any changes in groundwater quality at downgradient boundaries.**

   Indicator VOCs were detected at trace concentrations in samples from downgradient wells MW14 and MW15, screened in the upper aquifer. Benzene was detected in the sample collected from MW15; however, the concentration was very low (1.0 µg/l) and did not exceed the baseline value of 10 µg/l for this well. TCE was detected at a trace,

estimated concentration of 1.3 µg/l in the sample collected from MW14. This concentration is also very low and did not exceed the baseline value of 10 µg/l.

Arsenic was detected at MW15, but the concentration (32 µg/l) is below the maximum baseline concentrations of 59 µg/l for this well. MW15 is located downgradient of the Town of Griffith Landfill and occasional detections are attributed to the landfill and not the ACS Site itself.

In the lower aquifer, indicator VOCs were detected at downgradient monitoring wells MW32, MW33, MW53, and sentinel wells MW58 and MW59.

TCE was detected at a trace, estimated concentration of 1.2 µg/l in the sample collected from MW32. MWH will continue to monitor this well according to the LTGMP.

Benzene (2.8 µg/l), cis-1, 2-dichloroethene (1.3 µg/l), and TCE (3.9 µg/l) were detected below reporting limits in the sample collected from MW33. These concentrations were very low and did not exceed baseline values. MWH will continue to monitor this well according to the LTGMP.

Benzene was detected in the sample collected from MW53 at a concentration of 3.2 µg/l. A pumping system capable of capturing benzene impacted groundwater in the vicinity of MW53 has been installed and began operating in September 2007. Benzene concentrations have been decreasing over the past two monitoring events since the system was turned on. The system will continue to extract groundwater for treatment at this location.

TCE was detected in samples from MW58 and MW59 in March. Confirmation samples were collected from these wells in July. No TCE was detected in the confirmation samples indicating that the detections in March are not representative of Site conditions, but more likely related to incompletely decontaminated sampling equipment. Benzene was not detected in the samples collected from sentinel wells MW58 and MW59 in March. These results suggest that the lower aquifer extraction system near MW53 is effective in capturing and treating groundwater impacted with benzene in the lower aquifer at this location. MWH will continue sampling these wells to monitor groundwater quality in the lower aquifer at the downgradient boundary.

5. **Collect and analyze groundwater samples from the interior of the areas of contaminated groundwater to document how concentrations change with time as the remediation progresses.**

Sampling data from the upper aquifer indicate that concentrations within contaminated areas outside the

barrier wall continue to decrease. The concentrations of benzene and chloroethane in samples from MW48 and MW49 have decreased over the last several years. Concentrations in samples from MW06 and MW45 have also demonstrated decreasing trends during recent sampling events. Concentrations of benzene and chloroethane in samples from MW19 are variable but below their respective baseline values. These decreasing trends in the upper aquifer are likely the combined result of the barrier wall, the PGCS, the ISCO treatments near Colfax Street and Reder Road, as well as natural attenuation.

In samples collected from lower aquifer interior wells, concentrations of indicator VOCs have been decreasing. Concentrations of benzene and chloroethane in samples from MW09R and adjacent nested well MW29 have decreased over the past several sampling events. Benzene and chloroethane concentrations in samples collected from MW56 are also decreasing since the replacement of ATMW4D and installation of a pumping system in this well. A similar pumping system is operating at MW10C to capture impacted groundwater and prevent its migration in the lower aquifer. In addition, beginning in September 2007, the lower aquifer pumping system was expanded to include MW30 and the area near MW53. MWH will continue to monitor these locations according to the LTGMP.

The third quarter groundwater sampling event was conducted in September 2008. It consisted of monitoring for indicator VOCs at lower and upper aquifer wells specified in the LTGMP. In addition, five residential wells were sampled for “full-scan” analysis This paragraph should be in past tense if sampling took place in September.

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**Table 1**
**Groundwater Elevation Data - March 2008**
**American Chemical Service NPL Site**
**Griffith, Indiana**

| Monitoring Point Designation | Reference Points | | | March 24, 2008 | | Notes |
|---|---|---|---|---|---|---|
| | East | North | TOC | Level | Elevation | |
| **Upper Aquifer Monitoring Wells** | | | | | | |
| MW06 | 5298 | 5520 | 655.28 | 20.90 | 634.38 | |
| MW11 | 6377 | 7329 | 640.47 | 4.82 | 635.65 | |
| MW12 | 6019 | 6352 | 642.74 | 6.62 | 636.12 | |
| MW13 | 5050 | 7814 | 634.08 | 2.88 | 631.20 | |
| MW14 | 4882 | 6995 | 638.56 | 7.84 | 630.72 | |
| MW15 | 4721 | 5003 | 637.89 | 4.00 | 633.89 | |
| MW17 | 5656 | 5677 | 647.10 | 12.25 | 634.85 | |
| MW19 | 5231 | 4943 | 635.78 | 2.26 | 633.52 | |
| MW37 | 5395 | 7976 | 636.78 | 4.23 | 632.55 | |
| MW38 | 5903 | 8216 | 636.51 | 4.19 | 632.32 | |
| MW39 | 6253 | 7947 | 637.77 | 4.20 | 633.57 | |
| MW40 | 6349 | 6831 | 639.46 | 3.33 | 636.13 | |
| MW41 | 6242 | 4517 | 632.74 | 5.45 | 627.29 | |
| MW42 | 6264 | 3808 | 632.32 | 4.25 | 628.07 | |
| MW43 | 5880 | 3719 | 633.56 | 5.26 | 628.30 | |
| MW44 | 5390 | 4303 | 633.04 | NM | NM | Damaged |
| MW45 | 5830 | 4388 | 635.35 | 6.81 | 628.54 | |
| MW46 | 4526 | 7424 | 633.32 | 2.59 | 630.73 | |
| MW47 | 5958 | 5084 | 640.54 | 5.33 | 635.21 | |
| MW48 | 5669 | 7814 | 636.36 | 3.81 | 632.55 | |
| MW49 | 5551 | 7650 | 637.00 | 4.41 | 632.59 | |
| M4S | 4953 | 6537 | 633.42 | 1.37 | 632.05 | |

**Notes:**
All depth measurements and elevations are in units of feet.
Elevation is in feet above mean sea level.
TOC = top of casing
NM = not measured

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**Table 1**
**Groundwater Elevation Data - March 2008**
**American Chemical Service NPL Site**
**Griffith, Indiana**

| Monitoring Point Designation | Reference Points | | | March 24, 2008 | | Notes |
|---|---|---|---|---|---|---|
| | East | North | TOC | Level | Elevation | |
| **Staff Gauges & Piezometers** | | | | | | |
| P13 | 4878 | 5735 | 651.20 | 16.77 | 634.43 | |
| P17 | 4584 | 6006 | 651.90 | NM | NM | Destroyed |
| P23 | 4689 | 7018 | 636.18 | 5.33 | 630.85 | |
| P25 | 5131 | 7510 | 633.33 | NM | NM | Could not open |
| P26 | 4764 | 7309 | 634.23 | 3.57 | 630.66 | |
| P27 | 4904 | 7020 | 639.70 | 9.17 | 630.53 | |
| P28 | 5883 | 7486 | 644.53 | 9.72 | 634.81 | |
| P31 | 5480 | 7159 | 641.03 | DRY | DRY | |
| P32 | 5746 | 7026 | 642.32 | DRY | DRY | |
| P36 | 5410 | 6851 | 645.89 | DRY | DRY | |
| P40 | 5931 | 7241 | 638.77 | 3.97 | 634.80 | |
| P41 | 5663 | 7377 | 637.23 | 3.20 | 634.03 | |
| P49 | 5145 | 6949 | 638.98 | 10.94 | 628.04 | |
| SG8R | 5409 | 5252 | 634.70 | NM | NM | Destroyed |
| SG8R2 | 5409 | 5242 | 632.67 | NM | NM | Destroyed |
| SG8R3 | 5255 | 5406 | 636.32 | 4.74 | 634.46 | Re-installed 9/22/06, resurveyed 9/27/06 |
| SG5 | 5464 | 7713 | 633.36 | NM | NM | Destroyed |
| SG5R | 5465 | 7714 | 633.35 | 4.34 | 631.09 | Re-installed 9/22/06, resurveyed 9/27/07 |
| SG13 | 4819 | 7209 | 631.53 | 5.00 | 629.93 | Reference TOC is the 6.0' mark on staff gauge |
| SG14 | 5109 | 6523 | 635.44 | NM | NM | Destroyed |
| SG14R | 5093 | 6598 | 635.59 | 3.64 | 632.63 | Re-installed 9/22/06, resurveyed 9/27/07 |
| **PGCS Piezometer Sets** | | | | | | |
| P81 | 5577 | 7581 | 636.19 | 3.89 | 632.30 | |
| P82 | 5577 | 7572 | 635.77 | 3.90 | 631.87 | |
| P83 | 5577 | 7561.6 | 635.95 | 3.15 | 632.80 | |
| P84 | 5322 | 7603 | 634.35 | 2.59 | 631.76 | |
| P85 | 5326 | 7594 | 634.08 | 2.38 | 631.70 | |
| P86 | 5329 | 7585 | 634.41 | 3.12 | 631.29 | |
| P87 | 5121 | 7466 | 633.88 | 2.82 | 631.06 | |
| P88 | 5130 | 7460 | 633.90 | 2.73 | 631.17 | |
| P89 | 5137 | 7454 | 634.02 | 2.91 | 631.11 | |
| P90 | 4881 | 7152 | 634.45 | 4.04 | 630.41 | |
| P91 | 4889 | 7145 | 634.59 | 4.35 | 630.24 | |
| P92 | 4896 | 7138.1 | 633.87 | 3.55 | 630.32 | |

**Notes:**

All depth measurements and elevations are in units of feet.

Elevation is in feet above mean sea level.

TOC = top of casing

NM = not measured

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**Table 1**
**Groundwater Elevation Data - March 2008**
**American Chemical Service NPL Site**
**Griffith, Indiana**

| Monitoring Point Designation | Reference Points | | | March 24, 2008 | | Notes |
|---|---|---|---|---|---|---|
| | East | North | TOC | Level | Elevation | |
| **BWES Water Level and Piezometer Pairs** | | | | | | |
| P93 | 5136 | 7067 | 639.05 | 7.43 | 631.62 | |
| P94 | 5146 | 7061 | 640.99 | 13.43 | 627.56 | |
| P95 | 5146 | 6532 | 638.58 | 5.53 | 633.05 | |
| P96 | 5156 | 6537 | 641.26 | 16.96 | 624.30 | |
| P105 | 5885 | 6678 | 638.86 | 2.49 | 636.37 | |
| P106 | 5871 | 6685 | 638.10 | 10.12 | 627.98 | |
| P107 | 5766 | 7339 | 637.42 | 2.95 | 634.47 | |
| P108 | 5757 | 7324 | 638.13 | 7.48 | 630.65 | |
| P109 | 5740 | 6387 | 644.30 | 8.26 | 636.04 | |
| P110 | 5705 | 6382 | 647.68 | 20.41 | 627.27 | |
| P111 | 5551 | 5950 | 650.03 | 14.76 | 635.27 | |
| P112 | 5525 | 5960 | 653.36 | 26.50 | 626.86 | |
| P113 | 5309 | 5693 | 657.53 | 30.25 | 627.28 | |
| ORCPZ102 | 5331 | 5612 | 652.47 | 18.01 | 634.46 | |
| P114 | 5035 | 5729 | 653.69 | 25.84 | 627.85 | |
| P115 | 4970 | 5708 | 652.50 | 18.11 | 634.39 | |
| P116 | 5031 | 6087 | 646.26 | 18.53 | 627.73 | |
| P117 | 5014 | 6087 | 643.93 | 9.73 | 634.20 | |
| P118 | 5402 | 6539 | 645.52 | 18.81 | 626.71 | |

**Notes:**
All depth measurements and elevations are in units of feet.
Elevation is in feet above mean sea level.
TOC = top of casing

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**Table 1**
**Groundwater Elevation Data - March 2008**
**American Chemical Service NPL Site**
**Griffith, Indiana**

| Monitoring Point Designation | Reference Points | | | March 24, 2008 | | Notes |
|---|---|---|---|---|---|---|
| | East | North | TOC | Level | Elevation | |
| **Lower Aquifer Wells** | | | | | | |
| MW07 | 6113 | 6732 | 641.46 | 18.27 | 623.19 | |
| MW08 | 5934 | 7506 | 640.43 | 17.74 | 622.69 | |
| MW09R | 4893 | 6990 | 639.05 | 15.93 | 623.12 | |
| MW10C | 5229 | 7554 | 637.45 | NM | NM | Well contains built-in pump |
| MW23 | 4717 | 7404 | 633.31 | 10.24 | 623.07 | |
| MW24 | 4596 | 8033 | 635.22 | 12.53 | 622.69 | |
| MW28 | 5657 | 5695.6 | 648.77 | 24.79 | 623.98 | |
| MW50 | 5269 | 5383 | 649.43 | 25.42 | 624.01 | |
| MW51 | 5198 | 7767 | 634.16 | 11.65 | 622.51 | |
| MW52 | 4996 | 7814 | 632.74 | 10.14 | 622.60 | |
| MW54R | 5589.8 | 7592.2 | 637.51 | 14.67 | 622.84 | |
| M4D | 4949 | 6538 | 633.32 | 9.94 | 623.38 | |

| Monitoring Point Designation | Reference Points | | | March 24, 2008 | | Notes |
|---|---|---|---|---|---|---|
| | East | North | TOC | Level | Elevation | |
| **Sentinel Wells** | | | | | | |
| MW58 | 7937.20 | 8164.36 | 635.10 | 12.50 | 622.60 | |
| MW59 | 5032.32 | 8140.71 | 636.22 | 13.68 | 622.54 | |

**Notes:**
All depth measurements and elevations are in units of feet.
Elevation is in feet above mean sea level.
TOC = top of casing

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# Table 2
# Field Parameter Data - March 2008
# American Chemical Service NPL Site
# Griffith, Indiana

| Well ID | pH (std. units) | Electrical Conductivity (mS/cm) | Temperature ($^{o}$C) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Oxidation-Reduction Potential (mV) |
|---|---|---|---|---|---|---|
| **Upper Aquifer Monitoring Wells** | | | | | | |
| MW06 | 6.81 | 2.2 | 14.6 | 37 | 3.64 | -19 |
| MW11 | 6.16 | 0.31 | 8.8 | 37 | 0.00 | 43 |
| MW12 | 6.78 | 0.45 | 11.4 | 3.7 | 7.20 | -67 |
| MW13 | 6.90 | 1.3 | 7.5 | 0.0 | 0.00 | -93 |
| MW14 | 6.04 | 0.18 | 8.2 | 17.0 | 9.02 | 188 |
| MW15 | 7.14 | 2.6 | 9.6 | 4.2 | 2.52 | -115 |
| MW17 | 6.68 | 99 | 11.7 | 6.9 | 0.39 | 273 |
| MW19 | 7.35 | 2.9 | 10.5 | 8.2 | 0.00 | -161 |
| MW37 | 6.31 | 0.19 | 7.3 | 0.0 | 0.00 | -23 |
| MW39 | 7.02 | 1.4 | 7.3 | 31 | 0.00 | -111 |
| MW42 | 6.65 | 1.2 | 7.1 | 1.3 | 0.00 | 35 |
| MW43 | 6.58 | 1.7 | 9.4 | 8.8 | 0.00 | -47 |
| MW44 | NM | NM | NM | NM | NM | NM |
| MW45 | 7.24 | 0.72 | 6.4 | 7.2 | 0.00 | -108 |
| MW48 | 6.86 | 1.5 | 7.5 | 0.05 | 0.50 | -139 |
| MW49 | 5.84 | 0.33 | 6.4 | 8.3 | 1.80 | 74 |

**Notes:**

Values are those recorded upon stabilization during groundwater purging

mS/cm = milliSiemens per centimeter

$^{o}$C = Degrees Centrigrade

NTU = nephelometric turbidity units

mg/L = milligrams per liter

mV = millivolts

NM = Not measured due to damaged well casing. MW44 could not be sampled.

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**Table 2**
**Field Parameter Data - March 2008**
**American Chemical Service NPL Site**
**Griffith, Indiana**

| Well ID | pH (std. units) | Electrical Conductivity (mS/cm) | Temperature ($^{o}$C) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Oxidation-Reduction Potential (mV) |
|---|---|---|---|---|---|---|
| **Lower Aquifer Monitoring Wells** | | | | | | |
| MW08 | 7.63 | 0.46 | 13.1 | 0.85 | 0.00 | -154 |
| MW09R | 7.76 | 0.72 | 12.5 | 5.8 | 0.00 | -187 |
| MW10C | 7.25 | 1.3 | 12.4 | 0.00 | 0.00 | -146 |
| MW23 | 7.02 | 1.7 | 12.1 | 17 | 0.00 | -101 |
| MW28 | 7.42 | 0.90 | 13.6 | 1.8 | 0.00 | -120 |
| MW29 | 7.06 | 0.96 | 12.2 | 2.7 | 0.00 | -126 |
| MW30 | 7.34 | 1.2 | 11.2 | 0 | 0.00 | -166 |
| MW31 | 7.45 | 0.74 | 13.0 | 6.2 | 0.00 | -141 |
| MW32 | 7.22 | 0.99 | 12.0 | 7.4 | 0.00 | -100 |
| MW33 | 6.88 | 1.7 | 10.1 | 0.0 | 0.00 | -103 |
| MW51 | 7.06 | 1.6 | 11.0 | 4.9 | 0.00 | -136 |
| MW52 | 7.12 | 1.5 | 12.3 | 2.8 | 0.00 | -138 |
| MW53 | 7.07 | 1.4 | 11.3 | 0.0 | 0.00 | -136 |
| MW54R | 7.41 | 1.3 | 11.7 | 1.9 | 0.00 | -182 |
| MW55 | 7.43 | 99 | 11.3 | 4.2 | 0.00 | -113 |
| MW56 | 7.23 | 1.1 | 13.8 | 0.0 | 0.00 | -174 |
| MW58 | 6.92 | 3.0 | 13.2 | 20 | 0.00 | -128 |
| MW59 | 6.99 | 13 | 11.5 | 60 | 0.00 | -161 |

**Notes:**
Values are those recorded upon stabilization during groundwater purging
mS/cm = milliSiemens per centimeter
$^{o}$C = Degrees Centrigrade
NTU = nephelometric turbidity units
mg/L = milligrams per liter
mV = millivolts

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# Table 3
## Summary of Groundwater Sampling Activities - March 2008
## American Chemical Service, Inc. NPL Site
## Griffith, Indiana

| Monitoring Well ID | Location with Respect to Area of Groundwater Contamination | Date Sampled | Indicator VOCs | Indicator SVOCs | Arsenic | Quality Control Sample ID |
|---|---|---|---|---|---|---|
| **Upper Aquifer Monitoring Wells** | | | | | | |
| MW06 | Interior | 3/31/2008 | X | X | X | MS/MSD |
| MW11 | Upgradient | 3/26/2008 | X | | | |
| MW12 | Upgradient | 3/26/2008 | X | | | |
| MW13 | Downgradient | 3/28/2008 | X | | | |
| MW14 | Downgradient | 3/29/2008 | X | | | |
| MW15 | Downgradient | 3/26/2008 | X | | X | |
| MW17 | Upgradient | 3/25/2008 | X | | | DUP01 |
| MW19 | Interior | 3/26/2008 | X | X | | |
| MW37 | Downgradient | 3/29/2008 | X | | | |
| MW39 | Transgradient | 3/29/2008 | X | | | |
| MW42 | Downgradient | 3/26/2008 | X | | | |
| MW43 | Downgradient | 3/26/2008 | X | | X | DUP02 |
| MW44 | Downgradient | NS | | | | |
| MW45 | Interior | 3/26/2008 | X | | | |
| MW48 | Interior | 3/31/2008 | X | | | |
| MW49 | Interior | 3/31/2008 | X | | | |

**Notes:**

X - Indicates sample was analyzed for selected parameter.

Indicator Volatile Organic Compounds (VOCs) - Includes the parameters 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, benzene, chloroethane, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, trans-1,2-dichloroethene, and vinyl chloride.

Indicator SVOCs - Includes the parameter Bis(2-chloroethyl)ether.

NS - Well was not sampled due to damaged well casing.

DUP - Duplicate sample

MS/MSD - Matrix spike/matrix spike duplicate

**Table 3**
**Summary of Groundwater Sampling Activities - March 2008**
**American Chemical Service, Inc. NPL Site**
**Griffith, Indiana**

| Monitoring Well ID | Location with Respect to Area of Groundwater Contamination | Date Sampled | Indicator VOCs | Indicator SVOCs | Arsenic | Quality Control Sample ID |
|---|---|---|---|---|---|---|
| **Lower Aquifer Monitoring Wells** | | | | | | |
| MW08 | Downgradient | 3/25/2008 | X | | | |
| MW09R | Interior | 3/29/2008 | X | X | | DUP04 |
| MW10C | Interior | 3/28/2008 | X | | | DUP03 |
| MW23 | Downgradient | 3/26/2008 | X | | | |
| MW28 | Upgradient | 3/25/2008 | X | | | |
| MW29 | Interior | 3/29/2008 | X | | | |
| MW30 | Downgradient | 3/28/2008 | X | | | |
| MW31 | Downgradient | 3/25/2008 | X | | | |
| MW32 | Downgradient | 3/25/2008 | X | | | |
| MW33 | Downgradient | 3/28/2008 | X | | | |
| MW51 | Downgradient | 3/28/2008 | X | | | |
| MW52 | Downgradient | 3/28/2008 | X | | | |
| MW53 | Downgradient | 3/28/2008 | X | | | |
| MW54R | Downgradient | 3/28/2008 | X | | | |
| MW55 | Downgradient | 3/28/2008 | X | | | |
| MW56 | Interior | 3/28/2008 | X | | | |
| MW58 | Downgradient | 3/25/2008 | X | | | |
| MW59 | Downgradient | 3/25/2008 | X | | | MS/MSD |

**Notes:**
X - Indicates sample was analyzed for selected parameter.
Indicator Volatile Organic Compounds (VOCs) - Includes the parameters 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, benzene, chloroethane, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, trans-1,2-dichloroethene, and vinyl chloride.
Indicator SVOCs - Includes the parameter Bis(2-chloroethyl)ether.
DUP - Duplicate sample
MS/MSD - Matrix spike/matrix spike duplicate

**Table 4**
**Summary of Detections in Samples from Upper Aquifer Monitoring Wells - March 2008**
**American Chemical Service NPL Site**
**Griffith, Indiana**

| | MW06 | | | MW11 | | | MW12 | | | MW13 | | | MW14 | | | MW15 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Interior | | | Upgradient | | | Upgradient | | | Downgradient | | | Downgradient | | | Downgradient | | |
| **Analyte** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| 1,1-Dichloroethene | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | |
| 1,2-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Benzene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | **1.0** | J/ | *10* |
| Chloroethane | **3.1** | J/ | *720* | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| cis-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Tetrachloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| trans-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Trichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | **1.3** | J/ | *100* | 5 | U/ | |
| Vinyl Chloride | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| **Semi-volatile Organic Compounds** | | | | | | | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | 10 | U/ | | NS | | | NS | | | NS | | | NS | | | NS | | |
| **Inorganics** | | | | | | | | | | | | | | | | | | |
| Arsenic | **7.5** | JB/UB | *72* | NS | | | NS | | | NS | | | NS | | | **32** | | *59* |

**Notes:**

All concentrations in micrograms per liter (ug/l)

*BV* = Baseline Value (only provided for detected compounds).

NS = Not sampled for particular analyte

*X/* = Data qualifier added by laboratory

*/X* = Data qualifier added by data validator

U = Compound was analyzed for but not detected

J = Estimated value; concentration is below reporting limit

UJ = Analyte is not detected and the indicated reporting limit is an estimated value

UB = Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

JB = Detected in the associated Method Blank at a concentration between the Reporting Limit and Method Detection Limit.

**Bold** result indicates the compound was detected

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**Table 4**
**Summary of Detections in Samples from Upper Aquifer Monitoring Wells - March 2008**
**American Chemical Service NPL Site**
**Griffith, Indiana**

| | MW17 | | | MW19 | | | MW37 | | | MW39 | | | MW42 | | | MW43 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Upgradient | | | Interior | | | Downgradient | | | Transgradient | | | Downgradient | | | Downgradient | | |
| **Analyte** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** | **Mar-08** | | ***BV*** |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| 1,1-Dichloroethene | 5 | U/ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | |
| 1,2-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Benzene | 5 | U/ | | **6.5** | | *10* | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Chloroethane | 10 | U/ | | **8.4** | J/ | *20* | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| cis-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Tetrachloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| trans-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Trichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Vinyl Chloride | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| **Semi-volatile Organic Compounds** | | | | | | | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | NS | | | **6.0** | J/ | *12* | NS | | | NS | | | NS | | | NS | | |
| **Inorganics** | | | | | | | | | | | | | | | | | | |
| Arsenic | NS | | | NS | | | NS | | | NS | | | NS | | | 10 | U/ | |

**Notes:**

All concentrations in micrograms per liter (ug/l)

*BV* = Baseline Value (only provided for detected compounds).

NS = Not sampled for particular analyte

*X/* = Data qualifier added by laboratory

*/X* = Data qualifier added by data validator

U = Compound was analyzed for but not detected

J = Estimated value; concentration is below reporting limit

UJ = Analyte is not detected and the indicated reporting limit is an estimated value

UB = Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

JB = Detected in the associated Method Blank at a concentration between the Reporting Limit and Method Detection Limit.

**Bold** result indicates the compound was detected

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**Table 4**
**Summary of Detections in Samples from Upper Aquifer Monitoring Wells - March 2008**
**American Chemical Service NPL Site**
**Griffith, Indiana**

| Analyte | MW44 Downgradient Mar-08 | *BV* | MW45 Interior Mar-08 | | *BV* | MW48 Interior Mar-08 | | *BV* | MW49 Interior Mar-08 | | *BV* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | |
| 1,1-Dichloroethane | NS | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| 1,1-Dichloroethene | NS | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | |
| 1,2-Dichloroethane | NS | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Benzene | NS | | 5 | U/ | | **130** | | *9,500* | **40** | | *6,750* |
| Chloroethane | NS | | 10 | U/ | | **8.4** | J/ | *1,000* | 10 | U/ | |
| cis-1,2-Dichloroethene | NS | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Tetrachloroethene | NS | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| trans-1,2-Dichloroethene | NS | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Trichloroethene | NS | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Vinyl Chloride | NS | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| **Semi-volatile Organic Compounds** | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | NS | | NS | | | NS | | | NS | | |
| **Inorganics** | | | | | | | | | | | |
| Arsenic | NS | | NS | | | NS | | | NS | | |

**Notes:**

All concentrations in micrograms per liter (ug/l)

*BV* = Baseline Value (only provided for detected compounds).

NS = Not sampled for particular analyte

*X*/ = Data qualifier added by laboratory

/*X* = Data qualifier added by data validator

U = Compound was analyzed for but not detected

J = Estimated value; concentration is below reporting limit

UJ = Analyte is not detected and the indicated reporting limit is an estimated value

UB = Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

JB = Detected in the associated Method Blank at a concentration between the Reporting Limit and Method Detection Limit.

**Bold** result indicates the compound was detected

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# Table 5
## Summary of Detections in Samples from Lower Aquifer Monitoring Wells - March 2008
## American Chemical Service NPL Site
## Griffith, Indiana

| Analyte | MW08 Downgradient Mar-08 | | BV | MW09R Interior Mar-08 | | BV | MW10C Interior Mar-08 | | BV | MW23 Downgradient Mar-08 | | BV | MW28 Upgradient Mar-08 | | BV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| 1,1-Dichloroethene | 5 | U/ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/ | |
| 1,2-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Benzene | 5 | U/ | | **4.4** | J/ | *310* | **330** | | *150* | 5 | U/ | | 5 | U/ | |
| Chloroethane | 10 | U/ | | 10 | U/ | | **230** | J/ | *420* | 10 | U/ | | 10 | U/ | |
| cis-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Tetrachloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| trans-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Trichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Vinyl Chloride | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| **Semi-volatile Organic Compounds** | | | | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | NS | | | **4.7** | J/ | *50* | NS | | | NS | | | NS | | |
| **Inorganics** | | | | | | | | | | | | | | | |
| Arsenic | NS | | | NS | | | NS | | | NS | | | NS | | |

**Notes:**

All concentrations in micrograms per liter (ug/l)

*BV* = Baseline Value (only provided for detected compounds)

*NA* = Not available

NS = Not sampled for particular analyte

RE = Data from re-sampling event in July 2008

*X* / = Data qualifier added by laboratory

/*X* = Data qualifier added by data validator

U = Compound was analyzed for but not detected

J = Estimated value; concentration is below reporting limit

UJ = Analyte is not detected and the indicated reporting limit is an estimated value

**Bold** result indicates the compound was detected

**Bold** and Boxed results indicates an exceedance of the compound's baseline value

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# Table 5
## Summary of Detections in Samples from Lower Aquifer Monitoring Wells - March 2008
## American Chemical Service NPL Site
## Griffith, Indiana

| Analyte | MW29 Interior Mar-08 | | BV | MW30 Downgradient Mar-08 | | BV | MW31 Downgradient Mar-08 | | BV | MW32 Downgradient Mar-08 | | BV | MW33 Downgradient Mar-08 | | BV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| 1,1-Dichloroethene | 5 | U/UJ | | 5 | U/UJ | | 5 | U/ | | 5 | U/ | | 5 | U/UJ | |
| 1,2-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Benzene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | **2.8** | J/ | *10* |
| Chloroethane | **39** | J/ | *10* | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| cis-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | **1.3** | J/ | *NA* |
| Tetrachloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| trans-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Trichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | **1.2** | J/ | *10* | **3.9** | J/ | *10* |
| Vinyl Chloride | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| **Semi-volatile Organic Compounds** | | | | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | NS | | | NS | | | NS | | | NS | | | NS | | |
| **Inorganics** | | | | | | | | | | | | | | | |
| Arsenic | NS | | | NS | | | NS | | | NS | | | NS | | |

**Notes:**

All concentrations in micrograms per liter (ug/l)

*BV* = Baseline Value (only provided for detected compounds)

*NA* = Not available

NS = Not sampled for particular analyte

RE = Data from re-sampling event in July 2008

*X* / = Data qualifier added by laboratory

/*X* = Data qualifier added by data validator

U = Compound was analyzed for but not detected

J = Estimated value; concentration is below reporting limit

UJ = Analyte is not detected and the indicated reporting limit is an estimated value

**Bold** result indicates the compound was detected

**Bold** and Boxed results indicates an exceedance of the compound's baseline value

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# Table 5
## Summary of Detections in Samples from Lower Aquifer Monitoring Wells - March 2008
## American Chemical Service NPL Site
## Griffith, Indiana

| Analyte | MW51 Downgradient Mar-08 | | *BV* | MW52 Downgradient Mar-08 | | *BV* | MW53 Downgradient Mar-08 | | *BV* | MW54R Downgradient Mar-08 | | *BV* | MW55 Downgradient Mar-08 | | *BV* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| 1,1-Dichloroethene | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | | 5 | U/UJ | |
| 1,2-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Benzene | 5 | U/ | | 5 | U/ | | **3.2** | J/ | *10* | 5 | U/ | | 5 | U/ | |
| Chloroethane | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| cis-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Tetrachloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| trans-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Trichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Vinyl Chloride | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| **Semi-volatile Organic Compounds** | | | | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | NS | | | NS | | | NS | | | NS | | | NS | | |
| **Inorganics** | | | | | | | | | | | | | | | |
| Arsenic | NS | | | NS | | | NS | | | NS | | | NS | | |

**Notes:**

All concentrations in micrograms per liter (ug/l)

*BV* = Baseline Value (only provided for detected compounds)

*NA* = Not available

NS = Not sampled for particular analyte

RE = Data from re-sampling event in July 2008

*X* / = Data qualifier added by laboratory

/*X* = Data qualifier added by data validator

U = Compound was analyzed for but not detected

J = Estimated value; concentration is below reporting limit

UJ = Analyte is not detected and the indicated reporting limit is an estimated value

**Bold** result indicates the compound was detected

**Bold** and Boxed results indicates an exceedance of the compound's baseline value

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# Table 5
## Summary of Detections in Samples from Lower Aquifer Monitoring Wells - March 2008
## American Chemical Service NPL Site
## Griffith, Indiana

| Analyte | MW56 Interior Mar-08 | | BV | MW58 Downgradient Mar-08 | | BV | MW58-RE Downgradient Jul-08 | | BV | MW59 Downgradient Mar-08 | | BV | MW59-RE Downgradient Jul-08 | | BV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| 1,1-Dichloroethene | 5 | U/UJ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| 1,2-Dichloroethane | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Benzene | **240** | | *NA* | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Chloroethane | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| cis-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Tetrachloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| trans-1,2-Dichloroethene | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | | 5 | U/ | |
| Trichloroethene | 5 | U/ | | **8.7** | | *NA* | 5 | U/ | | **7.6** | | *NA* | 5 | U/ | |
| Vinyl Chloride | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | | 10 | U/ | |
| **Semi-volatile Organic Compounds** | | | | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | NS | | | NS | | | NS | | | NS | | | NS | | |
| **Inorganics** | | | | | | | | | | | | | | | |
| Arsenic | NS | | | NS | | | NS | | | NS | | | NS | | |

**Notes:**

All concentrations in micrograms per liter (ug/l)

*BV* = Baseline Value (only provided for detected compounds)

*NA* = Not available

NS = Not sampled for particular analyte

RE = Data from re-sampling event in July 2008

*X/* = Data qualifier added by laboratory

*/X* = Data qualifier added by data validator

U = Compound was analyzed for but not detected

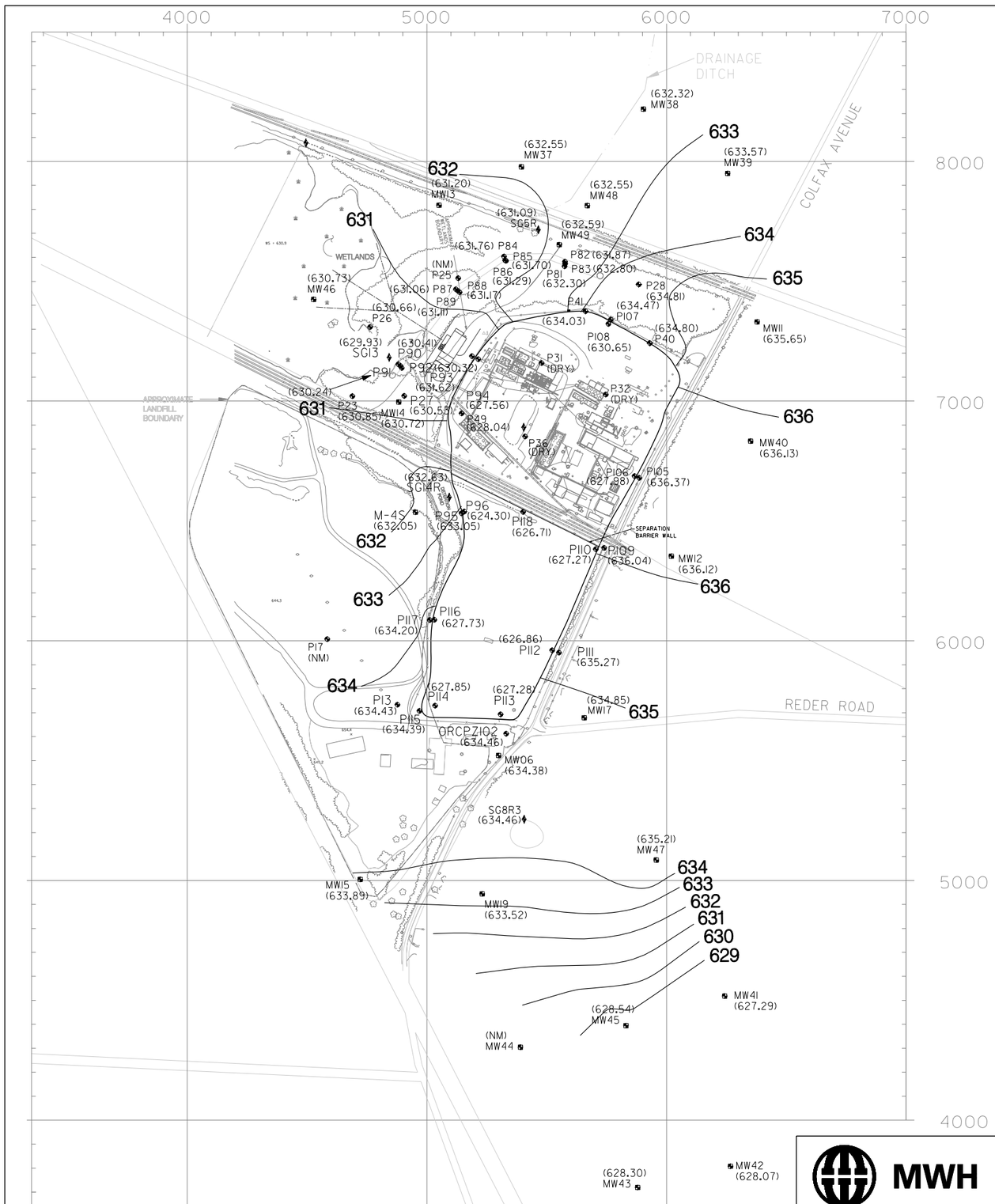
J = Estimated value; concentration is below reporting limit

UJ = Analyte is not detected and the indicated reporting limit is an estimated value

**Bold** result indicates the compound was detected

**Bold** and Boxed results indicates an exceedance of the compound's baseline value

JEF/acb
J:\405\0577 ACS\0301 GW Mon\March 2008\Report\Tables\Mar08-T5 LAresults.xls\Lower Aquifer
4050577.03010502




LEGEND

- BARRIER WALL
- PERIMETER GROUND WATER CONTAINMENT SYSTEM
- MWI3 — UPPER AQUIFER WELL LOCATION AND DESIGNATION
- P25 — PIEZOMETER LOCATION AND DESIGNATION
- SG5R — STAFF GAUGE LOCATION AND DESIGNATION
- (635.65) — GROUNDWATER ELEVATION
- (DRY) — WELL WAS DRY
- (NM) — GROUNDWATER ELEVATION WAS NOT MEASURED

**NOTES:**

1. P93 AND P94 WERE INSTALLED IN NOVEMBER 2004.
2. GROUNDWATER ELEVATIONS WERE MEASURED ON MARCH 24, 2008.
3. ALL ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL.

N

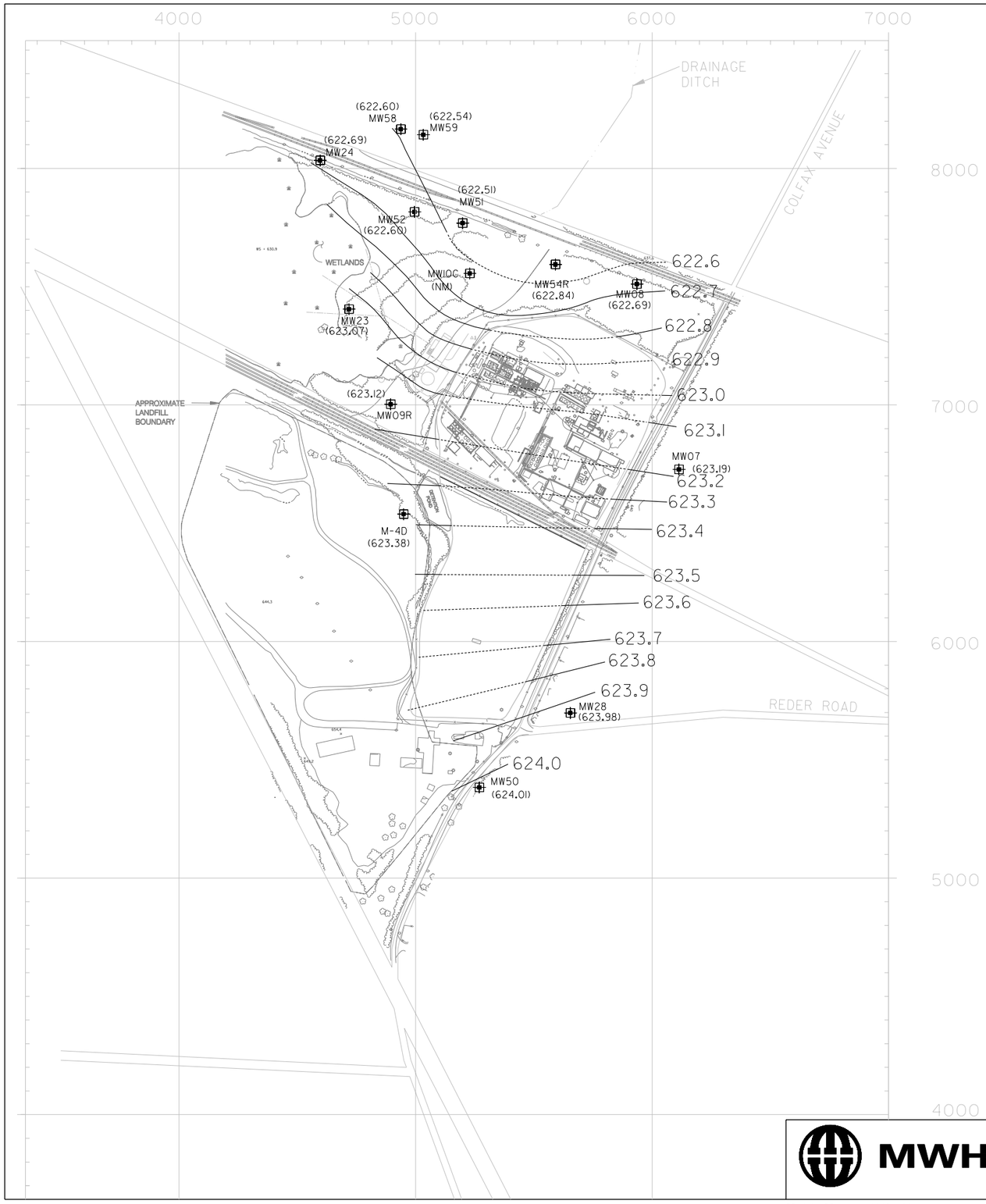
0 500 1000

SCALE IN FEET

| | | | |
|---|---|---|---|
| MWH | SCALE: AS SHOWN | AMERICAN CHEMICAL SERVICE, INC.<br>NPL SITE<br>GRIFFITH, INDIANA | UPPER AQUIFER WATER TABLE CONTOUR MAP<br>MARCH 2008 |

FIGURE 1

JOB No. MW Job No. FILE: \uschi4s02\warrenville\jobs\405\0577 ACS\Master Drawings folder•I\March 2008 GW Report\Mar08_Fig1.dgn Plot Date: 28-July-2008 $$time$$ DPP/JEF




LEGEND

| | |
|---|---|
| ——— | BARRIER WALL |
| ⊕ MW52 | LOWER AQUIFER WELL LOCATION AND DESIGNATION |
| (623.19) | GROUNDWATER ELEVATION |
| (NM) | NOT MEASURED |
| —— 622.6 | GROUNDWATER ELEVATION CONTOUR (DASHED WHERE APPROXIMATE) |

NOTES:

1. GROUNDWATER ELEVATIONS WERE MEASURED ON MARCH 24, 2008.
2. ALL ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL.

N

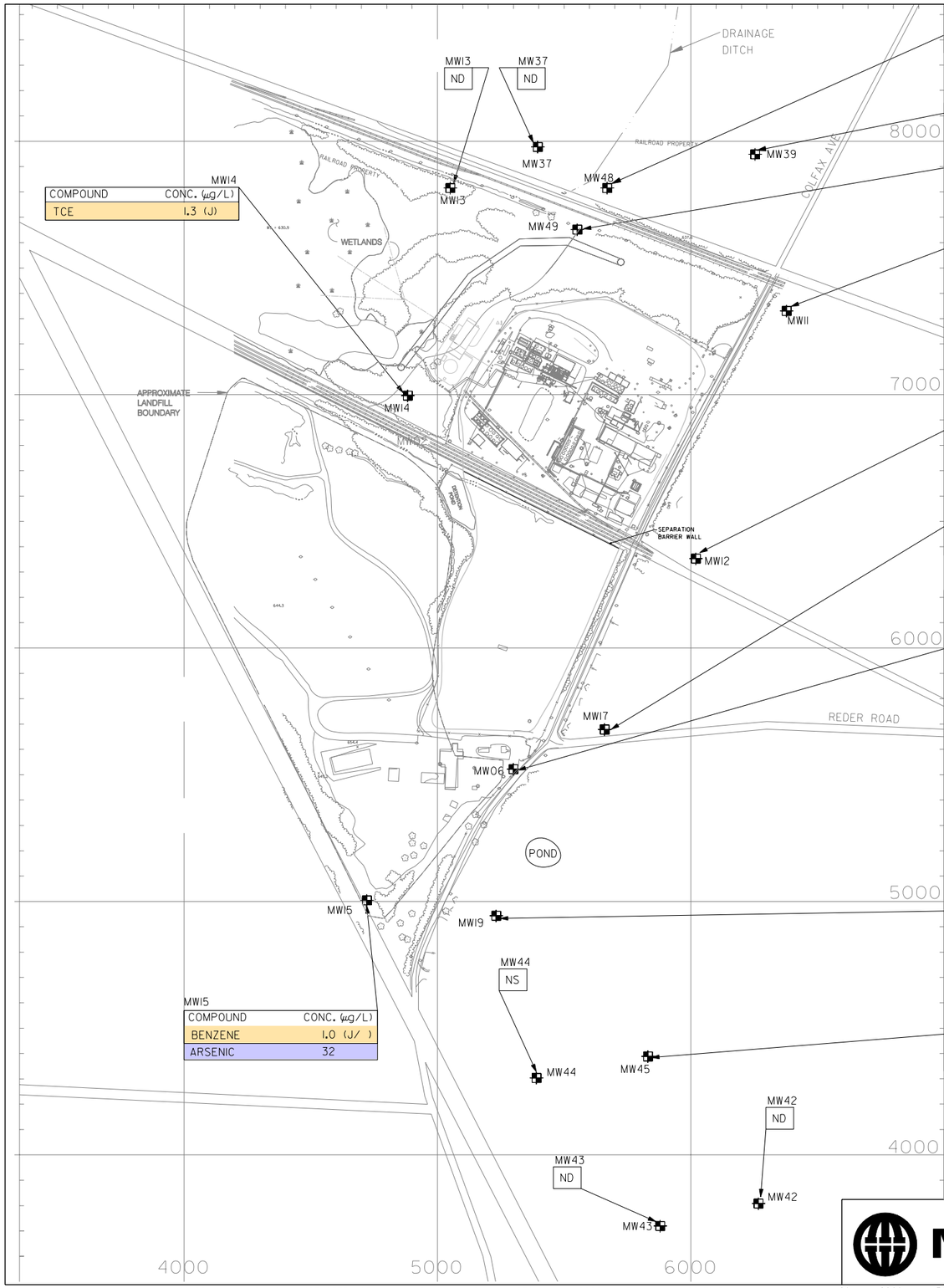
0 500 1000

SCALE IN FEET

MWH

| SCALE | | FIGURE |
|---|---|---|
| AS SHOWN | AMERICAN CHEMICAL SERVICE, INC.<br>NPL SITE<br>GRIFFITH, INDIANA | LOWER AQUIFER POTENTIOMETRIC SURFACE CONTOUR MAP<br>MARCH 2008 | 2 |

JOB No. MW Job No. FILE: \uschi4s02\warrenville\jobs\405\0577 ACS\Master Drawings folder•I\March 2008 GW Report\Mar08_Fig2.dgn Plot Date: 28-July-08 $$time$$ DPP/JEF




LEGEND

- MW11 — UPPER AQUIFER WELL LOCATION AND DESIGNATION
- BARRIER WALL
- PERIMETER GROUND WATER CONTAINMENT SYSTEM
- µg/L — MICROGRAMS PER LITER
- (J) — INDICATES AN ESTIMATED VALUE (LAB/VALIDATED)
- (JB) — INDICATES ANALYTE WAS DETECTED IN ASSOCIATED BLANK AT AN ESTIMATED VALUE (LAB/VALIDATED)
- (UB) — INDICATES ANALYTE WAS NOT DETECTED AT OR ABOVE INDICATED CONCENTRATION DUE TO BLANK CONTAMINATION (LAB/VALIDATED)
- ND — NO COMPOUNDS DETECTED
- NS — NOT SAMPLED
- B(2-C)E — BIS(2-CHLOROETHYL) ETHER
- TCE — TRICHLOROETHENE
- INDICATES A VOLATILE ORGANIC COMPOUND
- INDICATES A SEMI-VOLATILE ORGANIC COMPOUND
- INDICATES AN INORGANIC COMPOUND

NOTE: CONCENTRATIONS IN BOLD EXCEEDED BASELINE VALUES.

N

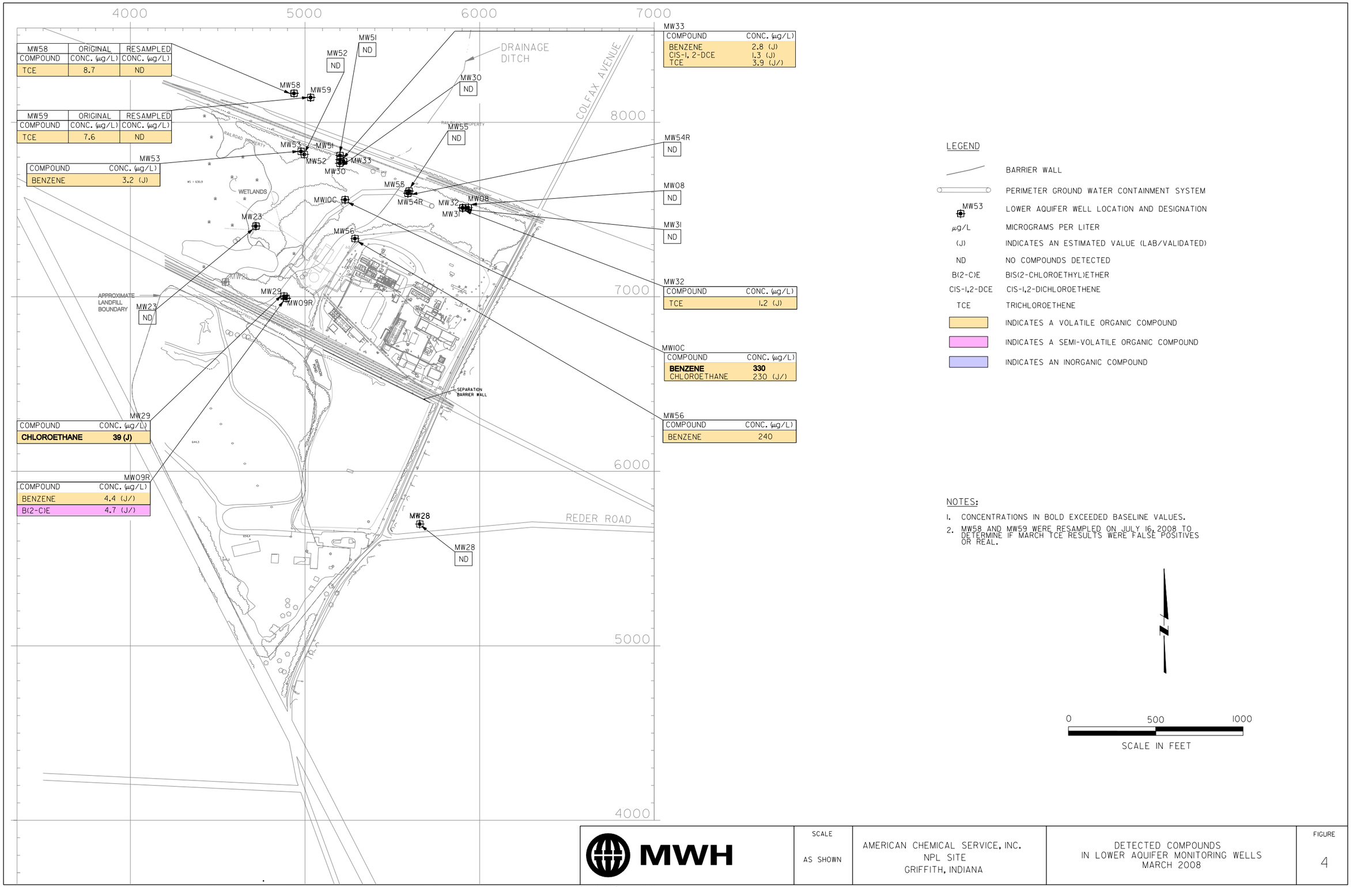
0 500 1000

SCALE IN FEET

MWH

| SCALE | | FIGURE |
|---|---|---|
| AS SHOWN | AMERICAN CHEMICAL SERVICE, INC.<br>NPL SITE<br>GRIFFITH, INDIANA | DETECTED COMPOUNDS<br>IN UPPER AQUIFER MONITORING WELLS<br>MARCH 2008 | 3 |

JOB No. MW Job No. FILE: \uschi4s02\warrenville\jobs\405\0577 ACS\Master Drawings folder\ 030\March 2008 GW Report\Mar08_Fig3.dgn Plot Date: 28-July-2008 11:50 DPP/JEF




LEGEND

- BARRIER WALL
- PERIMETER GROUND WATER CONTAINMENT SYSTEM
- MW53 — LOWER AQUIFER WELL LOCATION AND DESIGNATION
- µg/L — MICROGRAMS PER LITER
- (J) — INDICATES AN ESTIMATED VALUE (LAB/VALIDATED)
- ND — NO COMPOUNDS DETECTED
- B(2-C)E — BIS(2-CHLOROETHYL)ETHER
- CIS-1,2-DCE — CIS-1,2-DICHLOROETHENE
- TCE — TRICHLOROETHENE
- INDICATES A VOLATILE ORGANIC COMPOUND
- INDICATES A SEMI-VOLATILE ORGANIC COMPOUND
- INDICATES AN INORGANIC COMPOUND

NOTES:

1. CONCENTRATIONS IN BOLD EXCEEDED BASELINE VALUES.
2. MW58 AND MW59 WERE RESAMPLED ON JULY 16, 2008 TO DETERMINE IF MARCH TCE RESULTS WERE FALSE POSITIVES OR REAL.

0 500 1000

SCALE IN FEET

MWH

| SCALE | | FIGURE |
|---|---|---|
| AS SHOWN | AMERICAN CHEMICAL SERVICE, INC.<br>NPL SITE<br>GRIFFITH, INDIANA | DETECTED COMPOUNDS<br>IN LOWER AQUIFER MONITORING WELLS<br>MARCH 2008 | 4 |

JOB No. MW Job No. FILE: \uschi4s02\warrenville\jobs\405\0577 ACS\Master Drawings folder\ 030I\March 2008 GW Report\Mar08_Fig4.dgn Plot Date: 15-AUG-2007 9:00 DPP/JEF

# Appendix A

## Comparison of March 2008 Results to Maximum Baseline Concentrations

## Monitoring Wells

VOC Results
SVOC Results
Inorganic Results

# Monitoring Well Volatile Organic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-06 | 1,1-Dichloroethane | UG/L | 21 | | U | | 5 |
| MW-06 | 1,1-Dichloroethene | UG/L | 50 | | U | UJ | 5 |
| MW-06 | 1,2-Dichloroethane | UG/L | 50 | | U | | 5 |
| MW-06 | Benzene | UG/L | 320 | | U | | 5 |
| MW-06 | Chloroethane | UG/L | 720 | 3.1 | J | | 10 |
| MW-06 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-06 | Tetrachloroethene | UG/L | 50 | | U | | 5 |
| MW-06 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-06 | Trichloroethene | UG/L | 50 | | U | | 5 |
| MW-06 | Vinyl chloride | UG/L | 50 | | U | | 10 |
| MW-08 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-08 | 1,1-Dichloroethene | UG/L | 10 | | U | | 5 |
| MW-08 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-08 | Benzene | UG/L | 10 | | U | | 5 |
| MW-08 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-08 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-08 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-08 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-08 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-08 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-09R | 1,1-Dichloroethane | UG/L | 200 | | U | | 5 |
| MW-09R | 1,1-Dichloroethene | UG/L | 200 | | U | UJ | 5 |
| MW-09R | 1,2-Dichloroethane | UG/L | 200 | | U | | 5 |
| MW-09R | Benzene | UG/L | 310 | 4.4 | J | | 5 |
| MW-09R | Chloroethane | UG/L | 2,900 | | U | | 10 |
| MW-09R | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-09R | Tetrachloroethene | UG/L | 200 | | U | | 5 |
| MW-09R | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-09R | Trichloroethene | UG/L | 200 | | U | | 5 |
| MW-09R | Vinyl chloride | UG/L | 200 | | U | | 10 |
| MW-10C | 1,1-Dichloroethane | UG/L | 150 | | U | | 5 |
| MW-10C | 1,1-Dichloroethene | UG/L | 150 | | U | UJ | 5 |
| MW-10C | 1,2-Dichloroethane | UG/L | 150 | | U | | 5 |
| MW-10C | Benzene | UG/L | 150 | **330** | | | 120 |
| MW-10C | Chloroethane | UG/L | 420 | 230 | J | | 250 |
| MW-10C | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-10C | Tetrachloroethene | UG/L | 150 | | U | | 5 |
| MW-10C | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-10C | Trichloroethene | UG/L | 150 | | U | | 5 |
| MW-10C | Vinyl chloride | UG/L | 129 | | U | | 10 |
| MW-11 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-11 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-11 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-11 | Benzene | UG/L | 10 | | U | | 5 |
| MW-11 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-11 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |

**BOLD** = Exceedance of Highest Baseline Detection

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendix C.



DPP/ACB
J:\405\0577 ACS\0301 GW Mon\GW Monitoring Database\Current Database (Sept 2005)\ACS GW Database_2000.mdb[rptNewResults10VOCs]
4050577

# Monitoring Well Volatile Organic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-11 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-11 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-11 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-11 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-12 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-12 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-12 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-12 | Benzene | UG/L | 10 | | U | | 5 |
| MW-12 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-12 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-12 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-12 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-12 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-12 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-13 | 1,1-Dichloroethane | UG/L | 50 | | U | | 5 |
| MW-13 | 1,1-Dichloroethene | UG/L | 50 | | U | UJ | 5 |
| MW-13 | 1,2-Dichloroethane | UG/L | 50 | | U | | 5 |
| MW-13 | Benzene | UG/L | 610 | | U | | 5 |
| MW-13 | Chloroethane | UG/L | 570 | | U | | 10 |
| MW-13 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-13 | Tetrachloroethene | UG/L | 50 | | U | | 5 |
| MW-13 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-13 | Trichloroethene | UG/L | 50 | | U | | 5 |
| MW-13 | Vinyl chloride | UG/L | 50 | | U | | 10 |
| MW-14 | 1,1-Dichloroethane | UG/L | 100 | | U | | 5 |
| MW-14 | 1,1-Dichloroethene | UG/L | 100 | | U | UJ | 5 |
| MW-14 | 1,2-Dichloroethane | UG/L | 100 | | U | | 5 |
| MW-14 | Benzene | UG/L | 41 | | U | | 5 |
| MW-14 | Chloroethane | UG/L | 1,000 | | U | | 10 |
| MW-14 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-14 | Tetrachloroethene | UG/L | 100 | | U | | 5 |
| MW-14 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-14 | Trichloroethene | UG/L | 100 | 1.3 | J | | 5 |
| MW-14 | Vinyl chloride | UG/L | 100 | | U | | 10 |
| MW-15 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-15 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-15 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-15 | Benzene | UG/L | 10 | 1 | J | | 5 |
| MW-15 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-15 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-15 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-15 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-15 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-15 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-17 | 1,1-Dichloroethane | UG/L | | | U | | 5 |
| MW-17 | 1,1-Dichloroethene | UG/L | | | U | | 5 |

**BOLD** = Exceedance of Highest Baseline Detection

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendix C.



DPP/ACB
J:\405\0577 ACS\0301 GW Mon\GW Monitoring Database\Current Database (Sept 2005)\ACS GW Database_2000.mdb[rptNewResults10VOCs]
4050577

# Monitoring Well Volatile Organic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-17 | 1,2-Dichloroethane | UG/L | | | U | | 5 |
| MW-17 | Benzene | UG/L | | | U | | 5 |
| MW-17 | Chloroethane | UG/L | | | U | | 10 |
| MW-17 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-17 | Tetrachloroethene | UG/L | | | U | | 5 |
| MW-17 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-17 | Trichloroethene | UG/L | | | U | | 5 |
| MW-17 | Vinyl chloride | UG/L | | | U | | 10 |
| MW-19 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-19 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-19 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-19 | Benzene | UG/L | 10 | 6.5 | | | 5 |
| MW-19 | Chloroethane | UG/L | 20 | 8.4 | J | | 10 |
| MW-19 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-19 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-19 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-19 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-19 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-23 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-23 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-23 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-23 | Benzene | UG/L | 10 | | U | | 5 |
| MW-23 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-23 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-23 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-23 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-23 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-23 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-28 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-28 | 1,1-Dichloroethene | UG/L | 10 | | U | | 5 |
| MW-28 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-28 | Benzene | UG/L | 10 | | U | | 5 |
| MW-28 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-28 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-28 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-28 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-28 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-28 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-29 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-29 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-29 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-29 | Benzene | UG/L | 10 | | U | | 5 |
| MW-29 | Chloroethane | UG/L | 10 | **39** | J | | 50 |
| MW-29 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-29 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-29 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |

**BOLD** = Exceedance of Highest Baseline Detection

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendix C.



DPP/ACB
J:\405\0577 ACS\0301 GW Mon\GW Monitoring Database\Current Database (Sept 2005)\ACS GW Database_2000.mdb[rptNewResults10VOCs]
4050577

# Monitoring Well Volatile Organic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-29 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-29 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-30 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-30 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-30 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-30 | Benzene | UG/L | 10 | | U | | 5 |
| MW-30 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-30 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-30 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-30 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-30 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-30 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-31 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-31 | 1,1-Dichloroethene | UG/L | 10 | | U | | 5 |
| MW-31 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-31 | Benzene | UG/L | 10 | | U | | 5 |
| MW-31 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-31 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-31 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-31 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-31 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-31 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-32 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-32 | 1,1-Dichloroethene | UG/L | 10 | | U | | 5 |
| MW-32 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-32 | Benzene | UG/L | 10 | | U | | 5 |
| MW-32 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-32 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-32 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-32 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-32 | Trichloroethene | UG/L | 10 | 1.2 | J | | 5 |
| MW-32 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-33 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-33 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-33 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-33 | Benzene | UG/L | 10 | 2.8 | J | | 5 |
| MW-33 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-33 | cis-1,2-Dichloroethene | UG/L | | 1.3 | J | | 5 |
| MW-33 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-33 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-33 | Trichloroethene | UG/L | 10 | 3.9 | J | | 5 |
| MW-33 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-37 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-37 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-37 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-37 | Benzene | UG/L | 10 | | U | | 5 |

**BOLD** = Exceedance of Highest Baseline Detection

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendix C.



DPP/ACB
J:\405\0577 ACS\0301 GW Mon\GW Monitoring Database\Current Database (Sept 2005)\ACS GW Database_2000.mdb[rptNewResults10VOCs]
4050577

# Monitoring Well Volatile Organic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-37 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-37 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-37 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-37 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-37 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-37 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-39 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-39 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-39 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-39 | Benzene | UG/L | 12 | | U | | 5 |
| MW-39 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-39 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-39 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-39 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-39 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-39 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-42 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-42 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-42 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-42 | Benzene | UG/L | 10 | | U | | 5 |
| MW-42 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-42 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-42 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-42 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-42 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-42 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-43 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-43 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-43 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-43 | Benzene | UG/L | 10 | | U | | 5 |
| MW-43 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-43 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-43 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-43 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-43 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-43 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-45 | 1,1-Dichloroethane | UG/L | 80 | | U | | 5 |
| MW-45 | 1,1-Dichloroethene | UG/L | 80 | | U | UJ | 5 |
| MW-45 | 1,2-Dichloroethane | UG/L | 80 | | U | | 5 |
| MW-45 | Benzene | UG/L | 1,045 | | U | | 5 |
| MW-45 | Chloroethane | UG/L | 215 | | U | | 10 |
| MW-45 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-45 | Tetrachloroethene | UG/L | 80 | | U | | 5 |
| MW-45 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-45 | Trichloroethene | UG/L | 80 | | U | | 5 |
| MW-45 | Vinyl chloride | UG/L | 80 | | U | | 10 |

**BOLD** = Exceedance of Highest Baseline Detection

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendix C.



DPP/ACB
J:\405\0577 ACS\0301 GW Mon\GW Monitoring Database\Current Database (Sept 2005)\ACS GW Database_2000.mdb[rptNewResults10VOCs]
4050577

# Monitoring Well Volatile Organic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-48 | 1,1-Dichloroethane | UG/L | 500 | | U | | 5 |
| MW-48 | 1,1-Dichloroethene | UG/L | 500 | | U | UJ | 5 |
| MW-48 | 1,2-Dichloroethane | UG/L | 500 | | U | | 5 |
| MW-48 | Benzene | UG/L | 9,500 | 130 | | | 100 |
| MW-48 | Chloroethane | UG/L | 1,000 | 8.4 | J | | 10 |
| MW-48 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-48 | Tetrachloroethene | UG/L | 500 | | U | | 5 |
| MW-48 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-48 | Trichloroethene | UG/L | 500 | | U | | 5 |
| MW-48 | Vinyl chloride | UG/L | 500 | | U | | 10 |
| MW-49 | 1,1-Dichloroethane | UG/L | 500 | | U | | 5 |
| MW-49 | 1,1-Dichloroethene | UG/L | 500 | | U | UJ | 5 |
| MW-49 | 1,2-Dichloroethane | UG/L | 500 | | U | | 5 |
| MW-49 | Benzene | UG/L | 6,750 | 40 | | | 5 |
| MW-49 | Chloroethane | UG/L | 715 | | U | | 10 |
| MW-49 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-49 | Tetrachloroethene | UG/L | 500 | | U | | 5 |
| MW-49 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-49 | Trichloroethene | UG/L | 500 | | U | | 5 |
| MW-49 | Vinyl chloride | UG/L | 500 | | U | | 10 |
| MW-51 | 1,1-Dichloroethane | UG/L | 100 | | U | | 5 |
| MW-51 | 1,1-Dichloroethene | UG/L | 100 | | U | UJ | 5 |
| MW-51 | 1,2-Dichloroethane | UG/L | 100 | | U | | 5 |
| MW-51 | Benzene | UG/L | 100 | | U | | 5 |
| MW-51 | Chloroethane | UG/L | 100 | | U | | 10 |
| MW-51 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-51 | Tetrachloroethene | UG/L | 100 | | U | | 5 |
| MW-51 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-51 | Trichloroethene | UG/L | 100 | | U | | 5 |
| MW-51 | Vinyl chloride | UG/L | 100 | | U | | 10 |
| MW-52 | 1,1-Dichloroethane | UG/L | 100 | | U | | 5 |
| MW-52 | 1,1-Dichloroethene | UG/L | 100 | | U | UJ | 5 |
| MW-52 | 1,2-Dichloroethane | UG/L | 100 | | U | | 5 |
| MW-52 | Benzene | UG/L | 100 | | U | | 5 |
| MW-52 | Chloroethane | UG/L | 100 | | U | | 10 |
| MW-52 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-52 | Tetrachloroethene | UG/L | 100 | | U | | 5 |
| MW-52 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-52 | Trichloroethene | UG/L | 100 | | U | | 5 |
| MW-52 | Vinyl chloride | UG/L | 100 | | U | | 10 |
| MW-53 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-53 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-53 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-53 | Benzene | UG/L | 10 | 3.2 | J | | 5 |
| MW-53 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-53 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |

**BOLD** = Exceedance of Highest Baseline Detection

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendix C.



DPP/ACB
J:\405\0577 ACS\0301 GW Mon\GW Monitoring Database\Current Database (Sept 2005)\ACS GW Database_2000.mdb[rptNewResults10VOCs]
4050577

# Monitoring Well Volatile Organic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-53 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-53 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-53 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-53 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-54R | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-54R | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-54R | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-54R | Benzene | UG/L | 10 | | U | | 5 |
| MW-54R | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-54R | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-54R | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-54R | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-54R | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-54R | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-55 | 1,1-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-55 | 1,1-Dichloroethene | UG/L | 10 | | U | UJ | 5 |
| MW-55 | 1,2-Dichloroethane | UG/L | 10 | | U | | 5 |
| MW-55 | Benzene | UG/L | 10 | | U | | 5 |
| MW-55 | Chloroethane | UG/L | 10 | | U | | 10 |
| MW-55 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-55 | Tetrachloroethene | UG/L | 10 | | U | | 5 |
| MW-55 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-55 | Trichloroethene | UG/L | 10 | | U | | 5 |
| MW-55 | Vinyl chloride | UG/L | 10 | | U | | 10 |
| MW-56 | 1,1-Dichloroethane | UG/L | | | U | | 5 |
| MW-56 | 1,1-Dichloroethene | UG/L | | | U | UJ | 5 |
| MW-56 | 1,2-Dichloroethane | UG/L | | | U | | 5 |
| MW-56 | Benzene | UG/L | | 240 | | | 120 |
| MW-56 | Chloroethane | UG/L | | | U | | 10 |
| MW-56 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-56 | Tetrachloroethene | UG/L | | | U | | 5 |
| MW-56 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-56 | Trichloroethene | UG/L | | | U | | 5 |
| MW-56 | Vinyl chloride | UG/L | | | U | | 10 |
| MW-58 | 1,1-Dichloroethane | UG/L | | | U | | 5 |
| MW-58 | 1,1-Dichloroethene | UG/L | | | U | | 5 |
| MW-58 | 1,2-Dichloroethane | UG/L | | | U | | 5 |
| MW-58 | Benzene | UG/L | | | U | | 5 |
| MW-58 | Chloroethane | UG/L | | | U | | 10 |
| MW-58 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-58 | Tetrachloroethene | UG/L | | | U | | 5 |
| MW-58 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-58 | Trichloroethene | UG/L | | 8.7 | | | 5 |
| MW-58 | Vinyl chloride | UG/L | | | U | | 10 |
| MW-59 | 1,1-Dichloroethane | UG/L | | | U | | 5 |
| MW-59 | 1,1-Dichloroethene | UG/L | | | U | | 5 |

**BOLD** = Exceedance of Highest Baseline Detection

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendix C.



DPP/ACB
J:\405\0577 ACS\0301 GW Mon\GW Monitoring Database\Current Database (Sept 2005)\ACS GW Database_2000.mdb[rptNewResults10VOCs]
4050577

# Monitoring Well Volatile Organic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-59 | 1,2-Dichloroethane | UG/L | | | U | | 5 |
| MW-59 | Benzene | UG/L | | | U | | 5 |
| MW-59 | Chloroethane | UG/L | | | U | | 10 |
| MW-59 | cis-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-59 | Tetrachloroethene | UG/L | | | U | | 5 |
| MW-59 | trans-1,2-Dichloroethene | UG/L | | | U | | 5 |
| MW-59 | Trichloroethene | UG/L | | 7.6 | | | 5 |
| MW-59 | Vinyl chloride | UG/L | | | U | | 10 |

**BOLD** = Exceedance of Highest Baseline Detection

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendix C.



DPP/ACB
J:\405\0577 ACS\0301 GW Mon\GW Monitoring Database\Current Database (Sept 2005)\ACS GW Database_2000.mdb[rptNewResults10VOCs]
4050577

# Monitoring Well Semi-Volatile Organic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-06 | bis(2-chloroethyl) ether | UG/L | 56 | | U | | 10 |
| MW-09R | bis(2-chloroethyl) ether | UG/L | 50 | 4.7 | J | | 10 |
| MW-19 | bis(2-chloroethyl) ether | UG/L | 12 | 6 | J | | 10 |

**BOLD** = Exceedance

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendices C and D.



DPP/ACB
J:\209\0603 ACS\Database\ACS GW_2002.mdb [rptNewResultsSVOC]
4050577

# Monitoring Well Inorganic Results - March 2008
# Comparison to Maximum Baseline Detections
# American Chemical Service NPL Site
# Griffith, Indiana

| Well | Analyte | Units | Highest Detect during Baseline | Current Event | | | |
|---|---|---|---|---|---|---|---|
| | | | | Result | LQ | DQ | Detect Limit |
| MW-06 | Arsenic | UG/L | 72 | 7.5 | JB | UB | 10 |
| MW-15 | Arsenic | UG/L | 59 | 32 | | | 10 |
| MW-43 | Arsenic | UG/L | 81 | | U | | 10 |

**BOLD** = Exceedance of Highest Baseline Detection

For an explanation of Laboratory Qualifiers (LQ) and Data Validation Qualifiers (DQ), please see Appendices C and D.



DPP/ACB
J:\209\0603 ACS\Database\ACS GW_2002.mdb [rptNewResultsInorg]
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## Appendix B

## Concentration vs. Time Plots

### Upper Aquifer Monitoring Wells

MW06
MW11
MW12
MW13
MW14
MW15
MW17
MW19
MW37
MW39
MW42
MW43
MW44
MW45
MW48
MW49

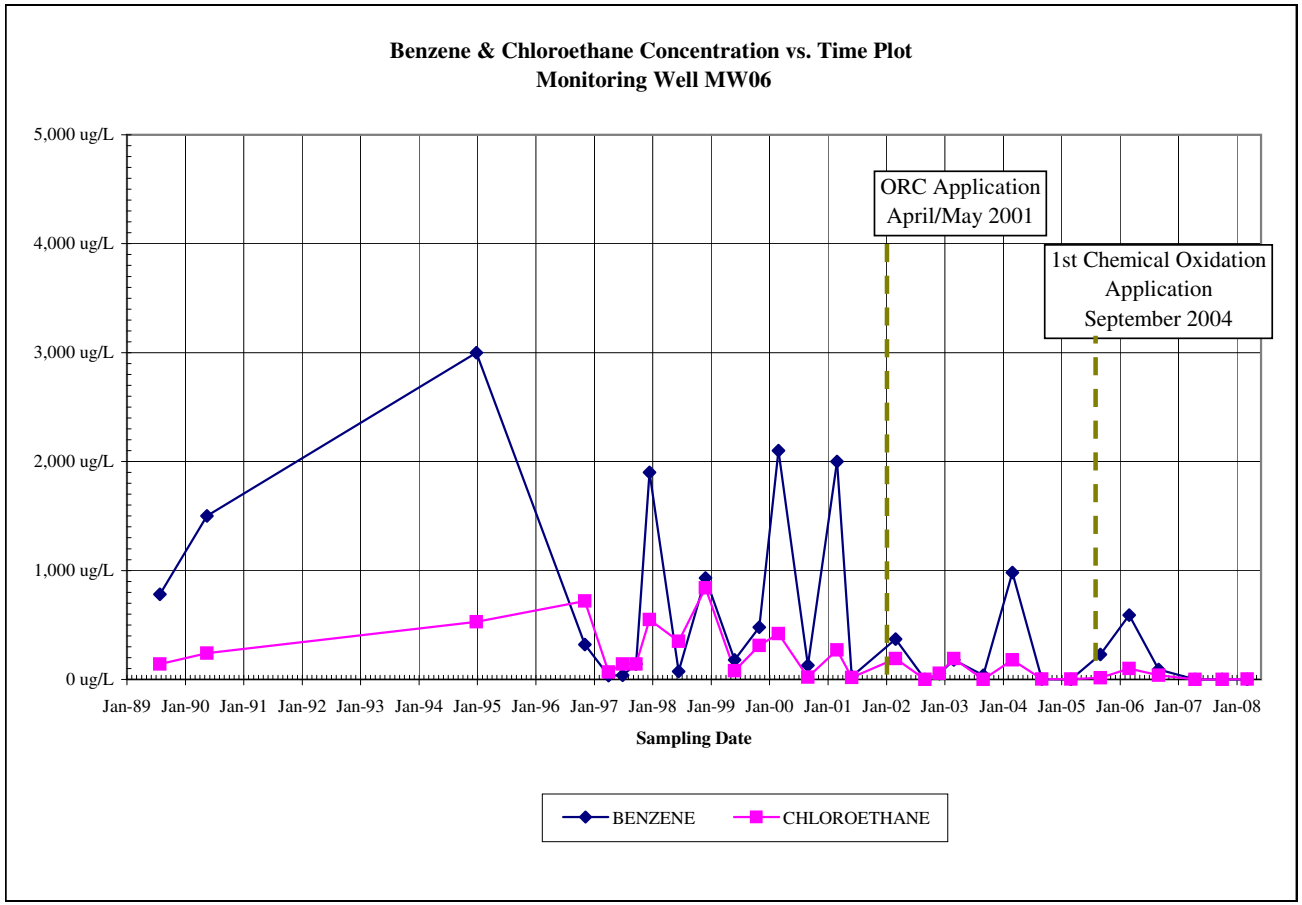
### Lower Aquifer Monitoring Wells

MW08
MW09R
MW10C
MW23
MW28
MW29
MW30
MW31
MW32
MW33
MW51
MW52
MW53
MW54R
MW55
MW56

# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW06

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **320** | **720** |
| August-89 | 780 ug/L | 140 ug/L |
| May-90 | 1,500 ug/L | 240 ug/L |
| December-94 | 3,000 ug/L | 530 ug/L |
| November-96 | 320 ug/L | 720 ug/L |
| April-97 | 35 ug/L | 67 ug/L |
| July-97 | 39 ug/L | 140 ug/L |
| September-97 | 140 ug/L | 140 ug/L |
| December-97 | 1,900 ug/L | 550 ug/L |
| June-98 | 72 ug/L | 350 ug/L |
| December-98 | 930 ug/L | 840 ug/L |
| June-99 | 180 ug/L | 78 ug/L |
| November-99 | 480 ug/L | 310 ug/L |
| March-00 | 2,100 ug/L | 420 ug/L |
| September-00 | 130 ug/L | 22 ug/L |
| March-01 | 2,000 ug/L | 270 ug/L |
| June-01 | 26 ug/L | 18 ug/L |
| March-02 | 370 ug/L | 190 ug/L |
| September-02 | BDL | BDL |
| December-02 | 54 ug/L | 56 ug/L |
| March-03 | 180 ug/L | 190 ug/L |
| September-03 | 39 ug/L | BDL |
| March-04 | 980 ug/L | 180 ug/L |
| September-04 | 2.7 ug/L | 2.6 ug/L |
| March-05 | BDL | 3 ug/L |
| September-05 | 230 ug/L | 14 ug/L |
| March-06 | 590 ug/L | 100 ug/L |
| September-06 | 91 ug/L | 37 ug/L |
| April-07 | BDL | BDL |
| October-07 | BDL | 0.9 ug/L |
| March-08 | BDL | 3.1 ug/L |

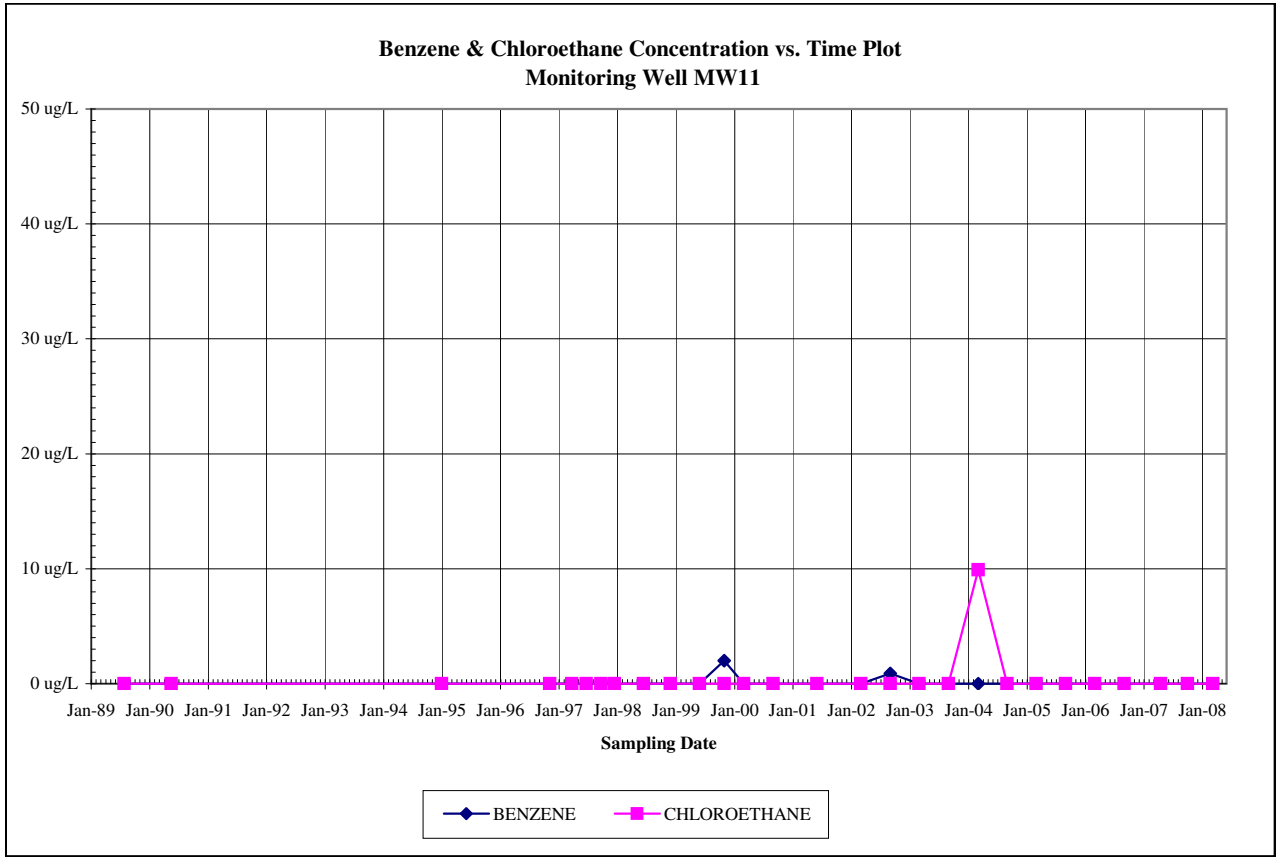
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW11

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | BDL | BDL |
| May-90 | BDL | BDL |
| January-95 | BDL | BDL |
| November-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | 2 ug/L | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | 0.9 ug/L | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | 9.9 |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

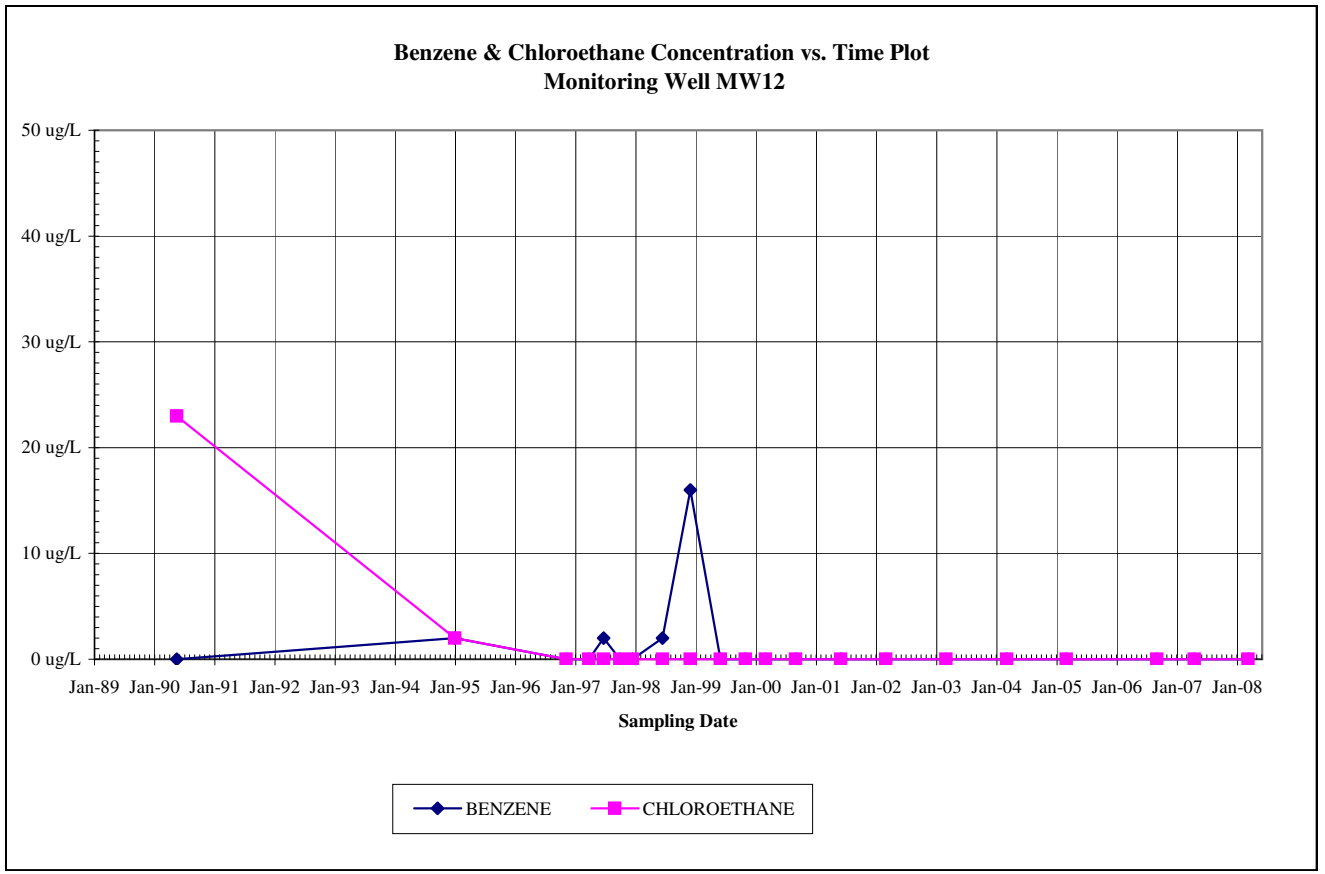
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW12

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | BDL | 23 ug/L |
| January-95 | 2 ug/L | 2 ug/L |
| November-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | 2 ug/L | BDL |
| October-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | 2 ug/L | BDL |
| December-98 | 16 ug/L | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| March-03 | BDL | BDL |
| March-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| March-08 | BDL | BDL |

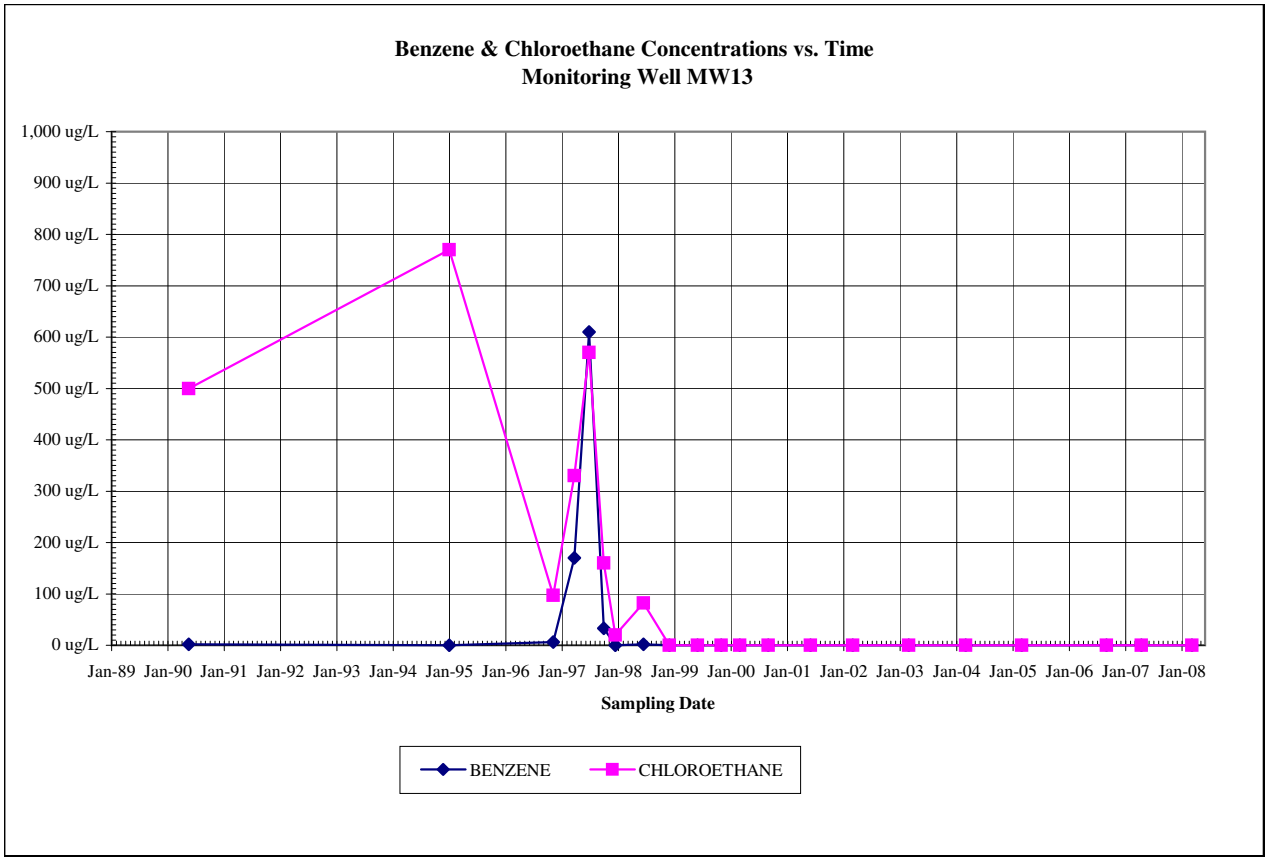
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW13

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **610** | **570** |
| August-89 | | |
| May-90 | 2 ug/L | 500 ug/L |
| January-95 | BDL | 770 ug/L |
| November-96 | 6 ug/L | 97 ug/L |
| March-97 | 170 ug/L | 330 ug/L |
| June-97 | 610 ug/L | 570 ug/L |
| October-97 | 33 ug/L | 160 ug/L |
| December-97 | BDL | 20 ug/L |
| June-98 | 2 ug/L | 82 ug/L |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| March-03 | BDL | BDL |
| March-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| March-08 | BDL | BDL |

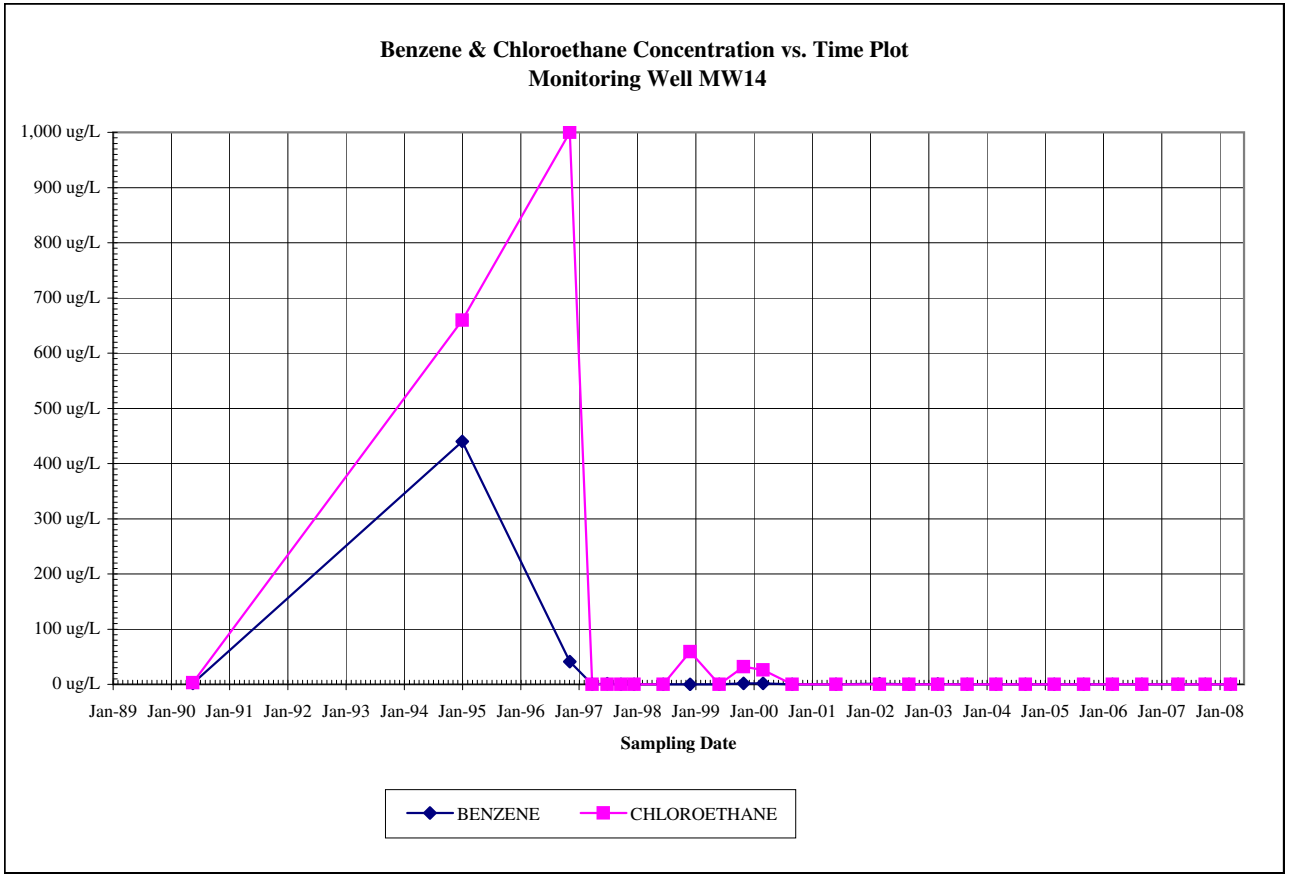
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW14

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **41** | **1000** |
| August-89 | | |
| May-90 | 2 ug/L | 3 ug/L |
| January-95 | 440 ug/L | 660 ug/L |
| November-96 | 41 ug/L | 1,000 ug/L |
| March-97 | BDL | BDL |
| June-97 | 1 ug/L | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | BDL | 59 ug/L |
| June-99 | BDL | BDL |
| November-99 | 2 ug/L | 32 ug/L |
| March-00 | 2 ug/L | 26 ug/L |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | 1 ug/L | BDL |
| September-02 | BDL | BDL |
| March-03 | 0.7 ug/L | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

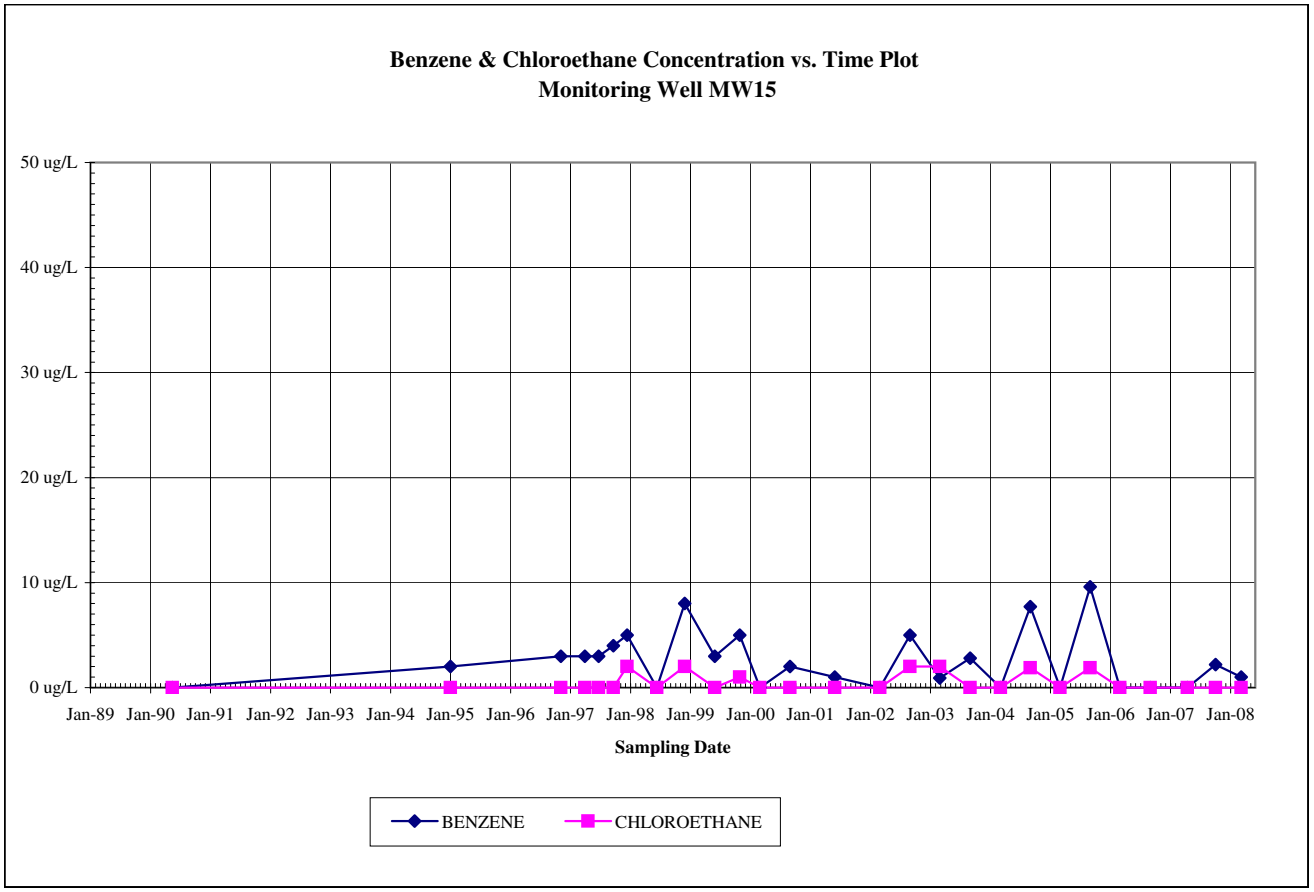
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW15

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | BDL | BDL |
| January-95 | 2 ug/L | BDL |
| November-96 | 3 ug/L | BDL |
| April-97 | 3 ug/L | BDL |
| June-97 | 3 ug/L | BDL |
| September-97 | 4 ug/L | BDL |
| December-97 | 5 ug/L | 2 ug/L |
| June-98 | BDL | BDL |
| December-98 | 8 ug/L | 2 ug/L |
| June-99 | 3 ug/L | BDL |
| November-99 | 5 ug/L | 1 ug/L |
| March-00 | BDL | BDL |
| September-00 | 2 ug/L | BDL |
| June-01 | 1 ug/L | BDL |
| March-02 | BDL | BDL |
| September-02 | 5 ug/L | 2 ug/L |
| March-03 | 1 ug/L | 2 ug/L |
| September-03 | 2.8 ug/L | BDL |
| March-04 | BDL | BDL |
| September-04 | 7.7 ug/L | 1.9 ug/L |
| March-05 | BDL | BDL |
| September-05 | 9.6 ug/L | 1.9 ug/L |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | 2.2 ug/L | BDL |
| March-08 | 1.0 ug/L | BDL |

BDL = Below the Detection Limit



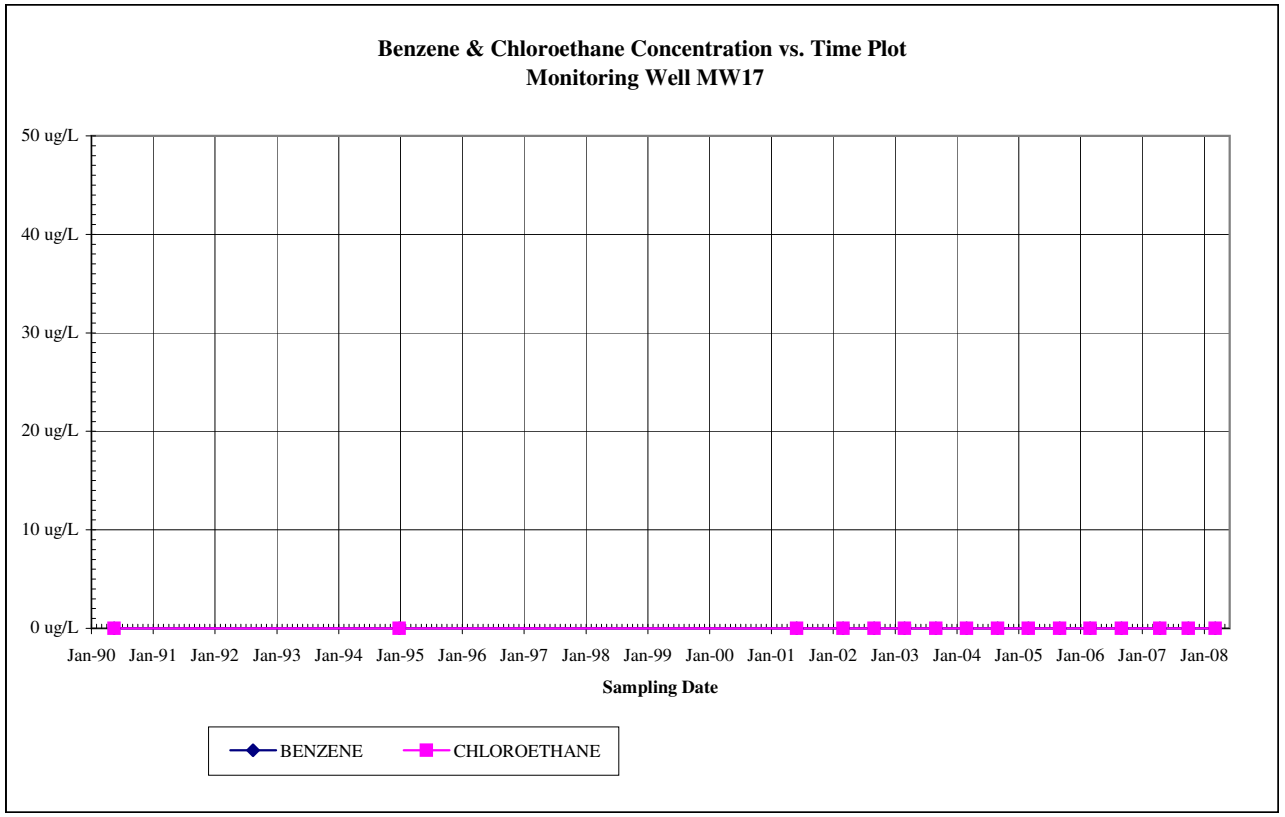

JEF/acb
J:\405\0577 ACS\0301 GW Mon\March 2008\Report\Appendices\Appendix B\Timetrnd_GWMP_UA_Electronic.xls\MW15

# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW17

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| May-90 | BDL | BDL |
| December-94 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

BDL = Below the Detection Limit

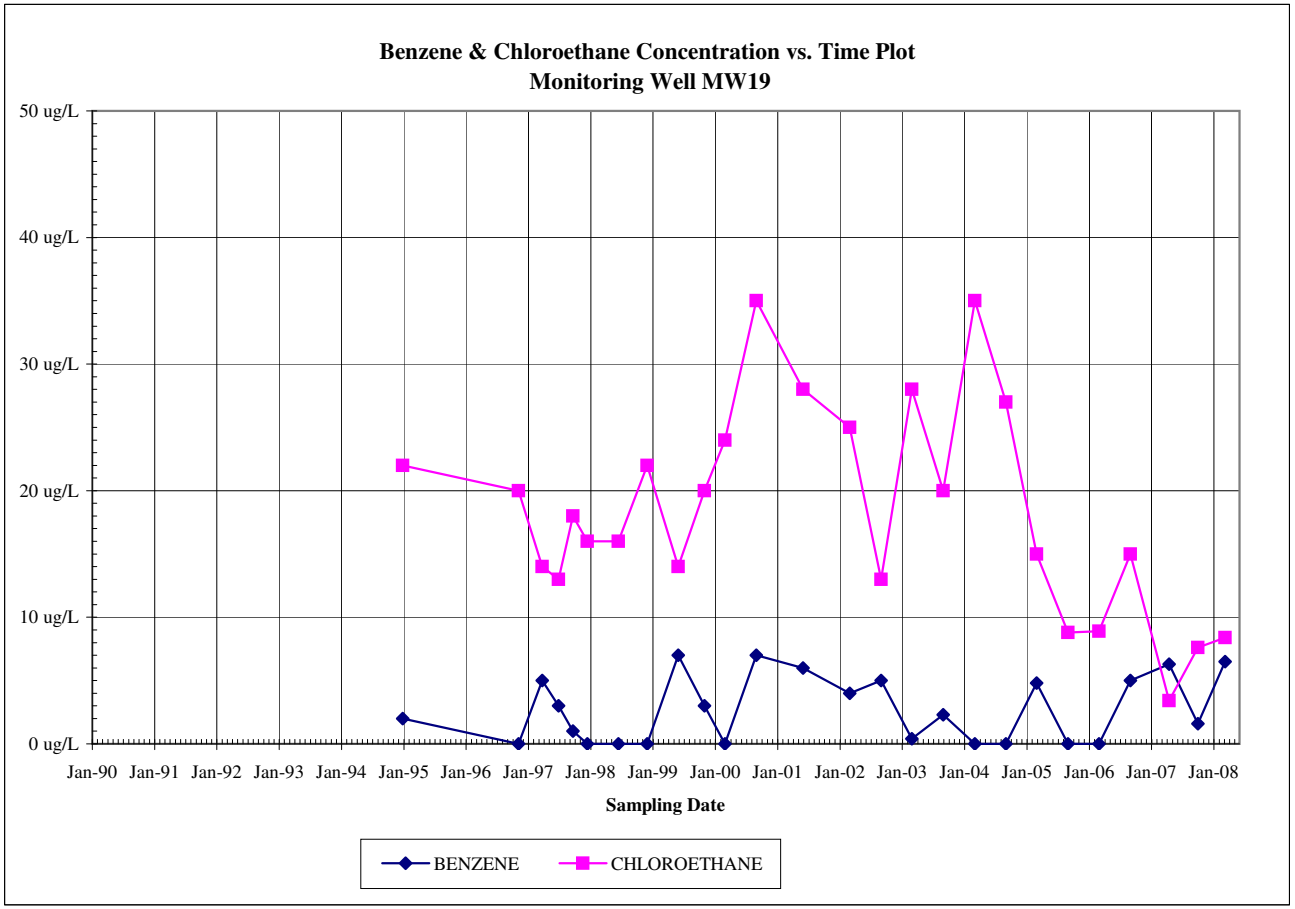
Baseline values adopted from nearby abandoned well MW18



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW19

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **20** |
| August-89 | | |
| May-90 | | |
| December-94 | 2 ug/L | 22 ug/L |
| November-96 | BDL | 20 ug/L |
| March-97 | 5 ug/L | 14 ug/L |
| June-97 | 3 ug/L | 13 ug/L |
| September-97 | 1 ug/L | 18 ug/L |
| December-97 | BDL | 16 ug/L |
| June-98 | BDL | 16 ug/L |
| December-98 | BDL | 22 ug/L |
| June-99 | 7 ug/L | 14 ug/L |
| November-99 | 3 ug/L | 20 ug/L |
| March-00 | BDL | 24 ug/L |
| September-00 | 7 ug/L | 35 ug/L |
| June-01 | 6 ug/L | 28 ug/L |
| March-02 | 4 ug/L | 25 ug/L |
| September-02 | 5 ug/L | 13 ug/L |
| March-03 | 0.4 ug/L | 28 ug/L |
| September-03 | 2.3 ug/L | 20 ug/L |
| March-04 | BDL | 35 ug/L |
| September-04 | BDL | 27 ug/L |
| March-05 | 4.8 ug/L | 15 ug/L |
| September-05 | BDL | 8.8 ug/L |
| March-06 | BDL | 8.9 ug/L |
| September-06 | 5.0 ug/L | 15.0 ug/L |
| April-07 | 6.3 ug/L | 3.4 ug/L |
| October-07 | 1.6 ug/L | 7.6 ug/L |
| March-08 | 6.5 ug/L | 8.4 ug/L |

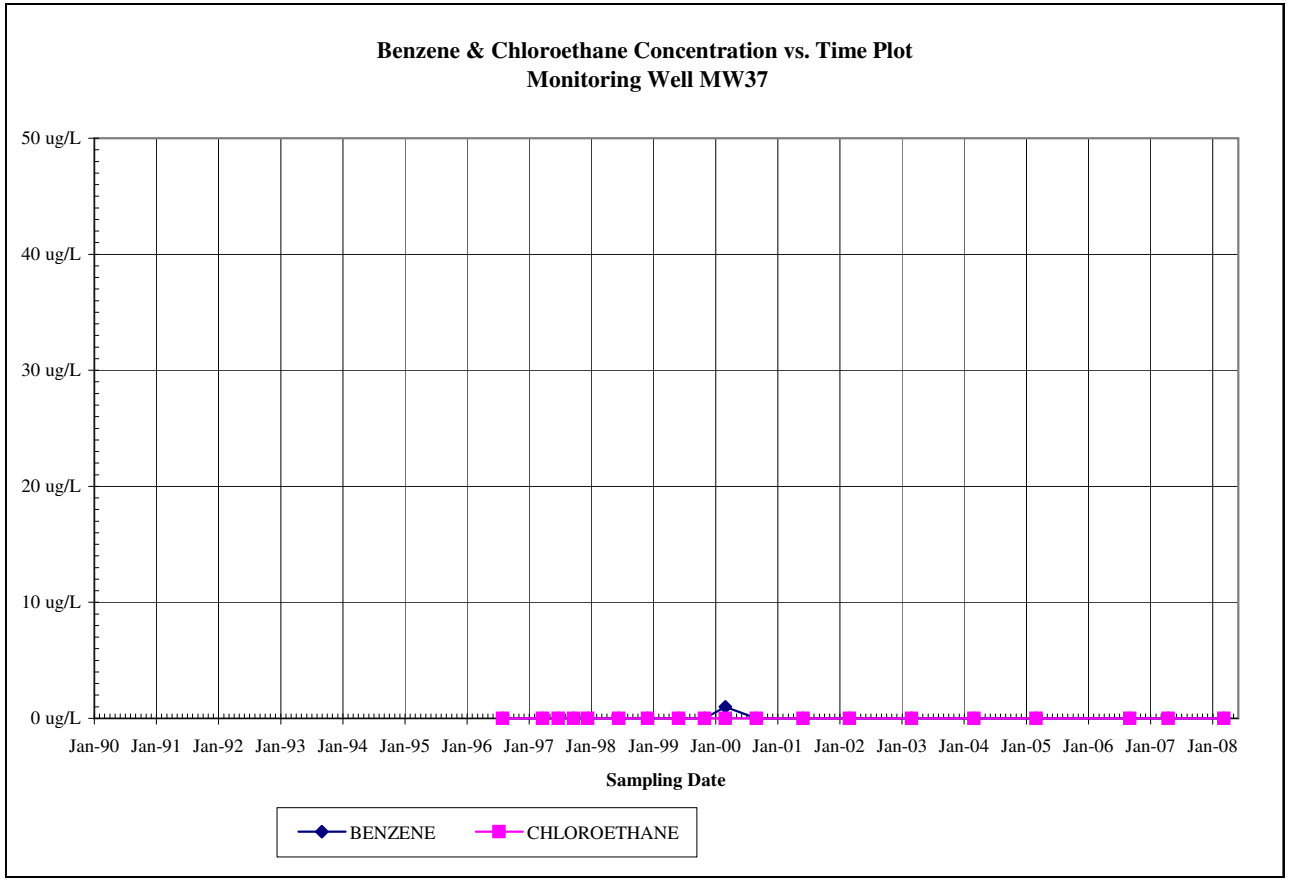
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW37

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | | |
| December-94 | | |
| August-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | 1 ug/L | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| March-03 | BDL | BDL |
| March-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| March-08 | BDL | BDL |

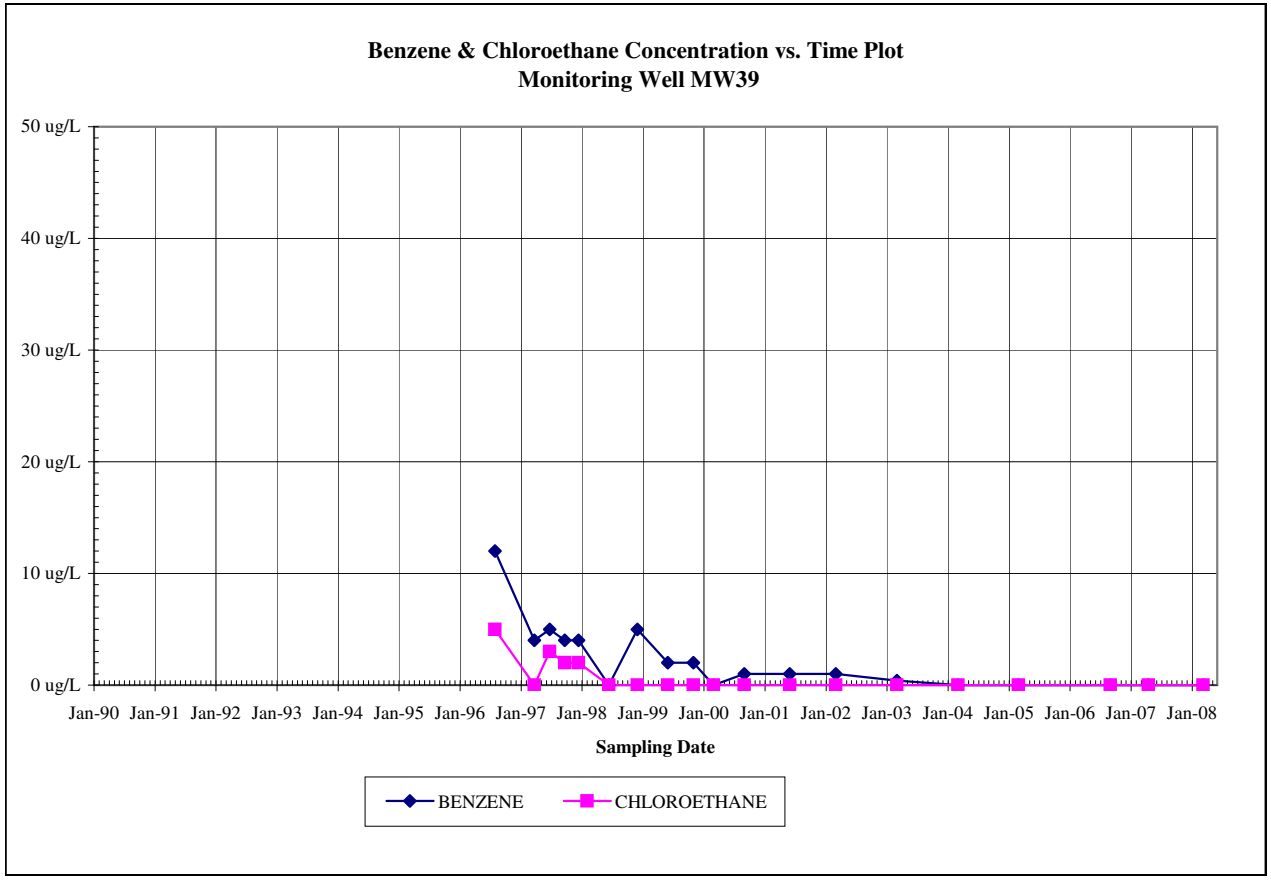
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW39

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **12** | **10** |
| August-89 | | |
| May-90 | | |
| December-94 | | |
| August-96 | 12 ug/L | 5 ug/L |
| March-97 | 4 ug/L | BDL |
| June-97 | 5 ug/L | 3 ug/L |
| September-97 | 4 ug/L | 2 ug/L |
| December-97 | 4 ug/L | 2 ug/L |
| June-98 | BDL | BDL |
| December-98 | 5 ug/L | BDL |
| June-99 | 2 ug/L | BDL |
| November-99 | 2 ug/L | BDL |
| March-00 | BDL | BDL |
| September-00 | 1 ug/L | BDL |
| June-01 | 1 ug/L | BDL |
| March-02 | 1 ug/L | BDL |
| March-03 | 0.4 ug/L | BDL |
| March-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| March-08 | BDL | BDL |

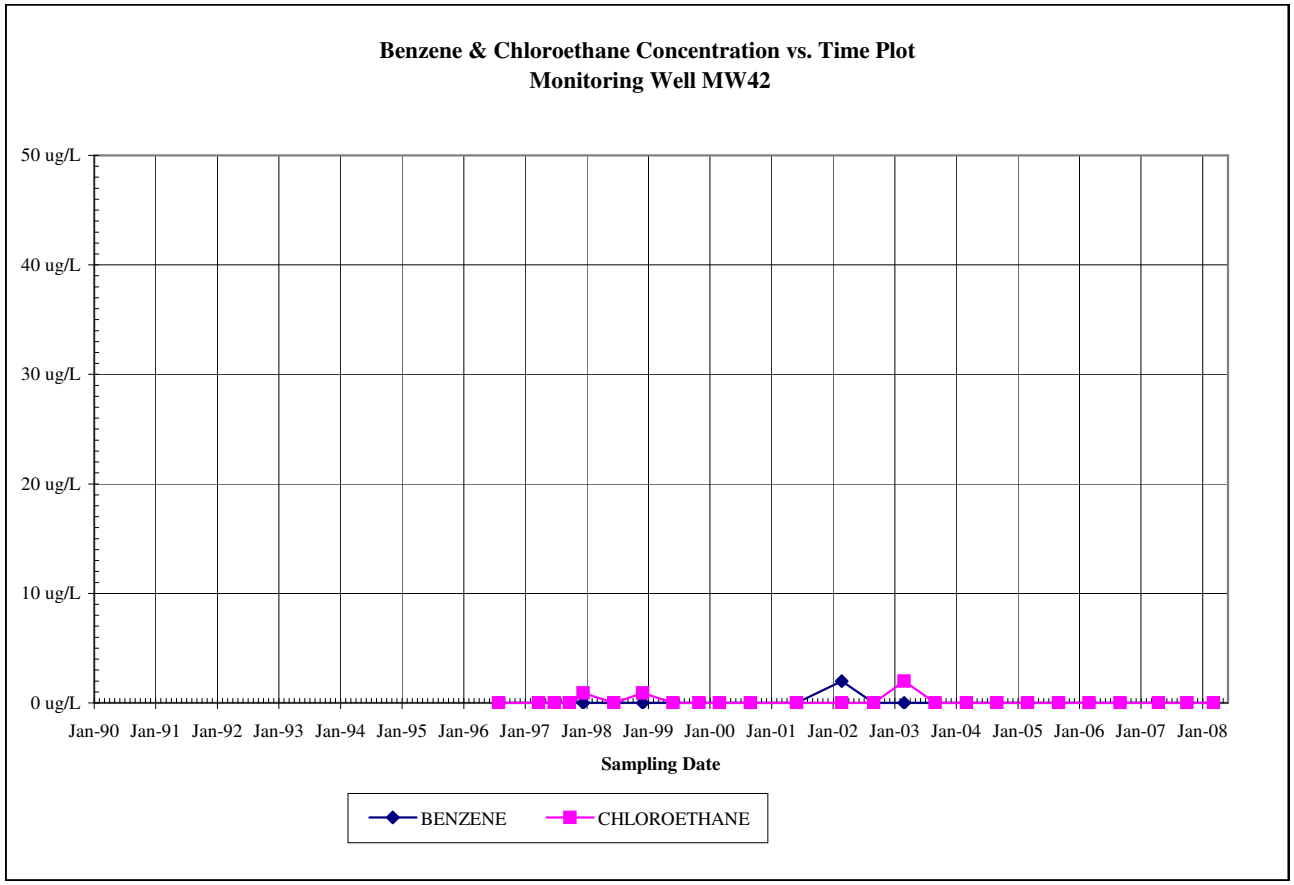
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW42

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | | |
| December-94 | | |
| August-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | 0.9 ug/L |
| June-98 | BDL | BDL |
| December-98 | BDL | 0.9 ug/L |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| February-02 | 2 ug/L | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | 2 ug/L |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

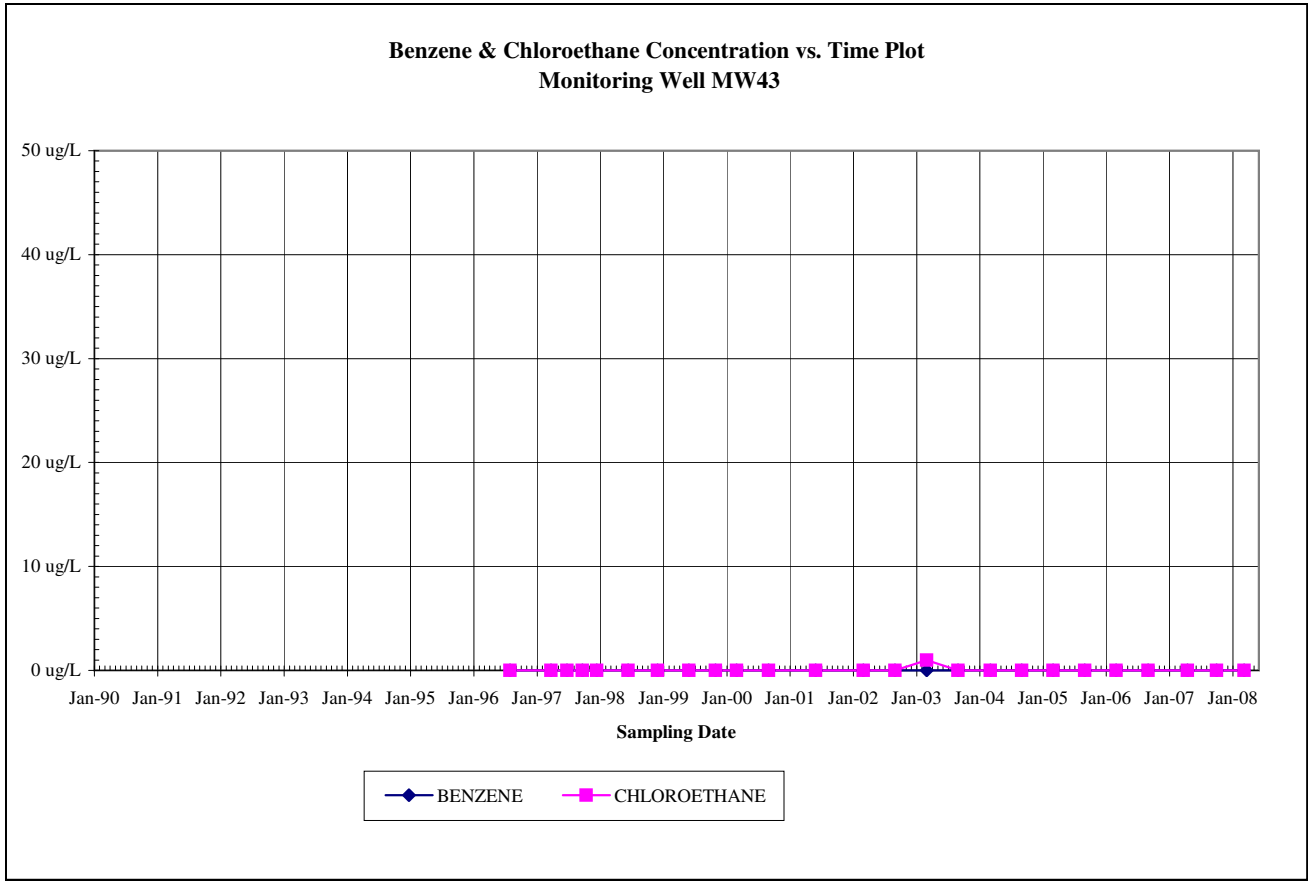
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW43

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | | |
| December-94 | | |
| August-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | 1 ug/L |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

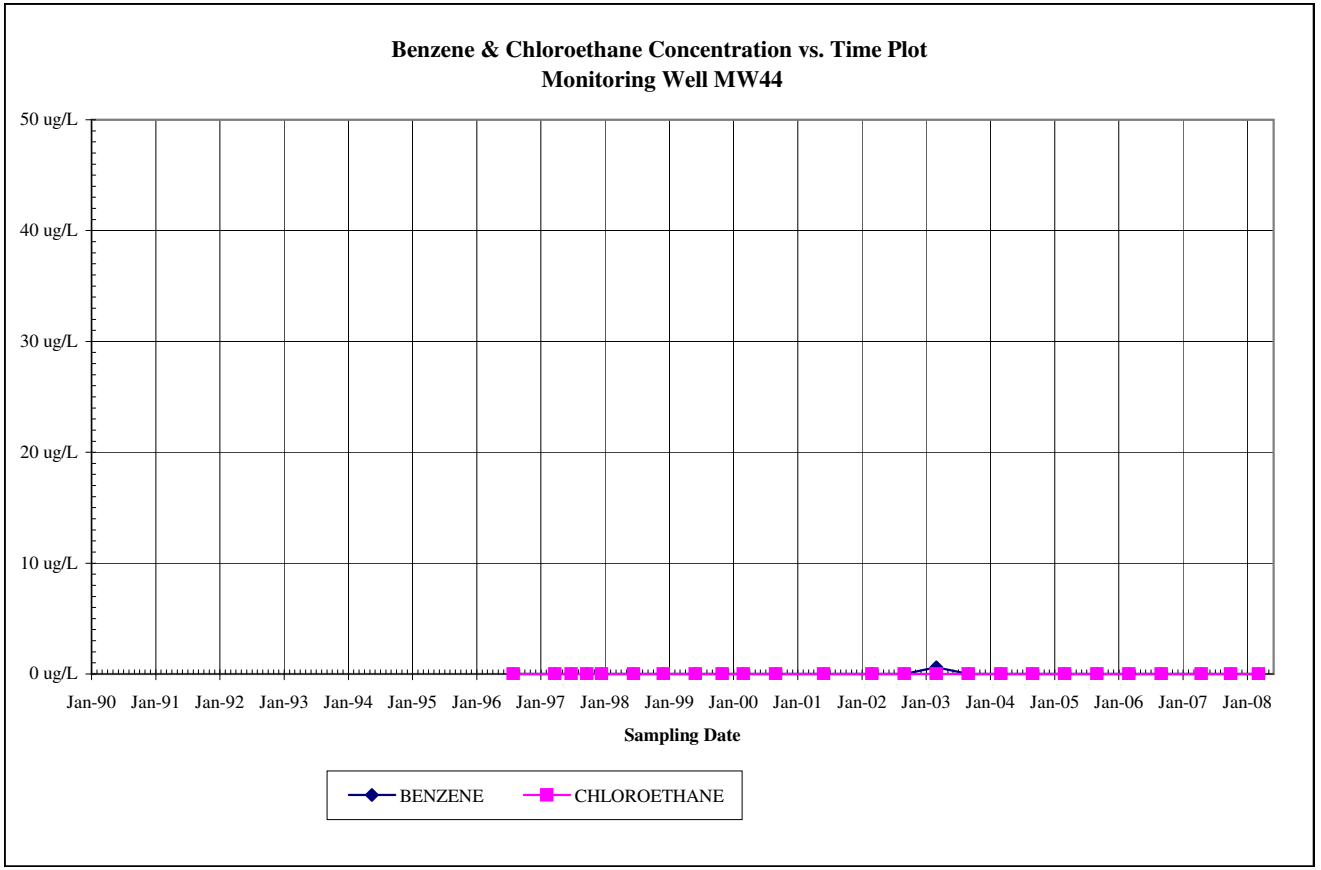
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW44

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| BASELINE | 10 | 10 |
| August-89 | | |
| May-90 | | |
| December-94 | | |
| August-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | 0.6 ug/L | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | NS | NS |
| March-08 | NS | NS |

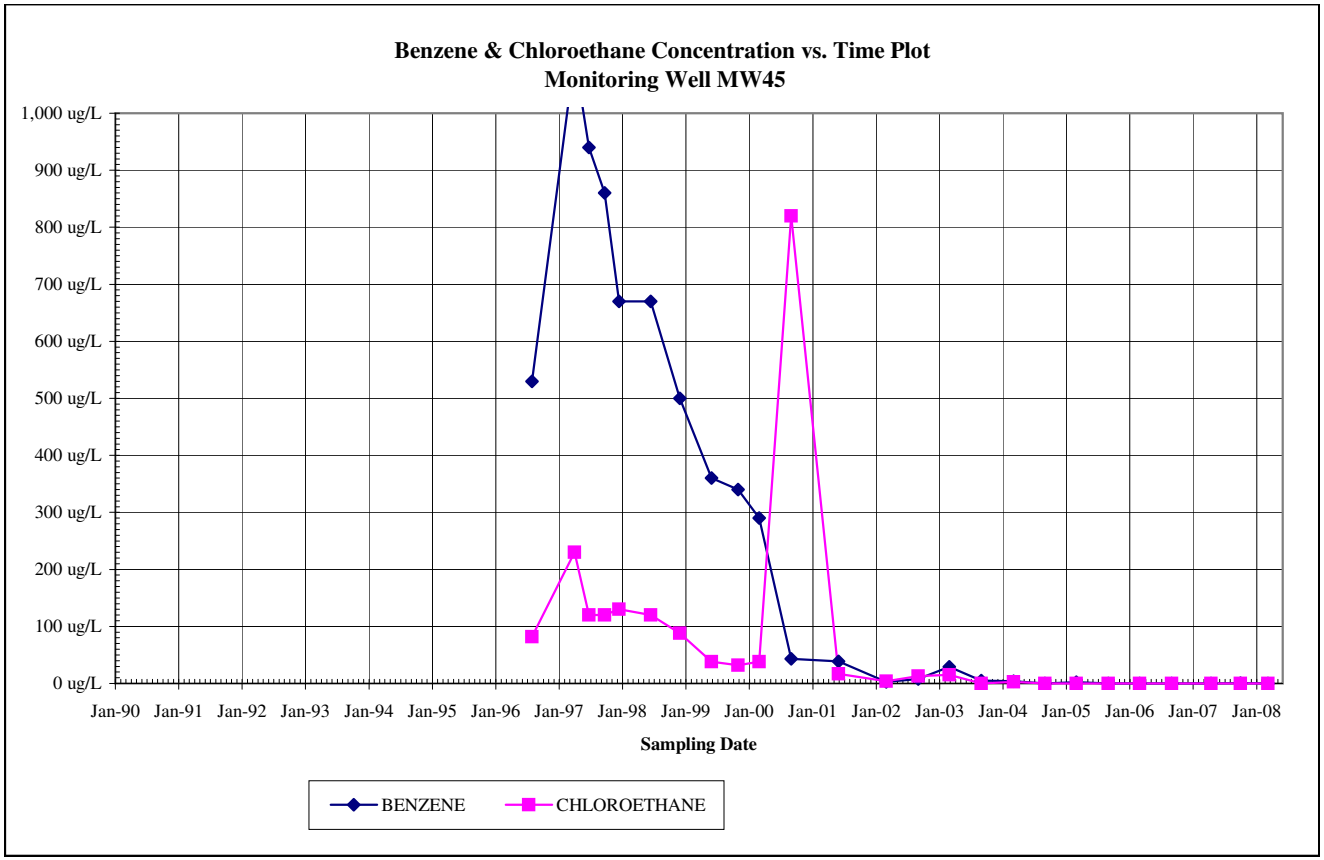
BDL = Below the Detection Limit
NS = Not sampled



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW45

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **1045** | **215** |
| August-89 | | |
| May-90 | | |
| December-94 | | |
| August-96 | 530 ug/L | 82 ug/L |
| April-97 | 1,100 ug/L | 230 ug/L |
| June-97 | 940 ug/L | 120 ug/L |
| September-97 | 860 ug/L | 120 ug/L |
| December-97 | 670 ug/L | 130 ug/L |
| June-98 | 670 ug/L | 120 ug/L |
| December-98 | 500 ug/L | 88 ug/L |
| June-99 | 360 ug/L | 38 ug/L |
| November-99 | 340 ug/L | 32 ug/L |
| March-00 | 290 ug/L | 38 ug/L |
| September-00 | 43 ug/L | 820 ug/L |
| June-01 | 39 ug/L | 17 ug/L |
| March-02 | 3 ug/L | 4 ug/L |
| September-02 | 8 ug/L | 13 ug/L |
| March-03 | 29 ug/L | 15 ug/L |
| September-03 | 5 ug/L | BDL |
| March-04 | 3.7 ug/L | 2.7 ug/L |
| September-04 | BDL | BDL |
| March-05 | 2.4 ug/L | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | 0.4 ug/L | BDL |
| March-08 | BDL | BDL |

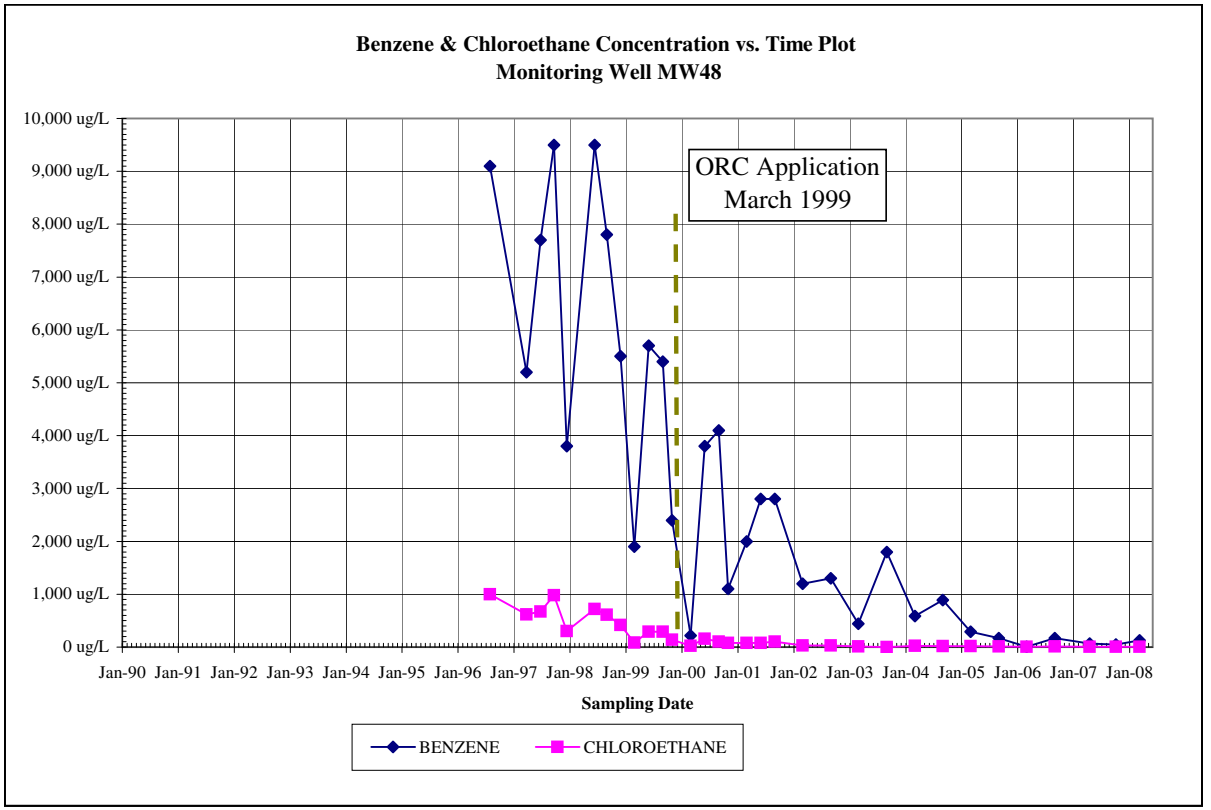
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW48

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **9500** | **1000** |
| August-89 | | |
| May-90 | | |
| December-94 | | |
| August-96 | 9,100 ug/L | 1,000 ug/L |
| March-97 | 5,200 ug/L | 620 ug/L |
| June-97 | 7,700 ug/L | 670 ug/L |
| September-97 | 9,500 ug/L | 980 ug/L |
| December-97 | 3,800 ug/L | 300 ug/L |
| June-98 | 9,500 ug/L | 720 ug/L |
| September-98 | 7,800 ug/L | 610 ug/L |
| December-98 | 5,500 ug/L | 420 ug/L |
| March-99 | 1,900 ug/L | 83 ug/L |
| June-99 | 5,700 ug/L | 290 ug/L |
| September-99 | 5,400 ug/L | 290 ug/L |
| November-99 | 2,400 ug/L | 140 ug/L |
| March-00 | 220 ug/L | 24 ug/L |
| June-00 | 3,800 ug/L | 160 ug/L |
| September-00 | 4,100 ug/L | 100 ug/L |
| November-00 | 1,100 ug/L | 78 ug/L |
| March-01 | 2,000 ug/L | 78 ug/L |
| June-01 | 2,800 ug/L | 80 ug/L |
| September-01 | 2,800 ug/L | 100 ug/L |
| March-02 | 1,200 ug/L | 33 ug/L |
| September-02 | 1,300 ug/L | 32 ug/L |
| March-03 | 440 ug/L | 15 ug/L |
| September-03 | 1,800 ug/L | BDL |
| March-04 | 590 ug/L | 22 ug/L |
| September-04 | 890 ug/L | 20 ug/L |
| March-05 | 290 ug/L | 19 ug/L |
| September-05 | 170 ug/L | 11 ug/L |
| March-06 | 7.3 ug/L | 4.6 ug/L |
| September-06 | 170.0 ug/L | 15.0 ug/L |
| April-07 | 65.0 ug/L | 4.7 ug/L |
| October-07 | 46.0 ug/L | 6.0 ug/L |
| March-08 | 130 ug/L | 8.4 ug/L |

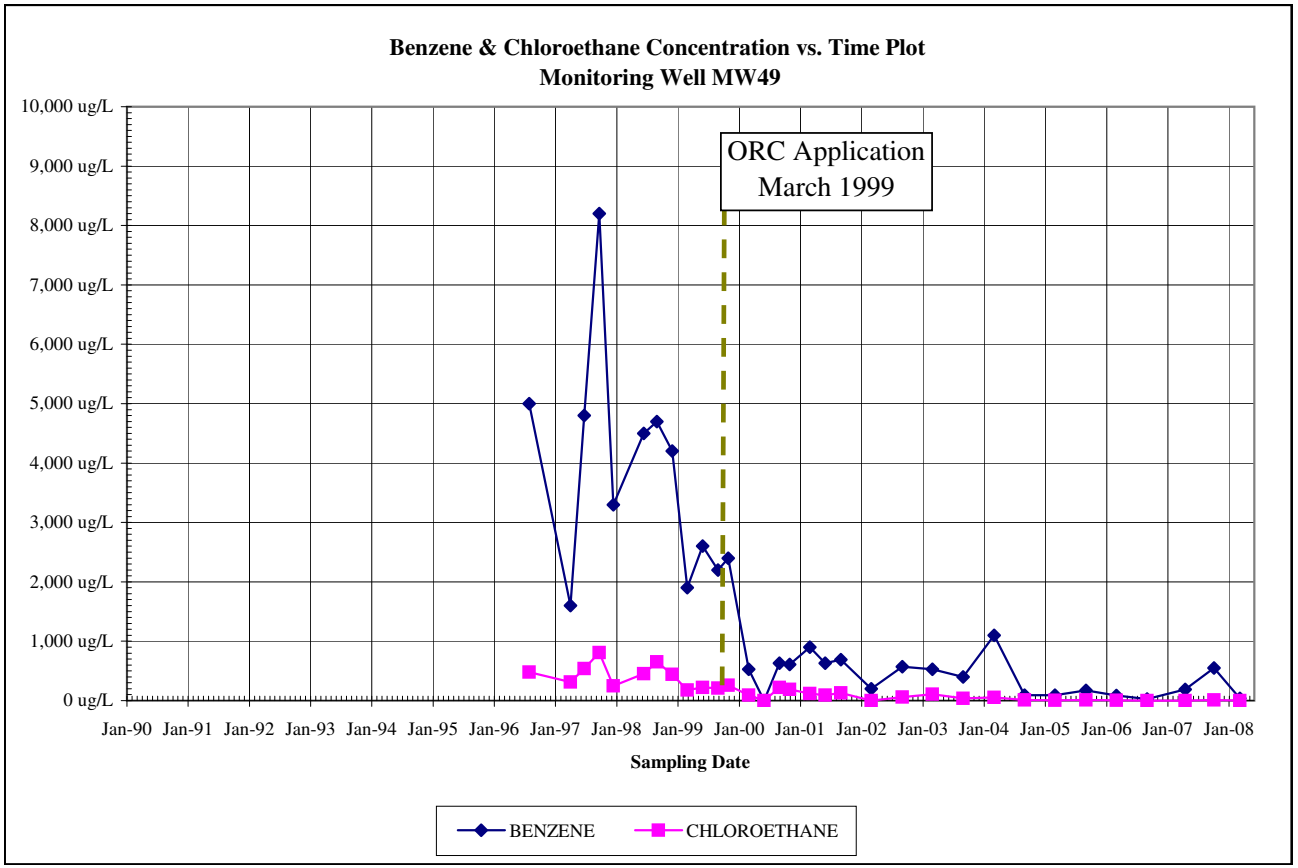
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Upper Aquifer Monitoring Well MW49

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **6750** | **715** |
| August-89 | | |
| May-90 | | |
| December-94 | | |
| August-96 | 5,000 ug/L | 480 ug/L |
| April-97 | 1,600 ug/L | 310 ug/L |
| June-97 | 4,800 ug/L | 540 ug/L |
| September-97 | 8,200 ug/L | 810 ug/L |
| December-97 | 3,300 ug/L | 250 ug/L |
| June-98 | 4,500 ug/L | 450 ug/L |
| September-98 | 4,700 ug/L | 650 ug/L |
| December-98 | 4,200 ug/L | 440 ug/L |
| March-99 | 1,900 ug/L | 180 ug/L |
| June-99 | 2,600 ug/L | 220 ug/L |
| September-99 | 2,200 ug/L | 210 ug/L |
| November-99 | 2,400 ug/L | 260 ug/L |
| March-00 | 530 ug/L | 91 ug/L |
| June-00 | BDL | BDL |
| September-00 | 630 ug/L | 220 ug/L |
| November-00 | 610 ug/L | 190 ug/L |
| March-01 | 900 ug/L | 120 ug/L |
| June-01 | 630 ug/L | 91 ug/L |
| September-01 | 690 ug/L | 130 ug/L |
| March-02 | 200 ug/L | BDL |
| September-02 | 570 ug/L | 60 ug/L |
| March-03 | 530 ug/L | 110 ug/L |
| September-03 | 400 ug/L | 38 ug/L |
| March-04 | 1,100 ug/L | 52 ug/L |
| September-04 | 90 ug/L | 11 ug/L |
| March-05 | 89 ug/L | 5.9 ug/L |
| September-05 | 170 ug/L | 9.3 ug/L |
| March-06 | 86 ug/L | 3.3 ug/L |
| September-06 | 25 ug/L | BDL |
| April-07 | 190 ug/L | BDL |
| October-07 | 550 ug/L | 10.0 ug/L |
| March-08 | 40 ug/L | BDL |

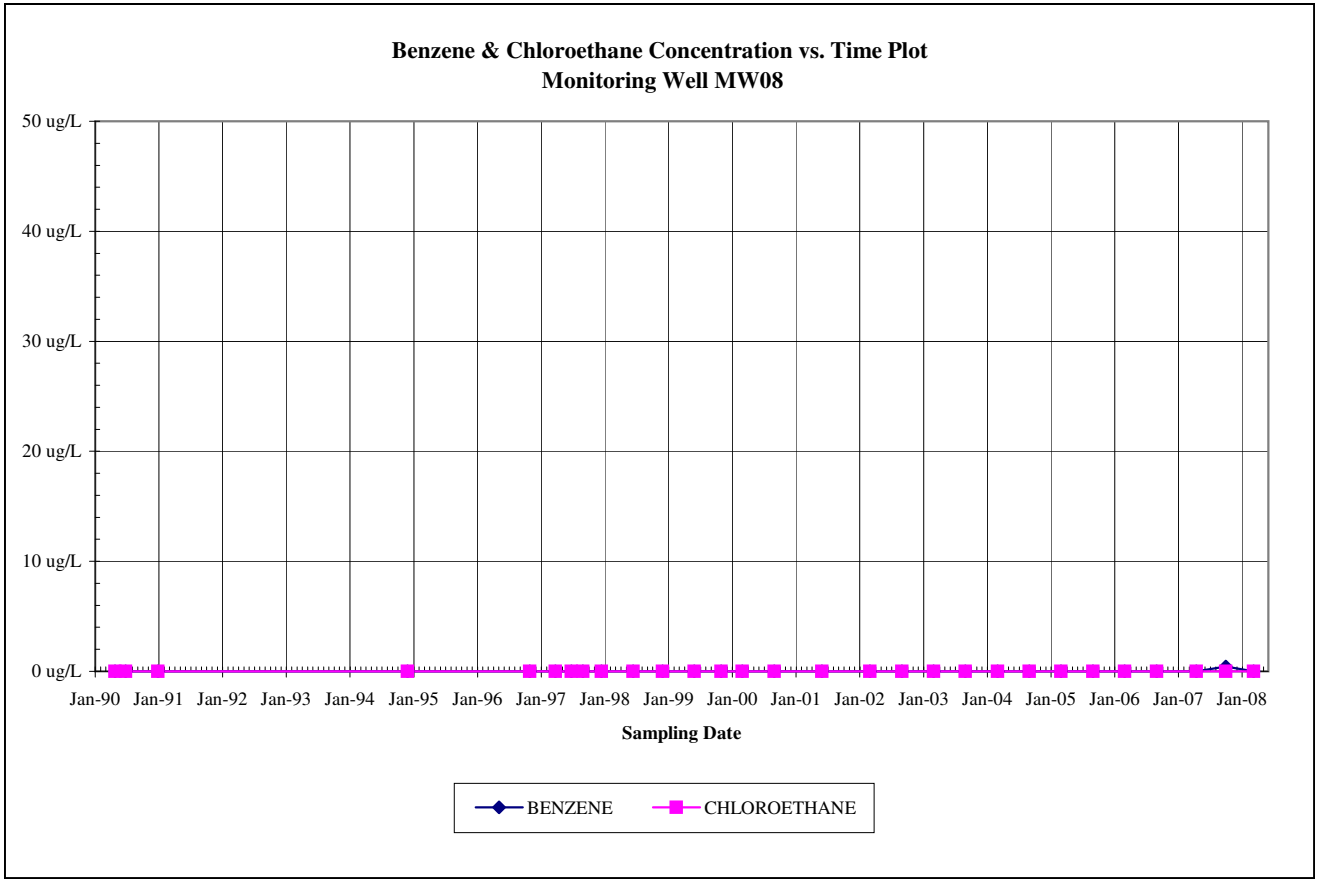
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW08

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| May-90 | BDL | BDL |
| July-90 | BDL | BDL |
| January-91 | BDL | BDL |
| December-94 | BDL | BDL |
| November-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | 0.4 ug/L | BDL |
| March-08 | BDL | BDL |

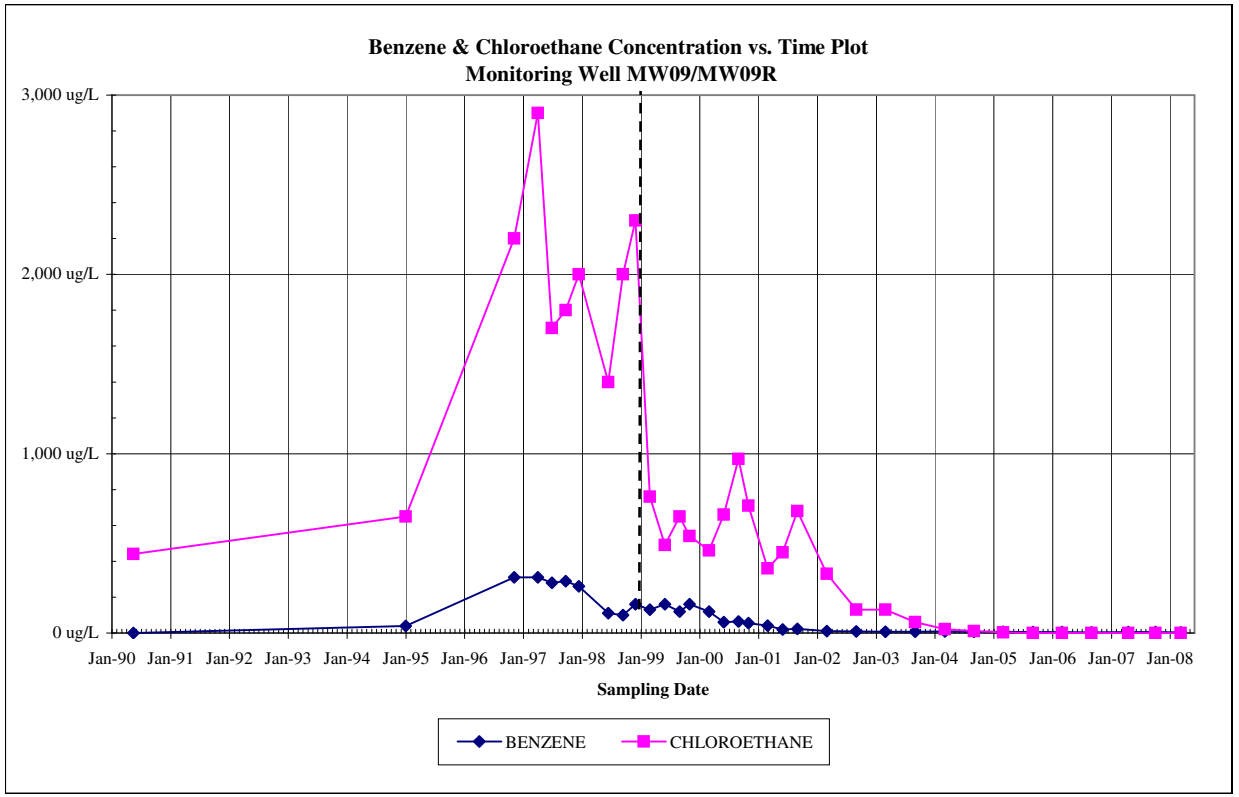
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW09/MW09R

| DATE | BENZENE | CHLOROETHANE | |
|---|---|---|---|
| **BASELINE** | **310** | **2900** | |
| August-89 | | | |
| May-90 | BDL | 440 ug/L | |
| January-95 | 40 ug/L | 650 ug/L | |
| November-96 | 310 ug/L | 2,200 ug/L | |
| April-97 | 310 ug/L | 2,900 ug/L | |
| June-97 | 280 ug/L | 1,700 ug/L | |
| September-97 | 290 ug/L | 1,800 ug/L | |
| December-97 | 260 ug/L | 2,000 ug/L | MW09 |
| June-98 | 110 ug/L | 1,400 ug/L | MW09R |
| September-98 | 100 ug/L | 2,000 ug/L | |
| December-98 | 160 ug/L | 2,300 ug/L | |
| March-99 | 130 ug/L | 760 ug/L | |
| June-99 | 160 ug/L | 490 ug/L | |
| September-99 | 120 ug/L | 650 ug/L | |
| November-99 | 160 ug/L | 540 ug/L | |
| March-00 | 120 ug/L | 460 ug/L | |
| June-00 | 60 ug/L | 660 ug/L | |
| September-00 | 65 ug/L | 970 ug/L | |
| November-00 | 55 ug/L | 710 ug/L | |
| March-01 | 41 ug/L | 360 ug/L | |
| June-01 | 19 ug/L | 450 ug/L | |
| September-01 | 23 ug/L | 680 ug/L | |
| March-02 | 11 ug/L | 330 ug/L | |
| September-02 | 9 ug/L | 130 ug/L | |
| March-03 | 8 ug/L | 130 ug/L | |
| September-03 | 6.6 ug/L | 61 ug/L | |
| March-04 | 8.3 ug/L | 22 ug/L | |
| September-04 | 6.5 ug/L | 11 ug/L | |
| March-05 | 6.8 ug/L | 3.8 ug/L | |
| September-05 | 6.2 ug/L | BDL | |
| March-06 | 5.5 ug/L | BDL | |
| September-06 | 4.4 ug/L | BDL | |
| April-07 | 4.7 ug/L | BDL | |
| October-07 | 4.9 ug/L | BDL | |
| March-08 | 4.4 ug/L | BDL | |

BDL = Below the Detection Limit

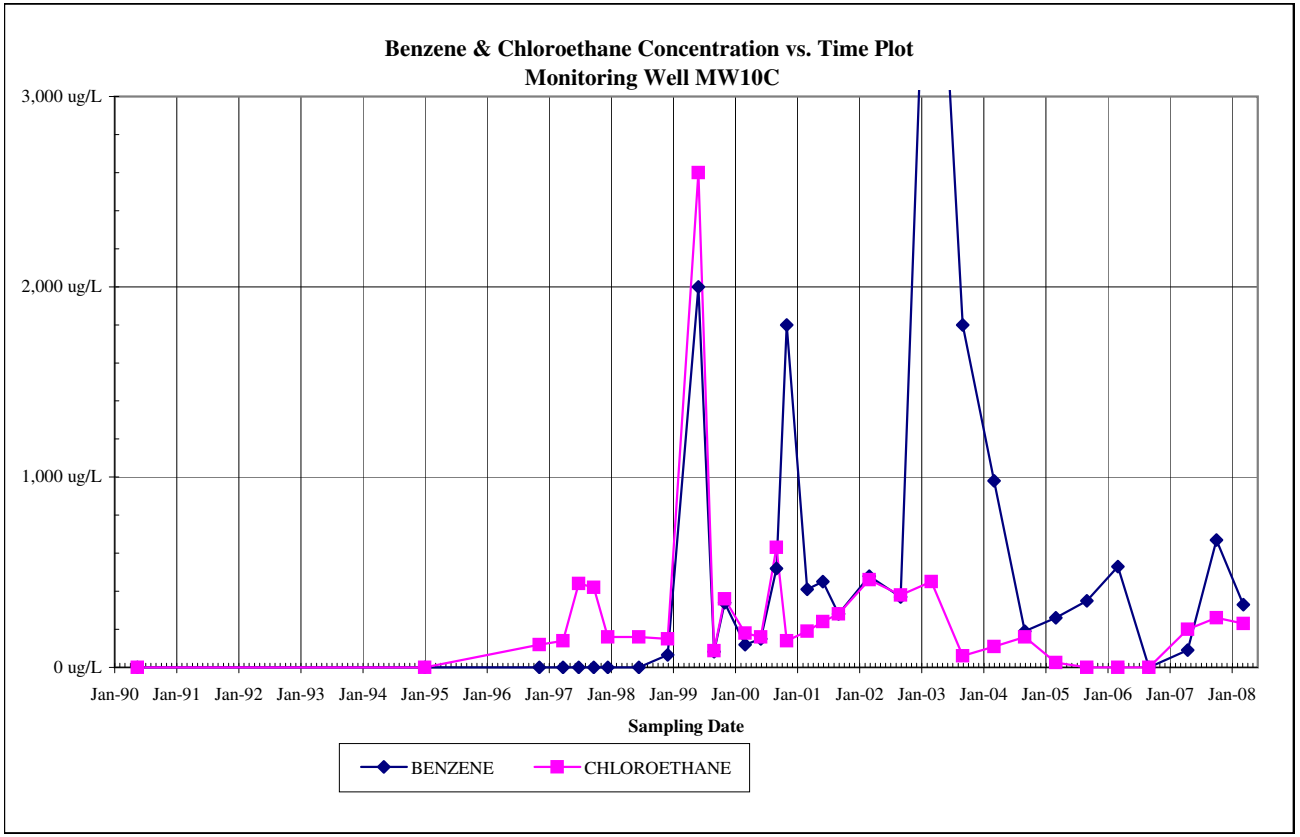



Line indicates change to replacement well

# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW10C

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **150** | **420** |
| August-89 | | |
| May-90 | BDL | BDL |
| January-95 | BDL | BDL |
| November-96 | BDL | 120 ug/L |
| March-97 | BDL | 140 ug/L |
| June-97 | BDL | 440 ug/L |
| September-97 | BDL | 420 ug/L |
| December-97 | BDL | 160 ug/L |
| June-98 | BDL | 160 ug/L |
| December-98 | 66 ug/L | 150 ug/L |
| June-99 | 2,000 ug/L | 2,600 ug/L |
| September-99 | 83 ug/L | 88 ug/L |
| November-99 | 340 ug/L | 360 ug/L |
| March-00 | 120 ug/L | 180 ug/L |
| June-00 | 150 ug/L | 160 ug/L |
| September-00 | 520 ug/L | 630 ug/L |
| November-00 | 1,800 ug/L | 140 ug/L |
| March-01 | 410 ug/L | 190 ug/L |
| June-01 | 450 ug/L | 240 ug/L |
| September-01 | 280 ug/L | 280 ug/L |
| March-02 | 480 ug/L | 460 ug/L |
| September-02 | 370 ug/L | 380 ug/L |
| March-03 | 4,800 ug/L | 450 ug/L |
| September-03 | 1,800 ug/L | 60 ug/L |
| March-04 | 980 ug/L | 110 ug/L |
| September-04 | 190 ug/L | 160 ug/L |
| March-05 | 260 ug/L | 25 ug/L |
| September-05 | 350 ug/L | BDL |
| March-06 | 530 ug/L | BDL |
| September-06 | NS | NS |
| April-07 | 90 ug/L | 200 ug/L |
| October-07 | 670 ug/L | 260 ug/L |
| March-08 | 330 ug/L | 230 ug/L |

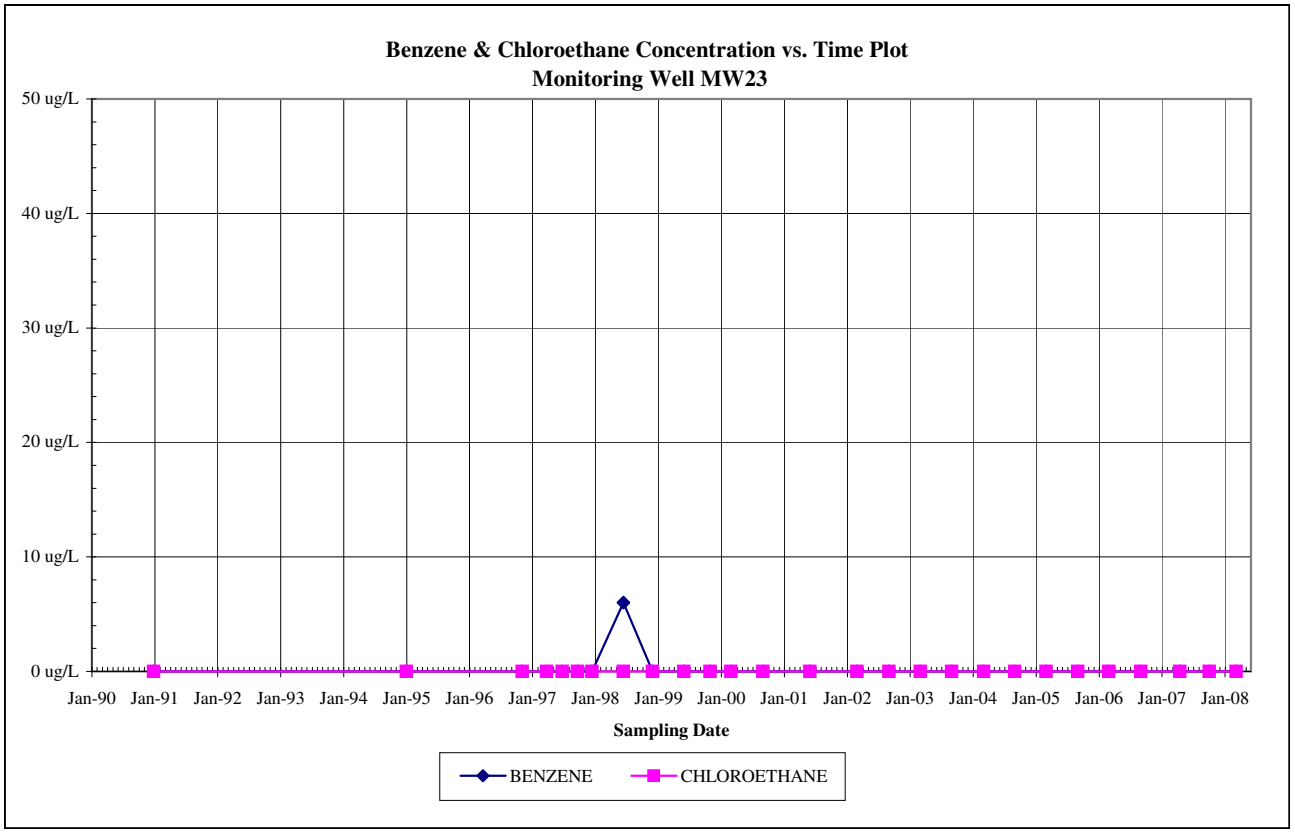
BDL = Below the Detection Limit NS = Not Sampled



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW23

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| January-91 | BDL | BDL |
| January-95 | BDL | BDL |
| November-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | 6 ug/L | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

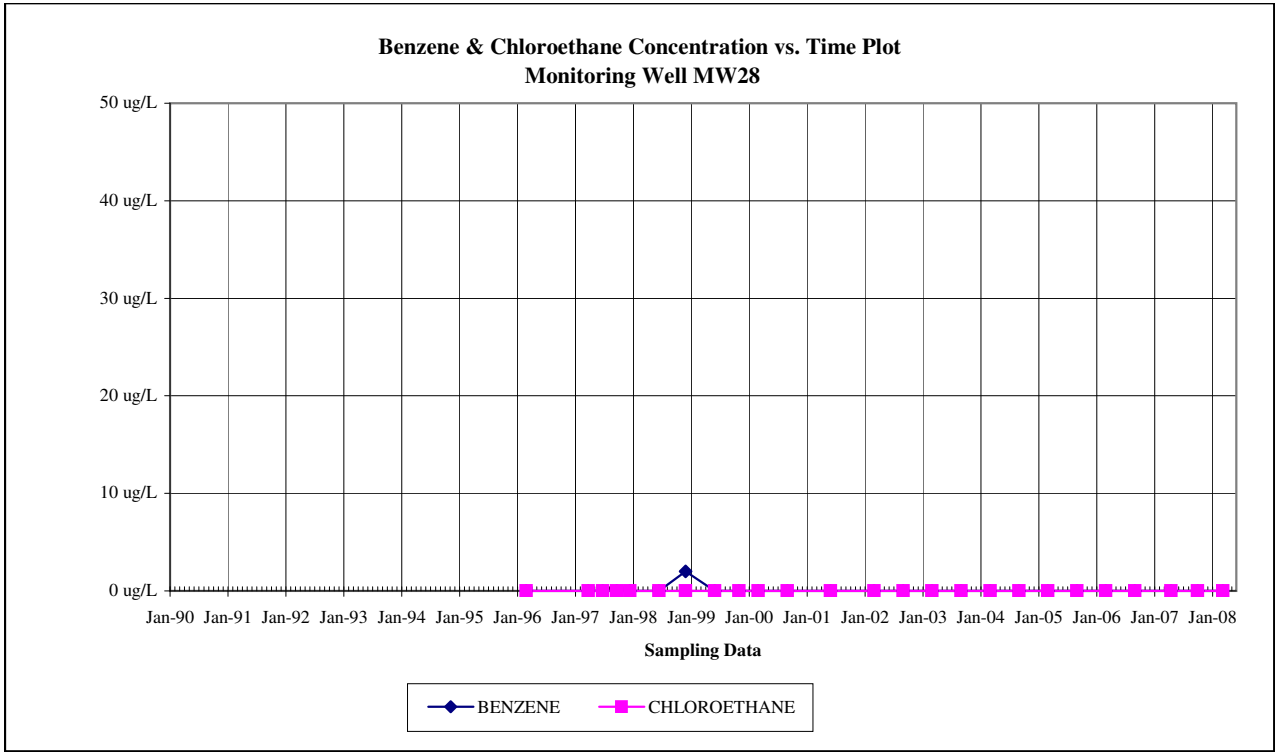
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW28

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | | |
| January-95 | | |
| March-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | 2 ug/L | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

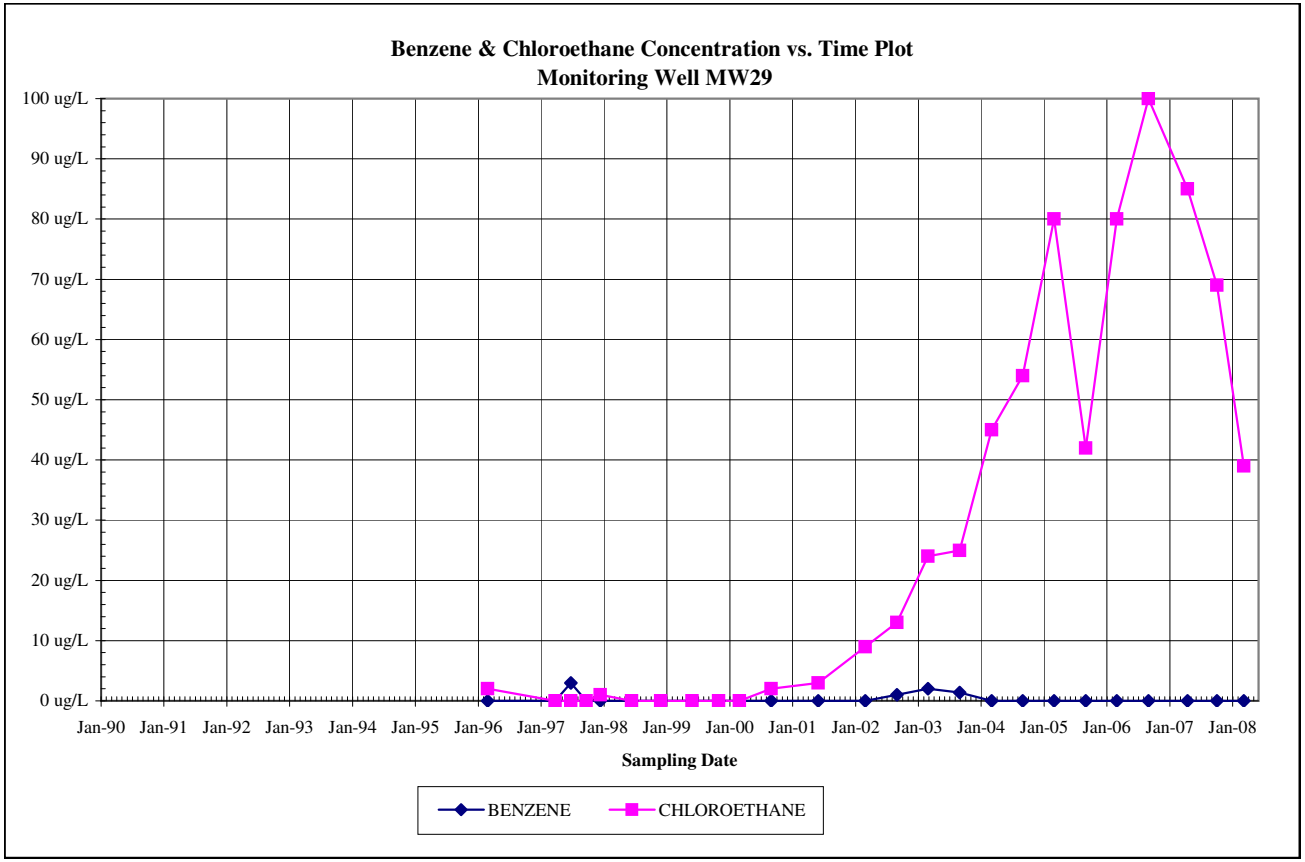
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW29

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | | |
| January-95 | | |
| March-96 | BDL | 2 ug/L |
| March-97 | BDL | BDL |
| June-97 | 3 ug/L | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | 1 ug/L |
| June-98 | BDL | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | 2 ug/L |
| June-01 | BDL | 3 ug/L |
| March-02 | BDL | 9 ug/L |
| September-02 | 1 ug/L | 13 ug/L |
| March-03 | 2 ug/L | 24 ug/L |
| September-03 | 1.4 ug/L | 25 ug/L |
| March-04 | BDL | 45 ug/L |
| September-04 | BDL | 54 ug/L |
| March-05 | BDL | 80 ug/L |
| September-05 | BDL | 42 ug/L |
| March-06 | BDL | 80 ug/L |
| September-06 | BDL | 100 ug/L |
| April-07 | BDL | 85 ug/L |
| October-07 | BDL | 69 ug/L |
| March-08 | BDL | 39 ug/L |

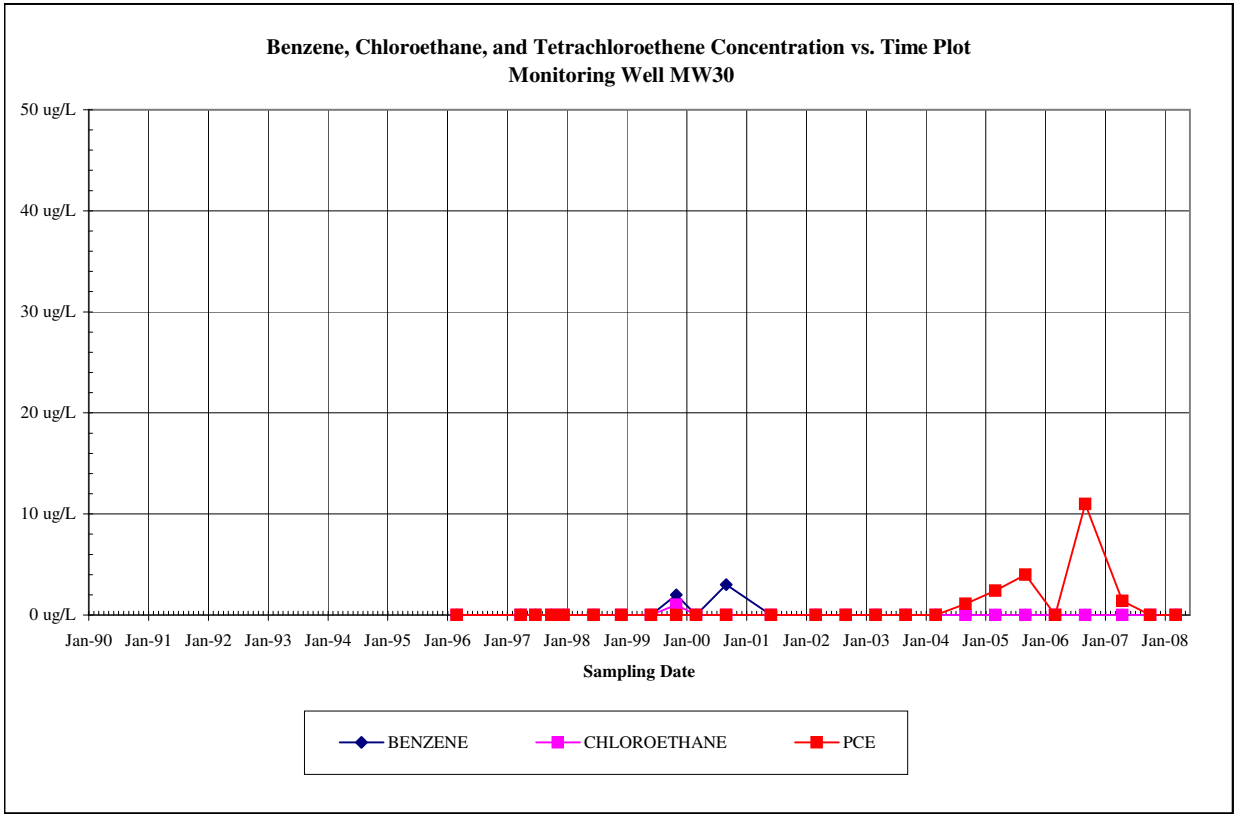
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW30

| DATE | BENZENE | CHLOROETHANE | PCE |
|---|---|---|---|
| **BASELINE** | **10** | **10** | **10** |
| August-89 | | | |
| May-90 | | | |
| January-95 | | | |
| March-96 | BDL | BDL | BDL |
| March-97 | BDL | BDL | BDL |
| June-97 | BDL | BDL | BDL |
| October-97 | BDL | BDL | BDL |
| December-97 | BDL | BDL | BDL |
| June-98 | BDL | BDL | BDL |
| December-98 | BDL | BDL | BDL |
| June-99 | BDL | BDL | BDL |
| November-99 | 2 ug/L | 1 ug/L | BDL |
| March-00 | BDL | BDL | BDL |
| September-00 | 3 ug/L | BDL | BDL |
| June-01 | BDL | BDL | BDL |
| March-02 | BDL | BDL | BDL |
| September-02 | BDL | BDL | BDL |
| March-03 | BDL | BDL | BDL |
| September-03 | BDL | BDL | BDL |
| March-04 | BDL | BDL | BDL |
| September-04 | BDL | BDL | 1.1 ug/L |
| March-05 | BDL | BDL | 2.4 ug/L |
| September-05 | BDL | BDL | 4.0 ug/L |
| March-06 | BDL | BDL | BDL |
| September-06 | BDL | BDL | 11.0 ug/L |
| April-07 | BDL | BDL | 1.4 ug/L |
| October-07 | BDL | BDL | BDL |
| March-08 | BDL | BDL | BDL |

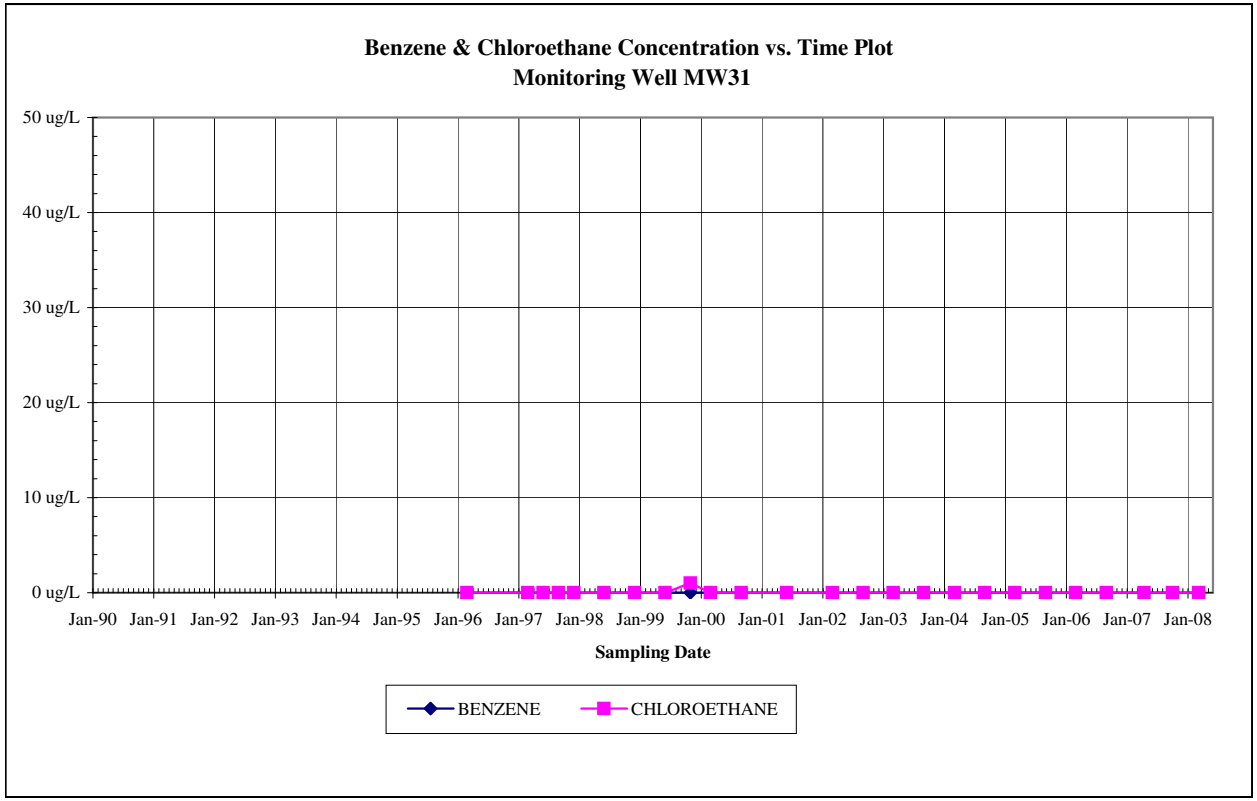
BDL = Below the Detection Limit
PCE = Tetrachloroethene



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW31

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| BASELINE | 10 | 10 |
| August-89 | | |
| May-90 | | |
| January-95 | | |
| March-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | 1 ug/L |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

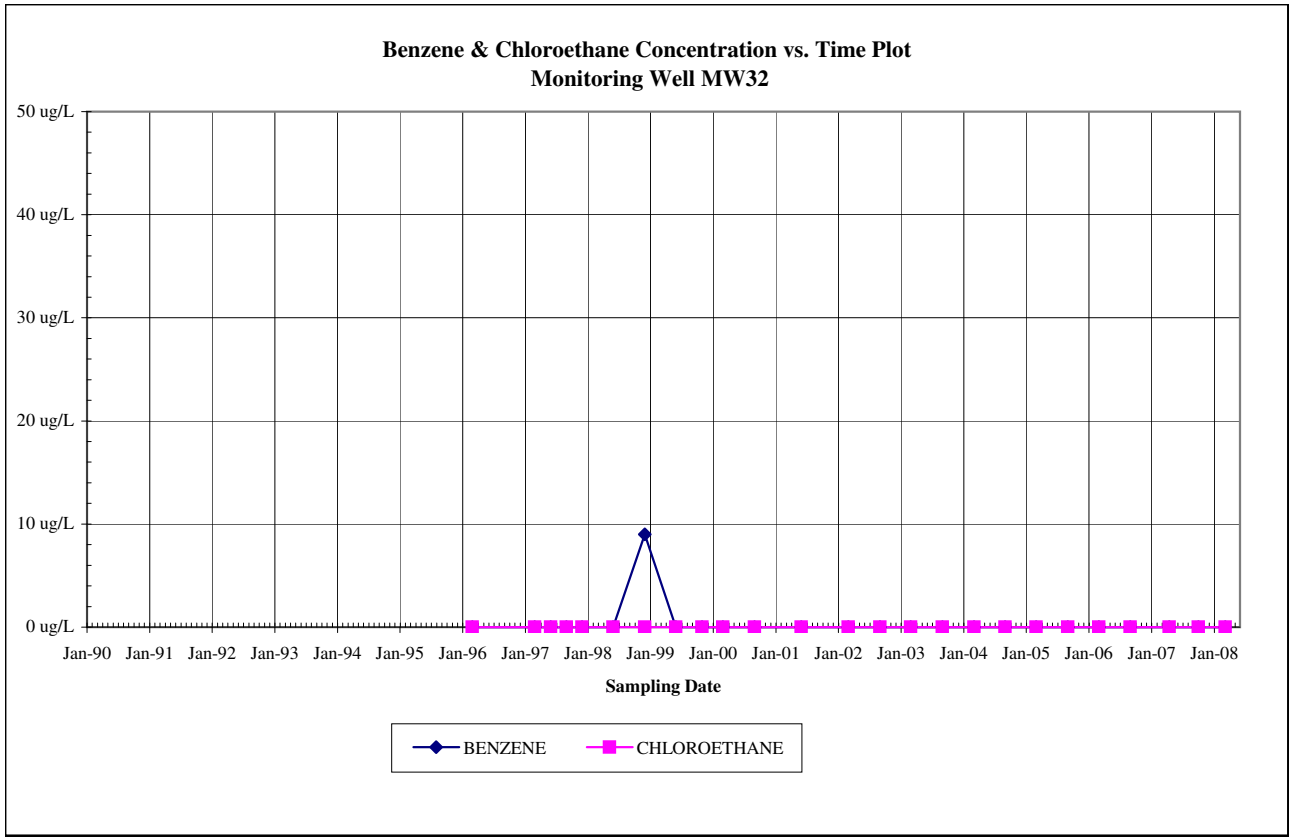
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW32

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | | |
| January-95 | | |
| March-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | 9 ug/L | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

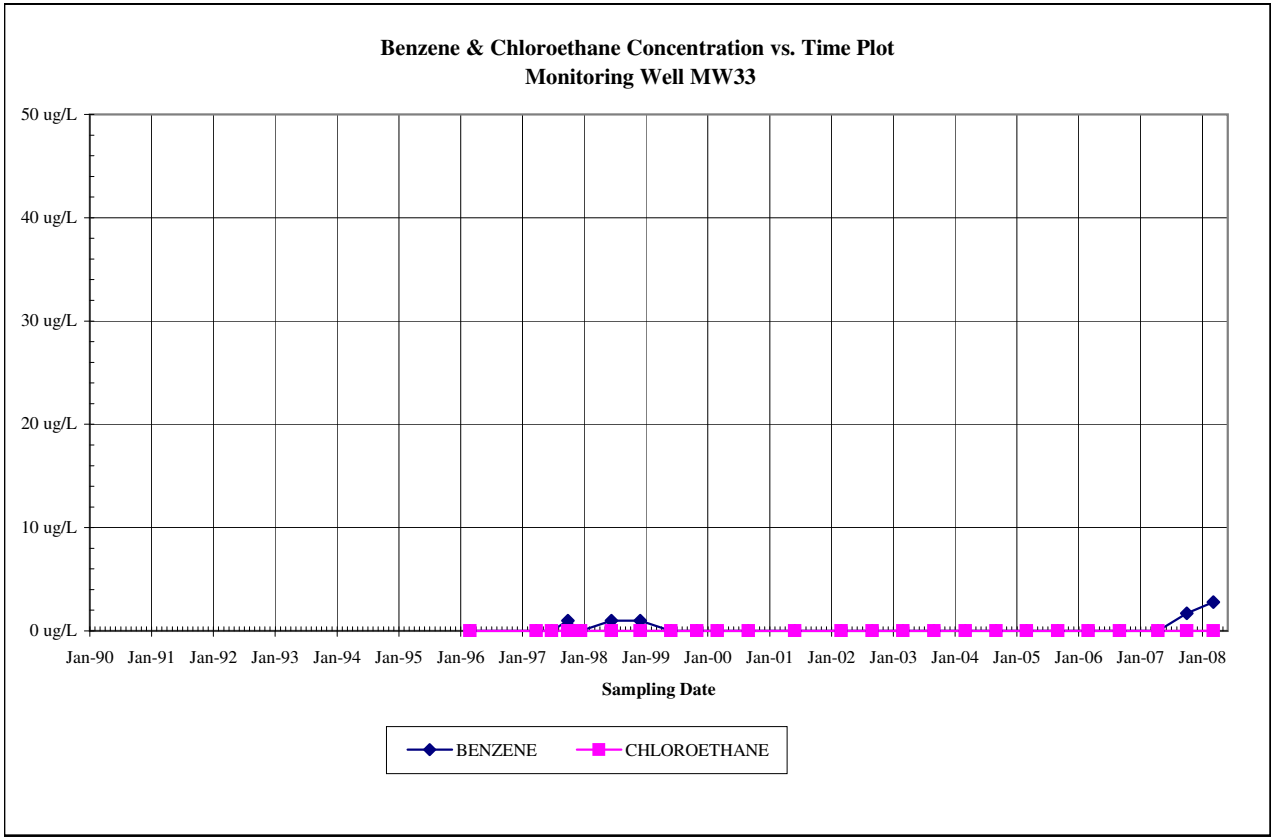
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW33

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | | |
| January-95 | | |
| March-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| October-97 | 1 ug/L | BDL |
| December-97 | BDL | BDL |
| June-98 | 1 ug/L | BDL |
| December-98 | 1 ug/L | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | 1.7 ug/L | BDL |
| March-08 | 2.8 ug/L | BDL |

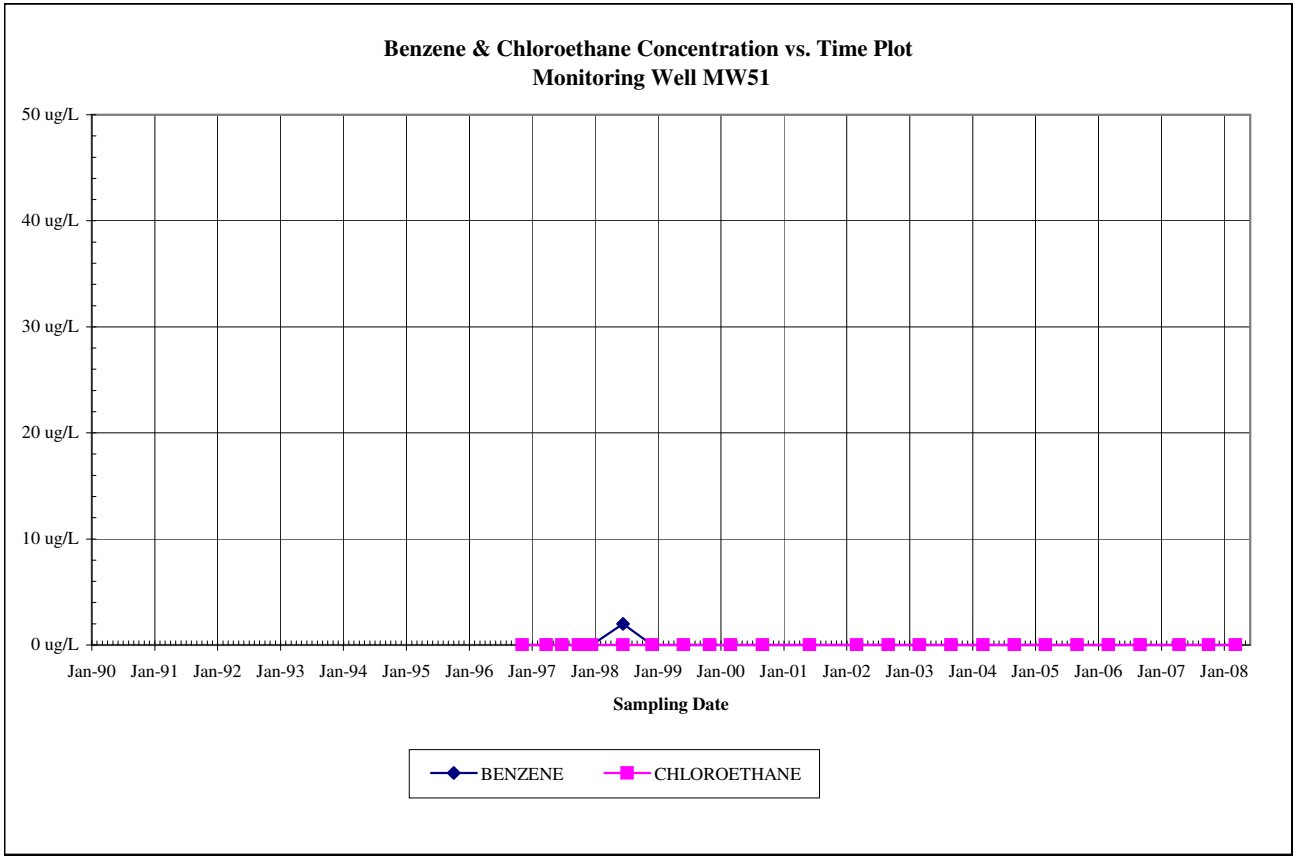
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW51

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **100** | **100** |
| August-89 | | |
| May-90 | | |
| January-95 | | |
| November-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| October-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | 2 ug/L | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

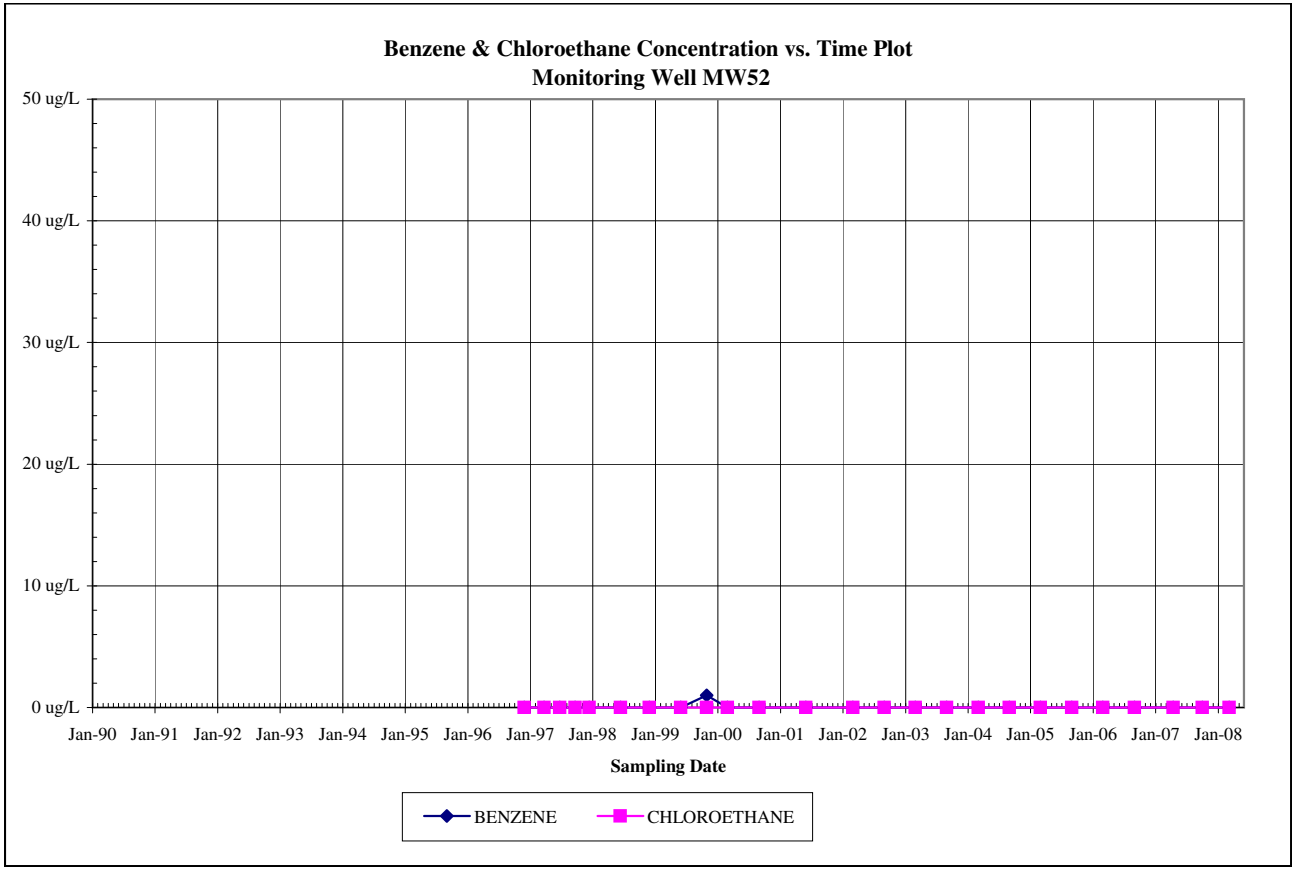
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW52

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **100** | **100** |
| August-89 | | |
| May-90 | | |
| January-95 | | |
| December-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | 1 ug/L | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

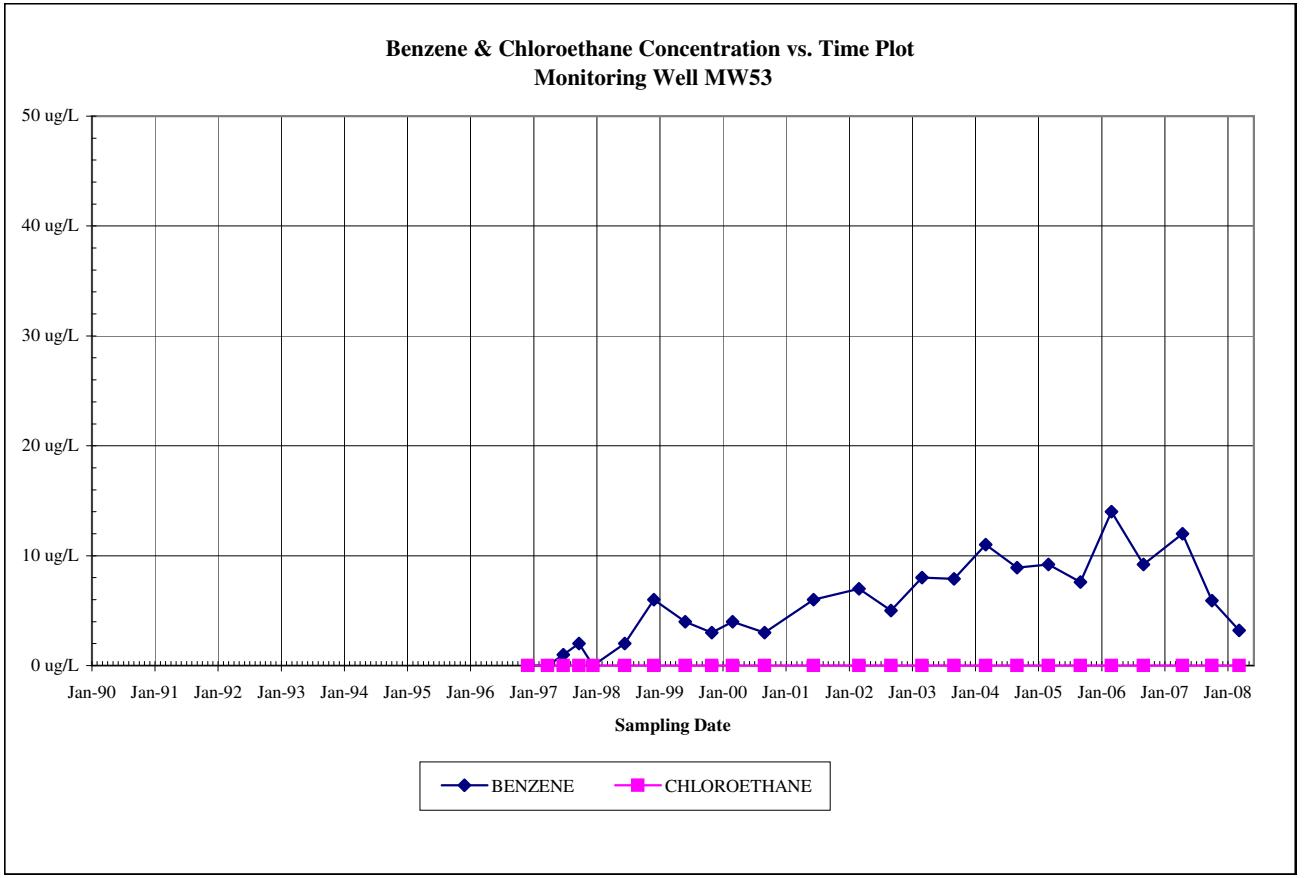
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW53

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| BASELINE | 10 | 10 |
| August-89 | | |
| May-90 | | |
| January-95 | | |
| December-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | 1 ug/L | BDL |
| September-97 | 2 ug/L | BDL |
| December-97 | BDL | BDL |
| June-98 | 2 ug/L | BDL |
| December-98 | 6 ug/L | BDL |
| June-99 | 4 ug/L | BDL |
| November-99 | 3 ug/L | BDL |
| March-00 | 4 ug/L | BDL |
| September-00 | 3 ug/L | BDL |
| June-01 | 6 ug/L | BDL |
| March-02 | 7 ug/L | BDL |
| September-02 | 5 ug/L | BDL |
| March-03 | 8 ug/L | BDL |
| September-03 | 7.9 ug/L | BDL |
| March-04 | 11 ug/L | BDL |
| September-04 | 8.9 ug/L | BDL |
| March-05 | 9.2 ug/L | BDL |
| September-05 | 7.6 ug/L | BDL |
| March-06 | 14 ug/L | BDL |
| September-06 | 9.2 ug/L | BDL |
| April-07 | 12.0 ug/L | BDL |
| October-07 | 5.9 ug/L | BDL |
| March-08 | 3.2 ug/L | BDL |

BDL = Below the Detection Limit

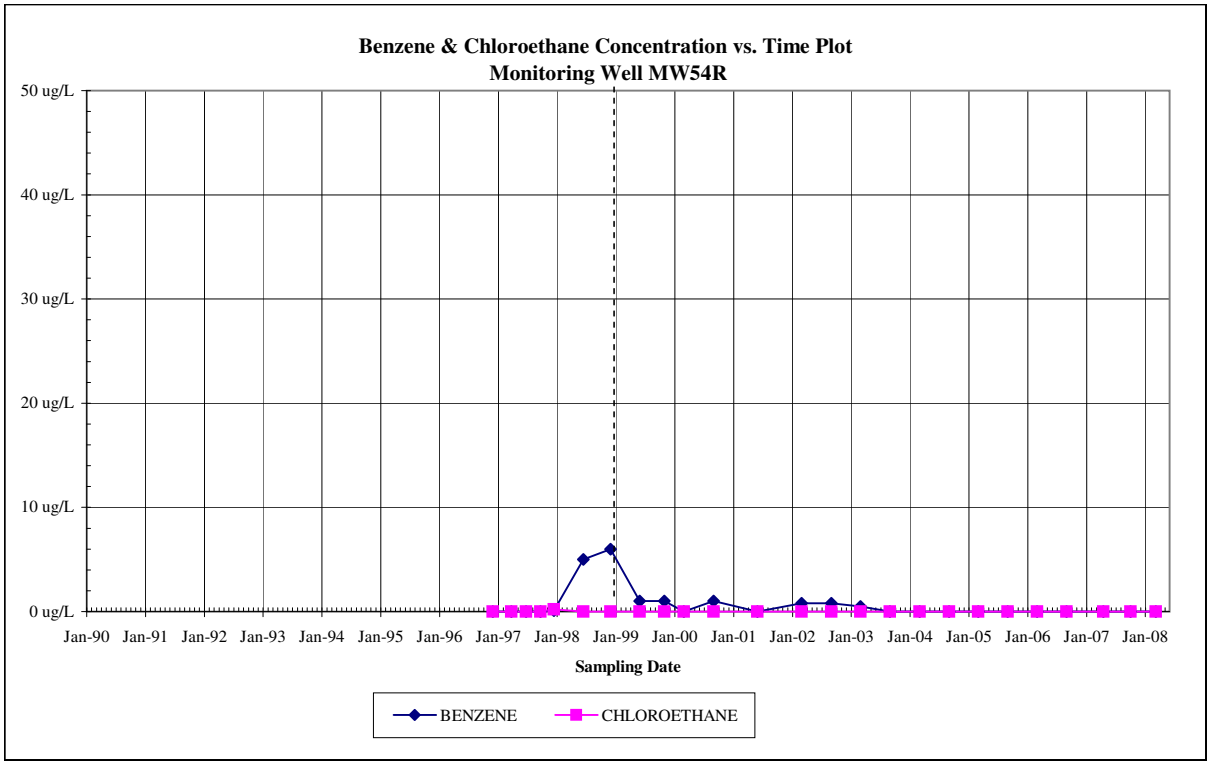


# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW54R

| DATE | BENZENE | CHLOROETHANE | |
|---|---|---|---|
| **BASELINE** | **10** | **10** | |
| August-89 | | | |
| May-90 | | | |
| January-95 | | | |
| December-96 | BDL | BDL | |
| March-97 | BDL | BDL | |
| June-97 | BDL | BDL | |
| September-97 | BDL | BDL | |
| December-97 | 0.1 ug/L | 0.2 ug/L | |
| June-98 | 5 ug/L | BDL | <- MW54R |
| December-98 | 6 ug/L | BDL | |
| June-99 | 1 ug/L | BDL | |
| November-99 | 1 ug/L | BDL | |
| March-00 | BDL | BDL | |
| September-00 | 1 ug/L | BDL | |
| June-01 | BDL | BDL | |
| March-02 | 1 ug/L | BDL | |
| September-02 | 1 ug/L | BDL | |
| March-03 | 0.5 ug/L | BDL | |
| September-03 | BDL | BDL | |
| March-04 | BDL | BDL | |
| September-04 | BDL | BDL | |
| March-05 | BDL | BDL | |
| September-05 | BDL | BDL | |
| March-06 | BDL | BDL | |
| September-06 | BDL | BDL | |
| April-07 | BDL | BDL | |
| October-07 | BDL | BDL | |
| March-08 | BDL | BDL | |

BDL = Below the Detection Limit

MW54 was damaged by a vehicle and was replaced with MW54R

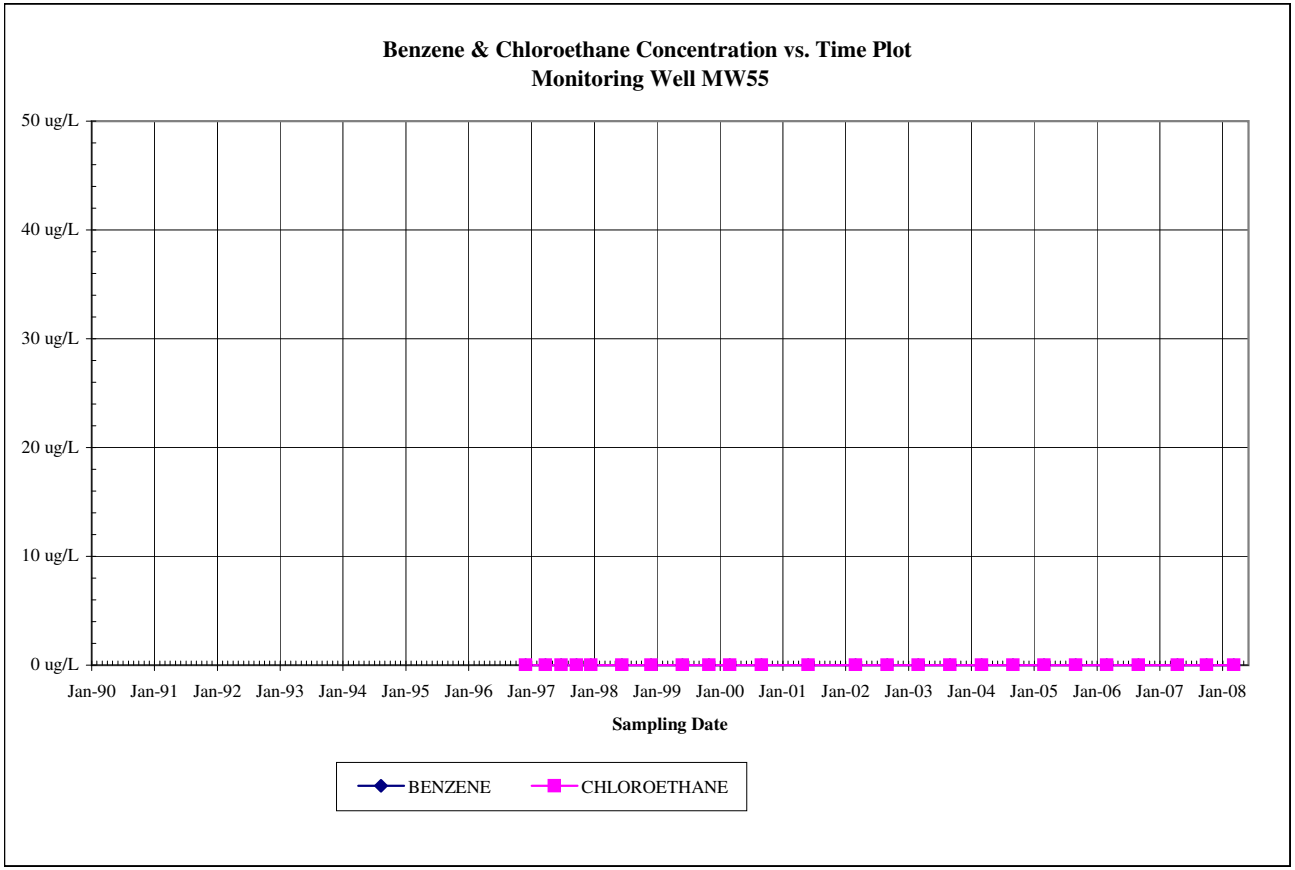



---------- Line indicates change to replacement well

# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well MW55

| DATE | BENZENE | CHLOROETHANE |
|---|---|---|
| **BASELINE** | **10** | **10** |
| August-89 | | |
| May-90 | | |
| January-95 | | |
| December-96 | BDL | BDL |
| March-97 | BDL | BDL |
| June-97 | BDL | BDL |
| September-97 | BDL | BDL |
| December-97 | BDL | BDL |
| June-98 | BDL | BDL |
| December-98 | BDL | BDL |
| June-99 | BDL | BDL |
| November-99 | BDL | BDL |
| March-00 | BDL | BDL |
| September-00 | BDL | BDL |
| June-01 | BDL | BDL |
| March-02 | BDL | BDL |
| September-02 | BDL | BDL |
| March-03 | BDL | BDL |
| September-03 | BDL | BDL |
| March-04 | BDL | BDL |
| September-04 | BDL | BDL |
| March-05 | BDL | BDL |
| September-05 | BDL | BDL |
| March-06 | BDL | BDL |
| September-06 | BDL | BDL |
| April-07 | BDL | BDL |
| October-07 | BDL | BDL |
| March-08 | BDL | BDL |

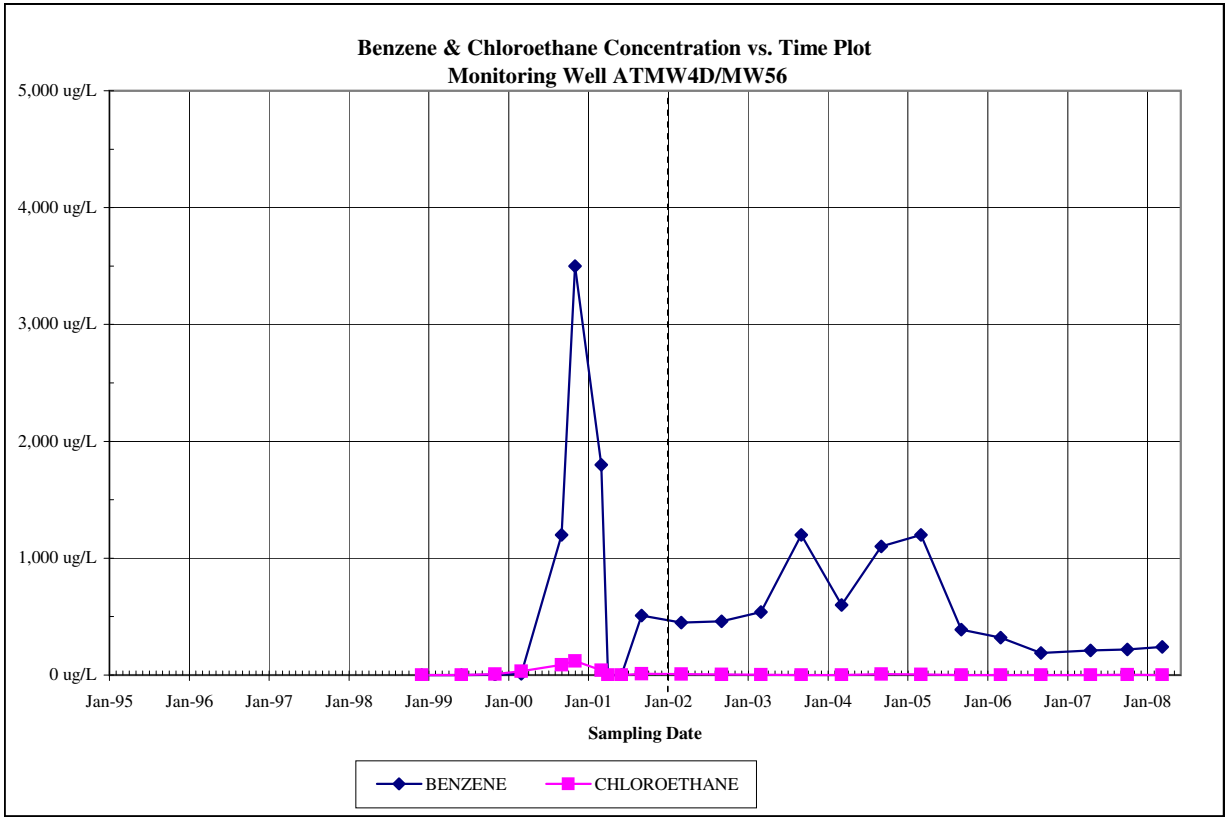
BDL = Below the Detection Limit



# Concentration vs. Time Plot for
# Lower Aquifer Monitoring Well ATMW4D-MW56

| DATE | BENZENE | CHLOROETHANE | |
|---|---|---|---|
| **BASELINE** | **-** | **-** | |
| December-98 | BDL | BDL | |
| June-99 | BDL | BDL | |
| November-99 | 3 ug/L | 9 ug/L | |
| March-00 | 12 ug/L | 34 ug/L | |
| September-00 | 1,200 ug/L | 88 ug/L | |
| November-00 | 3,500 ug/L | 120 ug/L | |
| March-01 | 1,800 ug/L | 42 ug/L | ATMW4D |
| April-01 | BDL | BDL | MW56 |
| June-01 | BDL | BDL | |
| September-01 | 510 ug/L | 10 ug/L | |
| March-02 | 450 ug/L | 8 ug/L | |
| September-02 | 460 ug/L | 6 ug/L | |
| March-03 | 540 ug/L | 4 ug/L | |
| September-03 | 1,200 ug/L | BDL | |
| March-04 | 600 ug/L | BDL | |
| September-04 | 1,100 ug/L | 7 ug/L | |
| March-05 | 1,200 ug/L | 6.4 ug/L | |
| September-05 | 390 ug/L | BDL | |
| March-06 | 320 ug/L | BDL | |
| September-06 | 190 ug/L | BDL | |
| April-07 | 210 ug/L | BDL | |
| October-07 | 220 ug/L | 1.8 ug/L | |
| March-08 | 240 ug/L | BDL | |

BDL = Below the Detection Limit




---------- Line indicates change to replacement well

## Appendix C

## Laboratory Analytical Reports and Data Validation Narratives

Sample Delivery Group (SDG) ME0803A55 VOCs
Data Validation Narrative VOCs
Data Validation Narrative Form 1s

SDG ME0803A91 VOCs, SVOCs, and Inorganics
Data Validation Narrative Forms 1s
Data Validation Narrative VOCs
Data Validation Narrative SVOCs
Data Validation Narrative Inorganics

SDG ME0803B85 VOCs and SVOCs
Data Validation Narrative Form 1s
Data Validation Narrative VOCs
Data Validation Narrative SVOCs

SDG ME0803C07 VOCs, SVOCs, and Inorganics
Data Validation Narrative Form 1s
Data Validation Narrative VOCs
Data Validation Narrative SVOCs
Data Validation Narrative Inorganics

Tentatively Identified Compounds (TICs)

Precision, Accuracy, Representativeness, Comparability, Completeness (PARCC) Review
SDG ME0803A55, SDG ME0803A91, SDG ME0803B85, and SDG ME0803C07

SDG ME0807691 VOCs
Data Validation Narrative VOCs
Data Validation Narrative Form 1s

PARCC Review SDG ME0807691

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# LEVEL IV
# QA/QC DATA PACKAGE

| | |
|---|---|
| **CLIENT:** | MWH, Inc. |
| **PROJECT:** | GW - SemiAnnual / ACS |
| **LAB WORKORDER:** | ME0803A55 |
| **DATE PACKAGE ISSUED:** | 04/14/08 |

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**CLIENT:** **MWH, Inc.**

**PROJECT:** **GW - SemiAnnual / ACS**

**LAB WORKORDER:** **ME0803A55**

**CHAIN-OF-CUSTODY:** **82594**


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# Case Narrative
# VOA Analysis

Client: MWH, Inc.

Project: GW - SemiAnnual / ACS

Laboratory #: ME0803A55

Ten groundwater samples were received on 03/26/08 for analysis and reporting in accordance with our Level IV protocol. The samples were received in acceptable physical condition. The samples were analyzed for Volatile Organic Analytes using SW-846 Method 8260B. To achieve lower reporting limits these samples were analyzed using a 25-ml sample size.

The samples were collected on 03/25/08. The samples were analyzed on 04/01/08 and 04/02/08. All samples were analyzed within the prescribed maximum allowable holding time without exception.

The required instrument calibration was performed and the acceptance criteria met. The grand mean average approach was used to assess linearity.

Prior to analysis, the resultant mass spectra for BFB met all method criteria, and all samples were analyzed within 12-hour analytical sequences.

Prior to analysis, a CCV standard was analyzed and the acceptance criteria met for all CCCs and SPCCs with the following exception.

- 1,1,2,2-Tetrachloroethane failed to meet the minimum response criteria in A040103. This criterion is based on a 5-ml sample size. These standards were analyzed using a 25-ml purge volume. This data is typical for a 25-ml purge and considered acceptable.

The batch quality control tests were performed and the acceptance criteria met with the following exception.

- The Laboratory Control Sample (SeqNo 1761897) failed for Chloromethane with a high bias. This is considered insignificant as the sample concentrations were below the reporting limit.

Surrogate compounds are spiked into each sample to evaluate analysis efficiency. All samples yielded acceptable surrogate recovery.

Internal standards are spiked into each CCV standard and environmental sample. All internal standard responses met the criteria established for the CCVs. The internal standard responses in the environmental samples were evaluated and deemed adequate.

# Case Narrative
# VOA Analysis

Client: MWH, Inc.

Project: GW - SemiAnnual / ACS

Laboratory #: ME0803A55

Matrix evaluation was performed on the following client-submitted samples. The accuracy and precision criteria were met as noted.

| SAMPLE ID | QC TYPE | EVALUATION |
|---|---|---|
| ACS-GW-MW59-31 | MS/MSD | Accuracy criteria met with the exception of Chloromethane which failed with a high bias. Precision criteria met without exception. |

This Case Narrative was prepared by Allyl McCarron, QC Assistant.

April 10, 2008

Christopher Daly
MWH, Inc.
175 West Jackson Boulevard, Suite 1900
Chicago, IL 60604

Work Order No.: ME0803A55

RE: GW - SemiAnnual / ACS

Dear Christopher Daly:

Microbac Laboratories, Inc. received 10 samples on 3/26/2008 1:20:00 PM for the analyses presented in the following report.

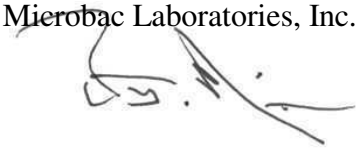
The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,
Microbac Laboratories, Inc.



Ronald J. Misiunas
Client Services Manager

Enclosures

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# WORK ORDER SAMPLE SUMMARY

**Date:** *Thursday, April 10, 2008*

**CLIENT:** MWH, Inc.
**Project:** GW - SemiAnnual / ACS
**Lab Order:** ME0803A55

| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---|---|---|---|---|
| ME0803A55-01A | ACS-GW-TB01-31 | | 3/25/2008 8:00:00 AM | 3/26/2008 |
| ME0803A55-02A | ACS-GW-DUP01-31 | | 3/25/2008 9:00:00 AM | 3/26/2008 |
| ME0803A55-03A | ACS-GW-MW59-31 | | 3/25/2008 10:50:00 AM | 3/26/2008 |
| ME0803A55-04A | ACS-GW-MW58-31 | | 3/25/2008 12:10:00 PM | 3/26/2008 |
| ME0803A55-05A | ACS-GW-MW17-31 | | 3/25/2008 1:58:00 PM | 3/26/2008 |
| ME0803A55-06A | ACS-GW-MW28-31 | | 3/25/2008 2:05:00 PM | 3/26/2008 |
| ME0803A55-07A | ACS-GW-MW31-31 | | 3/25/2008 3:30:00 PM | 3/26/2008 |
| ME0803A55-08A | ACS-GW-MW32-31 | | 3/25/2008 3:50:00 PM | 3/26/2008 |
| ME0803A55-09A | ACS-GW-MW08-31 | | 3/25/2008 4:30:00 PM | 3/26/2008 |
| ME0803A55-10A | ACS-GW-EB01-31 | | 3/25/2008 5:00:00 PM | 3/26/2008 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-TB01-31 | **Work Order / ID:** | ME0803A55-01 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 13:27 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| Chloroform | A | ***1.3*** | 0.9 | 5.0 | J | µg/L | 1 | 04/01/08 13:27 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 13:27 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 13:27 |
| *Surr: 4-Bromofluorobenzene* | S | 105 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 13:27 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-TB01-31 | **Work Order / ID:** | ME0803A55-01 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 114 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 13:27 |
| *Surr: 1,2-Dichloroethane-d4* | S | 127 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 13:27 |
| *Surr: Toluene-d8* | S | 99.9 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 13:27 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-DUP01-31 | **Work Order / ID:** | ME0803A55-02 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 14:04 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 14:04 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 14:04 |
| *Surr: 4-Bromofluorobenzene* | S | 108 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 14:04 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-DUP01-31 | **Work Order / ID:** | ME0803A55-02 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 113 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 14:04 |
| *Surr: 1,2-Dichloroethane-d4* | S | 129 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 14:04 |
| *Surr: Toluene-d8* | S | 101 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 14:04 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW59-31 | **Work Order / ID:** | ME0803A55-03 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 10:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 14:40 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Trichloroethene | A | ***7.6*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 14:40 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 14:40 |
| *Surr: 4-Bromofluorobenzene* | S | 107 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 14:40 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW59-31 | **Work Order / ID:** | ME0803A55-03 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 10:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 112 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 14:40 |
| *Surr: 1,2-Dichloroethane-d4* | S | 127 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 14:40 |
| *Surr: Toluene-d8* | S | 101 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 14:40 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW58-31 | **Work Order / ID:** | ME0803A55-04 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 12:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 20:27 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Trichloroethene | A | ***8.7*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 20:27 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 20:27 |
| *Surr: 4-Bromofluorobenzene* | S | 103 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 20:27 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW58-31 | **Work Order / ID:** | ME0803A55-04 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 12:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 20:27 |
| *Surr: 1,2-Dichloroethane-d4* | S | 112 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 20:27 |
| *Surr: Toluene-d8* | S | 101 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 20:27 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW17-31 | **Work Order / ID:** | ME0803A55-05 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 13:58 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 21:02 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 21:02 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 21:02 |
| *Surr: 4-Bromofluorobenzene* | S | 105 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 21:02 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW17-31 | **Work Order / ID:** | ME0803A55-05 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 13:58 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 111 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 21:02 |
| *Surr: 1,2-Dichloroethane-d4* | S | 116 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 21:02 |
| *Surr: Toluene-d8* | S | 98.3 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 21:02 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** GW - SemiAnnual / ACS
**Client Sample ID:** ACS-GW-MW28-31
**Work Order / ID:** ME0803A55-06
**Sample Description:**
**Collection Date:** 03/25/08 14:05
**Sample Matrix:** Aqueous
**Date Received:** 03/26/08 13:20

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 21:40 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 21:40 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 21:40 |
| *Surr: 4-Bromofluorobenzene* | S | 102 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 21:40 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW28-31 | **Work Order / ID:** | ME0803A55-06 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 14:05 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 21:40 |
| *Surr: 1,2-Dichloroethane-d4* | S | 113 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 21:40 |
| *Surr: Toluene-d8* | S | 97.4 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 21:40 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW31-31 | **Work Order / ID:** | ME0803A55-07 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 15:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 22:19 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 22:19 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 22:19 |
| *Surr: 4-Bromofluorobenzene* | S | 103 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 22:19 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW31-31 | **Work Order / ID:** | ME0803A55-07 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 15:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 108 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 22:19 |
| *Surr: 1,2-Dichloroethane-d4* | S | 117 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 22:19 |
| *Surr: Toluene-d8* | S | 97.8 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 22:19 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW32-31 | **Work Order / ID:** | ME0803A55-08 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 15:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 22:56 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| Trichloroethene | A | ***1.2*** | 0.9 | 5.0 | J | µg/L | 1 | 04/01/08 22:56 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 22:56 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 22:56 |
| *Surr: 4-Bromofluorobenzene* | S | 104 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 22:56 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW32-31 | **Work Order / ID:** | ME0803A55-08 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 15:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 112 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 22:56 |
| *Surr: 1,2-Dichloroethane-d4* | S | 118 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 22:56 |
| *Surr: Toluene-d8* | S | 98.9 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 22:56 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW08-31 | **Work Order / ID:** | ME0803A55-09 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 16:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 23:32 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 23:32 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 23:32 |
| *Surr: 4-Bromofluorobenzene* | S | 102 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 23:32 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW08-31 | **Work Order / ID:** | ME0803A55-09 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 16:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 110 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 23:32 |
| *Surr: 1,2-Dichloroethane-d4* | S | 117 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 23:32 |
| *Surr: Toluene-d8* | S | 98.2 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 23:32 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-EB01-31 | **Work Order / ID:** | ME0803A55-10 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 17:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/02/08 00:08 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/02/08 00:08 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/02/08 00:08 |
| *Surr: 4-Bromofluorobenzene* | S | 101 | 0 | 75.2-115 | | %REC | 1 | 04/02/08 00:08 |

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Microbac®

# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-EB01-31 | **Work Order / ID:** | ME0803A55-10 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 17:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 111 | 0 | 92.7-119 | | %REC | 1 | 04/02/08 00:08 |
| *Surr: 1,2-Dichloroethane-d4* | S | 116 | 0 | 88.2-132 | | %REC | 1 | 04/02/08 00:08 |
| *Surr: Toluene-d8* | S | 98.0 | 0 | 89.3-116 | | %REC | 1 | 04/02/08 00:08 |

**FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NA | = | Not Analyzed | N/A | = | Not Applicable | | | |
| mg/L | = | Milligrams per Liter (ppm) | ug/L | = | Micrograms per Liter (ppb) | cfu | = | Colony Forming Unit |
| mg/Kg | = | Milligrams per Kilogram (ppm) | ug/Kg | = | Micrograms per Kilogram (ppb) | ng/L | = | Nanograms per Liter (ppt) |

| | | |
|---|---|---|
| U | = | Undetected |
| J | = | Analyte concentration detected between RL and MDL (Metals / Organics) |
| B | = | Detected in the associated Method Blank at a concentration above the routine PQL/RL |
| b | = | Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL |
| D | = | Surrogate recoveries are not calculated due to sample dilution |
| ND | = | Not Detected at the Reporting Limit (or the Method Detection Limit, if listed) |
| E | = | Value above quantitation range |
| H | = | Analyte was prepared and/or analyzed outside of the analytical method holding time |
| I | = | Matrix Interference |
| R | = | RPD outside accepted recovery limits |
| S | = | Spike recovery outside recovery limits |
| Surr | = | Surrogate |

DF = Dilution Factor RL = Reporting Limit ST = Sample Type MDL = Method Detection Limit

**SAMPLE TYPES**

| | | |
|---|---|---|
| A | = | Analyte |
| I | = | Internal Standard |
| S | = | Surrogate |
| T | = | Tentatively Identified Compound (TIC, concentration estimated) |

**QC SAMPLE IDENTIFICATIONS**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MBLK | = | Method Blank | ICSA | = | Interference Check Standard "A" | OPR | = | Ongoing Precision and Recovery Standard |
| DUP | = | Method Duplicate | ICSAB | = | Interference Check Standard "AB" | | | |
| LCS | = | Laboratory Control Sample | LCSD | = | Laboratory Control Sample Duplicate | | | |
| MS | = | Matrix Spike | MSD | = | Matrix Spike Duplicate | | | |
| ICB | = | Initial Calibration Blank | CCB | = | Continuing Calibration Blank | | | |
| ICV | = | Initial Calibration Verification | CCV | = | Continuing Calibration Verification | | | |
| PDS | = | Post Digestion Spike | SD | = | Serial Dilution | | | |

**CERTIFICATIONS**

*Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.*

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

**MICROBAC LOCATIONS, SERVICE CENTERS (SC) AND SATELLITE OFFICES (Sat)**

**Baltimore Division** - Baltimore, MD
**Camp Hill Division** - Camp Hill, PA
**Camp Hill Division (SC)** - Pittston, PA
**Chicagoland Division** - Merrillville, IN
**Chicagoland Division (SC)** - Indianapolis, IN
**Corona Division** - Corona, CA
**Erie Division** - Erie, PA
**Fayetteville Division** - Fayetteville, NC
**Hauser Division** - Boulder, CO
**Kentucky Division** - Louisville, KY
**Kentucky Division (Sat)** - Evansville, IN
**Kentucky Division (Sat)** - Lexington, KY
**Kentucky Division (Sat)** - Paducah, KY
**Knoxville Division** - Maryville, TN
**Massachusetts Division** - Marlborough, MA
**Microbac Corporate Office** - Wexford, PA
**Microbac NY - Cortland Office** - Cortland, NY
**Microbac NY - Waverly Office** - Waverly, NY
**New Castle Division** - New Castle, PA
**Pittsburgh Division** - Warrendale, PA
**Richmond Division** - Richmond, VA
**South Carolina Division** - New Ellenton, SC
**South Jersey Division** - Turnersville, NJ
**Southern Headquarters** - Poquoson, VA
**Southern Testing Division** - Wilson, NC
**Southern Testing Division (Sat)** - Greensboro, NC
**Venice Division** - Venice, FL

# COOLER INSPECTION

**Date:** Thursday, April 10, 2008

Client Name: ***MWH, Inc.***

Work Order Number ***ME0803A55***

Checklist completed by SPM | 3/26/2008 2:25:07 PM

Date / Time Received: ***3/26/2008 1:20:00 PM***

Received by: SPM

Reviewed by CAG | 3/26/2008 4:43:20 PM

Carrier name: Microbac

| | | | |
|---|---|---|---|
| After-Hour Arrival? | Yes ☐ | No ☑ | |
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on shippping container/cooler? | Yes ☐ | No ☐ | Not Present ☑ |
| Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☑ |
| Chain of custody present? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient client identification? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient sample collector information? | Yes ☑ | No ☐ | |
| Chain of custody included a sample description? | Yes ☑ | No ☐ | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate matrix? | Yes ☑ | No ☐ | |
| Chain of custody included date of collection? | Yes ☑ | No ☐ | |
| Chain of custody included time of collection? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate number of containers? | Yes ☑ | No ☐ | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | |
| Sample containers intact? | Yes ☑ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | |
| All samples received within holding time? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate preservatives (if preserved)? | Yes ☑ | No ☐ | |
| Samples properly preserved? | Yes ☑ | No ☐ | |

If No, adjusted by? _____ Date/Time _____

| | | |
|---|---|---|
| Chain of custody included the requested analyses? | Yes ☑ | No ☐ |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ |
| Samples received on ice? | Yes ☑ | No ☐ |

| Container/Temp Blank temperatures | Cooler | Temp |
|---|---|---|
| | 1 | 2 ºC |

VOA vials for aqueous samples have zero headspace? No VOA vials submitted ☐ Yes ☑ No ☐

**ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.**

General Comments:

| Sample ID | Client Sample ID | Comments |
|---|---|---|
| ME0803A55-01A | ACS-GW-TB01-31 | |
| ME0803A55-02A | ACS-GW-DUP01-31 | |
| ME0803A55-03A | ACS-GW-MW59-31 | |
| ME0803A55-04A | ACS-GW-MW58-31 | |
| ME0803A55-05A | ACS-GW-MW17-31 | |
| ME0803A55-06A | ACS-GW-MW28-31 | |
| ME0803A55-07A | ACS-GW-MW31-31 | |
| ME0803A55-08A | ACS-GW-MW32-31 | |
| ME0803A55-09A | ACS-GW-MW08-31 | |
| ME0803A55-10A | ACS-GW-EB01-31 | |

ME0803A55 MONT. WATSON-IL-CHICAG 4/2/2008
ACS Groundwater / Griffith, IN RJM
Justin Finger

Microbac®

Samples Submitted to: [X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

# Chain of Custody Record

Number 82594

Instructions on back

| | | | |
|---|---|---|---|
| Client Name MWH | Project ACS GROUNDWATER | Turnaround Time | Report Type |
| Address 175 W. JACKSON BLVD SUITE 1900 | Location GRIFFITH, IN | [X] Routine (7 working days) | [ ] Results Only [ ] Level II |
| City, State, Zip CHICAGO, IL 60604 | PO # 4050577.03010501 | [ ] RUSH* (notify lab) | [ ] Level III [ ] Level III CLP-like |
| Contact JUSTIN FINGER | Compliance Monitoring? [ ] Yes(1) [ ] No | (needed by) | [ ] Level IV [ ] Level IV CLP-like |
| Telephone # (312) 831-3447 | (1)Agency/Program | | [ ] EDD |

Sampled by (PRINT) JUSTIN FINGER / AMANDA BUTLER Sampler Signature [signature] Sampler Phone # (312) 831-3447

Send Report via [X] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (address) JUSTIN.E.FINGER@MWHGLOBAL.COM

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

| Client Sample ID | Matrix* | Grab | Composite | Filtered | Date Collected | Time Collected | No. of Containers | Requested Analyses → Preservative Types ** ↓ | VOCs + TICs | | | | | | | For Lab Use Only ME0803A55 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACS-GW-TB01-31 | GW | X | | | 3/25/08 | 0800 | 1 | 3 | X | | | | | | | 1A |
| ACS-GW-DUP01-31 | GW | X | | | 3/25/08 | 0900 | 3 | 3 | X | | | | | | | 2A |
| ACS-GW-MW59-31 | GW | X | | | 3/25/08 | 1050 | 9 | 3 | X | | | | | | | 3A |
| ACS-GW-MW58-31 | GW | X | | | 3/25/08 | 1210 | 3 | 3 | X | | | | | | | 4A |
| ACS-GW-MW17-31 | GW | X | | | 3/25/08 | 1358 | 3 | 3 | X | | | | | | | 5A |
| ACS-GW-MW28-31 | GW | X | | | 3/25/08 | 1405 | 3 | 3 | X | | | | | | | 6A |
| ACS-GW-MW31-31 | GW | X | | | 3/25/08 | 1530 | 3 | 3 | X | | | | | | | 7A |
| ACS-GW-MW32-31 | GW | X | | | 3/25/08 | 1550 | 3 | 3 | X | | | | | | | 8A |
| ACS-GW-MW08-31 | GW | X | | | 3/25/08 | 1630 | 3 | 3 | X | | | | | | | 9A |
| ACS-GW-~~MW~~ EB01-31 | GW | X | | | 3/25/08 | 1700 | 3 | 3 | X | | | | | | | 10A |

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

| Comments | Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
|---|---|---|---|---|
| MS/MSD COLLECTED WITH SAMPLE ACS-GW-MW59-31 | [signature] | 3/26/08 0800 | [signature] | 3/26/08 0800 |
| | [signature] | 3/26/08 1320 | | 3/26/08 1320 |
| Sample temperature upon receipt in degrees C = 2° | | | Received for Lab By (signature) Scat Mccard | 3/26/08 13:20 |

rev. 11/04/04

Page 1 of 1

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A55
**Project:** GW - SemiAnnual / ACS

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110502**

Sample ID: **bk_w25 040108** SampType: **mblk** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080401A**
Client ID: **ZZZZZ** Batch ID: **R110502** TestNo: **SW8260B** Analysis Date: **4/1/2008 8:24:00 AM** SeqNo: **1761896**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | 5.0 | | | | | | | | | |
| Benzene | ND | 1.0 | | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | | |
| Bromomethane | ND | 2.0 | | | | | | | | | |
| 2-Butanone | ND | 2.0 | | | | | | | | | |
| Carbon Disulfide | ND | 2.0 | | | | | | | | | |
| Carbon tetrachloride | ND | 1.0 | | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | | |
| Chloromethane | ND | 2.0 | | | | | | | | | |
| Dibromochloromethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | | |
| 2-Hexanone | ND | 2.0 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 1.0 | | | | | | | | | |
| Methylene chloride | ND | 2.0 | | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | | | | | | | | | |
| Tetrachloroethene | ND | 1.0 | | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A55
**Project:** GW - SemiAnnual / ACS

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110502**

Sample ID: **bk_w25 040108** SampType: **mblk** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080401A**
Client ID: **ZZZZZ** Batch ID: **R110502** TestNo: **SW8260B** Analysis Date: **4/1/2008 8:24:00 AM** SeqNo: **1761896**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | | |
| Trichloroethene | ND | 1.0 | | | | | | | | | |
| Vinyl chloride | ND | 2.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| Total Xylenes | ND | 1.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 10.25 | 0 | 10 | 0 | 103 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.94 | 0 | 10 | 0 | 109 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 12.15 | 0 | 10 | 0 | 122 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 10.06 | 0 | 10 | 0 | 101 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **lcs_w25 10 ppb** SampType: **lcs** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080401A**
Client ID: **ZZZZZ** Batch ID: **R110502** TestNo: **SW8260B** Analysis Date: **4/1/2008 9:00:00 AM** SeqNo: **1761897**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 9.44 | 1.0 | 10 | 0 | 94.4 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 9.82 | 1.0 | 10 | 0 | 98.2 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 9.41 | 1.0 | 10 | 0 | 94.1 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 11.67 | 1.0 | 10 | 0 | 117 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 9.13 | 1.0 | 10 | 0 | 91.3 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 10.61 | 1.0 | 10 | 0 | 106 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 19.05 | 2.0 | 10 | 0 | 190 | 22.5 | 147 | 0 | 0 | | S |
| Dibromochloromethane | 9.65 | 1.0 | 10 | 0 | 96.5 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 10.57 | 1.0 | 10 | 0 | 106 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 10.71 | 1.0 | 10 | 0 | 107 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 11.11 | 1.0 | 10 | 0 | 111 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 10.09 | 1.0 | 10 | 0 | 101 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 8.94 | 1.0 | 10 | 0 | 89.4 | 74.4 | 126 | 0 | 0 | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A55
**Project:** GW - SemiAnnual / ACS

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110502**

Sample ID: **lcs_w25 10 ppb** SampType: **lcs** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080401A**
Client ID: **ZZZZZ** Batch ID: **R110502** TestNo: **SW8260B** Analysis Date: **4/1/2008 9:00:00 AM** SeqNo: **1761897**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | 9.86 | 1.0 | 10 | 0 | 98.6 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 8.97 | 1.0 | 10 | 0 | 89.7 | 69.1 | 126 | 0 | 0 | | |
| Ethylbenzene | 9.7 | 1.0 | 10 | 0 | 97 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 8.74 | 2.0 | 10 | 0 | 87.4 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 7.91 | 1.0 | 10 | 0 | 79.1 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 9.46 | 1.0 | 10 | 0 | 94.6 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 9.42 | 1.0 | 10 | 0 | 94.2 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 11.15 | 1.0 | 10 | 0 | 112 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 8.86 | 1.0 | 10 | 0 | 88.6 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 9.28 | 1.0 | 10 | 0 | 92.8 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 13.97 | 2.0 | 10 | 0 | 140 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.97 | 0 | 10 | 0 | 110 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 11.1 | 0 | 10 | 0 | 111 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 12.32 | 0 | 10 | 0 | 123 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 10.24 | 0 | 10 | 0 | 102 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **ME0803A55-03AMS** SampType: **MS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080401A**
Client ID: **ACS-GW-MW59-31** Batch ID: **R110502** TestNo: **SW8260B** Analysis Date: **4/1/2008 3:17:00 PM** SeqNo: **1763117**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 9.63 | 1.0 | 10 | 0 | 96.3 | 60.6 | 130 | 0 | 0 | | |
| Bromodichloromethane | 10.21 | 1.0 | 10 | 0 | 102 | 65.8 | 126 | 0 | 0 | | |
| Bromoform | 9.38 | 1.0 | 10 | 0 | 93.8 | 40.5 | 146 | 0 | 0 | | |
| Bromomethane | 22.25 | 2.0 | 10 | 0 | 222 | 0 | 243 | 0 | 0 | | |
| Carbon tetrachloride | 12.06 | 1.0 | 10 | 0 | 121 | 47.2 | 149 | 0 | 0 | | |
| Chlorobenzene | 9.07 | 1.0 | 10 | 0 | 90.7 | 75.6 | 127 | 0 | 0 | | |
| Chloroethane | 16.08 | 2.0 | 10 | 0 | 161 | 0 | 357 | 0 | 0 | | |
| Chloroform | 11.02 | 1.0 | 10 | 0 | 110 | 71.2 | 120 | 0 | 0 | | |
| Chloromethane | 21.36 | 2.0 | 10 | 0 | 214 | 10.8 | 155 | 0 | 0 | | S |
| Dibromochloromethane | 9.72 | 1.0 | 10 | 0 | 97.2 | 60.1 | 136 | 0 | 0 | | |
| 1,1-Dichloroethane | 10.71 | 1.0 | 10 | 0 | 107 | 68 | 119 | 0 | 0 | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A55
**Project:** GW - SemiAnnual / ACS

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110502**

Sample ID: **ME0803A55-03AMS** SampType: **MS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080401A**
Client ID: **ACS-GW-MW59-31** Batch ID: **R110502** TestNo: **SW8260B** Analysis Date: **4/1/2008 3:17:00 PM** SeqNo: **1763117**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | 10.94 | 1.0 | 10 | 0 | 109 | 67.7 | 133 | 0 | 0 | | |
| 1,1-Dichloroethene | 11.66 | 1.0 | 10 | 0 | 117 | 50.1 | 125 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 10.35 | 1.0 | 10 | 0 | 104 | 56.9 | 132 | 0 | 0 | | |
| 1,2-Dichloropropane | 8.97 | 1.0 | 10 | 0 | 89.7 | 71.4 | 125 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 9.77 | 1.0 | 10 | 0 | 97.7 | 69.9 | 130 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 8.82 | 1.0 | 10 | 0 | 88.2 | 66.9 | 134 | 0 | 0 | | |
| Ethylbenzene | 9.72 | 1.0 | 10 | 0 | 97.2 | 60.6 | 144 | 0 | 0 | | |
| Methylene chloride | 9.23 | 2.0 | 10 | 0 | 92.3 | 55.4 | 130 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 8.08 | 1.0 | 10 | 0 | 80.8 | 46.8 | 168 | 0 | 0 | | |
| Tetrachloroethene | 9.54 | 1.0 | 10 | 0 | 95.4 | 60.1 | 144 | 0 | 0 | | |
| Toluene | 9.61 | 1.0 | 10 | 0 | 96.1 | 69.7 | 130 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 11.66 | 1.0 | 10 | 0 | 117 | 63 | 136 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 8.85 | 1.0 | 10 | 0 | 88.5 | 40.6 | 165 | 0 | 0 | | |
| Trichloroethene | 16.67 | 1.0 | 10 | 7.57 | 91 | 48.6 | 139 | 0 | 0 | | |
| Vinyl chloride | 15.67 | 2.0 | 10 | 0 | 157 | 33 | 151 | 0 | 0 | | S |
| Surr: 4-Bromofluorobenzene | 11.15 | 0 | 10 | 0 | 112 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 11.08 | 0 | 10 | 0 | 111 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 12.38 | 0 | 10 | 0 | 124 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 10.15 | 0 | 10 | 0 | 102 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **ME0803A55-03AMS** SampType: **MSD** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080401A**
Client ID: **ACS-GW-MW59-31** Batch ID: **R110502** TestNo: **SW8260B** Analysis Date: **4/1/2008 3:52:00 PM** SeqNo: **1763118**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 9.85 | 1.0 | 10 | 0 | 98.5 | 60.6 | 130 | 9.63 | 2.26 | 23.7 | |
| Bromodichloromethane | 9.92 | 1.0 | 10 | 0 | 99.2 | 65.8 | 126 | 10.21 | 2.88 | 28.4 | |
| Bromoform | 9.41 | 1.0 | 10 | 0 | 94.1 | 40.5 | 146 | 9.38 | 0.319 | 28.8 | |
| Bromomethane | 22.01 | 2.0 | 10 | 0 | 220 | 0 | 243 | 22.25 | 1.08 | 52.8 | |
| Carbon tetrachloride | 11.76 | 1.0 | 10 | 0 | 118 | 47.2 | 149 | 12.06 | 2.52 | 31.1 | |
| Chlorobenzene | 9.06 | 1.0 | 10 | 0 | 90.6 | 75.6 | 127 | 9.07 | 0.110 | 23 | |
| Chloroethane | 14.8 | 2.0 | 10 | 0 | 148 | 0 | 357 | 16.08 | 8.29 | 29.3 | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A55
**Project:** GW - SemiAnnual / ACS

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110502**

Sample ID: **ME0803A55-03AMS** SampType: **MSD** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080401A**
Client ID: **ACS-GW-MW59-31** Batch ID: **R110502** TestNo: **SW8260B** Analysis Date: **4/1/2008 3:52:00 PM** SeqNo: **1763118**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloroform | 10.86 | 1.0 | 10 | 0 | 109 | 71.2 | 120 | 11.02 | 1.46 | 25 | |
| Chloromethane | 20.27 | 2.0 | 10 | 0 | 203 | 10.8 | 155 | 21.36 | 5.24 | 90.9 | S |
| Dibromochloromethane | 9.47 | 1.0 | 10 | 0 | 94.7 | 60.1 | 136 | 9.72 | 2.61 | 27.1 | |
| 1,1-Dichloroethane | 10.68 | 1.0 | 10 | 0 | 107 | 68 | 119 | 10.71 | 0.281 | 14.2 | |
| 1,2-Dichloroethane | 10.66 | 1.0 | 10 | 0 | 107 | 67.7 | 133 | 10.94 | 2.59 | 23.3 | |
| 1,1-Dichloroethene | 11.36 | 1.0 | 10 | 0 | 114 | 50.1 | 125 | 11.66 | 2.61 | 31 | |
| trans-1,2-Dichloroethene | 10.66 | 1.0 | 10 | 0 | 107 | 56.9 | 132 | 10.35 | 2.95 | 66.1 | |
| 1,2-Dichloropropane | 9.13 | 1.0 | 10 | 0 | 91.3 | 71.4 | 125 | 8.97 | 1.77 | 26 | |
| trans-1,3-Dichloropropene | 9.87 | 1.0 | 10 | 0 | 98.7 | 69.9 | 130 | 9.77 | 1.02 | 27.9 | |
| cis-1,3-Dichloropropene | 8.76 | 1.0 | 10 | 0 | 87.6 | 66.9 | 134 | 8.82 | 0.683 | 28.7 | |
| Ethylbenzene | 9.65 | 1.0 | 10 | 0 | 96.5 | 60.6 | 144 | 9.72 | 0.723 | 25.2 | |
| Methylene chloride | 9.16 | 2.0 | 10 | 0 | 91.6 | 55.4 | 130 | 9.23 | 0.761 | 28.7 | |
| 1,1,2,2-Tetrachloroethane | 8.58 | 1.0 | 10 | 0 | 85.8 | 46.8 | 168 | 8.08 | 6.00 | 22.3 | |
| Tetrachloroethene | 9.6 | 1.0 | 10 | 0 | 96 | 60.1 | 144 | 9.54 | 0.627 | 29.7 | |
| Toluene | 9.65 | 1.0 | 10 | 0 | 96.5 | 69.7 | 130 | 9.61 | 0.415 | 25.4 | |
| 1,1,1-Trichloroethane | 11.41 | 1.0 | 10 | 0 | 114 | 63 | 136 | 11.66 | 2.17 | 29 | |
| 1,1,2-Trichloroethane | 8.88 | 1.0 | 10 | 0 | 88.8 | 40.6 | 165 | 8.85 | 0.338 | 25.9 | |
| Trichloroethene | 16.74 | 1.0 | 10 | 7.57 | 91.7 | 48.6 | 139 | 16.67 | 0.419 | 26.9 | |
| Vinyl chloride | 14.91 | 2.0 | 10 | 0 | 149 | 33 | 151 | 15.67 | 4.97 | 31.2 | |
| Surr: 4-Bromofluorobenzene | 10.76 | 0 | 10 | 0 | 108 | 75.2 | 115 | 0 | 0 | 0 | |
| Surr: Dibromofluoromethane | 11 | 0 | 10 | 0 | 110 | 92.7 | 119 | 0 | 0 | 0 | |
| Surr: 1,2-Dichloroethane-d4 | 11.78 | 0 | 10 | 0 | 118 | 88.2 | 132 | 0 | 0 | 0 | |
| Surr: Toluene-d8 | 10.02 | 0 | 10 | 0 | 100 | 89.3 | 116 | 0 | 0 | 0 | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
b - Analyte detected below reporting limit in the Method Blank
H - Analyte was prepared and/or analyzed outside of the analytical method holding time

# VOA GC/MS
# RAW DATA

# METHOD BLANK RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040104.D
Acq On : 1 Apr 2008 8:24 am
Sample : ,mblk,bk_w25 040108,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 01 09:32:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 372640 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 281231 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 141961 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 93987 | 10.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.40% | | |
| 30) 1,2-dichloroethane-d4 | 6.598 | 65 | 91086 | 12.15 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 121.50% | | |
| 44) toluene-d8 | 9.250 | 98 | 354611 | 10.06 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.60% | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 132886 | 10.25 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 102.50% | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.983 | 39 | 344 | 0.04 | ug/L # | 14 |
| 84) 1,2,3-trichlorobenzene | 18.512 | 180 | 2671 | 0.32 | ug/L | 92 |
| 85) 2-methyl naphthalene | 19.320 | 142 | 5751 | 0.97 | ug/L | 94 |

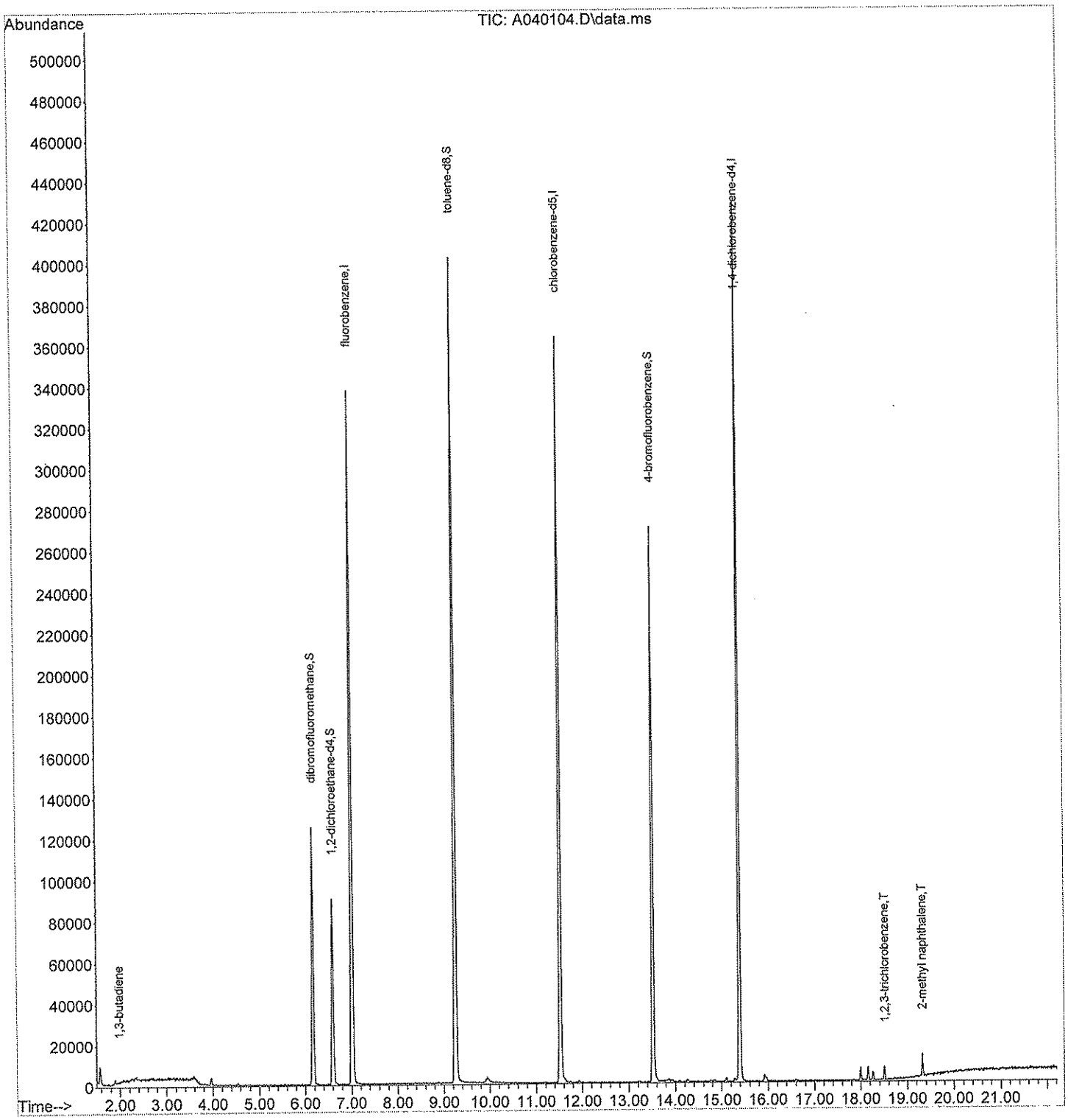
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/04/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040104.D
Acq On : 1 Apr 2008 8:24 am
Sample : ,mblk,bk_w25 040108,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 01 09:32:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# LABORATORY CONTROL SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040105.D
Acq On : 1 Apr 2008 9:00 am
Sample : ,lcs,lcs_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 01 09:32:51 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.005 | 96 | 369564 | 10.00 | ug/L | | -0.01 |
| 41) chlorobenzene-d5 | 11.523 | 117 | 281609 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.385 | 152 | 163550 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.159 | 113 | 94529 | 11.10 | ug/L | | -0.01 |
| Spiked Amount 10.000 | | | Recovery = | 111.00% | | | |
| 30) 1,2-dichloroethane-d4 | 6.591 | 65 | 91574 | 12.32 | ug/L | | -0.01 |
| Spiked Amount 10.000 | | | Recovery = | 123.20% | | | |
| 44) toluene-d8 | 9.243 | 98 | 361604 | 10.24 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 102.40% | | | |
| 63) 4-bromofluorobenzene | 13.518 | 95 | 142348 | 10.97 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.70% | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 112161 | 33.70 | ug/L | | 98 |
| 3) chloromethane | 1.817 | 50 | 139559 | 19.05 | ug/L | | 94 |
| 4) vinyl chloride | 1.933 | 62 | 111633 | 13.97 | ug/L | | 95 |
| 5) 1,3-butadiene | 1.963 | 39 | 255 | 0.03 | ug/L | # | 38 |
| 6) bromomethane | 2.316 | 94 | 42532 | 19.57 | ug/L | | 95 |
| 7) chloroethane | 2.438 | 64 | 68661 | 14.44 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.717 | 101 | 208685 | 16.97 | ug/L | | 92 |
| 9) acrolein | 3.277 | 56 | 277 | 3.98 | ug/L | # | 75 |
| 10) 1,1-dichloroethene | 3.332 | 96 | 74962 | 11.11 | ug/L | # | 84 |
| 11) acetone | 3.459 | 43 | 10206 | 12.54 | ug/L | | 94 |
| 12) carbon disulfide | 3.581 | 76 | 282725 | 12.80 | ug/L | | 98 |
| 13) methylene chloride | 3.952 | 84 | 86256 | 8.74 | ug/L | | 90 |
| 14) acrylonitrile | 4.293 | 53 | 12601 | 12.35 | ug/L | | 92 |
| 15) trans-1,2-dichloroethene | 4.256 | 96 | 91461 | 10.09 | ug/L | | 90 |
| 16) methyl-t-butyl ether | 4.256 | 73 | 149297 | 10.10 | ug/L | | 93 |
| 17) acetonitrile | 3.818 | 41 | 5346 | 13.45 | ug/L | | 94 |
| 19) 1,1-dichloroethane | 4.791 | 63 | 187643 | 10.57 | ug/L | | 94 |
| 20) vinyl acetate | 4.858 | 43 | 102748 | 19.68 | ug/L | | 94 |
| 21) cis-1,2-dichloroethene | 5.527 | 96 | 90499 | 9.14 | ug/L | | 88 |
| 22) 2,2-dichloropropane | 5.484 | 77 | 182648 | 11.38 | ug/L | | 98 |
| 23) 2-butanone | 5.576 | 72 | 2358 | 9.24 | ug/L | | 93 |
| 25) chloroform | 5.947 | 83 | 188302 | 10.61 | ug/L | | 96 |
| 27) 1,1,1-trichloroethane | 6.129 | 97 | 190927 | 11.15 | ug/L | | 89 |
| 29) carbon tetrachloride | 6.330 | 117 | 163416 | 11.67 | ug/L | | 91 |
| 31) benzene | 6.622 | 78 | 337156 | 9.44 | ug/L | | 95 |
| 32) 1,1-dichloropropene | 6.342 | 75 | 129590 | 10.18 | ug/L | | 96 |
| 33) 1,2-dichloroethane | 6.695 | 62 | 103013 | 10.71 | ug/L | | 92 |
| 34) trichloroethene | 7.503 | 95 | 96330 | 9.28 | ug/L | | 93 |
| 36) 1,2-dichloropropane | 7.832 | 63 | 76326 | 8.94 | ug/L | | 88 |
| 37) methyl methacrylate | 7.832 | 41 | 61096 | 17.86 | ug/L | # | 41 |
| 38) dibromomethane | 8.026 | 93 | 33711 | 9.74 | ug/L | | 92 |
| 39) bromodichloromethane | 8.258 | 83 | 116786 | 9.82 | ug/L | | 94 |
| 40) 2-chloroethyl vinyl ether | 8.683 | 63 | 2892 | 5.24 | ug/L | | 96 |
| 42) cis-1,3-dichloropropene | 8.890 | 75 | 105817 | 8.97 | ug/L | | 93 |
| 43) 4-methyl-2-pentanone | 9.127 | 43 | 32399 | 9.58 | ug/L | | 93 |

Data File: C:\msdchem\1\DATA\A040108\A040105.D
Acq On : 1 Apr 2008 9:00 am
Sample : ,lcs,lcs_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 01 09:32:51 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

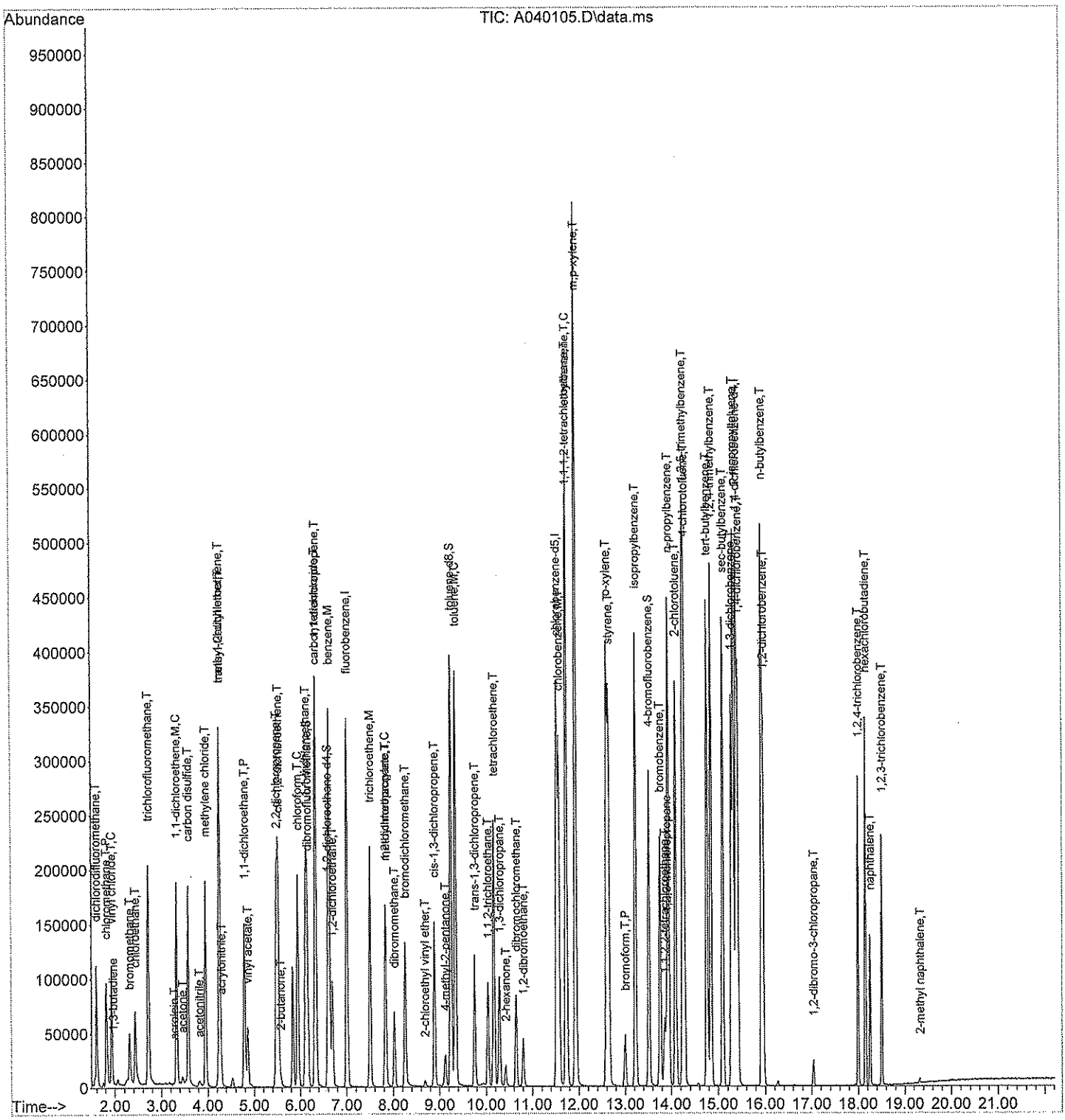
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 45) toluene | 9.346 | 92 | 226386 | 9.42 | ug/L | # | 86 |
| 46) 1,1,2-trichloroethane | 10.033 | 83 | 34425 | 8.86 | ug/L | | 92 |
| 47) 1,3-dichloropropane | 10.289 | 76 | 74417 | 8.92 | ug/L | | 93 |
| 48) tetrachloroethene | 10.167 | 164 | 81112 | 9.46 | ug/L | | 91 |
| 49) trans-1,3-dichloropropene | 9.754 | 75 | 86260 | 9.86 | ug/L | | 97 |
| 50) 2-hexanone | 10.422 | 43 | 20265 | 9.14 | ug/L | # | 57 |
| 51) dibromochloromethane | 10.648 | 129 | 62303 | 9.65 | ug/L | | 95 |
| 52) 1,2-dibromoethane | 10.806 | 107 | 42066 | 8.90 | ug/L | | 98 |
| 53) chlorobenzene | 11.572 | 112 | 229944 | 9.13 | ug/L | | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.724 | 131 | 82866 | 9.49 | ug/L | | 92 |
| 55) ethylbenzene | 11.736 | 91 | 460772 | 9.70 | ug/L | | 95 |
| 56) m,p-xylene | 11.931 | 106 | 336316 | 18.86 | ug/L | # | 74 |
| 58) o-xylene | 12.600 | 106 | 157719 | 9.22 | ug/L | # | 79 |
| 59) styrene | 12.642 | 104 | 247964 | 9.06 | ug/L | | 93 |
| 60) isopropylbenzene | 13.226 | 105 | 432788 | 10.80 | ug/L | | 92 |
| 61) bromobenzene | 13.755 | 156 | 99496 | 9.11 | ug/L | | 91 |
| 62) bromoform | 13.001 | 173 | 34206 | 9.41 | ug/L | | 91 |
| 64) 1,2,3-trichloropropane | 13.907 | 75 | 37587 | 9.65 | ug/L | | 94 |
| 65) n-propylbenzene | 13.938 | 91 | 526803 | 10.09 | ug/L | | 94 |
| 66) 2-chlorotoluene | 14.090 | 91 | 320141 | 9.75 | ug/L | | 91 |
| 67) 4-chlorotoluene | 14.278 | 91 | 377896 | 10.10 | ug/L | | 90 |
| 68) 1,3,5-trimethylbenzene | 14.248 | 105 | 381054 | 10.06 | ug/L | | 84 |
| 70) 1,1,2,2-tetrachloroethane | 13.858 | 83 | 40554 | 7.91 | ug/L | | 98 |
| 71) tert-butylbenzene | 14.758 | 119 | 301628 | 8.63 | ug/L | | 90 |
| 72) sec-butylbenzene | 15.099 | 105 | 419540 | 8.38 | ug/L | | 97 |
| 73) 1,2,4-trimethylbenzene | 14.844 | 105 | 380811 | 8.54 | ug/L | | 84 |
| 74) 1,3-dichlorobenzene | 15.281 | 146 | 195203 | 8.40 | ug/L | | 90 |
| 75) p-isopropyltoluene | 15.324 | 119 | 384143 | 9.16 | ug/L | | 93 |
| 77) 1,4-dichlorobenzene | 15.421 | 146 | 190776 | 8.35 | ug/L | | 92 |
| 78) 1,2-dichlorobenzene | 15.957 | 146 | 159789 | 8.46 | ug/L | | 93 |
| 79) n-butylbenzene | 15.926 | 91 | 356037 | 9.11 | ug/L | | 91 |
| 80) 1,2-dibromo-3-chloropr... | 17.039 | 75 | 7573 | 8.88 | ug/L | # | 68 |
| 81) 1,2,4-trichlorobenzene | 18.000 | 180 | 99048 | 7.71 | ug/L | | 93 |
| 82) hexachlorobutadiene | 18.158 | 225 | 77437 | 8.40 | ug/L | | 94 |
| 83) naphthalene | 18.255 | 128 | 108751 | 6.86 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.511 | 180 | 74410 | 7.76 | ug/L | | 92 |
| 85) 2-methyl naphthalene | 19.326 | 142 | 2225 | 0.33 | ug/L | | 88 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040105.D
Acq On : 1 Apr 2008 9:00 am
Sample : ,lcs,lcs_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 01 09:32:51 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# MATRIX SPIKE/MATRIX SPIKE DUPLICATE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040113.D
Acq On : 1 Apr 2008 2:40 pm
Sample : ,SAMP,ME0803A55-03A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 01 15:44:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

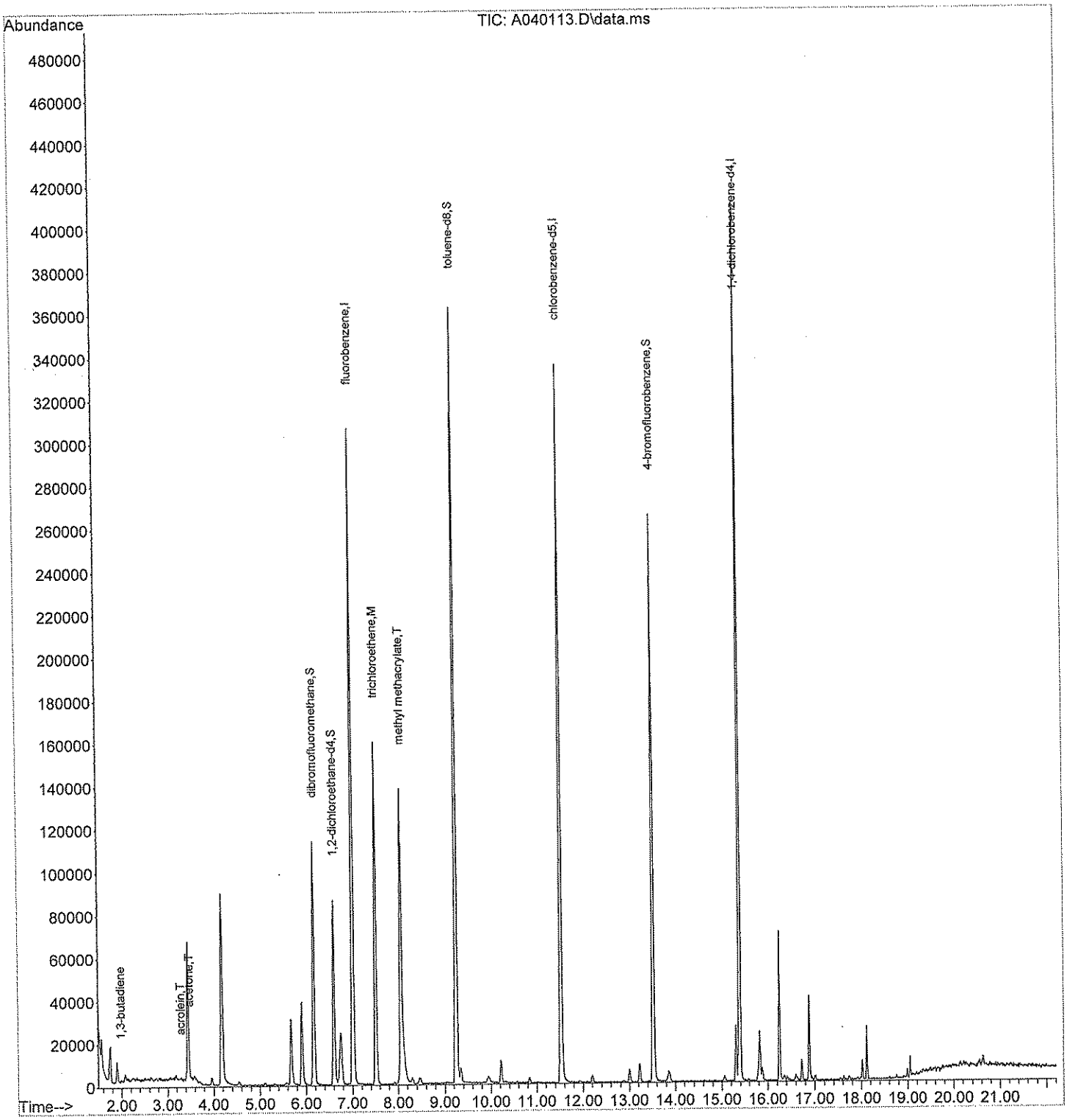
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 334996 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 255917 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 138361 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 86712 | 11.23 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 112.30% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 85577 | 12.70 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 127.00% | | | |
| 44) toluene-d8 | 9.254 | 98 | 322821 | 10.06 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.60% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 126632 | 10.74 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.40% | | | |
| Target Compounds | | | | | | Qvalue |
| 6) 1,3-butadiene | 1.987 | 39 | 132 | 0.02 | ug/L # | 14 |
| 9) acrolein | 3.282 | 56 | 580 | 9.19 | ug/L # | 75 |
| 11) acetone | 3.477 | 43 | 3984 | 5.40 | ug/L | 89 |
| 34) trichloroethene | 7.509 | 95 | 71232 | 7.57 | ug/L | 88 |
| 67) methyl methacrylate | 8.068 | 41 | 3619 | 1.17 | ug/L # | 54 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040113.D
Acq On : 1 Apr 2008 2:40 pm
Sample : ,SAMP,ME0803A55-03A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 01 15:44:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040114.D
Acq On : 1 Apr 2008 3:17 pm
Sample : ,MS,ME0803A55-03AMS,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 01 15:44:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 349845 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.529 | 117 | 270569 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 159259 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 89324 | 11.08 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 110.80% | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 87107 | 12.38 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 123.80% | | |
| 44) toluene-d8 | 9.248 | 98 | 344455 | 10.15 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.50% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 138966 | 11.15 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 111.50% | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 113808 | 36.12 | ug/L | 97 |
| 3) chloromethane | 1.823 | 50 | 148126 | 21.36 | ug/L | 94 |
| 4) vinyl chloride | 1.938 | 62 | 118476 | 15.67 | ug/L | 96 |
| 5) 1,3-butadiene | 1.969 | 39 | 471 | 0.06 | ug/L # | 14 |
| 6) bromomethane | 2.316 | 94 | 45760 | 22.25 | ug/L | 96 |
| 7) chloroethane | 2.443 | 64 | 72372 | 16.08 | ug/L | 94 |
| 8) trichlorofluoromethane | 2.729 | 101 | 219764 | 18.87 | ug/L | 93 |
| 9) acrolein | 3.282 | 56 | 308 | 4.67 | ug/L # | 5 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 74451 | 11.66 | ug/L # | 86 |
| 11) acetone | 3.471 | 43 | 13622 | 17.68 | ug/L | 84 |
| 12) carbon disulfide | 3.593 | 76 | 292135 | 13.97 | ug/L | 100 |
| 13) methylene chloride | 3.964 | 84 | 86251 | 9.23 | ug/L # | 88 |
| 14) acrylonitrile | 4.304 | 53 | 11818 | 12.23 | ug/L | 91 |
| 15) trans-1,2-dichloroethene | 4.268 | 96 | 88768 | 10.35 | ug/L | 90 |
| 16) methyl-t-butyl ether | 4.262 | 73 | 146607 | 10.47 | ug/L | 93 |
| 17) acetonitrile | 3.824 | 41 | 4901 | 13.03 | ug/L | 94 |
| 19) 1,1-dichloroethane | 4.803 | 63 | 180043 | 10.71 | ug/L | 95 |
| 20) vinyl acetate | 4.876 | 43 | 88890 | 17.98 | ug/L | 96 |
| 21) cis-1,2-dichloroethene | 5.533 | 96 | 84693 | 9.03 | ug/L # | 86 |
| 22) 2,2-dichloropropane | 5.502 | 77 | 168480 | 11.09 | ug/L | 97 |
| 23) 2-butanone | 5.587 | 72 | 2708 | 11.21 | ug/L # | 89 |
| 25) chloroform | 5.958 | 83 | 185258 | 11.02 | ug/L | 96 |
| 27) 1,1,1-trichloroethane | 6.135 | 97 | 188893 | 11.66 | ug/L | 88 |
| 29) carbon tetrachloride | 6.341 | 117 | 159893 | 12.06 | ug/L | 94 |
| 31) benzene | 6.633 | 78 | 325650 | 9.63 | ug/L | 94 |
| 32) 1,1-dichloropropene | 6.354 | 75 | 126277 | 10.48 | ug/L | 100 |
| 33) 1,2-dichloroethane | 6.706 | 62 | 99579 | 10.94 | ug/L | 95 |
| 34) trichloroethene | 7.509 | 95 | 163786 | 16.67 | ug/L | 92 |
| 36) 1,2-dichloropropane | 7.843 | 63 | 72483 | 8.97 | ug/L | 91 |
| 37) methyl methacrylate | 8.062 | 41 | 3872 | 1.20 | ug/L # | 47 |
| 38) dibromomethane | 8.032 | 93 | 32040 | 9.78 | ug/L | 89 |
| 39) bromodichloromethane | 8.263 | 83 | 114861 | 10.21 | ug/L | 95 |
| 40) 2-chloroethyl vinyl ether | 8.896 | 63 | 573 | 1.10 | ug/L # | 47 |
| 42) cis-1,3-dichloropropene | 8.896 | 75 | 99913 | 8.82 | ug/L | 93 |
| 43) 4-methyl-2-pentanone | 9.133 | 43 | 35372 | 10.88 | ug/L | 89 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040114.D
Acq On : 1 Apr 2008 3:17 pm
Sample : ,MS,ME0803A55-03AMS,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 01 15:44:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

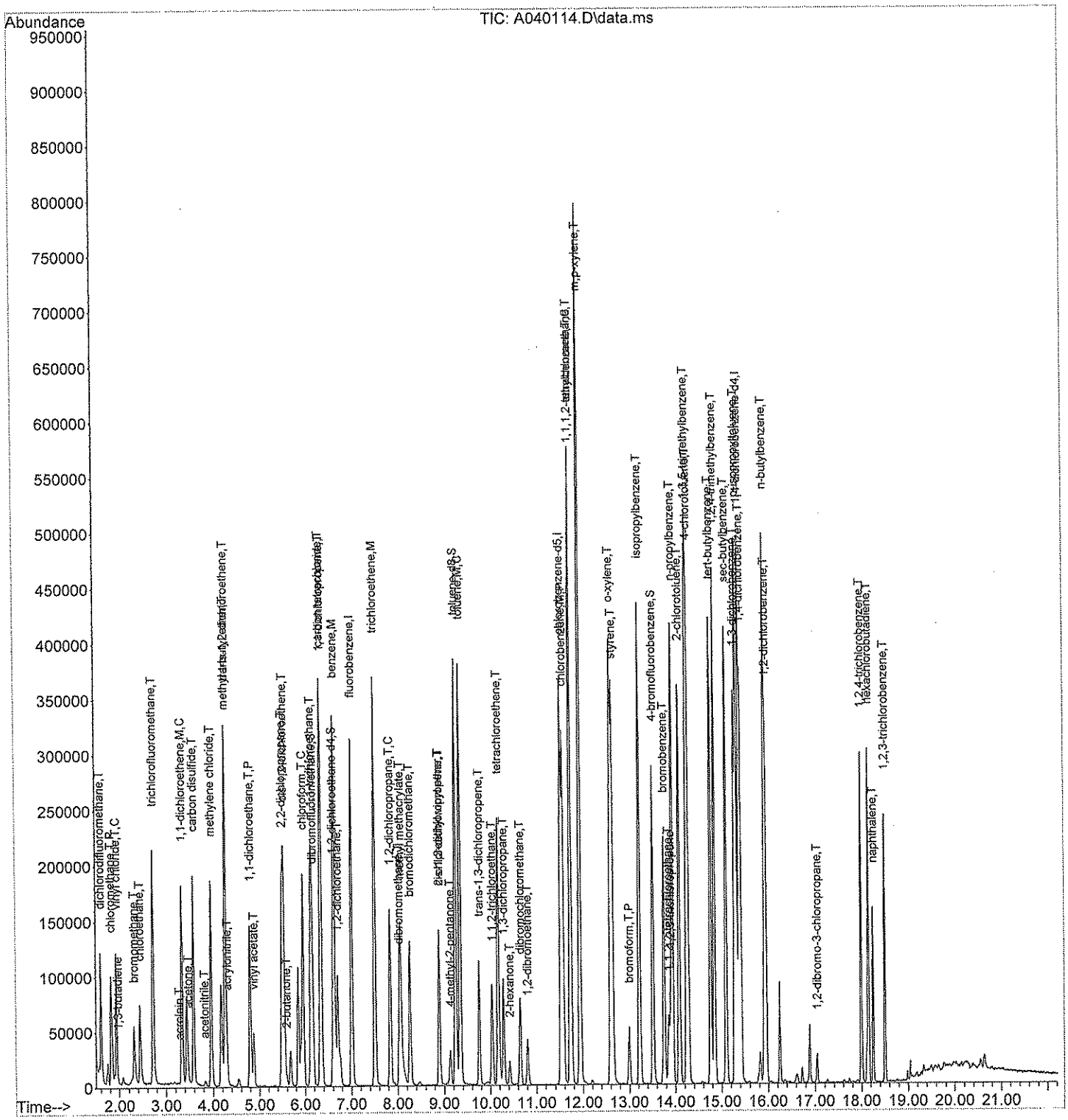
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 45) toluene | 9.352 | 92 | 221947 | 9.61 ug/L | 87 |
| 46) 1,1,2-trichloroethane | 10.045 | 83 | 33053 | 8.85 ug/L | 91 |
| 47) 1,3-dichloropropane | 10.288 | 76 | 71320 | 8.89 ug/L | 96 |
| 48) tetrachloroethene | 10.173 | 164 | 78585 | 9.54 ug/L | 90 |
| 49) trans-1,3-dichloropropene | 9.759 | 75 | 82165 | 9.77 ug/L | 93 |
| 50) 2-hexanone | 10.422 | 43 | 24006 | 11.27 ug/L # | 64 |
| 51) dibromochloromethane | 10.653 | 129 | 60285 | 9.72 ug/L | 99 |
| 52) 1,2-dibromoethane | 10.805 | 107 | 40791 | 8.98 ug/L | 92 |
| 53) chlorobenzene | 11.571 | 112 | 219389 | 9.07 ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.729 | 131 | 79741 | 9.51 ug/L | 93 |
| 55) ethylbenzene | 11.736 | 91 | 443836 | 9.72 ug/L | 93 |
| 56) m,p-xylene | 11.936 | 106 | 322276 | 18.81 ug/L # | 72 |
| 58) o-xylene | 12.599 | 106 | 153616 | 9.35 ug/L # | 85 |
| 59) styrene | 12.648 | 104 | 240474 | 9.14 ug/L | 91 |
| 60) isopropylbenzene | 13.225 | 105 | 418610 | 10.87 ug/L | 93 |
| 61) bromobenzene | 13.761 | 156 | 96681 | 9.22 ug/L | 89 |
| 62) bromoform | 13.000 | 173 | 32772 | 9.38 ug/L | 98 |
| 64) 1,2,3-trichloropropane | 13.900 | 75 | 36355 | 9.71 ug/L | 85 |
| 65) n-propylbenzene | 13.943 | 91 | 499881 | 9.96 ug/L | 96 |
| 66) 2-chlorotoluene | 14.089 | 91 | 307465 | 9.75 ug/L | 91 |
| 67) 4-chlorotoluene | 14.278 | 91 | 365104 | 10.15 ug/L | 90 |
| 68) 1,3,5-trimethylbenzene | 14.247 | 105 | 363090 | 9.97 ug/L | 83 |
| 70) 1,1,2,2-tetrachloroethane | 13.858 | 83 | 40373 | 8.08 ug/L | 93 |
| 71) tert-butylbenzene | 14.764 | 119 | 287495 | 8.45 ug/L | 91 |
| 72) sec-butylbenzene | 15.099 | 105 | 394735 | 8.10 ug/L | 98 |
| 73) 1,2,4-trimethylbenzene | 14.849 | 105 | 361432 | 8.32 ug/L | 84 |
| 74) 1,3-dichlorobenzene | 15.281 | 146 | 188594 | 8.33 ug/L | 90 |
| 75) p-isopropyltoluene | 15.330 | 119 | 367913 | 9.01 ug/L | 94 |
| 77) 1,4-dichlorobenzene | 15.421 | 146 | 185244 | 8.33 ug/L | 90 |
| 78) 1,2-dichlorobenzene | 15.956 | 146 | 157812 | 8.58 ug/L | 94 |
| 79) n-butylbenzene | 15.926 | 91 | 333626 | 8.77 ug/L | 90 |
| 80) 1,2-dibromo-3-chloropr... | 17.045 | 75 | 8589 | 10.34 ug/L # | 81 |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 99778 | 7.98 ug/L | 92 |
| 82) hexachlorobutadiene | 18.157 | 225 | 67107 | 7.47 ug/L | 95 |
| 83) naphthalene | 18.261 | 128 | 126073 | 8.16 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.510 | 180 | 77878 | 8.34 ug/L | 91 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040114.D
Acq On : 1 Apr 2008 3:17 pm
Sample : ,MS,ME0803A55-03AMS,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 01 15:44:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040115.D
Acq On : 1 Apr 2008 3:52 pm
Sample : ,MSD,ME0803A55-03AMSD,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 01 17:05:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 398834 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 307469 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 170613 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 101121 | 11.00 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 110.00% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 94560 | 11.78 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 117.80% | | |
| 44) toluene-d8 | 9.247 | 98 | 386066 | 10.02 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.20% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 152464 | 10.76 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 107.60% | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 123856 | 34.48 | ug/L | 98 |
| 3) chloromethane | 1.822 | 50 | 160253 | 20.27 | ug/L | 95 |
| 4) vinyl chloride | 1.938 | 62 | 128592 | 14.91 | ug/L | 99 |
| 5) 1,3-butadiene | 1.974 | 39 | 168 | 0.02 | ug/L # | 14 |
| 6) bromomethane | 2.315 | 94 | 51607 | 22.01 | ug/L | 98 |
| 7) chloroethane | 2.448 | 64 | 75922 | 14.80 | ug/L | 95 |
| 8) trichlorofluoromethane | 2.728 | 101 | 229376 | 17.28 | ug/L | 91 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 82693 | 11.36 | ug/L # | 87 |
| 11) acetone | 3.476 | 43 | 13032 | 14.84 | ug/L | 90 |
| 12) carbon disulfide | 3.592 | 76 | 315932 | 13.25 | ug/L | 99 |
| 13) methylene chloride | 3.963 | 84 | 97560 | 9.16 | ug/L | 92 |
| 14) acrylonitrile | 4.303 | 53 | 13568 | 12.32 | ug/L | 96 |
| 15) trans-1,2-dichloroethene | 4.273 | 96 | 104216 | 10.66 | ug/L | 94 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 168245 | 10.54 | ug/L | 91 |
| 17) acetonitrile | 3.835 | 41 | 5612 | 13.08 | ug/L | 98 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 204752 | 10.68 | ug/L | 96 |
| 20) vinyl acetate | 4.875 | 43 | 97787 | 17.35 | ug/L | 94 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 100875 | 9.44 | ug/L | 89 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 187061 | 10.80 | ug/L | 95 |
| 23) 2-butanone | 5.586 | 72 | 3312 | 12.03 | ug/L # | 92 |
| 25) chloroform | 5.957 | 83 | 208130 | 10.86 | ug/L | 97 |
| 27) 1,1,1-trichloroethane | 6.140 | 97 | 210850 | 11.41 | ug/L | 87 |
| 29) carbon tetrachloride | 6.340 | 117 | 177760 | 11.76 | ug/L | 94 |
| 31) benzene | 6.632 | 78 | 379952 | 9.85 | ug/L | 96 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 143817 | 10.47 | ug/L | 97 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 110588 | 10.66 | ug/L | 92 |
| 34) trichloroethene | 7.514 | 95 | 187596 | 16.74 | ug/L | 91 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 84093 | 9.13 | ug/L | 90 |
| 37) methyl methacrylate | 8.061 | 41 | 3884 | 1.05 | ug/L # | 60 |
| 38) dibromomethane | 8.037 | 93 | 36482 | 9.77 | ug/L | 92 |
| 39) bromodichloromethane | 8.268 | 83 | 127293 | 9.92 | ug/L | 95 |
| 40) 2-chloroethyl vinyl ether | 8.895 | 63 | 537 | 0.90 | ug/L # | 47 |
| 42) cis-1,3-dichloropropene | 8.895 | 75 | 112793 | 8.76 | ug/L | 97 |
| 43) 4-methyl-2-pentanone | 9.132 | 43 | 39481 | 10.69 | ug/L | 97 |
| 45) toluene | 9.351 | 92 | 253161 | 9.65 | ug/L | 89 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040115.D
Acq On : 1 Apr 2008 3:52 pm
Sample : ,MSD,ME0803A55-03AMSD,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 01 17:05:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

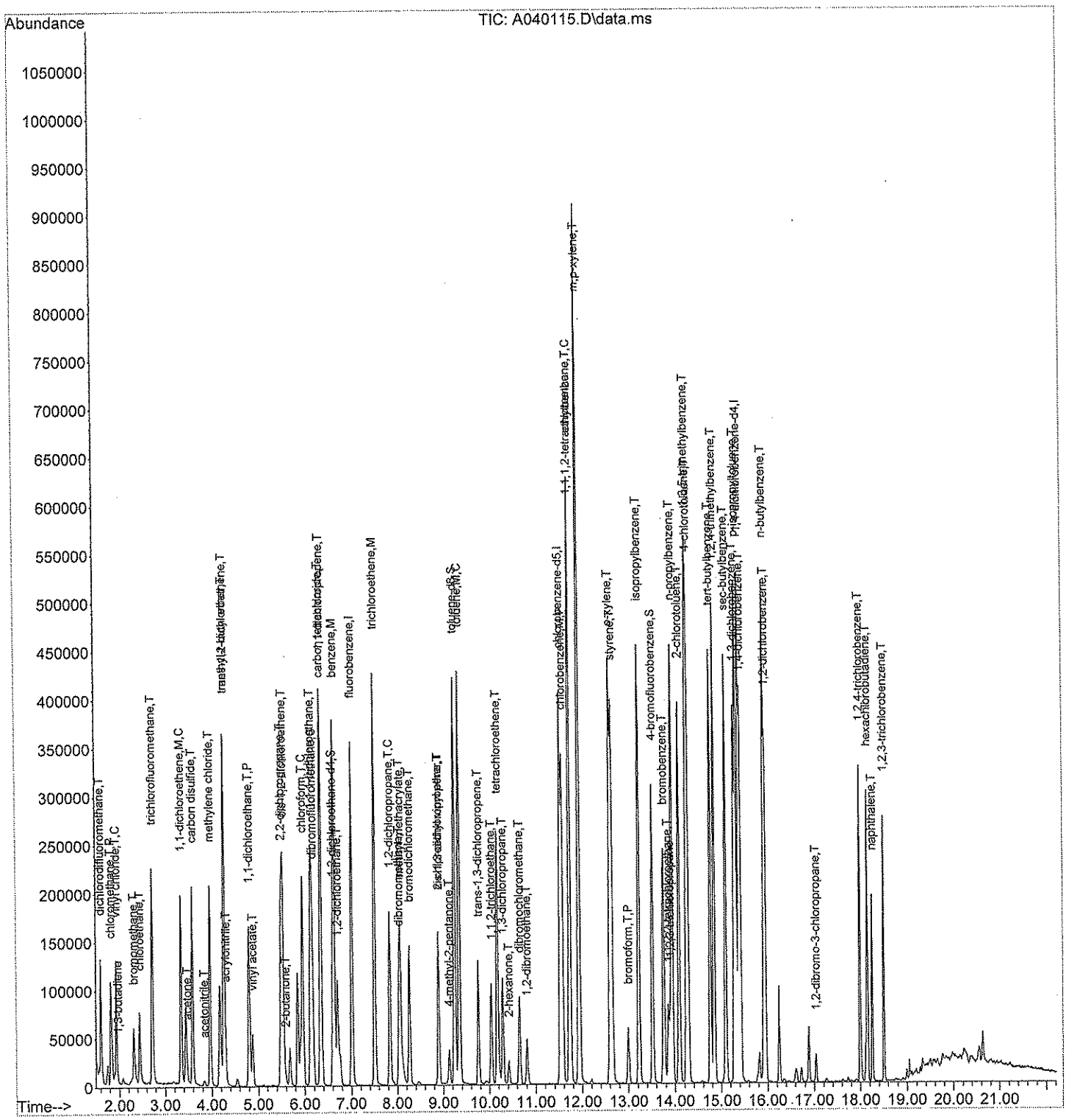
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 46) 1,1,2-trichloroethane | 10.044 | 83 | 37667 | 8.88 | ug/L | | 90 |
| 47) 1,3-dichloropropane | 10.287 | 76 | 82474 | 9.05 | ug/L | | 94 |
| 48) tetrachloroethene | 10.178 | 164 | 89880 | 9.60 | ug/L | | 93 |
| 49) trans-1,3-dichloropropene | 9.758 | 75 | 94252 | 9.87 | ug/L | | 94 |
| 50) 2-hexanone | 10.421 | 43 | 26263 | 10.85 | ug/L | # | 57 |
| 51) dibromochloromethane | 10.652 | 129 | 66736 | 9.47 | ug/L | | 96 |
| 52) 1,2-dibromoethane | 10.804 | 107 | 46837 | 9.08 | ug/L | | 98 |
| 53) chlorobenzene | 11.576 | 112 | 249083 | 9.06 | ug/L | | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 90441 | 9.49 | ug/L | | 93 |
| 55) ethylbenzene | 11.741 | 91 | 500403 | 9.65 | ug/L | | 95 |
| 56) m,p-xylene | 11.935 | 106 | 364350 | 18.72 | ug/L | # | 75 |
| 58) o-xylene | 12.598 | 106 | 170186 | 9.11 | ug/L | # | 87 |
| 59) styrene | 12.647 | 104 | 269740 | 9.03 | ug/L | | 93 |
| 60) isopropylbenzene | 13.224 | 105 | 456741 | 10.44 | ug/L | | 94 |
| 61) bromobenzene | 13.760 | 156 | 107796 | 9.04 | ug/L | | 90 |
| 62) bromoform | 12.999 | 173 | 37344 | 9.41 | ug/L | | 99 |
| 64) 1,2,3-trichloropropane | 13.899 | 75 | 40914 | 9.62 | ug/L | | 91 |
| 65) n-propylbenzene | 13.942 | 91 | 543618 | 9.53 | ug/L | | 96 |
| 66) 2-chlorotoluene | 14.094 | 91 | 338021 | 9.43 | ug/L | | 91 |
| 67) 4-chlorotoluene | 14.277 | 91 | 394232 | 9.65 | ug/L | | 90 |
| 68) 1,3,5-trimethylbenzene | 14.252 | 105 | 391384 | 9.46 | ug/L | | 84 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 45888 | 8.58 | ug/L | | 98 |
| 71) tert-butylbenzene | 14.763 | 119 | 307008 | 8.42 | ug/L | | 92 |
| 72) sec-butylbenzene | 15.098 | 105 | 414057 | 7.93 | ug/L | | 100 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 389322 | 8.37 | ug/L | | 84 |
| 74) 1,3-dichlorobenzene | 15.286 | 146 | 204687 | 8.44 | ug/L | | 91 |
| 75) p-isopropyltoluene | 15.329 | 119 | 387103 | 8.85 | ug/L | | 95 |
| 77) 1,4-dichlorobenzene | 15.426 | 146 | 200488 | 8.42 | ug/L | | 92 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 172916 | 8.77 | ug/L | | 91 |
| 79) n-butylbenzene | 15.925 | 91 | 346933 | 8.51 | ug/L | | 93 |
| 80) 1,2-dibromo-3-chloropr... | 17.037 | 75 | 9418 | 10.58 | ug/L | # | 79 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 108443 | 8.09 | ug/L | | 95 |
| 82) hexachlorobutadiene | 18.156 | 225 | 68554 | 7.12 | ug/L | | 96 |
| 83) naphthalene | 18.260 | 128 | 143106 | 8.65 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 85327 | 8.53 | ug/L | | 95 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040115.D
Acq On : 1 Apr 2008 3:52 pm
Sample : ,MSD,ME0803A55-03AMSD,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 01 17:05:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

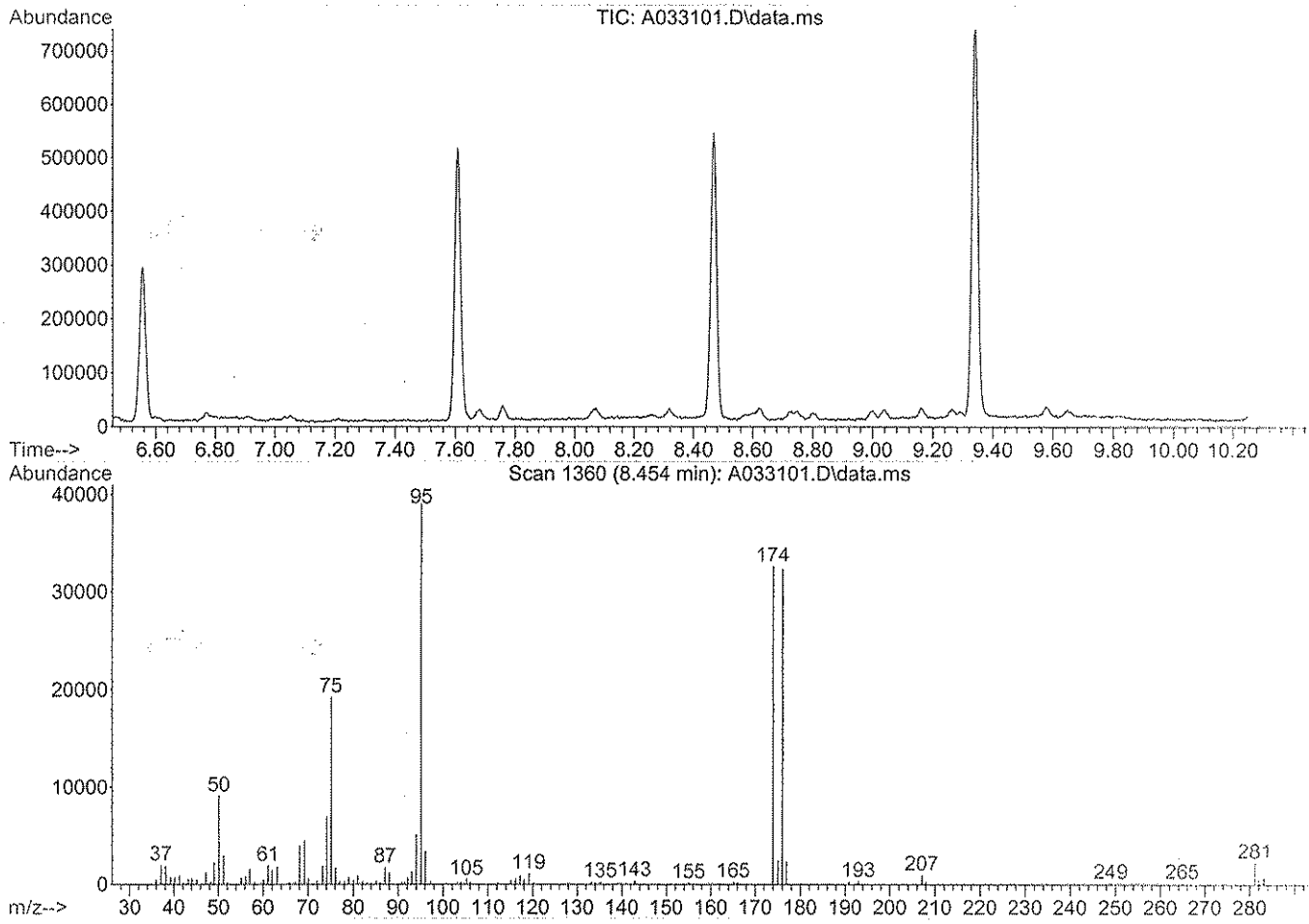


# TUNING RAW DATA

Data File: C:\msdchem\1\DATA\A033108\A033101.D
Acq On : 31 Mar 2008 6:29 am
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : JDB
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\SOIL0321.M
Title : Soil ICAL 3/21/08-Misc Included
Last Update : Sat Mar 22 10:06:01 2008




Spectrum Information: Scan 1360

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 23.4 | 9106 | PASS |
| 75 | 95 | 30 | 60 | 49.4 | 19256 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 38992 | PASS |
| 96 | 95 | 5 | 9 | 8.7 | 3408 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 83.7 | 32624 | PASS |
| 175 | 174 | 5 | 9 | 7.5 | 2436 | PASS |
| 176 | 174 | 95 | 101 | 99.3 | 32392 | PASS |
| 177 | 176 | 5 | 9 | 7.4 | 2399 | PASS |

3/31/08

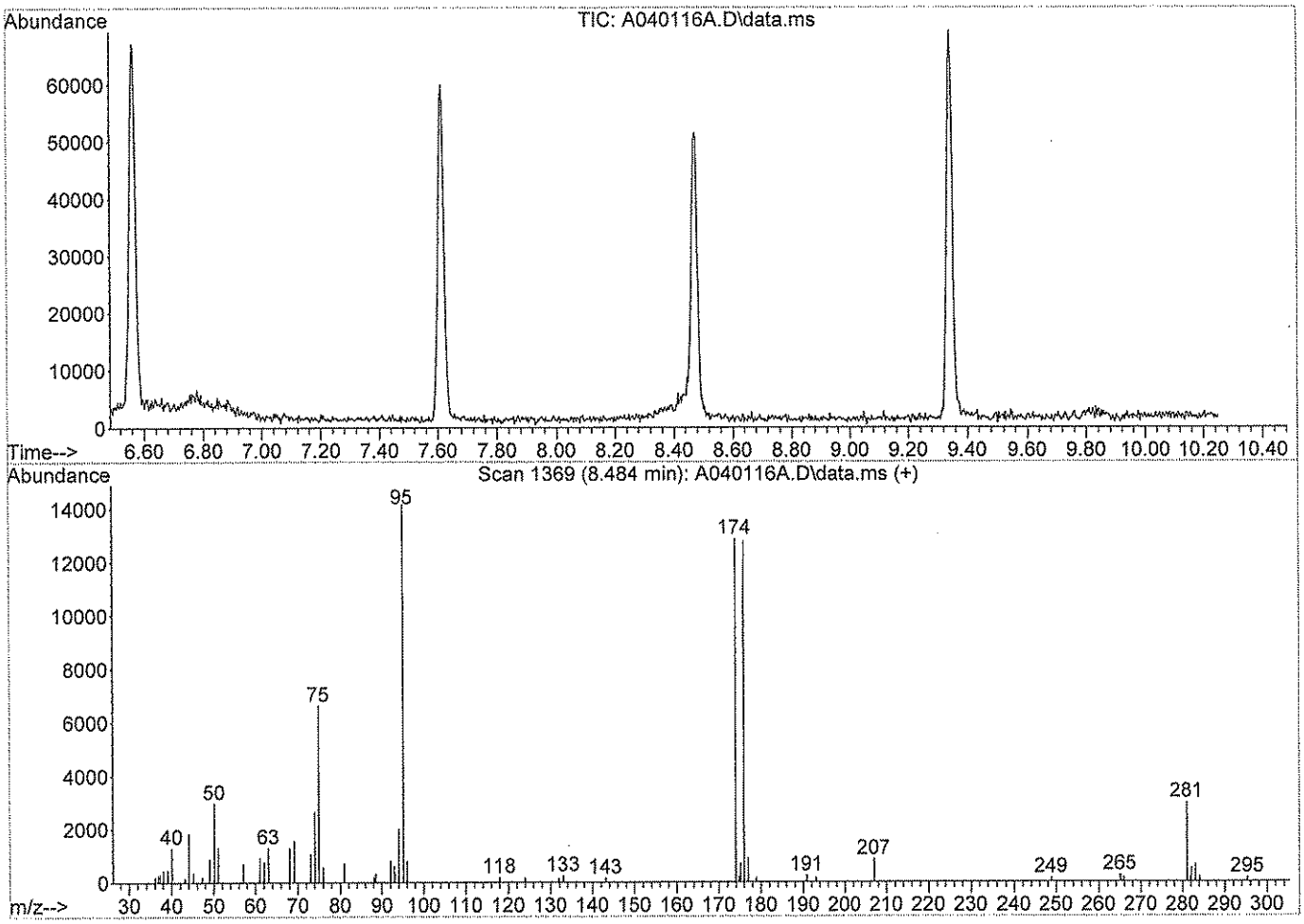


3/31/08

Data File: C:\msdchem\1\DATA\A040108\A040116A.D
Acq On : 1 Apr 2008 5:11 pm
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 16 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds
Last Update : Mon Mar 31 16:38:00 2008




Spectrum Information: Scan 1369

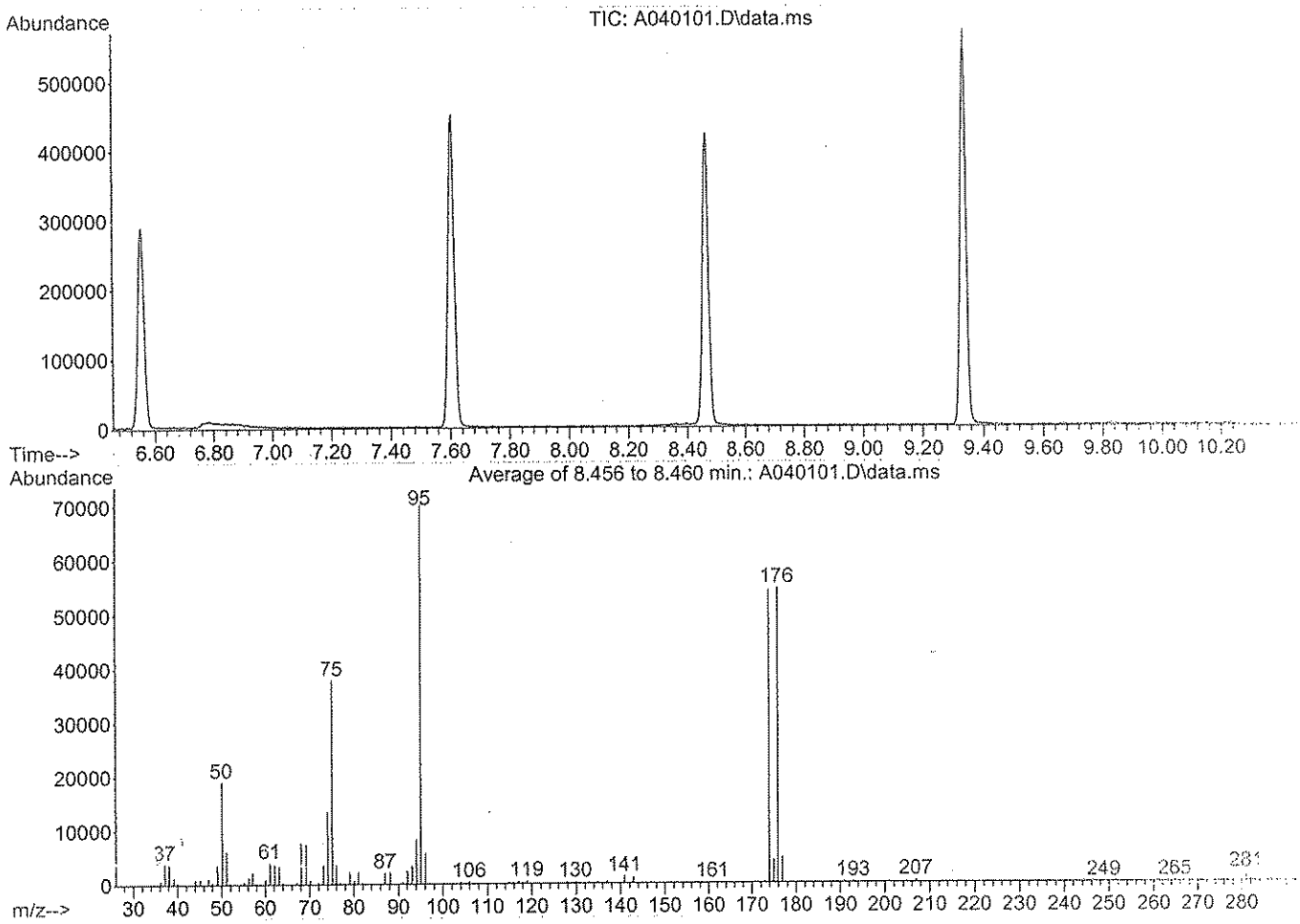
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 21.0 | 2973 | PASS |
| 75 | 95 | 30 | 60 | 46.8 | 6629 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 14173 | PASS |
| 96 | 95 | 5 | 9 | 5.6 | 796 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 90.8 | 12876 | PASS |
| 175 | 174 | 5 | 9 | 5.5 | 707 | PASS |
| 176 | 174 | 95 | 101 | 99.3 | 12782 | PASS |
| 177 | 176 | 5 | 9 | 7.0 | 901 | PASS |

4/1/8

Data File: C:\msdchem\1\DATA\A040108\A040101.D
Acq On : 1 Apr 2008 6:33 am
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : JDB
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds
Last Update : Mon Mar 31 16:38:00 2008




Spectrum Information: Average of 8.456 to 8.460 min.

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 27.1 | 19024 | PASS |
| 75 | 95 | 30 | 60 | 54.1 | 37884 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 70088 | PASS |
| 96 | 95 | 5 | 9 | 8.1 | 5657 | PASS |
| 173 | 174 | 0.00 | 2 | 0.4 | 211 | PASS |
| 174 | 95 | 50 | 250 | 77.6 | 54400 | PASS |
| 175 | 174 | 5 | 9 | 7.7 | 4197 | PASS |
| 176 | 174 | 95 | 101 | 100.4 | 54616 | PASS |
| 177 | 176 | 5 | 9 | 8.6 | 4706 | PASS |

# INITIAL CALIBRATION RAW DATA

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds
Last Update : Mon Mar 31 15:35:18 2008
Response Via : Initial Calibration

Avg < 15%

Calibration Files
1 =A033111.D 2 =A033110.D 4 =A033109.D 8 =A033108.D 10 =A033107.D 20 =A033113.D 40 =A033114.D
15 =A033112.D

| | | Compound | 1 | 2 | 4 | 8 | 10 | 20 | 40 | 15 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 4 | 8 | 10 | 20 | 40 | 15 | Avg | |
| | | | | | | ISTD | | | | | | |
| 1) | I | fluorobenzene | | | | | | | | | | |
| 2) | T | dichlorodifluo... | 0.096 | 0.088 | 0.086 | 0.063 | 0.095 | 0.097 | 0.098 | 0.098 | 0.090 | 12.95 |
| 3) | T,P | chloromethane | 0.266 | 0.215 | 0.201 | 0.163 | 0.181 | 0.189 | 0.187 | 0.184 | 0.198# | 15.74 |
| 4) | T,C | vinyl chloride | 0.263 | 0.222 | 0.212 | 0.163 | 0.211 | 0.219 | 0.221 | 0.217 | 0.216 | 12.52 |
| 5) | | 1,3-butadiene | 0.259 | 0.204 | 0.196 | 0.121 | 0.209 | 0.221 | 0.231 | 0.228 | 0.209 | 19.35 |
| 6) | T | bromomethane | 0.059 | 0.057 | 0.052 | 0.055 | 0.066 | 0.073 | 0.043 | 0.066 | 0.059 | 16.10 |
| 7) | T | chloroethane | 0.168 | 0.139 | 0.128 | 0.104 | 0.119 | 0.125 | 0.119 | 0.127 | 0.129 | 14.47 |
| 8) | T | trichlorofluor... | 0.373 | 0.324 | 0.318 | 0.235 | 0.326 | 0.363 | 0.367 | 0.357 | 0.333 | 13.54 |
| 9) | T | acrolein | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 | 0.003 | 0.003 | 0.003 | 0.002 | 43.88 |
| 10) | M,C | 1,1-dichloroet... | 0.216 | 0.183 | 0.170 | 0.135 | 0.184 | 0.193 | 0.188 | 0.192 | 0.183 | 12.71 |
| 11) | T | acetone | PQL=5 | | 0.025 | 0.025 | 0.018 | 0.021 | 0.022 | 0.021 | 0.022 | 11.88 |
| 12) | T | carbon disulfide | 0.714 | 0.608 | 0.558 | 0.449 | 0.607 | 0.616 | 0.617 | 0.612 | 0.598 | 12.35 |
| 13) | T | methylene chlo... | PQL=2 | 0.369 | 0.294 | 0.270 | 0.245 | 0.233 | 0.217 | 0.241 | 0.267 | 19.31 |
| 14) | T | acrylonitrile | 0.032 | 0.026 | 0.026 | 0.027 | 0.025 | 0.028 | 0.028 | 0.029 | 0.028 | 7.73 |
| 15) | T | trans-1,2-dich... | 0.293 | 0.244 | 0.237 | 0.208 | 0.248 | 0.247 | 0.242 | 0.243 | 0.245 | 9.42 |
| 16) | T | methyl-t-butyl... | 0.485 | 0.408 | 0.396 | 0.408 | 0.358 | 0.388 | 0.376 | 0.382 | 0.400 | 9.50 |
| 17) | T | acetonitrile | 0.015 | 0.011 | 0.010 | 0.010 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 | 15.37 |
| 18) | T | hexane | 0.329 | 0.270 | 0.288 | 0.166 | 0.337 | 0.320 | 0.330 | 0.332 | 0.297 | 19.56 |
| 19) | T,P | 1,1-dichloroet... | 0.568 | 0.484 | 0.457 | 0.425 | 0.471 | 0.484 | 0.479 | 0.477 | 0.480 | 8.40 |
| 20) | T | vinyl acetate | 0.163 | 0.137 | 0.136 | 0.146 | 0.130 | 0.139 | 0.141 | 0.138 | 0.141 | 7.01 |
| 21) | T | cis-1,2-dichlo... | 0.315 | 0.270 | 0.256 | 0.248 | 0.261 | 0.269 | 0.262 | 0.264 | 0.268 | 7.52 |
| 22) | T | 2,2-dichloropr... | 0.497 | 0.428 | 0.412 | 0.353 | 0.456 | 0.445 | 0.438 | 0.445 | 0.434 | 9.45 |
| 23) | T | 2-butanone | 0.004 | 0.007 | 0.006 | 0.008 | 0.007 | 0.008 | 0.008 | 0.008 | 0.007 | 20.75 |
| 24) | T | methyl acrylate | 0.098 | 0.080 | 0.081 | 0.084 | 0.069 | 0.081 | 0.085 | 0.080 | 0.082 | 9.97 |
| 25) | T,C | chloroform | 0.588 | 0.480 | 0.455 | 0.439 | 0.456 | 0.476 | 0.474 | 0.475 | 0.480 | 9.50 |
| 26) | S | dibromofluorom... | 0.235 | 0.231 | 0.230 | 0.233 | 0.225 | 0.230 | 0.228 | 0.232 | 0.230 | 1.24 |
| 27) | T | 1,1,1-trichlor... | 0.533 | 0.461 | 0.435 | 0.355 | 0.462 | 0.485 | 0.487 | 0.487 | 0.463 | 11.25 |
| 28) | T | cyclohexane | 0.425 | 0.361 | 0.365 | 0.229 | 0.409 | 0.424 | 0.437 | 0.430 | 0.385 | 18.02 |
| 29) | T | carbon tetrach... | 0.422 | 0.371 | 0.346 | 0.269 | 0.392 | 0.413 | 0.411 | 0.406 | 0.379 | 13.46 |
| 30) | S | 1,2-dichloroet... | 0.206 | 0.201 | 0.198 | 0.200 | 0.193 | 0.204 | 0.204 | 0.204 | 0.201 | 2.18 |
| 31) | M | benzene | 1.158 | 0.992 | 0.936 | 0.856 | 0.935 | 0.955 | 0.951 | 0.953 | 0.967 | 8.91 |
| 32) | T | 1,1-dichloropr... | 0.390 | 0.346 | 0.317 | 0.257 | 0.355 | 0.365 | 0.364 | 0.361 | 0.344 | 11.81 |
| 33) | T | 1,2-dichloroet... | 0.325 | 0.263 | 0.239 | 0.247 | 0.231 | 0.257 | 0.264 | 0.256 | 0.260 | 10.94 |
| 34) | M | trichloroethene | 0.323 | 0.280 | 0.269 | 0.239 | 0.279 | 0.288 | 0.286 | 0.284 | 0.281 | 8.31 |
| 35) | T | ethyl acrylate | PQL=2 | 0.124 | 0.125 | 0.131 | 0.109 | 0.128 | 0.138 | 0.127 | 0.126 | 7.06 |
| 36) | T,C | 1,2-dichloropr... | 0.279 | 0.230 | 0.220 | 0.219 | 0.217 | 0.228 | 0.227 | 0.227 | 0.231 | 8.70 |
| 37) | T | methyl methacr... | PQL=2 | 0.094 | 0.092 | 0.098 | 0.078 | 0.095 | 0.099 | 0.092 | 0.093 | 7.58 |



4/03/08W

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38) | T | dibromomethane | 0.112 | 0.092 | 0.092 | 0.094 | 0.084 | 0.092 | 0.092 | 0.091 | 0.094 | 8.79 |
| 39) | T | bromodichlorom... | 0.373 | 0.317 | 0.307 | 0.306 | 0.297 | 0.324 | 0.328 | 0.320 | 0.322 | 7.22 |
| 40) | T | 2-chloroethyl ... | 0.015 | 0.017 | 0.016 | 0.017 | 0.015 | 0.015 | 0.009 | 0.016 | 0.015 | 18.39 |
| | | | 1 | 2 | 4 | 8 | | 10 | 20 | 40 | 15 | avg |
| 41) | I | chlorobenzene-d5 | ---------- | | | ISTD | | | | | | |
| 42) | T | cis-1,3-dichlo... | 0.466 | 0.401 | 0.393 | 0.408 | 0.400 | 0.428 | 0.434 | 0.421 | 0.419 | 5.73 |
| 43) | T | 4-methyl-2-pen... | 0.139 | 0.121 | 0.114 | 0.120 | 0.103 | 0.121 | 0.125 | 0.119 | 0.120 | 8.52 |
| 44) | S | toluene-d8 | 1.249 | 1.249 | 1.250 | 1.249 | 1.255 | 1.267 | 1.253 | 1.257 | 1.254 | 0.50 |
| 45) | M,C | toluene | 1.028 | 0.866 | 0.811 | 0.754 | 0.838 | 0.850 | 0.840 | 0.838 | 0.853 | 9.19 |
| 46) | T | 1,1,2-trichlor... | 0.162 | 0.137 | 0.133 | 0.136 | 0.126 | 0.136 | 0.139 | 0.134 | 0.138 | 7.47 |
| 47) | T | 1,3-dichloropr... | 0.337 | 0.290 | 0.284 | 0.297 | 0.271 | 0.299 | 0.301 | 0.292 | 0.296 | 6.42 |
| 48) | T | tetrachloroethene | 0.356 | 0.304 | 0.287 | 0.236 | 0.314 | 0.316 | 0.311 | 0.312 | 0.304 | 11.03 |
| 49) | T | trans-1,3-dich... | 0.345 | 0.296 | 0.293 | 0.306 | 0.290 | 0.316 | 0.327 | 0.312 | 0.311 | 6.04 |
| 50) | T | 2-hexanone | 0.086 | 0.074 | 0.077 | 0.079 | 0.068 | 0.081 | 0.085 | 0.079 | 0.079 | 7.45 |
| 51) | T | dibromochlorom... | 0.250 | 0.215 | 0.214 | 0.229 | 0.212 | 0.238 | 0.246 | 0.231 | 0.229 | 6.38 |
| 52) | T | 1,2-dibromoethane | 0.189 | 0.165 | 0.162 | 0.168 | 0.153 | 0.169 | 0.171 | 0.167 | 0.168 | 6.04 |
| 53) | M,P | chlorobenzene | 1.083 | 0.900 | 0.865 | 0.826 | 0.857 | 0.886 | 0.872 | 0.864 | 0.894 | 8.86 |
| 54) | T | 1,1,1,2-tetrac... | 0.348 | 0.303 | 0.297 | 0.294 | 0.297 | 0.313 | 0.317 | 0.311 | 0.310 | 5.71 |
| 55) | T,C | ethylbenzene | 1.987 | 1.690 | 1.629 | 1.477 | 1.680 | 1.692 | 1.658 | 1.684 | 1.687 | 8.33 |
| 56) | T | m,p-xylene | 0.755 | 0.638 | 0.618 | 0.561 | 0.632 | 0.631 | 0.605 | 0.623 | 0.633 | 8.68 |
| 57) | T | butyl acrylate | 80=2 | 0.341 | 0.348 | 0.353 | 0.296 | 0.358 | 0.368 | 0.351 | 0.345 | 6.72 |
| 58) | T | o-xylene | 0.728 | 0.607 | 0.593 | 0.560 | 0.593 | 0.602 | 0.585 | 0.590 | 0.607 | 8.38 |
| 59) | T | styrene | 1.133 | 0.967 | 0.941 | 0.923 | 0.927 | 0.970 | 0.951 | 0.963 | 0.972 | 6.93 |
| 60) | T | isopropylbenzene | 1.627 | 1.428 | 1.365 | 1.186 | 1.447 | 1.463 | 1.437 | 1.429 | 1.423 | 8.56 |
| 61) | T | bromobenzene | 0.462 | 0.380 | 0.375 | 0.375 | 0.365 | 0.383 | 0.385 | 0.377 | 0.388 | 7.85 |
| 62) | T,P | bromoform | 0.141 | 0.118 | 0.119 | 0.127 | 0.117 | 0.137 | 0.143 | 0.131 | 0.129 | 8.30 |
| 63) | S | 4-bromofluorob... | 0.460 | 0.458 | 0.455 | 0.461 | 0.450 | 0.466 | 0.469 | 0.469 | 0.461 | 1.45 |
| 64) | | 1,2,3-trichlor... | 0.166 | 0.139 | 0.134 | 0.137 | 0.121 | 0.137 | 0.140 | 0.133 | 0.138 | 9.11 |
| 65) | T | n-propylbenzene | 2.151 | 1.869 | 1.759 | 1.545 | 1.881 | 1.899 | 1.868 | 1.862 | 1.854 | 9.01 |
| 66) | T | 2-chlorotoluene | 1.378 | 1.161 | 1.128 | 1.065 | 1.133 | 1.165 | 1.155 | 1.142 | 1.166 | 7.83 |
| 67) | T | 4-chlorotoluene | 1.581 | 1.322 | 1.293 | 1.210 | 1.282 | 1.328 | 1.311 | 1.306 | 1.329 | 8.15 |
| 68) | T | 1,3,5-trimethy... | 1.575 | 1.344 | 1.290 | 1.182 | 1.344 | 1.366 | 1.333 | 1.329 | 1.345 | 8.12 |
| 69) | I | 1,4-dichlorobenzen... | ---------- | | | ISTD | | | | | | |
| 70) | T | 1,1,2,2-tetrac... | 0.359 | 0.298 | 0.314 | 0.315 | 0.287 | 0.311 | 0.326 | 0.300 | 0.314 | 7.01 |
| 71) | T | tert-butylbenzene | 2.410 | 2.107 | 2.054 | 1.769 | 2.282 | 2.181 | 2.175 | 2.117 | 2.137 | 8.71 |
| 72) | T | sec-butylbenzene | 3.450 | 3.048 | 2.920 | 2.459 | 3.311 | 3.147 | 3.118 | 3.040 | 3.062 | 9.62 |
| 73) | T | 1,2,4-trimethy... | 3.151 | 2.711 | 2.646 | 2.467 | 2.777 | 2.709 | 2.724 | 2.636 | 2.728 | 7.14 |
| 74) | T | 1,3-dichlorobe... | 1.680 | 1.425 | 1.382 | 1.333 | 1.399 | 1.394 | 1.394 | 1.360 | 1.421 | 7.62 |
| 75) | T | p-isopropyltol... | 2.862 | 2.511 | 2.480 | 2.130 | 2.789 | 2.588 | 2.613 | 2.536 | 2.563 | 8.61 |
| 76) | T | dicyclopentadiene | 3.356 | 2.673 | 2.627 | 2.239 | 2.672 | 2.697 | 2.788 | 2.678 | 2.716 | 11.27 |
| 77) | T | 1,4-dichlorobe... | 1.722 | 1.459 | 1.372 | 1.317 | 1.341 | 1.337 | 1.325 | 1.297 | 1.396 | 10.08 |
| 78) | T | 1,2-dichlorobe... | 1.384 | 1.163 | 1.137 | 1.122 | 1.098 | 1.130 | 1.115 | 1.095 | 1.155 | 8.23 |
| 79) | T | n-butylbenzene | 2.637 | 2.362 | 2.296 | 1.974 | 2.611 | 2.453 | 2.421 | 2.362 | 2.389 | 8.64 |
| 80) | T | 1,2-dibromo-3-... | 0.058 | 0.054 | 0.052 | 0.052 | 0.046 | 0.052 | 0.055 | 0.049 | 0.052 | 7.11 |
| 81) | T | 1,2,4-trichlor... | 0.972 | 0.820 | 0.785 | 0.760 | 0.733 | 0.753 | 0.753 | 0.708 | 0.785 | 10.49 |
| 82) | T | hexachlorobuta... | 0.637 | 0.574 | 0.544 | 0.471 | 0.614 | 0.565 | 0.570 | 0.536 | 0.564 | 8.94 |

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounts

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 83) | T | naphthalene | 1.330 | 1.077 | 1.005 | 0.941 | 0.805 | 0.878 | 0.888 | 0.835 | 0.970 | 17.58 |
| 84) | T | 1,2,3-trichlor... | 0.724 | 0.630 | 0.597 | 0.571 | 0.518 | 0.562 | 0.557 | 0.530 | 0.586 | 11.26 |
| 85) | T | 2-methyl napht... | 0.609 | 0.494 | 0.466 | 0.395 | 0.292 | 0.371 | 0.382 | 0.340 | 0.418 | 23.97 |

(#) = Out of Range

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033111.D
Acq On : 31 Mar 2008 1:17 pm
Sample : ,ical,ical_w25 1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 31 13:58:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:57:52 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 550760 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 421228 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 220574 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 129347 | 10.11 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.10% | | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 113417 | 9.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.40% | | | |
| 44) toluene-d8 | 9.253 | 98 | 526171 | 9.81 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.10% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 193739 | 9.90 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.609 | 85 | 5265 | 0.87 | ug/L | 92 |
| 3) chloromethane | 1.822 | 50 | 14644 | 1.21 | ug/L | 95 |
| 4) vinyl chloride | 1.937 | 62 | 14505 | 1.16 | ug/L | 92 |
| 5) 1,3-butadiene | 1.974 | 39 | 14261 | 1.25 | ug/L | 88 |
| 6) bromomethane | 2.332 | 94 | 3272 | 1.04 | ug/L | 91 |
| 7) chloroethane | 2.442 | 64 | 9229 | 1.26 | ug/L | 99 |
| 8) trichlorofluoromethane | 2.728 | 101 | 20521 | 1.07 | ug/L | 95 |
| 9) acrolein | 3.287 | 56 | 1012 | 8.13 | ug/L | 81 |
| 10) 1,1-dichloroethene | 3.348 | 96 | 11871 | 1.17 | ug/L | 95 |
| 11) acetone | 3.476 | 43 | 2406 | 1.80 | ug/L | 92 |
| 12) carbon disulfide | 3.591 | 76 | 39302 | 1.13 | ug/L | 98 |
| 13) methylene chloride | 3.968 | 84 | 31162 | 2.09 | ug/L | 97 |
| 14) acrylonitrile | 4.309 | 53 | 17427 | 11.01 | ug/L | 88 |
| 15) trans-1,2-dichloroethene | 4.272 | 96 | 16110 | 1.21 | ug/L | 97 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 26687 | 1.38 | ug/L | 95 |
| 17) acetonitrile | 3.828 | 41 | 8094 | 12.96 | ug/L | 91 |
| 18) hexane | 4.546 | 57 | 18132 | 1.13 | ug/L | 95 |
| 19) 1,1-dichloroethane | 4.801 | 63 | 31274 | 1.21 | ug/L | 97 |
| 20) vinyl acetate | 4.880 | 43 | 8995 | 1.19 | ug/L | 98 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 17326 | 1.20 | ug/L | 92 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 27370 | 1.17 | ug/L | 97 |
| 23) 2-butanone | 5.592 | 72 | 201 | 0.52 | ug/L # | 41 |
| 24) methyl acrylate | 5.689 | 55 | 5424 | 1.18 | ug/L | 100 |
| 25) chloroform | 5.963 | 83 | 32369 | 1.25 | ug/L | 98 |
| 27) 1,1,1-trichloroethane | 6.139 | 97 | 29374 | 1.19 | ug/L | 84 |
| 28) cyclohexane | 6.170 | 56 | 23428 | 1.13 | ug/L | 95 |
| 29) carbon tetrachloride | 6.340 | 117 | 23250 | 1.15 | ug/L | 92 |
| 31) benzene | 6.632 | 78 | 63783 | 1.24 | ug/L | 98 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 21457 | 1.17 | ug/L | 95 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 17878 | 1.26 | ug/L | 94 |
| 34) trichloroethene | 7.514 | 95 | 17808 | 1.19 | ug/L | 92 |
| 35) ethyl acrylate | 7.696 | 55 | 8171 | 1.19 | ug/L | 95 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 15385 | 1.25 | ug/L | 94 |
| 37) methyl methacrylate | 8.012 | 41 | 6065 | 1.19 | ug/L | 92 |
| 38) dibromomethane | 8.031 | 93 | 6194 | 1.23 | ug/L | 88 |

CS 3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033111.D
Acq On : 31 Mar 2008 1:17 pm
Sample : ,ical,ical_w25 1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 31 13:58:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:57:52 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

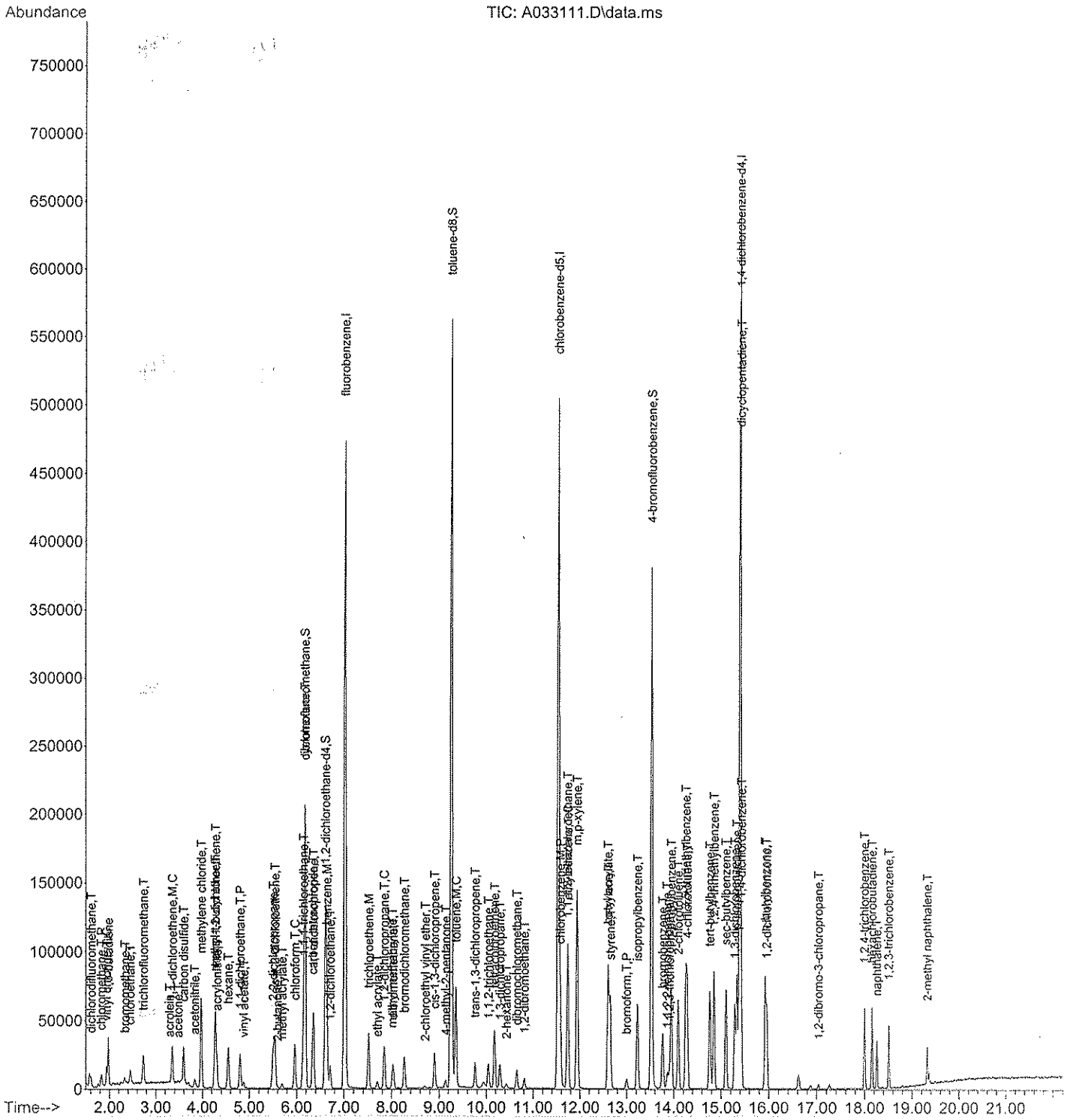
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.268 | 83 | 20564 | 1.19 ug/L | 92 |
| 40) 2-chloroethyl vinyl ether | 8.706 | 63 | 841 | 1.32 ug/L # | 70 |
| 42) cis-1,3-dichloropropene | 8.900 | 75 | 19627 | 1.12 ug/L | 97 |
| 43) 4-methyl-2-pentanone | 9.137 | 43 | 5865 | 1.16 ug/L | 84 |
| 45) toluene | 9.350 | 92 | 43317 | 1.22 ug/L | 89 |
| 46) 1,1,2-trichloroethane | 10.044 | 83 | 6812 | 1.17 ug/L | 91 |
| 47) 1,3-dichloropropane | 10.293 | 76 | 14207 | 1.14 ug/L | 91 |
| 48) tetrachloroethene | 10.177 | 164 | 14987 | 1.19 ug/L | 97 |
| 49) trans-1,3-dichloropropene | 9.758 | 75 | 14534 | 1.12 ug/L | 88 |
| 50) 2-hexanone | 10.427 | 43 | 3642 | 1.10 ug/L | 77 |
| 51) dibromochloromethane | 10.652 | 129 | 10528 | 1.10 ug/L | 97 |
| 52) 1,2-dibromoethane | 10.810 | 107 | 7946 | 1.14 ug/L | 99 |
| 53) chlorobenzene | 11.576 | 112 | 45614 | 1.23 ug/L | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 14673 | 1.13 ug/L | 95 |
| 55) ethylbenzene | 11.740 | 91 | 83680 | 1.19 ug/L | 98 |
| 56) m,p-xylene | 11.935 | 106 | 63600 | 2.41 ug/L # | 84 |
| 57) butyl acrylate | 12.598 | 55 | 16780 | 1.14 ug/L | 91 |
| 58) o-xylene | 12.604 | 106 | 30677 | 1.22 ug/L | 89 |
| 59) styrene | 12.652 | 104 | 47727 | 1.19 ug/L | 99 |
| 60) isopropylbenzene | 13.230 | 105 | 68532 | 1.16 ug/L | 94 |
| 61) bromobenzene | 13.765 | 156 | 19441 | 1.22 ug/L | 98 |
| 62) bromoform | 12.999 | 173 | 5955 | 1.13 ug/L | 90 |
| 64) 1,2,3-trichloropropane | 13.905 | 75 | 6999 | 1.20 ug/L | 97 |
| 65) n-propylbenzene | 13.942 | 91 | 90586 | 1.16 ug/L | 96 |
| 66) 2-chlorotoluene | 14.094 | 91 | 58038 | 1.19 ug/L | 92 |
| 67) 4-chlorotoluene | 14.282 | 91 | 66591 | 1.20 ug/L | 96 |
| 68) 1,3,5-trimethylbenzene | 14.252 | 105 | 66353 | 1.18 ug/L | 85 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 7926 | 1.16 ug/L | 95 |
| 71) tert-butylbenzene | 14.763 | 119 | 53149 | 1.14 ug/L | 96 |
| 72) sec-butylbenzene | 15.097 | 105 | 76108 | 1.13 ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 69499 | 1.16 ug/L | 85 |
| 74) 1,3-dichlorobenzene | 15.286 | 146 | 37055 | 1.20 ug/L | 94 |
| 75) p-isopropyltoluene | 15.328 | 119 | 63119 | 1.12 ug/L | 95 |
| 76) dicyclopentadiene | 15.401 | 66 | 74035 | 1.23 ug/L | 97 |
| 77) 1,4-dichlorobenzene | 15.426 | 146 | 37992 | 1.24 ug/L | 92 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 30535 | 1.22 ug/L | 95 |
| 79) n-butylbenzene | 15.924 | 91 | 58172 | 1.10 ug/L | 93 |
| 80) 1,2-dibromo-3-chloropr... | 17.037 | 75 | 1272 | 1.11 ug/L # | 58 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 21439 | 1.26 ug/L | 89 |
| 82) hexachlorobutadiene | 18.156 | 225 | 14055 | 1.12 ug/L | 93 |
| 83) naphthalene | 18.259 | 128 | 29328 | 1.47 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 15970 | 1.25 ug/L | 92 |
| 85) 2-methyl naphthalene | 19.324 | 142 | 13422 | 1.54 ug/L | 99 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033111.D
Acq On : 31 Mar 2008 1:17 pm
Sample : ,ical,ical_w25 1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 31 13:58:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:57:52 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033111.D 25ML0331.M Mon Mar 31 13:58:17 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033110.D
Acq On : 31 Mar 2008 12:42 pm
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 31 13:42:48 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:38:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 570843 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 437862 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.392 | 152 | 227186 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 131999 | 9.90 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.00% | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 114766 | 9.57 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.70% | | | |
| 44) toluene-d8 | 9.250 | 98 | 546758 | 9.76 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.60% | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 200497 | 9.85 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.50% | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 10088 | 1.59 | ug/L | | 99 |
| 3) chloromethane | 1.824 | 50 | 24528 | 1.97 | ug/L | | 96 |
| 4) vinyl chloride | 1.940 | 62 | 25321 | 1.96 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.976 | 39 | 23311 | 1.92 | ug/L | | 84 |
| 6) bromomethane | 2.329 | 94 | 6513 | 2.07 | ug/L | | 93 |
| 7) chloroethane | 2.451 | 64 | 15884 | 2.10 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.730 | 101 | 36948 | 1.80 | ug/L | | 93 |
| 9) acrolein | 3.284 | 56 | 1491 | 10.30 | ug/L | | 95 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 20844 | 1.95 | ug/L | | 92 |
| 11) acetone | 3.472 | 43 | 2781 | 2.01 | ug/L | | 84 |
| 12) carbon disulfide | 3.594 | 76 | 69430 | 1.91 | ug/L | | 98 |
| 13) methylene chloride | 3.965 | 84 | 42114 | 2.63 | ug/L | | 97 |
| 14) acrylonitrile | 4.305 | 53 | 30114 | 17.87 | ug/L | | 89 |
| 15) trans-1,2-dichloroethene | 4.269 | 96 | 27898 | 1.99 | ug/L | | 96 |
| 16) methyl-t-butyl ether | 4.275 | 73 | 46584 | 2.32 | ug/L | | 91 |
| 17) acetonitrile | 3.831 | 41 | 12501 | 18.64 | ug/L | | 99 |
| 18) hexane | 4.549 | 57 | 30872 | 1.82 | ug/L | | 98 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 55216 | 2.04 | ug/L | | 94 |
| 20) vinyl acetate | 4.877 | 43 | 15658 | 2.00 | ug/L | | 88 |
| 21) cis-1,2-dichloroethene | 5.540 | 96 | 30813 | 2.05 | ug/L | | 95 |
| 22) 2,2-dichloropropane | 5.497 | 77 | 48870 | 2.00 | ug/L | | 97 |
| 23) 2-butanone | 5.595 | 72 | 774 | 1.96 | ug/L | # | 36 |
| 24) methyl acrylate | 5.692 | 55 | 9166 | 1.91 | ug/L | | 91 |
| 25) chloroform | 5.960 | 83 | 54842 | 2.03 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.142 | 97 | 52608 | 2.05 | ug/L | | 86 |
| 28) cyclohexane | 6.166 | 56 | 41241 | 1.88 | ug/L | | 93 |
| 29) carbon tetrachloride | 6.337 | 117 | 42399 | 2.01 | ug/L | | 86 |
| 31) benzene | 6.635 | 78 | 113207 | 2.13 | ug/L | | 97 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 39470 | 2.08 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.708 | 62 | 30028 | 2.02 | ug/L | | 95 |
| 34) trichloroethene | 7.516 | 95 | 31984 | 2.06 | ug/L | | 94 |
| 35) ethyl acrylate | 7.693 | 55 | 14132 | 1.97 | ug/L | | 94 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 26273 | 2.07 | ug/L | | 94 |
| 37) methyl methacrylate | 8.015 | 41 | 10780 | 2.03 | ug/L | | 94 |
| 38) dibromomethane | 8.039 | 93 | 10452 | 1.99 | ug/L | | 92 |

CF 3/31/08



MS 04/01/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033110.D
Acq On : 31 Mar 2008 12:42 pm
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 31 13:42:48 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:38:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

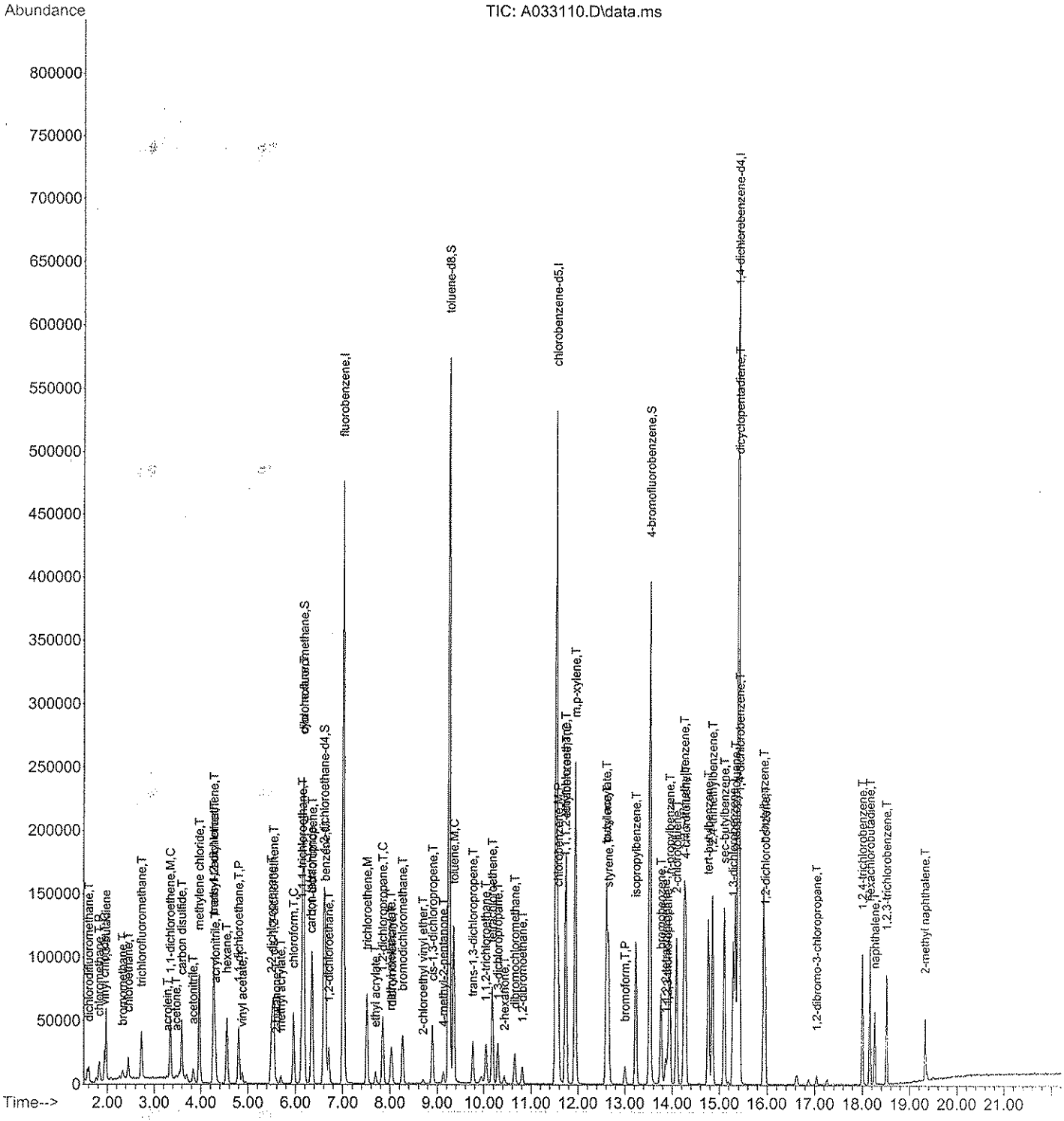
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.264 | 83 | 36232 | 2.03 | ug/L | | 94 |
| 40) | 2-chloroethyl vinyl ether | 8.696 | 63 | 1957 | 3.54 | ug/L | | 93 |
| 42) | cis-1,3-dichloropropene | 8.903 | 75 | 35136 | 1.90 | ug/L | | 93 |
| 43) | 4-methyl-2-pentanone | 9.134 | 43 | 10591 | 2.02 | ug/L | | 96 |
| 45) | toluene | 9.353 | 92 | 75817 | 2.02 | ug/L | | 89 |
| 46) | 1,1,2-trichloroethane | 10.034 | 83 | 12006 | 1.96 | ug/L | | 95 |
| 47) | 1,3-dichloropropane | 10.296 | 76 | 25354 | 1.94 | ug/L | | 93 |
| 48) | tetrachloroethene | 10.174 | 164 | 26583 | 2.02 | ug/L | | 91 |
| 49) | trans-1,3-dichloropropene | 9.760 | 75 | 25964 | 1.92 | ug/L | | 88 |
| 50) | 2-hexanone | 10.429 | 43 | 6483 | 1.87 | ug/L | # | 62 |
| 51) | dibromochloromethane | 10.654 | 129 | 18842 | 1.87 | ug/L | | 100 |
| 52) | 1,2-dibromoethane | 10.813 | 107 | 14414 | 1.98 | ug/L | | 96 |
| 53) | chlorobenzene | 11.573 | 112 | 78804 | 2.05 | ug/L | | 95 |
| 54) | 1,1,1,2-tetrachloroethane | 11.725 | 131 | 26499 | 1.95 | ug/L | | 96 |
| 55) | ethylbenzene | 11.743 | 91 | 147965 | 2.02 | ug/L | | 98 |
| 56) | m,p-xylene | 11.938 | 106 | 111818 | 4.06 | ug/L | # | 80 |
| 57) | butyl acrylate | 12.600 | 55 | 29905 | 1.93 | ug/L | | 95 |
| 58) | o-xylene | 12.607 | 106 | 53152 | 2.03 | ug/L | | 93 |
| 59) | styrene | 12.643 | 104 | 84695 | 2.03 | ug/L | | 96 |
| 60) | isopropylbenzene | 13.227 | 105 | 125069 | 2.03 | ug/L | | 95 |
| 61) | bromobenzene | 13.762 | 156 | 33296 | 1.99 | ug/L | | 93 |
| 62) | bromoform | 13.002 | 173 | 10346 | 1.88 | ug/L | | 98 |
| 64) | 1,2,3-trichloropropane | 13.902 | 75 | 12158 | 1.99 | ug/L | | 98 |
| 65) | n-propylbenzene | 13.944 | 91 | 163684 | 2.02 | ug/L | | 99 |
| 66) | 2-chlorotoluene | 14.090 | 91 | 101645 | 1.99 | ug/L | | 94 |
| 67) | 4-chlorotoluene | 14.279 | 91 | 115781 | 1.98 | ug/L | | 95 |
| 68) | 1,3,5-trimethylbenzene | 14.248 | 105 | 117689 | 2.00 | ug/L | | 82 |
| 70) | 1,1,2,2-tetrachloroethane | 13.859 | 83 | 13525 | 1.89 | ug/L | | 96 |
| 71) | tert-butylbenzene | 14.759 | 119 | 95717 | 1.99 | ug/L | | 95 |
| 72) | sec-butylbenzene | 15.100 | 105 | 138485 | 1.99 | ug/L | | 99 |
| 73) | 1,2,4-trimethylbenzene | 14.844 | 105 | 123164 | 1.98 | ug/L | | 83 |
| 74) | 1,3-dichlorobenzene | 15.282 | 146 | 64740 | 2.02 | ug/L | | 90 |
| 75) | p-isopropyltoluene | 15.331 | 119 | 114080 | 1.95 | ug/L | | 98 |
| 76) | dicyclopentadiene | 15.404 | 66 | 121464 | 1.92 | ug/L | | 96 |
| 77) | 1,4-dichlorobenzene | 15.422 | 146 | 66277 | 2.10 | ug/L | | 92 |
| 78) | 1,2-dichlorobenzene | 15.957 | 146 | 52824 | 2.03 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.927 | 91 | 107329 | 1.96 | ug/L | | 93 |
| 80) | 1,2-dibromo-3-chloropr... | 17.040 | 75 | 2442 | 2.07 | ug/L | # | 69 |
| 81) | 1,2,4-trichlorobenzene | 17.995 | 180 | 37244 | 2.12 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.159 | 225 | 26083 | 1.99 | ug/L | | 97 |
| 83) | naphthalene | 18.262 | 128 | 48914 | 2.44 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.505 | 180 | 28646 | 2.17 | ug/L | | 95 |
| 85) | 2-methyl naphthalene | 19.320 | 142 | 22426 | 2.53 | ug/L | | 95 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033110.D
Acq On : 31 Mar 2008 12:42 pm
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 31 13:42:48 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:38:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033109.D
Acq On : 31 Mar 2008 12:06 pm
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 31 12:34:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:05:59 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 586946 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 448463 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 229651 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 134872 | 9.79 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.90% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 116245 | 9.30 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 93.00% | | |
| 44) toluene-d8 | 9.248 | 98 | 560537 | 9.74 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.40% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 203843 | 9.72 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.20% | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 20118 | 3.04 | ug/L | 92 |
| 3) chloromethane | 1.822 | 50 | 47163 | 3.70 | ug/L | 96 |
| 4) vinyl chloride | 1.938 | 62 | 49858 | 3.75 | ug/L | 96 |
| 5) 1,3-butadiene | 1.974 | 39 | 46051 | 3.57 | ug/L | 83 |
| 6) bromomethane | 2.321 | 94 | 12130 | 3.68 | ug/L | 94 |
| 7) chloroethane | 2.443 | 64 | 30122 | 3.84 | ug/L | 95 |
| 8) trichlorofluoromethane | 2.729 | 101 | 74587 | 3.44 | ug/L | 88 |
| 9) acrolein | 3.276 | 56 | 2622 | 15.82 | ug/L | 93 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 39990 | 3.60 | ug/L | 91 |
| 11) acetone | 3.477 | 43 | 5882 | 4.16 | ug/L | 82 |
| 12) carbon disulfide | 3.592 | 76 | 131059 | 3.50 | ug/L | 99 |
| 13) methylene chloride | 3.963 | 84 | 69050 | 4.25 | ug/L | 98 |
| 14) acrylonitrile | 4.304 | 53 | 60154 | 33.97 | ug/L | 94 |
| 15) trans-1,2-dichloroethene | 4.267 | 96 | 55676 | 3.87 | ug/L | 96 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 92972 | 4.59 | ug/L | 92 |
| 17) acetonitrile | 3.829 | 41 | 23486 | 33.25 | ug/L | 95 |
| 18) hexane | 4.547 | 57 | 67596 | 3.82 | ug/L | 96 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 107318 | 3.86 | ug/L | 95 |
| 20) vinyl acetate | 4.875 | 43 | 32018 | 4.03 | ug/L | 89 |
| 21) cis-1,2-dichloroethene | 5.532 | 96 | 60018 | 3.90 | ug/L | 94 |
| 22) 2,2-dichloropropane | 5.496 | 77 | 96733 | 3.86 | ug/L | 99 |
| 23) 2-butanone | 5.593 | 72 | 1510 | 3.70 | ug/L # | 36 |
| 24) methyl acrylate | 5.690 | 55 | 18969 | 3.85 | ug/L | 100 |
| 25) chloroform | 5.958 | 83 | 106874 | 3.85 | ug/L | 97 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 102071 | 3.88 | ug/L | 88 |
| 28) cyclohexane | 6.165 | 56 | 85772 | 3.73 | ug/L | 92 |
| 29) carbon tetrachloride | 6.335 | 117 | 81310 | 3.75 | ug/L | 91 |
| 31) benzene | 6.627 | 78 | 219755 | 4.07 | ug/L | 97 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 74361 | 3.82 | ug/L | 97 |
| 33) 1,2-dichloroethane | 6.700 | 62 | 56148 | 3.67 | ug/L | 95 |
| 34) trichloroethene | 7.509 | 95 | 63102 | 4.00 | ug/L | 95 |
| 35) ethyl acrylate | 7.691 | 55 | 29325 | 3.98 | ug/L | 97 |
| 36) 1,2-dichloropropane | 7.837 | 63 | 51694 | 3.99 | ug/L | 93 |
| 37) methyl methacrylate | 8.013 | 41 | 21533 | 3.93 | ug/L | 98 |
| 38) dibromomethane | 8.032 | 93 | 21619 | 4.05 | ug/L | 89 |

ADH 4/01/08

3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033109.D
Acq On : 31 Mar 2008 12:06 pm
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 31 12:34:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:05:59 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

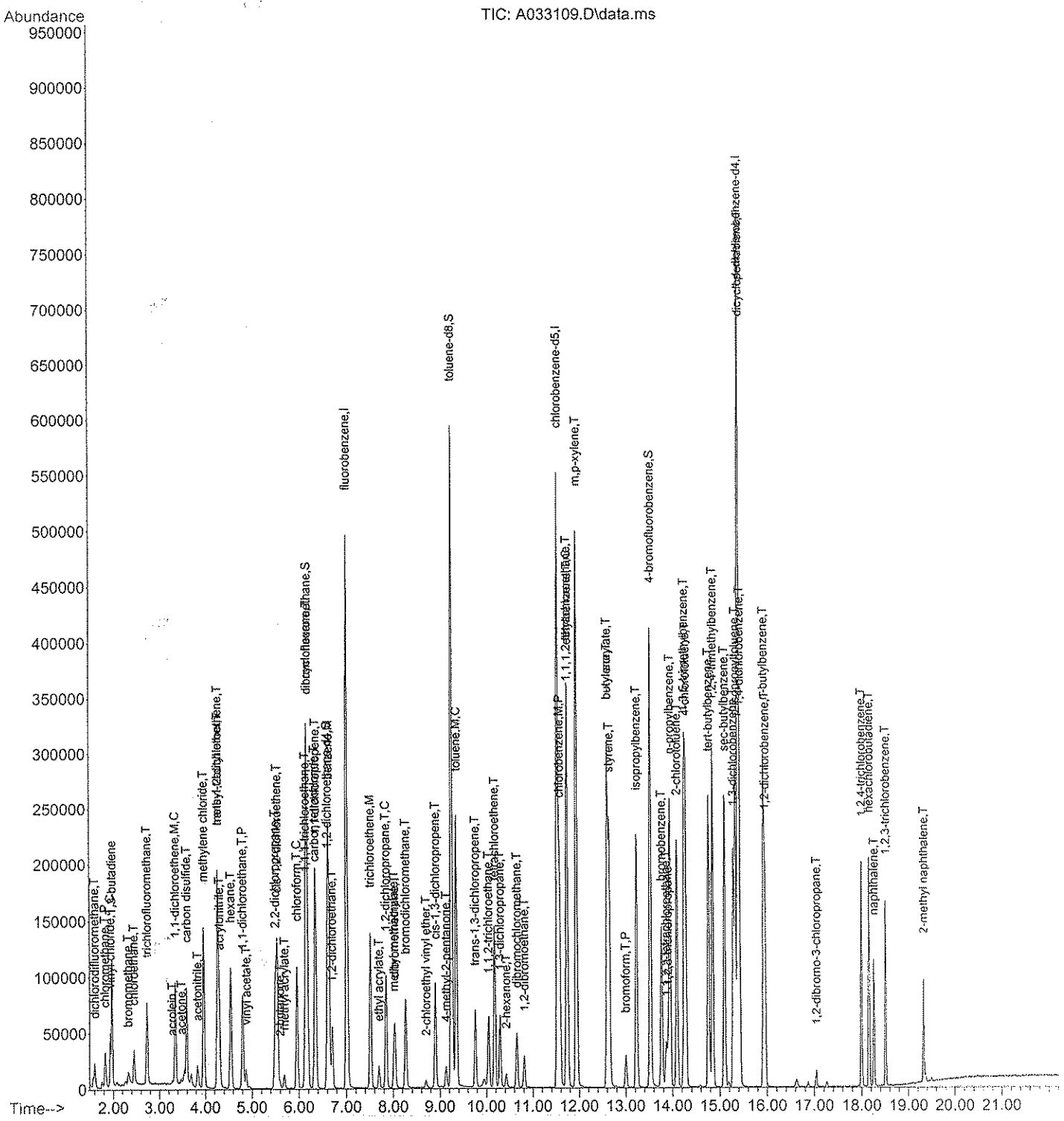
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.263 | 83 | 72037 | 3.94 | ug/L | | 94 |
| 40) | 2-chloroethyl vinyl ether | 8.700 | 63 | 3689 | 7.74 | ug/L | | 92 |
| 42) | cis-1,3-dichloropropene | 8.901 | 75 | 70433 | 3.71 | ug/L | | 96 |
| 43) | 4-methyl-2-pentanone | 9.132 | 43 | 20365 | 3.79 | ug/L | | 97 |
| 45) | toluene | 9.351 | 92 | 145400 | 3.79 | ug/L | # | 86 |
| 46) | 1,1,2-trichloroethane | 10.038 | 83 | 23905 | 3.81 | ug/L | | 90 |
| 47) | 1,3-dichloropropane | 10.288 | 76 | 51022 | 3.81 | ug/L | | 97 |
| 48) | tetrachloroethene | 10.172 | 164 | 51426 | 3.81 | ug/L | | 94 |
| 49) | trans-1,3-dichloropropene | 9.753 | 75 | 52585 | 3.79 | ug/L | | 88 |
| 50) | 2-hexanone | 10.421 | 43 | 13767 | 3.89 | ug/L | # | 54 |
| 51) | dibromochloromethane | 10.653 | 129 | 38347 | 3.71 | ug/L | | 95 |
| 52) | 1,2-dibromoethane | 10.811 | 107 | 29084 | 3.93 | ug/L | | 99 |
| 53) | chlorobenzene | 11.571 | 112 | 155191 | 3.95 | ug/L | | 96 |
| 54) | 1,1,1,2-tetrachloroethane | 11.729 | 131 | 53302 | 3.84 | ug/L | | 96 |
| 55) | ethylbenzene | 11.741 | 91 | 292217 | 3.91 | ug/L | | 99 |
| 56) | m,p-xylene | 11.936 | 106 | 221733 | 7.88 | ug/L | # | 80 |
| 57) | butyl acrylate | 12.599 | 55 | 62356 | 3.89 | ug/L | | 93 |
| 58) | o-xylene | 12.599 | 106 | 106367 | 3.97 | ug/L | | 94 |
| 59) | styrene | 12.641 | 104 | 168799 | 3.97 | ug/L | | 97 |
| 60) | isopropylbenzene | 13.225 | 105 | 244926 | 3.89 | ug/L | | 91 |
| 61) | bromobenzene | 13.760 | 156 | 67315 | 3.96 | ug/L | | 94 |
| 62) | bromoform | 12.994 | 173 | 21259 | 3.78 | ug/L | | 95 |
| 64) | 1,2,3-trichloropropane | 13.900 | 75 | 24071 | 3.85 | ug/L | | 85 |
| 65) | n-propylbenzene | 13.943 | 91 | 315605 | 3.78 | ug/L | | 98 |
| 66) | 2-chlorotoluene | 14.089 | 91 | 202319 | 3.87 | ug/L | | 93 |
| 67) | 4-chlorotoluene | 14.277 | 91 | 232027 | 3.88 | ug/L | | 93 |
| 68) | 1,3,5-trimethylbenzene | 14.247 | 105 | 231487 | 3.84 | ug/L | | 88 |
| 70) | 1,1,2,2-tetrachloroethane | 13.857 | 83 | 28801 | 4.01 | ug/L | | 97 |
| 71) | tert-butylbenzene | 14.764 | 119 | 188725 | 3.89 | ug/L | | 96 |
| 72) | sec-butylbenzene | 15.098 | 105 | 268241 | 3.80 | ug/L | | 99 |
| 73) | 1,2,4-trimethylbenzene | 14.849 | 105 | 243020 | 3.88 | ug/L | | 86 |
| 74) | 1,3-dichlorobenzene | 15.280 | 146 | 126944 | 3.93 | ug/L | | 92 |
| 75) | p-isopropyltoluene | 15.329 | 119 | 227781 | 3.86 | ug/L | | 97 |
| 76) | dicyclopentadiene | 15.402 | 66 | 241324 | 3.71 | ug/L | | 96 |
| 77) | 1,4-dichlorobenzene | 15.426 | 146 | 126009 | 3.97 | ug/L | | 92 |
| 78) | 1,2-dichlorobenzene | 15.955 | 146 | 104476 | 3.99 | ug/L | | 95 |
| 79) | n-butylbenzene | 15.925 | 91 | 210890 | 3.79 | ug/L | | 91 |
| 80) | 1,2-dibromo-3-chloropr... | 17.044 | 75 | 4794 | 4.05 | ug/L | # | 78 |
| 81) | 1,2,4-trichlorobenzene | 17.999 | 180 | 72156 | 4.10 | ug/L | | 93 |
| 82) | hexachlorobutadiene | 18.157 | 225 | 49980 | 3.75 | ug/L | | 94 |
| 83) | naphthalene | 18.260 | 128 | 92284 | 4.68 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.510 | 180 | 54806 | 4.14 | ug/L | | 92 |
| 85) | 2-methyl naphthalene | 19.325 | 142 | 42831 | 4.86 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033109.D
Acq On : 31 Mar 2008 12:06 pm
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 31 12:34:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:05:59 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033108.D
Acq On : 31 Mar 2008 11:31 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 31 12:04:35 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 11:31:37 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.017 | 96 | 603711 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 459539 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.385 | 152 | 235884 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 140378 | 9.88 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.80% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 120589 | 9.26 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 92.60% | | | | |
| 44) toluene-d8 | 9.255 | 98 | 574093 | 9.69 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.90% | | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 211660 | 9.81 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.10% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 30622 | 4.27 | ug/L | | 98 |
| 3) chloromethane | 1.824 | 50 | 78550 | 5.87 | ug/L | | 95 |
| 4) vinyl chloride | 1.940 | 62 | 78919 | 5.59 | ug/L | | 98 |
| 5) 1,3-butadiene | 1.976 | 39 | 58493 | 4.09 | ug/L | | 82 |
| 6) bromomethane | 2.323 | 94 | 26344 | 7.58 | ug/L | | 99 |
| 7) chloroethane | 2.450 | 64 | 50352 | 6.10 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.730 | 101 | 113484 | 4.81 | ug/L | | 93 |
| 9) acrolein | 3.284 | 56 | 5656 | 30.91 | ug/L | | 94 |
| 10) 1,1-dichloroethene | 3.350 | 96 | 64999 | 5.46 | ug/L | | 96 |
| 11) acetone | 3.478 | 43 | 11873 | 8.28 | ug/L | | 77 |
| 12) carbon disulfide | 3.594 | 76 | 216934 | 5.42 | ug/L | | 99 |
| 13) methylene chloride | 3.971 | 84 | 130387 | 7.87 | ug/L | | 96 |
| 14) acrylonitrile | 4.305 | 53 | 132623 | 72.08 | ug/L | | 92 |
| 15) trans-1,2-dichloroethene | 4.275 | 96 | 100367 | 6.62 | ug/L | | 95 |
| 16) methyl-t-butyl ether | 4.269 | 73 | 197015 | 9.61 | ug/L | | 94 |
| 17) acetonitrile | 3.831 | 41 | 49055 | 66.37 | ug/L | | 95 |
| 18) hexane | 4.548 | 57 | 80033 | 4.11 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 205164 | 7.05 | ug/L | | 95 |
| 20) vinyl acetate | 4.877 | 43 | 70411 | 8.69 | ug/L | | 92 |
| 21) cis-1,2-dichloroethene | 5.540 | 96 | 119608 | 7.49 | ug/L | | 95 |
| 22) 2,2-dichloropropane | 5.503 | 77 | 170447 | 6.43 | ug/L | | 100 |
| 23) 2-butanone | 5.594 | 72 | 3881 | 9.24 | ug/L | # | 73 |
| 24) methyl acrylate | 5.692 | 55 | 40389 | 7.93 | ug/L | | 95 |
| 25) chloroform | 5.965 | 83 | 211903 | 7.33 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.142 | 97 | 171617 | 6.11 | ug/L | | 88 |
| 28) cyclohexane | 6.172 | 56 | 110631 | 4.38 | ug/L | | 93 |
| 29) carbon tetrachloride | 6.342 | 117 | 129920 | 5.56 | ug/L | | 93 |
| 31) benzene | 6.634 | 78 | 413653 | 7.35 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 124331 | 5.98 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.707 | 62 | 119384 | 7.52 | ug/L | | 95 |
| 34) trichloroethene | 7.510 | 95 | 115289 | 6.99 | ug/L | | 93 |
| 35) ethyl acrylate | 7.692 | 55 | 63160 | 8.38 | ug/L | | 98 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 105955 | 7.93 | ug/L | | 95 |
| 37) methyl methacrylate | 8.015 | 41 | 47303 | 8.38 | ug/L | | 97 |
| 38) dibromomethane | 8.039 | 93 | 45517 | 8.31 | ug/L | | 97 |

3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033108.D
Acq On : 31 Mar 2008 11:31 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 31 12:04:35 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 11:31:37 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

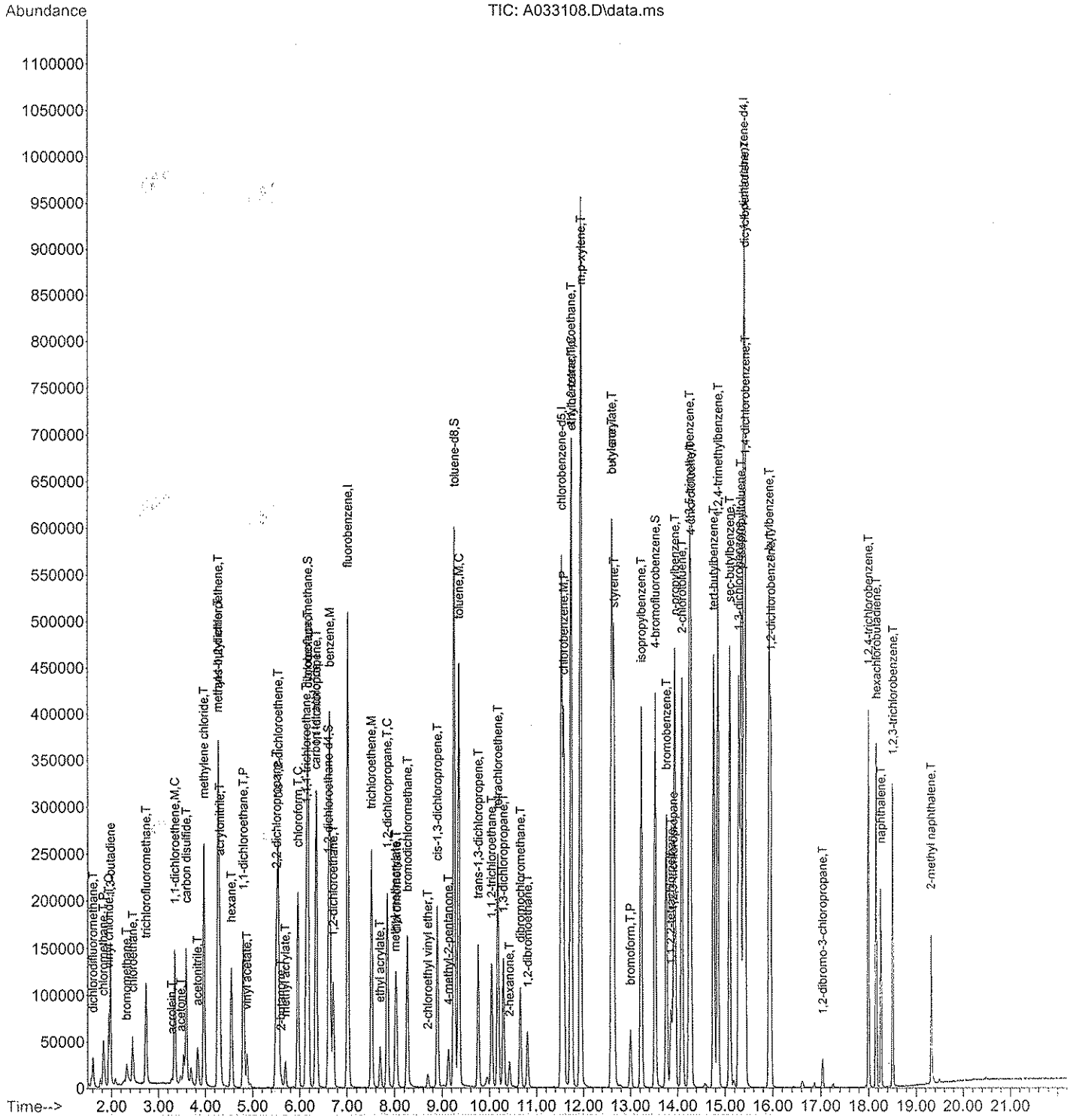
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.270 | 83 | 148011 | 7.86 | ug/L | | 93 |
| 40) | 2-chloroethyl vinyl ether | 8.696 | 63 | 8327 | 21.55 | ug/L | | 92 |
| 42) | cis-1,3-dichloropropene | 8.897 | 75 | 149822 | 7.65 | ug/L | | 96 |
| 43) | 4-methyl-2-pentanone | 9.134 | 43 | 44010 | 7.95 | ug/L | | 95 |
| 45) | toluene | 9.353 | 92 | 277359 | 6.93 | ug/L | | 88 |
| 46) | 1,1,2-trichloroethane | 10.040 | 83 | 50143 | 7.78 | ug/L | | 91 |
| 47) | 1,3-dichloropropane | 10.289 | 76 | 109167 | 7.93 | ug/L | | 97 |
| 48) | tetrachloroethene | 10.174 | 164 | 86940 | 6.08 | ug/L | | 94 |
| 49) | trans-1,3-dichloropropene | 9.760 | 75 | 112474 | 7.89 | ug/L | | 88 |
| 50) | 2-hexanone | 10.423 | 43 | 28998 | 7.94 | ug/L | # | 52 |
| 51) | dibromochloromethane | 10.654 | 129 | 84215 | 7.95 | ug/L | | 97 |
| 52) | 1,2-dibromoethane | 10.812 | 107 | 61623 | 8.13 | ug/L | | 98 |
| 53) | chlorobenzene | 11.578 | 112 | 303844 | 7.47 | ug/L | | 95 |
| 54) | 1,1,1,2-tetrachloroethane | 11.730 | 131 | 107918 | 7.52 | ug/L | | 93 |
| 55) | ethylbenzene | 11.743 | 91 | 542904 | 6.94 | ug/L | | 96 |
| 56) | m,p-xylene | 11.937 | 106 | 412736 | 14.03 | ug/L | # | 81 |
| 57) | butyl acrylate | 12.600 | 55 | 129758 | 7.79 | ug/L | | 98 |
| 58) | o-xylene | 12.600 | 106 | 205761 | 7.39 | ug/L | | 91 |
| 59) | styrene | 12.649 | 104 | 339489 | 7.71 | ug/L | | 96 |
| 60) | isopropylbenzene | 13.227 | 105 | 435881 | 6.56 | ug/L | | 93 |
| 61) | bromobenzene | 13.762 | 156 | 137869 | 7.89 | ug/L | | 96 |
| 62) | bromoform | 13.002 | 173 | 46553 | 8.08 | ug/L | | 98 |
| 64) | 1,2,3-trichloropropane | 13.908 | 75 | 50193 | 7.81 | ug/L | | 95 |
| 65) | n-propylbenzene | 13.944 | 91 | 568070 | 6.45 | ug/L | | 98 |
| 66) | 2-chlorotoluene | 14.090 | 91 | 391673 | 7.19 | ug/L | | 94 |
| 67) | 4-chlorotoluene | 14.279 | 91 | 444679 | 7.12 | ug/L | | 92 |
| 68) | 1,3,5-trimethylbenzene | 14.248 | 105 | 434427 | 6.88 | ug/L | | 87 |
| 70) | 1,1,2,2-tetrachloroethane | 13.859 | 83 | 59380 | 8.06 | ug/L | | 92 |
| 71) | tert-butylbenzene | 14.759 | 119 | 333799 | 6.51 | ug/L | | 96 |
| 72) | sec-butylbenzene | 15.100 | 105 | 464013 | 6.19 | ug/L | | 99 |
| 73) | 1,2,4-trimethylbenzene | 14.850 | 105 | 465481 | 7.12 | ug/L | | 85 |
| 74) | 1,3-dichlorobenzene | 15.282 | 146 | 251559 | 7.52 | ug/L | | 90 |
| 75) | p-isopropyltoluene | 15.331 | 119 | 401924 | 6.45 | ug/L | | 97 |
| 76) | dicyclopentadiene | 15.404 | 66 | 422537 | 6.09 | ug/L | | 96 |
| 77) | 1,4-dichlorobenzene | 15.422 | 146 | 248457 | 7.56 | ug/L | | 93 |
| 78) | 1,2-dichlorobenzene | 15.957 | 146 | 211637 | 7.84 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.921 | 91 | 372460 | 6.31 | ug/L | | 93 |
| 80) | 1,2-dibromo-3-chloropr... | 17.046 | 75 | 9898 | 8.13 | ug/L | | 88 |
| 81) | 1,2,4-trichlorobenzene | 17.994 | 180 | 143430 | 7.95 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.158 | 225 | 88909 | 6.32 | ug/L | | 95 |
| 83) | naphthalene | 18.262 | 128 | 177529 | 8.93 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.511 | 180 | 107733 | 7.97 | ug/L | | 94 |
| 85) | 2-methyl naphthalene | 19.320 | 142 | 74547 | 8.27 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033108.D
Acq On : 31 Mar 2008 11:31 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 31 12:04:35 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 11:31:37 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033108.D 25ML0331.M Mon Mar 31 12:04:37 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033107.D
Acq On : 31 Mar 2008 10:56 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 31 11:27:28 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Thu Mar 27 16:48:50 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 616390 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 463224 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 229798 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 138869 | 9.52 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 118692 | 8.79 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 87.90% | | | | |
| 44) toluene-d8 | 9.247 | 98 | 581121 | 9.66 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.60% | | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 208533 | 9.52 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.20% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 58716 | 7.89 | ug/L | | 98 |
| 3) chloromethane | 1.822 | 50 | 111662 | 8.11 | ug/L | | 95 |
| 4) vinyl chloride | 1.937 | 62 | 129939 | 8.96 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.974 | 39 | 128632 | 8.51 | ug/L | | 82 |
| 6) bromomethane | 2.327 | 94 | 40632 | 11.18 | ug/L | | 98 |
| 7) chloroethane | 2.448 | 64 | 73296 | 8.58 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.728 | 101 | 201020 | 8.09 | ug/L | | 94 |
| 9) acrolein | 3.281 | 56 | 6911 | 34.80 | ug/L | | 94 |
| 10) 1,1-dichloroethene | 3.348 | 96 | 113700 | 9.25 | ug/L | | 94 |
| 11) acetone | 3.470 | 43 | 11021 | 6.91 | ug/L | | 85 |
| 12) carbon disulfide | 3.592 | 76 | 374391 | 8.84 | ug/L | | 98 |
| 13) methylene chloride | 3.969 | 84 | 151083 | 8.91 | ug/L | | 99 |
| 14) acrylonitrile | 4.303 | 53 | 152377 | 79.89 | ug/L | | 91 |
| 15) trans-1,2-dichloroethene | 4.273 | 96 | 152740 | 9.85 | ug/L | | 97 |
| 16) methyl-t-butyl ether | 4.273 | 73 | 220615 | 10.65 | ug/L | | 94 |
| 17) acetonitrile | 3.829 | 41 | 57910 | 74.94 | ug/L | | 95 |
| 18) hexane | 4.552 | 57 | 208026 | 10.32 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 290253 | 9.73 | ug/L | | 95 |
| 20) vinyl acetate | 4.875 | 43 | 80215 | 9.69 | ug/L | | 94 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 160645 | 9.87 | ug/L | | 94 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 281020 | 10.37 | ug/L | | 99 |
| 23) 2-butanone | 5.586 | 72 | 4342 | 10.23 | ug/L | # | 75 |
| 24) methyl acrylate | 5.690 | 55 | 42360 | 8.02 | ug/L | | 99 |
| 25) chloroform | 5.963 | 83 | 280928 | 9.47 | ug/L | | 95 |
| 27) 1,1,1-trichloroethane | 6.140 | 97 | 284909 | 9.88 | ug/L | | 88 |
| 28) cyclohexane | 6.170 | 56 | 252056 | 9.65 | ug/L | | 93 |
| 29) carbon tetrachloride | 6.340 | 117 | 241651 | 10.09 | ug/L | | 91 |
| 31) benzene | 6.632 | 78 | 576028 | 10.04 | ug/L | | 97 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 218726 | 10.29 | ug/L | | 100 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 142317 | 8.68 | ug/L | | 95 |
| 34) trichloroethene | 7.514 | 95 | 171705 | 10.23 | ug/L | | 94 |
| 35) ethyl acrylate | 7.696 | 55 | 67089 | 8.64 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 133681 | 9.81 | ug/L | | 91 |
| 37) methyl methacrylate | 8.013 | 41 | 47966 | 8.16 | ug/L | | 96 |
| 38) dibromomethane | 8.037 | 93 | 51575 | 9.18 | ug/L | | 96 |

mo4/01/08

3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033107.D
Acq On : 31 Mar 2008 10:56 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 31 11:27:28 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Thu Mar 27 16:48:50 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

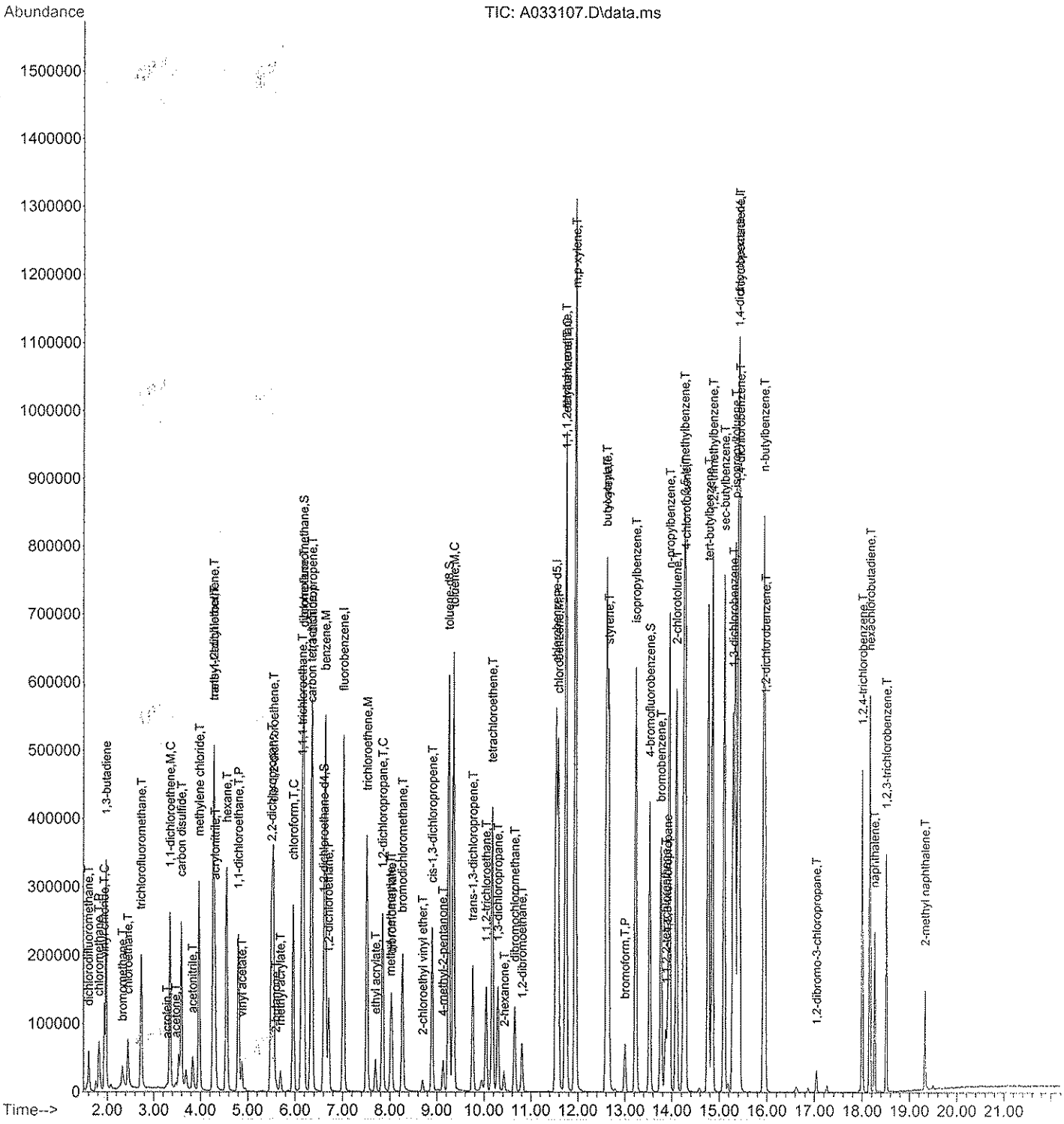
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.262 | 83 | 183369 | 9.50 | ug/L | | 92 |
| 40) | 2-chloroethyl vinyl ether | 8.700 | 63 | 9336 | 34.95 | ug/L | | 97 |
| 42) | cis-1,3-dichloropropene | 8.901 | 75 | 185153 | 9.32 | ug/L | | 96 |
| 43) | 4-methyl-2-pentanone | 9.126 | 43 | 47637 | 8.43 | ug/L | | 96 |
| 45) | toluene | 9.351 | 92 | 388156 | 9.54 | ug/L | | 89 |
| 46) | 1,1,2-trichloroethane | 10.044 | 83 | 58519 | 8.94 | ug/L | # | 88 |
| 47) | 1,3-dichloropropane | 10.293 | 76 | 125720 | 8.99 | ug/L | | 93 |
| 48) | tetrachloroethene | 10.172 | 164 | 145466 | 10.06 | ug/L | | 92 |
| 49) | trans-1,3-dichloropropene | 9.758 | 75 | 134113 | 9.25 | ug/L | | 86 |
| 50) | 2-hexanone | 10.427 | 43 | 31713 | 8.47 | ug/L | # | 60 |
| 51) | dibromochloromethane | 10.652 | 129 | 98364 | 9.12 | ug/L | | 97 |
| 52) | 1,2-dibromoethane | 10.810 | 107 | 70747 | 9.20 | ug/L | | 91 |
| 53) | chlorobenzene | 11.576 | 112 | 396779 | 9.64 | ug/L | | 98 |
| 54) | 1,1,1,2-tetrachloroethane | 11.728 | 131 | 137512 | 9.45 | ug/L | | 95 |
| 55) | ethylbenzene | 11.741 | 91 | 778443 | 9.80 | ug/L | | 97 |
| 56) | m,p-xylene | 11.935 | 106 | 585902 | 19.63 | ug/L | # | 79 |
| 57) | butyl acrylate | 12.598 | 55 | 136986 | 7.95 | ug/L | | 95 |
| 58) | o-xylene | 12.604 | 106 | 274571 | 9.71 | ug/L | | 89 |
| 59) | styrene | 12.647 | 104 | 429462 | 9.61 | ug/L | | 96 |
| 60) | isopropylbenzene | 13.224 | 105 | 670375 | 9.92 | ug/L | | 94 |
| 61) | bromobenzene | 13.760 | 156 | 169091 | 9.56 | ug/L | | 96 |
| 62) | bromoform | 12.999 | 173 | 54173 | 9.25 | ug/L | | 99 |
| 64) | 1,2,3-trichloropropane | 13.905 | 75 | 56224 | 8.59 | ug/L | | 100 |
| 65) | n-propylbenzene | 13.942 | 91 | 871366 | 9.67 | ug/L | | 99 |
| 66) | 2-chlorotoluene | 14.088 | 91 | 524639 | 9.44 | ug/L | | 92 |
| 67) | 4-chlorotoluene | 14.276 | 91 | 593849 | 9.29 | ug/L | | 92 |
| 68) | 1,3,5-trimethylbenzene | 14.246 | 105 | 622757 | 9.64 | ug/L | | 87 |
| 70) | 1,1,2,2-tetrachloroethane | 13.863 | 83 | 65989 | 9.20 | ug/L | | 97 |
| 71) | tert-butylbenzene | 14.763 | 119 | 524388 | 10.50 | ug/L | | 96 |
| 72) | sec-butylbenzene | 15.097 | 105 | 760924 | 10.36 | ug/L | | 98 |
| 73) | 1,2,4-trimethylbenzene | 14.848 | 105 | 638136 | 9.99 | ug/L | | 85 |
| 74) | 1,3-dichlorobenzene | 15.286 | 146 | 321388 | 9.86 | ug/L | | 90 |
| 75) | p-isopropyltoluene | 15.329 | 119 | 640872 | 10.52 | ug/L | | 97 |
| 76) | dicyclopentadiene | 15.401 | 66 | 614046 | 8.94 | ug/L | | 96 |
| 77) | 1,4-dichlorobenzene | 15.420 | 146 | 308178 | 9.61 | ug/L | | 91 |
| 78) | 1,2-dichlorobenzene | 15.955 | 146 | 252239 | 9.59 | ug/L | | 95 |
| 79) | n-butylbenzene | 15.924 | 91 | 599951 | 10.36 | ug/L | | 92 |
| 80) | 1,2-dibromo-3-chloropr... | 17.043 | 75 | 10463 | 8.75 | ug/L | # | 80 |
| 81) | 1,2,4-trichlorobenzene | 17.998 | 180 | 168372 | 9.65 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.156 | 225 | 141081 | 10.27 | ug/L | | 95 |
| 83) | naphthalene | 18.260 | 128 | 184882 | 9.71 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.509 | 180 | 119026 | 9.10 | ug/L | | 97 |
| 85) | 2-methyl naphthalene | 19.324 | 142 | 66987 | 7.81 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033107.D
Acq On : 31 Mar 2008 10:56 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 31 11:27:28 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Thu Mar 27 16:48:50 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033112.D
Acq On : 31 Mar 2008 1:52 pm
Sample : ,ical,ical_w25 15 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 31 15:04:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 568671 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 424981 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 219864 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 26) dibromofluoromethane | 6.175 | 113 | 131673 | 10.01 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.10% | | | |
| 30) 1,2-dichloroethane-d4 | 6.607 | 65 | 116016 | 9.96 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.60% | | | |
| 44) toluene-d8 | 9.253 | 98 | 534302 | 9.95 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.50% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 199196 | 10.13 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.30% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.608 | 85 | 83485 | 13.59 | ug/L | 95 |
| 3) chloromethane | 1.827 | 50 | 157317 | 12.56 | ug/L | 95 |
| 4) vinyl chloride | 1.937 | 62 | 185004 | 14.33 | ug/L | 96 |
| 5) 1,3-butadiene | 1.973 | 39 | 194800 | 16.76 | ug/L | 84 |
| 6) bromomethane | 2.314 | 94 | 56281 | 17.62 | ug/L | 95 |
| 7) chloroethane | 2.448 | 64 | 108563 | 14.43 | ug/L | 97 |
| 8) trichlorofluoromethane | 2.727 | 101 | 304815 | 15.68 | ug/L | 93 |
| 9) acrolein | 3.287 | 56 | 23011 | 219.19 | ug/L | 97 |
| 10) 1,1-dichloroethene | 3.348 | 96 | 163458 | 15.80 | ug/L | 90 |
| 11) acetone | 3.475 | 43 | 18325 | 13.31 | ug/L | 69 |
| 12) carbon disulfide | 3.597 | 76 | 521833 | 15.05 | ug/L | 98 |
| 13) methylene chloride | 3.968 | 84 | 205305 | 13.35 | ug/L | 95 |
| 14) acrylonitrile | 4.308 | 53 | 243774 | 153.17 | ug/L | 91 |
| 15) trans-1,2-dichloroethene | 4.272 | 96 | 206892 | 15.09 | ug/L | 95 |
| 16) methyl-t-butyl ether | 4.272 | 73 | 325971 | 16.05 | ug/L | 92 |
| 17) acetonitrile | 3.834 | 41 | 89775 | 141.91 | ug/L | 97 |
| 18) hexane | 4.552 | 57 | 283357 | 17.22 | ug/L | 98 |
| 19) 1,1-dichloroethane | 4.807 | 63 | 406583 | 15.17 | ug/L | 96 |
| 20) vinyl acetate | 4.880 | 43 | 117916 | 14.90 | ug/L | 92 |
| 21) cis-1,2-dichloroethene | 5.543 | 96 | 225367 | 15.05 | ug/L | 93 |
| 22) 2,2-dichloropropane | 5.506 | 77 | 379592 | 15.86 | ug/L | 98 |
| 23) 2-butanone | 5.592 | 72 | 6689 | 17.65 | ug/L # | 74 |
| 24) methyl acrylate | 5.689 | 55 | 68325 | 14.38 | ug/L | 99 |
| 25) chloroform | 5.963 | 83 | 405211 | 15.05 | ug/L | 95 |
| 27) 1,1,1-trichloroethane | 6.145 | 97 | 415239 | 16.32 | ug/L | 86 |
| 28) cyclohexane | 6.169 | 56 | 366879 | 17.31 | ug/L | 92 |
| 29) carbon tetrachloride | 6.340 | 117 | 346398 | 16.76 | ug/L | 92 |
| 31) benzene | 6.632 | 78 | 812670 | 15.14 | ug/L | 97 |
| 32) 1,1-dichloropropene | 6.358 | 75 | 308143 | 16.33 | ug/L | 99 |
| 33) 1,2-dichloroethane | 6.711 | 62 | 218281 | 14.86 | ug/L | 95 |
| 34) trichloroethene | 7.513 | 95 | 242211 | 15.65 | ug/L | 96 |
| 35) ethyl acrylate | 7.696 | 55 | 108081 | 15.20 | ug/L | 96 |
| 36) 1,2-dichloropropane | 7.848 | 63 | 193709 | 15.07 | ug/L | 96 |
| 37) methyl methacrylate | 8.012 | 41 | 78727 | 14.97 | ug/L | 99 |
| 38) dibromomethane | 8.036 | 93 | 77537 | 14.80 | ug/L | 94 |

A033112.D 25ML0331.M Mon Mar 31 15:04:41 2008 Page: 1

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Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033112.D
Acq On : 31 Mar 2008 1:52 pm
Sample : ,ical,ical_w25 15 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 31 15:04:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

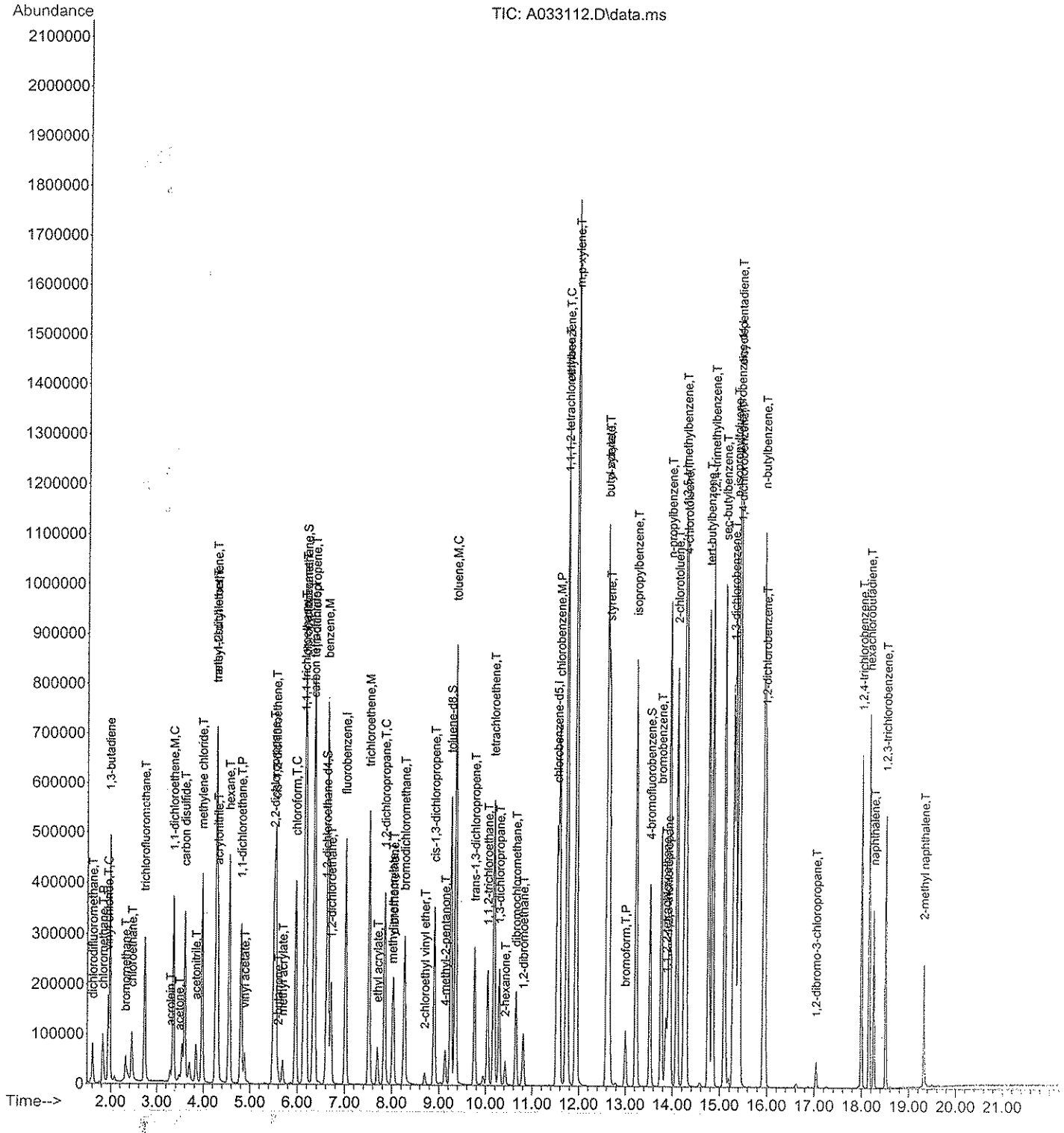
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.267 | 83 | 273169 | 15.22 ug/L | 96 |
| 40) 2-chloroethyl vinyl ether | 8.699 | 63 | 13538 | 19.65 ug/L | 97 |
| 42) cis-1,3-dichloropropene | 8.900 | 75 | 268570 | 15.23 ug/L | 97 |
| 43) 4-methyl-2-pentanone | 9.131 | 43 | 75770 | 14.78 ug/L | 94 |
| 45) toluene | 9.350 | 92 | 534400 | 14.91 ug/L | 89 |
| 46) 1,1,2-trichloroethane | 10.043 | 83 | 85579 | 14.63 ug/L | 91 |
| 47) 1,3-dichloropropane | 10.292 | 76 | 186104 | 14.85 ug/L | 97 |
| 48) tetrachloroethene | 10.177 | 164 | 198626 | 15.75 ug/L | 94 |
| 49) trans-1,3-dichloropropene | 9.757 | 75 | 199061 | 15.17 ug/L | 89 |
| 50) 2-hexanone | 10.420 | 43 | 50116 | 14.93 ug/L # | 56 |
| 51) dibromochloromethane | 10.651 | 129 | 146956 | 15.27 ug/L | 99 |
| 52) 1,2-dibromoethane | 10.809 | 107 | 106175 | 15.06 ug/L | 95 |
| 53) chlorobenzene | 11.576 | 112 | 551040 | 14.67 ug/L | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 198373 | 15.24 ug/L | 95 |
| 55) ethylbenzene | 11.740 | 91 | 1073576 | 15.16 ug/L | 96 |
| 56) m,p-xylene | 11.941 | 106 | 794825 | 29.86 ug/L # | 81 |
| 57) butyl acrylate | 12.597 | 55 | 223635 | 15.09 ug/L | 96 |
| 58) o-xylene | 12.603 | 106 | 376198 | 14.70 ug/L # | 86 |
| 59) styrene | 12.646 | 104 | 614073 | 15.06 ug/L | 95 |
| 60) isopropylbenzene | 13.224 | 105 | 911045 | 15.28 ug/L | 94 |
| 61) bromobenzene | 13.759 | 156 | 240260 | 14.77 ug/L | 93 |
| 62) bromoform | 12.999 | 173 | 83553 | 15.54 ug/L | 99 |
| 64) 1,2,3-trichloropropane | 13.905 | 75 | 85033 | 14.45 ug/L | 96 |
| 65) n-propylbenzene | 13.941 | 91 | 1186824 | 15.22 ug/L | 98 |
| 66) 2-chlorotoluene | 14.093 | 91 | 727832 | 14.79 ug/L | 92 |
| 67) 4-chlorotoluene | 14.282 | 91 | 832357 | 14.81 ug/L | 93 |
| 68) 1,3,5-trimethylbenzene | 14.245 | 105 | 847474 | 14.92 ug/L | 86 |
| 70) 1,1,2,2-tetrachloroethane | 13.862 | 83 | 98917 | 14.53 ug/L | 94 |
| 71) tert-butylbenzene | 14.762 | 119 | 698224 | 15.15 ug/L | 94 |
| 72) sec-butylbenzene | 15.097 | 105 | 1002635 | 15.13 ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.847 | 105 | 869506 | 14.65 ug/L | 86 |
| 74) 1,3-dichlorobenzene | 15.285 | 146 | 448362 | 14.52 ug/L | 90 |
| 75) p-isopropyltoluene | 15.328 | 119 | 836220 | 15.04 ug/L | 96 |
| 76) dicyclopentadiene | 15.401 | 66 | 883134 | 14.73 ug/L | 97 |
| 77) 1,4-dichlorobenzene | 15.425 | 146 | 427651 | 14.04 ug/L | 91 |
| 78) 1,2-dichlorobenzene | 15.960 | 146 | 360994 | 14.36 ug/L | 94 |
| 79) n-butylbenzene | 15.924 | 91 | 778821 | 14.99 ug/L | 93 |
| 80) 1,2-dibromo-3-chloropr... | 17.043 | 75 | 16131 | 14.09 ug/L # | 82 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 233387 | 13.62 ug/L | 94 |
| 82) hexachlorobutadiene | 18.156 | 225 | 176805 | 14.38 ug/L | 94 |
| 83) naphthalene | 18.259 | 128 | 275448 | 13.09 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.508 | 180 | 174951 | 13.68 ug/L | 94 |
| 85) 2-methyl naphthalene | 19.323 | 142 | 112259 | 12.47 ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033112.D
Acq On : 31 Mar 2008 1:52 pm
Sample : ,ical,ical_w25 15 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 31 15:04:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033112.D 25ML0331.M Mon Mar 31 15:04:42 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033113.D
Acq On : 31 Mar 2008 2:28 pm
Sample : ,ical,ical_w25 20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 31 15:04:44 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.013 | 96 | 576302 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.531 | 117 | 429066 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.387 | 152 | 219870 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.173 | 113 | 132735 | 9.96 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.60% | | | |
| 30) 1,2-dichloroethane-d4 | 6.605 | 65 | 117467 | 9.95 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.50% | | | |
| 44) toluene-d8 | 9.251 | 98 | 543623 | 10.02 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.20% | | | |
| 63) 4-bromofluorobenzene | 13.526 | 95 | 199962 | 10.07 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.606 | 85 | 111331 | 17.88 | ug/L | 97 |
| 3) chloromethane | 1.825 | 50 | 217541 | 17.13 | ug/L | 95 |
| 4) vinyl chloride | 1.935 | 62 | 252793 | 19.33 | ug/L | 97 |
| 5) 1,3-butadiene | 1.977 | 39 | 254309 | 21.59 | ug/L | 81 |
| 6) bromomethane | 2.318 | 94 | 84047 | 25.96 | ug/L | 92 |
| 7) chloroethane | 2.446 | 64 | 143620 | 18.84 | ug/L | 97 |
| 8) trichlorofluoromethane | 2.731 | 101 | 418937 | 21.26 | ug/L | 94 |
| 9) acrolein | 3.285 | 56 | 32877 | 309.01 | ug/L | 97 |
| 10) 1,1-dichloroethene | 3.346 | 96 | 222862 | 21.25 | ug/L | 93 |
| 11) acetone | 3.473 | 43 | 24234 | 17.37 | ug/L | 76 |
| 12) carbon disulfide | 3.595 | 76 | 709827 | 20.21 | ug/L | 99 |
| 13) methylene chloride | 3.966 | 84 | 268798 | 17.24 | ug/L | 98 |
| 14) acrylonitrile | 4.306 | 53 | 327221 | 202.88 | ug/L | 91 |
| 15) trans-1,2-dichloroethene | 4.270 | 96 | 285035 | 20.52 | ug/L | 94 |
| 16) methyl-t-butyl ether | 4.270 | 73 | 447705 | 21.76 | ug/L | 94 |
| 17) acetonitrile | 3.832 | 41 | 118264 | 184.47 | ug/L | 96 |
| 18) hexane | 4.550 | 57 | 369347 | 22.15 | ug/L | 99 |
| 19) 1,1-dichloroethane | 4.805 | 63 | 557676 | 20.53 | ug/L | 96 |
| 20) vinyl acetate | 4.878 | 43 | 160060 | 19.96 | ug/L | 92 |
| 21) cis-1,2-dichloroethene | 5.541 | 96 | 309915 | 20.42 | ug/L | 97 |
| 22) 2,2-dichloropropane | 5.505 | 77 | 513233 | 21.17 | ug/L | 98 |
| 23) 2-butanone | 5.590 | 72 | 8851 | 23.05 | ug/L # | 88 |
| 24) methyl acrylate | 5.693 | 55 | 92881 | 19.29 | ug/L | 99 |
| 25) chloroform | 5.961 | 83 | 548260 | 20.10 | ug/L | 97 |
| 27) 1,1,1-trichloroethane | 6.143 | 97 | 559391 | 21.69 | ug/L | 88 |
| 28) cyclohexane | 6.173 | 56 | 488508 | 22.74 | ug/L | 93 |
| 29) carbon tetrachloride | 6.344 | 117 | 476473 | 22.75 | ug/L | 94 |
| 31) benzene | 6.636 | 78 | 1100267 | 20.23 | ug/L | 97 |
| 32) 1,1-dichloropropene | 6.356 | 75 | 420832 | 22.00 | ug/L | 98 |
| 33) 1,2-dichloroethane | 6.709 | 62 | 296228 | 19.89 | ug/L | 95 |
| 34) trichloroethene | 7.511 | 95 | 331940 | 21.16 | ug/L | 94 |
| 35) ethyl acrylate | 7.694 | 55 | 147063 | 20.41 | ug/L | 95 |
| 36) 1,2-dichloropropane | 7.846 | 63 | 262451 | 20.15 | ug/L | 95 |
| 37) methyl methacrylate | 8.016 | 41 | 109282 | 20.50 | ug/L | 95 |
| 38) dibromomethane | 8.034 | 93 | 105828 | 19.93 | ug/L | 94 |

4/01/08
3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033113.D
Acq On : 31 Mar 2008 2:28 pm
Sample : ,ical,ical_w25 20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 31 15:04:44 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

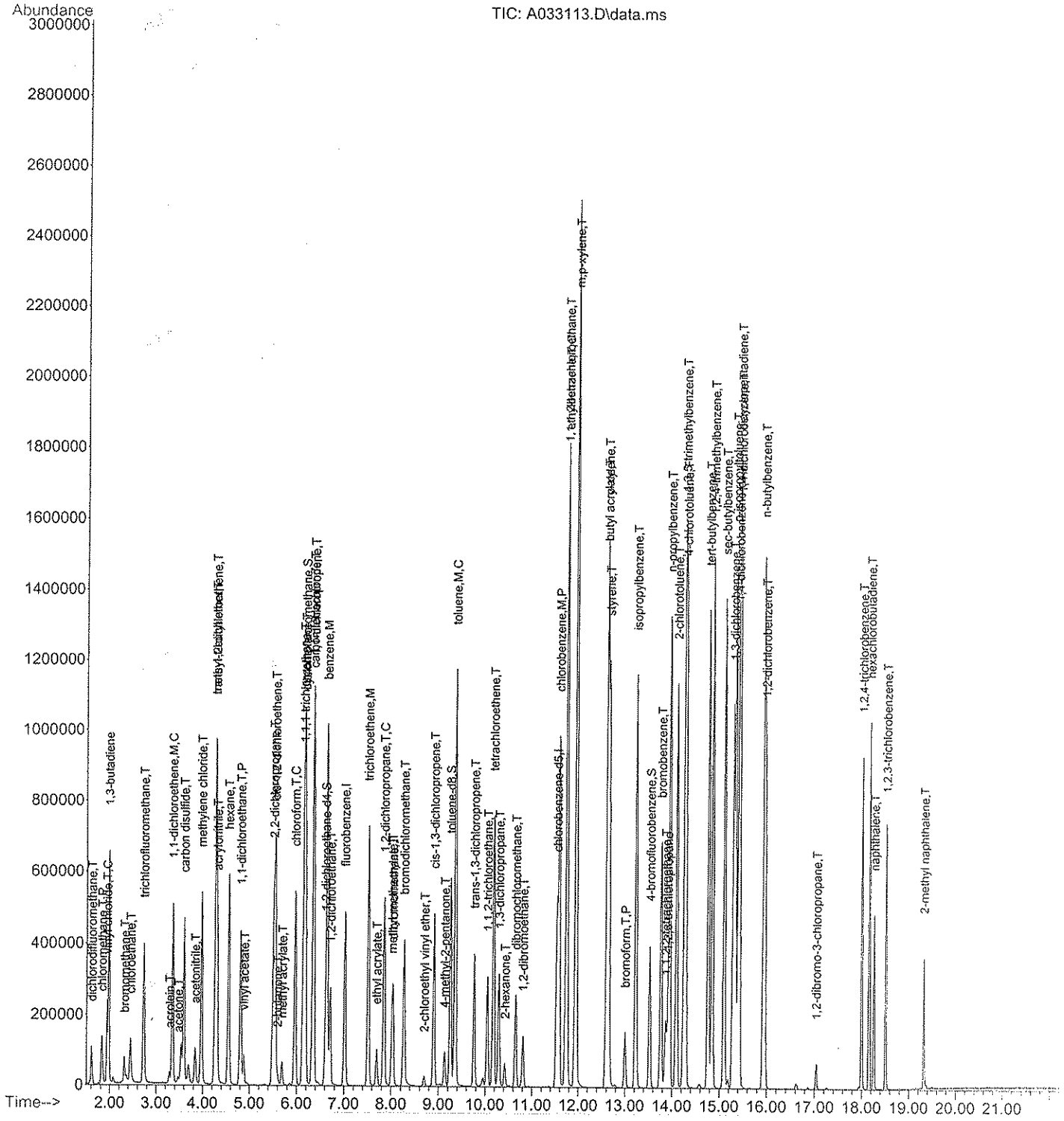
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.265 | 83 | 373010 | 20.50 | ug/L | | 95 |
| 40) 2-chloroethyl vinyl ether | 8.697 | 63 | 16714 | 23.93 | ug/L | | 97 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 367368 | 20.63 | ug/L | | 98 |
| 43) 4-methyl-2-pentanone | 9.129 | 43 | 103737 | 20.04 | ug/L | | 96 |
| 45) toluene | 9.354 | 92 | 729398 | 20.16 | ug/L | | 89 |
| 46) 1,1,2-trichloroethane | 10.041 | 83 | 116546 | 19.73 | ug/L | | 90 |
| 47) 1,3-dichloropropane | 10.291 | 76 | 256230 | 20.25 | ug/L | | 97 |
| 48) tetrachloroethene | 10.175 | 164 | 271294 | 21.30 | ug/L | | 93 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 271188 | 20.47 | ug/L | | 90 |
| 50) 2-hexanone | 10.424 | 43 | 69523 | 20.52 | ug/L | # | 54 |
| 51) dibromochloromethane | 10.649 | 129 | 204381 | 21.03 | ug/L | | 99 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 144969 | 20.37 | ug/L | | 97 |
| 53) chlorobenzene | 11.574 | 112 | 760071 | 20.05 | ug/L | | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.732 | 131 | 268916 | 20.46 | ug/L | | 95 |
| 55) ethylbenzene | 11.744 | 91 | 1452072 | 20.31 | ug/L | | 96 |
| 56) m,p-xylene | 11.939 | 106 | 1083315 | 40.32 | ug/L | # | 78 |
| 57) butyl acrylate | 12.595 | 55 | 306872 | 20.51 | ug/L | | 93 |
| 58) o-xylene | 12.601 | 106 | 516793 | 20.01 | ug/L | # | 86 |
| 59) styrene | 12.644 | 104 | 832563 | 20.22 | ug/L | | 94 |
| 60) isopropylbenzene | 13.228 | 105 | 1255586 | 20.86 | ug/L | | 95 |
| 61) bromobenzene | 13.763 | 156 | 328827 | 20.03 | ug/L | | 95 |
| 62) bromoform | 13.003 | 173 | 117547 | 21.65 | ug/L | | 98 |
| 64) 1,2,3-trichloropropane | 13.903 | 75 | 117161 | 19.72 | ug/L | | 94 |
| 65) n-propylbenzene | 13.939 | 91 | 1629873 | 20.71 | ug/L | | 97 |
| 66) 2-chlorotoluene | 14.091 | 91 | 999370 | 20.12 | ug/L | | 92 |
| 67) 4-chlorotoluene | 14.280 | 91 | 1139957 | 20.09 | ug/L | | 91 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 1171889 | 20.43 | ug/L | | 87 |
| 70) 1,1,2,2-tetrachloroethane | 13.860 | 83 | 136623 | 20.07 | ug/L | | 98 |
| 71) tert-butylbenzene | 14.760 | 119 | 959043 | 20.81 | ug/L | | 95 |
| 72) sec-butylbenzene | 15.101 | 105 | 1383650 | 20.89 | ug/L | | 99 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 1191128 | 20.07 | ug/L | | 85 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 612933 | 19.85 | ug/L | | 91 |
| 75) p-isopropyltoluene | 15.326 | 119 | 1138158 | 20.47 | ug/L | | 96 |
| 76) dicyclopentadiene | 15.405 | 66 | 1185894 | 19.78 | ug/L | | 96 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 588023 | 19.30 | ug/L | | 91 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 496749 | 19.76 | ug/L | | 94 |
| 79) n-butylbenzene | 15.922 | 91 | 1078710 | 20.76 | ug/L | | 92 |
| 80) 1,2-dibromo-3-chloropr... | 17.041 | 75 | 22724 | 19.85 | ug/L | # | 84 |
| 81) 1,2,4-trichlorobenzene | 17.996 | 180 | 331202 | 19.32 | ug/L | | 93 |
| 82) hexachlorobutadiene | 18.160 | 225 | 248578 | 20.21 | ug/L | | 95 |
| 83) naphthalene | 18.257 | 128 | 386184 | 18.35 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.512 | 180 | 247243 | 19.33 | ug/L | | 95 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 163135 | 18.12 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033113.D
Acq On : 31 Mar 2008 2:28 pm
Sample : ,ical,ical_w25 20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 31 15:04:44 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033113.D 25ML0331.M Mon Mar 31 15:04:45 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033114.D
Acq On : 31 Mar 2008 3:03 pm
Sample : ,ical,ical_w25 40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 31 15:33:22 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 15:15:05 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) fluorobenzene | 7.018 | 96 | 602786 | 10.00 ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 447240 | 10.00 ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.392 | 152 | 226242 | 10.00 ug/L | 0.00 |
| System Monitoring Compounds | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 137641 | 9.91 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.10% | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 123232 | 10.09 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.90% | |
| 44) toluene-d8 | 9.249 | 98 | 560580 | 9.95 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.50% | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 209632 | 10.15 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.50% | |
| Target Compounds | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 235478 | 36.86 ug/L | 98 |
| 3) chloromethane | 1.818 | 50 | 451814 | 35.31 ug/L | 96 |
| 4) vinyl chloride | 1.934 | 62 | 533971 | 39.50 ug/L | 97 |
| 5) 1,3-butadiene | 1.976 | 39 | 557964 | 44.80 ug/L | 81 |
| 6) bromomethane | 2.311 | 94 | 103403 | 28.24 ug/L | 95 |
| 7) chloroethane | 2.426 | 64 | 286908 | 36.38 ug/L | 98 |
| 8) trichlorofluoromethane | 2.724 | 101 | 884348 | 43.36 ug/L | 93 |
| 9) acrolein | 3.278 | 56 | 71443 | 611.06 ug/L | 98 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 453504 | 40.65 ug/L | 94 |
| 11) acetone | 3.478 | 43 | 53255 | 37.80 ug/L | 80 |
| 12) carbon disulfide | 3.594 | 76 | 1488086 | 40.91 ug/L | 99 |
| 13) methylene chloride | 3.965 | 84 | 523049 | 32.61 ug/L | 96 |
| 14) acrylonitrile | 4.305 | 53 | 677516 | 403.80 ug/L | 91 |
| 15) trans-1,2-dichloroethene | 4.269 | 96 | 583294 | 39.68 ug/L | 93 |
| 16) methyl-t-butyl ether | 4.269 | 73 | 905688 | 40.39 ug/L | 94 |
| 17) acetonitrile | 3.831 | 41 | 242472 | 368.96 ug/L | 96 |
| 18) hexane | 4.549 | 57 | 794823 | 44.82 ug/L | 99 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 1155529 | 40.20 ug/L | 95 |
| 20) vinyl acetate | 4.877 | 43 | 338816 | 40.01 ug/L | 90 |
| 21) cis-1,2-dichloroethene | 5.540 | 96 | 632412 | 39.37 ug/L | 94 |
| 22) 2,2-dichloropropane | 5.503 | 77 | 1056850 | 40.82 ug/L | 100 |
| 23) 2-butanone | 5.589 | 72 | 18742 | 45.53 ug/L # | 92 |
| 24) methyl acrylate | 5.686 | 55 | 205645 | 41.42 ug/L | 100 |
| 25) chloroform | 5.959 | 83 | 1142993 | 39.72 ug/L | 96 |
| 27) 1,1,1-trichloroethane | 6.142 | 97 | 1175342 | 42.58 ug/L | 88 |
| 28) cyclohexane | 6.172 | 56 | 1053838 | 45.91 ug/L | 94 |
| 29) carbon tetrachloride | 6.343 | 117 | 991818 | 43.94 ug/L | 92 |
| 31) benzene | 6.635 | 78 | 2293799 | 39.73 ug/L | 97 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 877443 | 42.75 ug/L | 99 |
| 33) 1,2-dichloroethane | 6.707 | 62 | 636777 | 40.82 ug/L | 94 |
| 34) trichloroethene | 7.510 | 95 | 689305 | 41.14 ug/L | 94 |
| 35) ethyl acrylate | 7.693 | 55 | 333122 | 44.25 ug/L | 95 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 548487 | 39.72 ug/L | 94 |
| 37) methyl methacrylate | 8.015 | 41 | 238409 | 42.89 ug/L | 97 |
| 38) dibromomethane | 8.033 | 93 | 222369 | 39.77 ug/L | 92 |

Mon/01/W
CB 31 3/25/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033114.D
Acq On : 31 Mar 2008 3:03 pm
Sample : ,ical,ical_w25 40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 31 15:33:22 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 15:15:05 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

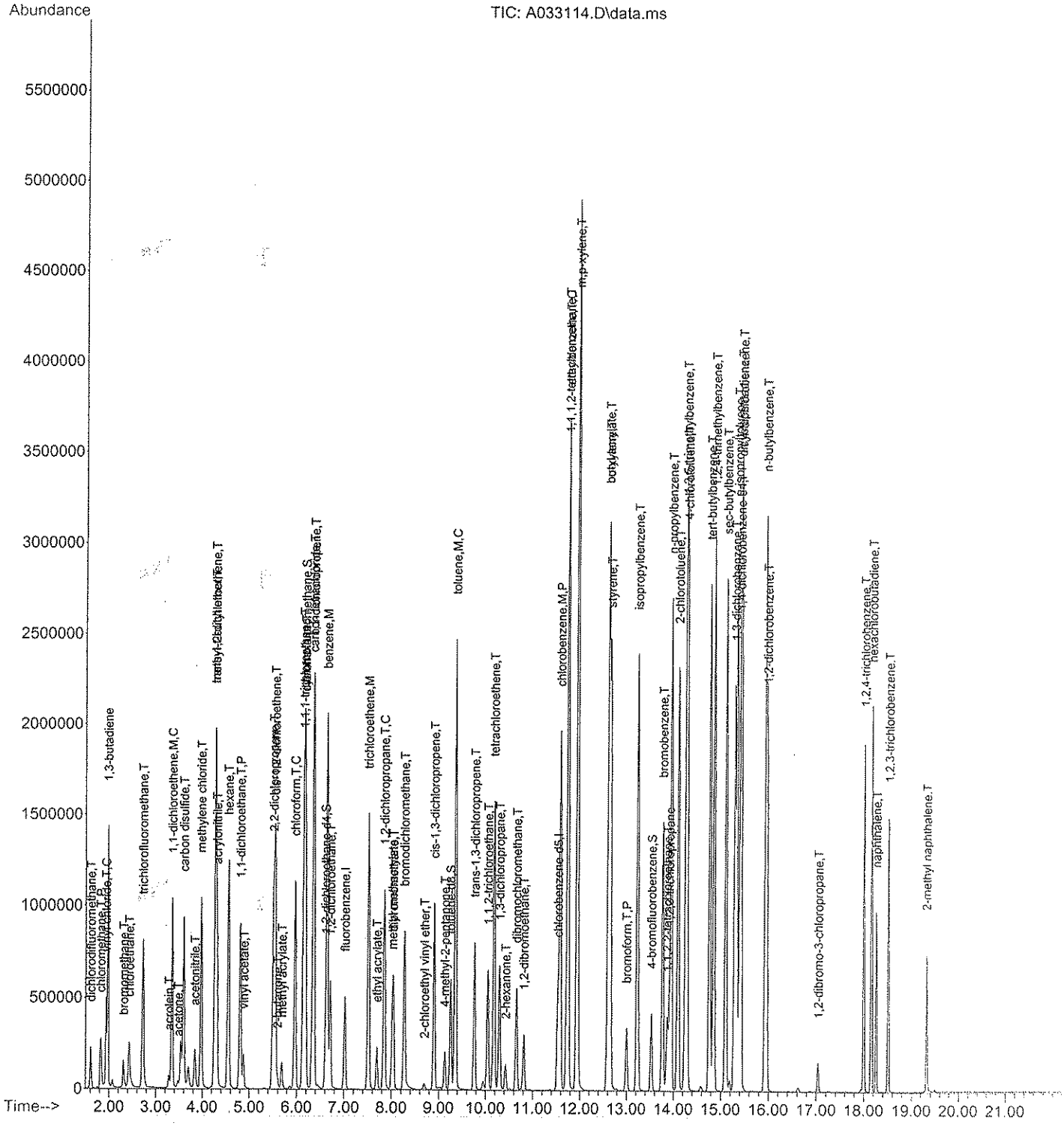
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.264 | 83 | 790759 | 41.10 ug/L | 94 |
| 40) 2-chloroethyl vinyl ether | 8.696 | 63 | 20616 | 24.13 ug/L | 97 |
| 42) cis-1,3-dichloropropene | 8.897 | 75 | 776267 | 41.49 ug/L | 98 |
| 43) 4-methyl-2-pentanone | 9.128 | 43 | 223419 | 41.54 ug/L | 97 |
| 45) toluene | 9.353 | 92 | 1503125 | 39.52 ug/L | 90 |
| 46) 1,1,2-trichloroethane | 10.046 | 83 | 249123 | 40.46 ug/L | 89 |
| 47) 1,3-dichloropropane | 10.289 | 76 | 538018 | 40.60 ug/L | 94 |
| 48) tetrachloroethene | 10.174 | 164 | 556826 | 41.15 ug/L | 93 |
| 49) trans-1,3-dichloropropene | 9.760 | 75 | 585557 | 42.21 ug/L | 88 |
| 50) 2-hexanone | 10.423 | 43 | 152717 | 43.41 ug/L # | 58 |
| 51) dibromochloromethane | 10.654 | 129 | 439286 | 42.96 ug/L | 98 |
| 52) 1,2-dibromoethane | 10.806 | 107 | 306626 | 41.02 ug/L | 96 |
| 53) chlorobenzene | 11.579 | 112 | 1559728 | 39.18 ug/L | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.731 | 131 | 566702 | 41.00 ug/L | 94 |
| 55) ethylbenzene | 11.743 | 91 | 2965705 | 39.42 ug/L | 96 |
| 56) m,p-xylene | 11.937 | 106 | 2165209 | 76.67 ug/L # | 78 |
| 57) butyl acrylate | 12.600 | 55 | 657981 | 42.42 ug/L | 95 |
| 58) o-xylene | 12.606 | 106 | 1047254 | 38.67 ug/L # | 86 |
| 59) styrene | 12.649 | 104 | 1701835 | 39.27 ug/L | 93 |
| 60) isopropylbenzene | 13.227 | 105 | 2571266 | 40.54 ug/L | 93 |
| 61) bromobenzene | 13.762 | 156 | 688186 | 39.89 ug/L | 94 |
| 62) bromoform | 13.002 | 173 | 256292 | 44.65 ug/L | 99 |
| 64) 1,2,3-trichloropropane | 13.908 | 75 | 250397 | 40.54 ug/L | 98 |
| 65) n-propylbenzene | 13.944 | 91 | 3341964 | 40.41 ug/L | 98 |
| 66) 2-chlorotoluene | 14.090 | 91 | 2066989 | 39.74 ug/L | 93 |
| 67) 4-chlorotoluene | 14.279 | 91 | 2344901 | 39.49 ug/L | 91 |
| 68) 1,3,5-trimethylbenzene | 14.248 | 105 | 2384706 | 39.67 ug/L | 86 |
| 70) 1,1,2,2-tetrachloroethane | 13.859 | 83 | 294690 | 41.80 ug/L | 97 |
| 71) tert-butylbenzene | 14.759 | 119 | 1968423 | 40.94 ug/L | 93 |
| 72) sec-butylbenzene | 15.100 | 105 | 2821994 | 40.92 ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.850 | 105 | 2465484 | 40.09 ug/L | 86 |
| 74) 1,3-dichlorobenzene | 15.288 | 146 | 1261958 | 39.41 ug/L | 91 |
| 75) p-isopropyltoluene | 15.331 | 119 | 2364744 | 40.97 ug/L | 96 |
| 76) dicyclopentadiene | 15.404 | 66 | 2523472 | 41.03 ug/L | 97 |
| 77) 1,4-dichlorobenzene | 15.422 | 146 | 1199325 | 38.16 ug/L | 91 |
| 78) 1,2-dichlorobenzene | 15.957 | 146 | 1008849 | 38.74 ug/L | 94 |
| 79) n-butylbenzene | 15.927 | 91 | 2190582 | 40.62 ug/L | 93 |
| 80) 1,2-dibromo-3-chloropr... | 17.046 | 75 | 49862 | 42.39 ug/L # | 82 |
| 81) 1,2,4-trichlorobenzene | 18.001 | 180 | 681378 | 38.55 ug/L | 93 |
| 82) hexachlorobutadiene | 18.159 | 225 | 515737 | 40.60 ug/L | 95 |
| 83) naphthalene | 18.256 | 128 | 803888 | 37.00 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.511 | 180 | 504210 | 38.18 ug/L | 94 |
| 85) 2-methyl naphthalene | 19.320 | 142 | 345303 | 37.21 ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033114.D
Acq On : 31 Mar 2008 3:03 pm
Sample : ,ical,ical_w25 40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 31 15:33:22 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 15:15:05 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# CONTINUING CALIBRATION RAW DATA

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040108\A040103.D
Acq On : 1 Apr 2008 7:44 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 01 08:37:13 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 63 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.090 | 0.078 | 13.3 | 51 | 0.00 |
| 3 | T,P | chloromethane | 0.198 | 0.186# | 6.1 | 64 | 0.00 |
| 4 | T,C | vinyl chloride | 0.216 | 0.226 | -4.6 | 67 | 0.00 |
| 5 | | 1,3-butadiene | 0.209 | 0.269 | -28.7# | 81 | 0.00 |
| 6 | T | bromomethane | 0.059 | 0.073 | -23.7# | 70 | 0.01 |
| 7 | T | chloroethane | 0.129 | 0.147 | -14.0 | 77 | 0.02 |
| 8 | T | trichlorofluoromethane | 0.333 | 0.477 | -43.2# | 92 | 0.00 |
| 9 | T | acrolein | 0.002 | 0.003 | -50.0# | 162# | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.183 | 0.228 | -24.6# | 77 | 0.00 |
| 11 | T | acetone | 0.022 | 0.026 | -18.2 | 91 | 0.00 |
| 12 | T | carbon disulfide | 0.598 | 0.726 | -21.4# | 75 | 0.00 |
| 13 | T | methylene chloride | 0.267 | 0.234 | 12.4 | 60 | 0.00 |
| 14 | T | acrylonitrile | 0.028 | 0.027 | 3.6 | 70 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.245 | 0.255 | -4.1 | 64 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.400 | 0.361 | 9.8 | 63 | 0.00 |
| 17 | T | acetonitrile | 0.011 | 0.011 | 0.0 | 75 | 0.00 |
| 18 | T | hexane | 0.297 | 0.350 | -17.8 | 65 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.480 | 0.501 | -4.4 | 67 | 0.00 |
| 20 | T | vinyl acetate | 0.141 | 0.134 | 5.0 | 64 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.268 | 0.261 | 2.6 | 63 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.434 | 0.499 | -15.0 | 69 | 0.00 |
| 23 | T | 2-butanone | 0.007 | 0.006 | 14.3 | 56 | 0.00 |
| 24 | T | methyl acrylate | 0.082 | 0.070 | 14.6 | 64 | 0.00 |
| 25 | T,C | chloroform | 0.480 | 0.495 | -3.1 | 68 | 0.00 |
| 26 | S | dibromofluoromethane | 0.230 | 0.246 | -7.0 | 68 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.463 | 0.529 | -14.3 | 72 | 0.00 |
| 28 | T | cyclohexane | 0.385 | 0.434 | -12.7 | 66 | 0.00 |
| 29 | T | carbon tetrachloride | 0.379 | 0.454 | -19.8 | 73 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.201 | 0.234 | -16.4 | 76 | 0.00 |
| 31 | M | benzene | 0.967 | 0.930 | 3.8 | 62 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.344 | 0.369 | -7.3 | 65 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.260 | 0.273 | -5.0 | 74 | 0.00 |
| 34 | M | trichloroethene | 0.281 | 0.281 | 0.0 | 63 | 0.00 |
| 35 | T | ethyl acrylate | 0.126 | 0.108 | 14.3 | 62 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.231 | 0.215 | 6.9 | 62 | 0.00 |
| 37 | T | methyl methacrylate | 0.093 | 0.088 | 5.4 | 71 | 0.00 |
| 38 | T | dibromomethane | 0.094 | 0.089 | 5.3 | 67 | 0.00 |
| 39 | T | bromodichloromethane | 0.322 | 0.325 | -0.9 | 68 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.015 | 0.006 | 60.0# | 26# | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 62 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.419 | 0.395 | 5.7 | 62 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.120 | 0.105 | 12.5 | 64 | 0.00 |
| 44 | S | toluene-d8 | 1.254 | 1.288 | -2.7 | 64 | 0.00 |
| 45 | M,C | toluene | 0.853 | 0.820 | 3.9 | 61 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.138 | 0.126 | 8.7 | 62 | 0.00 |



M 04/08/08

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040108\A040103.D
Acq On : 1 Apr 2008 7:44 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 01 08:37:13 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.296 | 0.270 | 8.8 | 62 | 0.00 |
| 48 | T | tetrachloroethene | 0.304 | 0.311 | -2.3 | 62 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.294 | 5.5 | 63 | 0.00 |
| 50 | T | 2-hexanone | 0.079 | 0.067 | 15.2 | 61 | 0.00 |
| 51 | T | dibromochloromethane | 0.229 | 0.223 | 2.6 | 65 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.168 | 0.150 | 10.7 | 61 | 0.00 |
| 53 | M,P | chlorobenzene | 0.894 | 0.827 | 7.5 | 60 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.310 | 0.305 | 1.6 | 64 | 0.00 |
| 55 | T,C | ethylbenzene | 1.687 | 1.704 | -1.0 | 63 | 0.00 |
| 56 | T | m,p-xylene | 0.633 | 0.624 | 1.4 | 61 | 0.00 |
| 57 | T | butyl acrylate | 0.345 | 0.305 | 11.6 | 64 | 0.00 |
| 58 | T | o-xylene | 0.607 | 0.586 | 3.5 | 62 | 0.00 |
| 59 | T | styrene | 0.972 | 0.925 | 4.8 | 62 | 0.00 |
| 60 | T | isopropylbenzene | 1.423 | 1.485 | -4.4 | 64 | 0.00 |
| 61 | T | bromobenzene | 0.388 | 0.357 | 8.0 | 61 | 0.00 |
| 62 | T,P | bromoform | 0.129 | 0.119 | 7.8 | 63 | 0.00 |
| 63 | S | 4-bromofluorobenzene | 0.461 | 0.493 | -6.9 | 68 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.138 | 0.130 | 5.8 | 66 | 0.00 |
| 65 | T | n-propylbenzene | 1.854 | 1.991 | -7.4 | 66 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.166 | 1.189 | -2.0 | 65 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.329 | 1.381 | -3.9 | 67 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.345 | 1.418 | -5.4 | 66 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 69 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.314 | 0.265 | 15.6 | 63 | 0.00 |
| 71 | T | tert-butylbenzene | 2.137 | 2.134 | 0.1 | 64 | 0.00 |
| 72 | T | sec-butylbenzene | 3.062 | 3.182 | -3.9 | 66 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.728 | 2.648 | 2.9 | 65 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.421 | 1.294 | 8.9 | 63 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.563 | 2.661 | -3.8 | 65 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 2.734 | -0.7 | 70 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.396 | 1.262 | 9.6 | 65 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.155 | 1.041 | 9.9 | 65 | 0.00 |
| 79 | T | n-butylbenzene | 2.389 | 2.567 | -7.5 | 67 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.052 | 0.046 | 11.5 | 70 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.785 | 0.663 | 15.5 | 62 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.564 | 0.592 | -5.0 | 66 | 0.00 |
| 83 | T | naphthalene | 0.970 | 0.686 | 29.3# | 58 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.586 | 0.480 | 18.1 | 64 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.418 | 0.288 | 31.1# | 68 | 0.00 |

(#) = Out of Range SPCC's out = 1 CCC's out = 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040103.D
Acq On : 1 Apr 2008 7:44 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 01 08:37:13 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 386213 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 288113 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 157616 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 94826 | 10.65 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 106.50% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 90373 | 11.63 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 116.30% | | | | |
| 44) toluene-d8 | 9.248 | 98 | 371020 | 10.27 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 102.70% | | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 141994 | 10.69 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 106.90% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 30104 | 8.66 | ug/L | | 96 |
| 3) chloromethane | 1.823 | 50 | 71909 | 9.39 | ug/L | | 92 |
| 4) vinyl chloride | 1.938 | 62 | 87106 | 10.43 | ug/L | | 97 |
| 5) 1,3-butadiene | 1.975 | 39 | 104006 | 12.90 | ug/L | | 87 |
| 6) bromomethane | 2.321 | 94 | 28307 | 12.47 | ug/L | | 97 |
| 7) chloroethane | 2.443 | 64 | 56732 | 11.42 | ug/L | | 96 |
| 8) trichlorofluoromethane | 2.729 | 101 | 184214 | 14.33 | ug/L | | 93 |
| 9) acrolein | 3.276 | 56 | 11164 | 153.50 | ug/L | | 99 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 88052 | 12.49 | ug/L | # | 86 |
| 11) acetone | 3.471 | 43 | 10041 | 11.81 | ug/L | | 89 |
| 12) carbon disulfide | 3.592 | 76 | 280484 | 12.15 | ug/L | | 99 |
| 13) methylene chloride | 3.963 | 84 | 90462 | 8.77 | ug/L | | 88 |
| 14) acrylonitrile | 4.298 | 53 | 106078 | 99.48 | ug/L | | 90 |
| 15) trans-1,2-dichloroethene | 4.267 | 96 | 98370 | 10.39 | ug/L | | 91 |
| 16) methyl-t-butyl ether | 4.261 | 73 | 139257 | 9.01 | ug/L | | 92 |
| 17) acetonitrile | 3.829 | 41 | 43654 | 105.09 | ug/L | | 99 |
| 18) hexane | 4.547 | 57 | 135146 | 11.80 | ug/L | | 98 |
| 19) 1,1-dichloroethane | 4.796 | 63 | 193550 | 10.43 | ug/L | | 96 |
| 20) vinyl acetate | 4.875 | 43 | 51659 | 9.47 | ug/L | | 94 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 100731 | 9.73 | ug/L | | 94 |
| 22) 2,2-dichloropropane | 5.496 | 77 | 192624 | 11.48 | ug/L | | 97 |
| 23) 2-butanone | 5.587 | 72 | 2420 | 9.08 | ug/L | # | 80 |
| 24) methyl acrylate | 5.684 | 55 | 27092 | 8.53 | ug/L | | 94 |
| 25) chloroform | 5.958 | 83 | 191315 | 10.31 | ug/L | | 98 |
| 27) 1,1,1-trichloroethane | 6.140 | 97 | 204408 | 11.42 | ug/L | | 86 |
| 28) cyclohexane | 6.165 | 56 | 167479 | 11.26 | ug/L | | 94 |
| 29) carbon tetrachloride | 6.335 | 117 | 175327 | 11.98 | ug/L | | 92 |
| 31) benzene | 6.627 | 78 | 359041 | 9.61 | ug/L | | 96 |
| 32) 1,1-dichloropropene | 6.347 | 75 | 142457 | 10.71 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.700 | 62 | 105282 | 10.48 | ug/L | | 94 |
| 34) trichloroethene | 7.509 | 95 | 108486 | 10.00 | ug/L | | 94 |
| 35) ethyl acrylate | 7.691 | 55 | 41789 | 8.60 | ug/L | | 95 |
| 36) 1,2-dichloropropane | 7.843 | 63 | 82926 | 9.29 | ug/L | | 93 |
| 37) methyl methacrylate | 8.013 | 41 | 33926 | 9.49 | ug/L | | 95 |
| 38) dibromomethane | 8.032 | 93 | 34451 | 9.53 | ug/L | | 90 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040103.D
Acq On : 1 Apr 2008 7:44 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 01 08:37:13 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

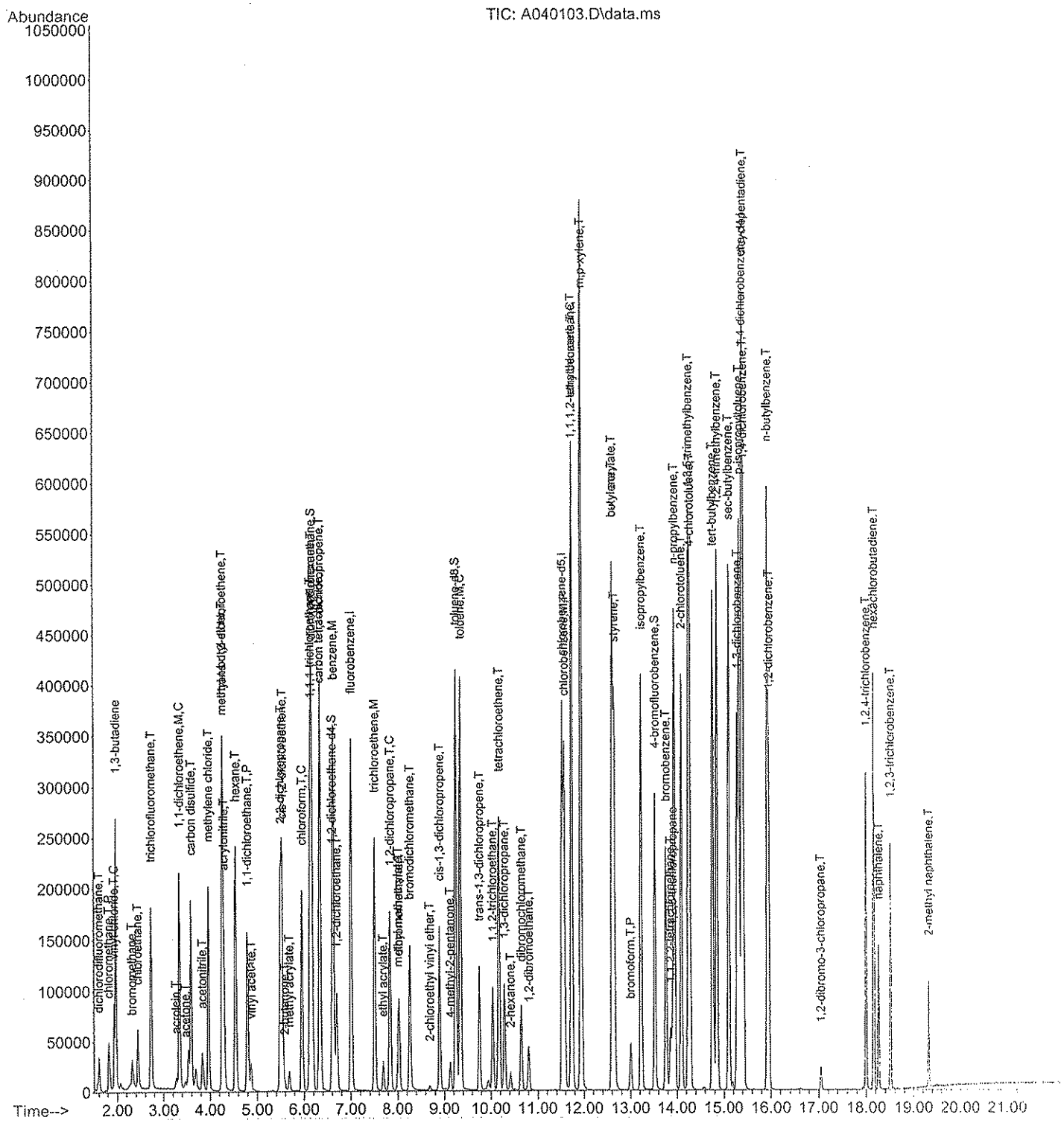
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.263 | 83 | 125488 | 10.10 | ug/L | | 93 |
| 40) 2-chloroethyl vinyl ether | 8.688 | 63 | 2439 | 4.23 | ug/L | | 96 |
| 42) cis-1,3-dichloropropene | 8.895 | 75 | 113901 | 9.44 | ug/L | | 96 |
| 43) 4-methyl-2-pentanone | 9.126 | 43 | 30272 | 8.75 | ug/L | | 91 |
| 45) toluene | 9.351 | 92 | 236281 | 9.61 | ug/L | | 89 |
| 46) 1,1,2-trichloroethane | 10.039 | 83 | 36320 | 9.13 | ug/L | | 92 |
| 47) 1,3-dichloropropane | 10.288 | 76 | 77724 | 9.10 | ug/L | | 96 |
| 48) tetrachloroethene | 10.172 | 164 | 89609 | 10.22 | ug/L | | 91 |
| 49) trans-1,3-dichloropropene | 9.753 | 75 | 84703 | 9.46 | ug/L | | 96 |
| 50) 2-hexanone | 10.422 | 43 | 19244 | 8.49 | ug/L | | 65 |
| 51) dibromochloromethane | 10.653 | 129 | 64237 | 9.72 | ug/L | | 96 |
| 52) 1,2-dibromoethane | 10.811 | 107 | 43254 | 8.95 | ug/L | | 99 |
| 53) chlorobenzene | 11.571 | 112 | 238146 | 9.24 | ug/L | | 99 |
| 54) 1,1,1,2-tetrachloroethane | 11.729 | 131 | 87926 | 9.85 | ug/L | | 92 |
| 55) ethylbenzene | 11.735 | 91 | 490894 | 10.10 | ug/L | | 93 |
| 56) m,p-xylene | 11.936 | 106 | 359568 | 19.71 | ug/L | # | 75 |
| 57) butyl acrylate | 12.599 | 55 | 87917 | 8.85 | ug/L | | 92 |
| 58) o-xylene | 12.599 | 106 | 168966 | 9.66 | ug/L | # | 83 |
| 59) styrene | 12.641 | 104 | 266366 | 9.51 | ug/L | | 91 |
| 60) isopropylbenzene | 13.225 | 105 | 427894 | 10.44 | ug/L | | 93 |
| 61) bromobenzene | 13.760 | 156 | 102802 | 9.20 | ug/L | | 90 |
| 62) bromoform | 12.994 | 173 | 34167 | 9.18 | ug/L | | 97 |
| 64) 1,2,3-trichloropropane | 13.906 | 75 | 37372 | 9.37 | ug/L | | 98 |
| 65) n-propylbenzene | 13.937 | 91 | 573566 | 10.74 | ug/L | | 95 |
| 66) 2-chlorotoluene | 14.089 | 91 | 342699 | 10.20 | ug/L | | 90 |
| 67) 4-chlorotoluene | 14.277 | 91 | 397953 | 10.39 | ug/L | | 91 |
| 68) 1,3,5-trimethylbenzene | 14.247 | 105 | 408509 | 10.54 | ug/L | | 84 |
| 70) 1,1,2,2-tetrachloroethane | 13.858 | 83 | 41693 | 8.44 | ug/L | | 94 |
| 71) tert-butylbenzene | 14.758 | 119 | 336316 | 9.99 | ug/L | | 92 |
| 72) sec-butylbenzene | 15.098 | 105 | 501528 | 10.39 | ug/L | | 97 |
| 73) 1,2,4-trimethylbenzene | 14.849 | 105 | 417346 | 9.71 | ug/L | | 84 |
| 74) 1,3-dichlorobenzene | 15.287 | 146 | 203937 | 9.11 | ug/L | | 89 |
| 75) p-isopropyltoluene | 15.329 | 119 | 419394 | 10.38 | ug/L | | 94 |
| 76) dicyclopentadiene | 15.402 | 66 | 430962 | 10.07 | ug/L | | 97 |
| 77) 1,4-dichlorobenzene | 15.420 | 146 | 198895 | 9.04 | ug/L | | 91 |
| 78) 1,2-dichlorobenzene | 15.956 | 146 | 164055 | 9.01 | ug/L | | 94 |
| 79) n-butylbenzene | 15.925 | 91 | 404611 | 10.74 | ug/L | | 92 |
| 80) 1,2-dibromo-3-chloropr... | 17.038 | 75 | 7284 | 8.86 | ug/L | # | 68 |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 104467 | 8.44 | ug/L | | 92 |
| 82) hexachlorobutadiene | 18.157 | 225 | 93244 | 10.49 | ug/L | | 94 |
| 83) naphthalene | 18.260 | 128 | 108101 | 7.07 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.510 | 180 | 75706 | 8.19 | ug/L | | 94 |
| 85) 2-methyl naphthalene | 19.325 | 142 | 45470 | 6.89 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040103.D
Acq On : 1 Apr 2008 7:44 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 01 08:37:13 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040111.D
Acq On : 1 Apr 2008 1:27 pm
Sample : ,SAMP,ME0803A55-01A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 01 15:44:37 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

11-16, 20-32

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 324142 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.533 | 117 | 247474 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 127820 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.176 | 113 | 85282 | 11.41 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.10% | | | |
| 30) 1,2-dichloroethane-d4 | 6.607 | 65 | 82934 | 12.72 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 127.20% | | | |
| 44) toluene-d8 | 9.253 | 98 | 310034 | 9.99 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.90% | | | |
| 63) 4-bromofluorobenzene | 13.528 | 95 | 119373 | 10.47 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.961 | 39 | 81 | 0.01 | ug/L # | 14 |
| 13) methylene chloride | 3.968 | 84 | 11266 | 1.30 | ug/L | 88 |
| 25) chloroform | 5.957 | 83 | 20644 | 1.33 | ug/L | 92 |

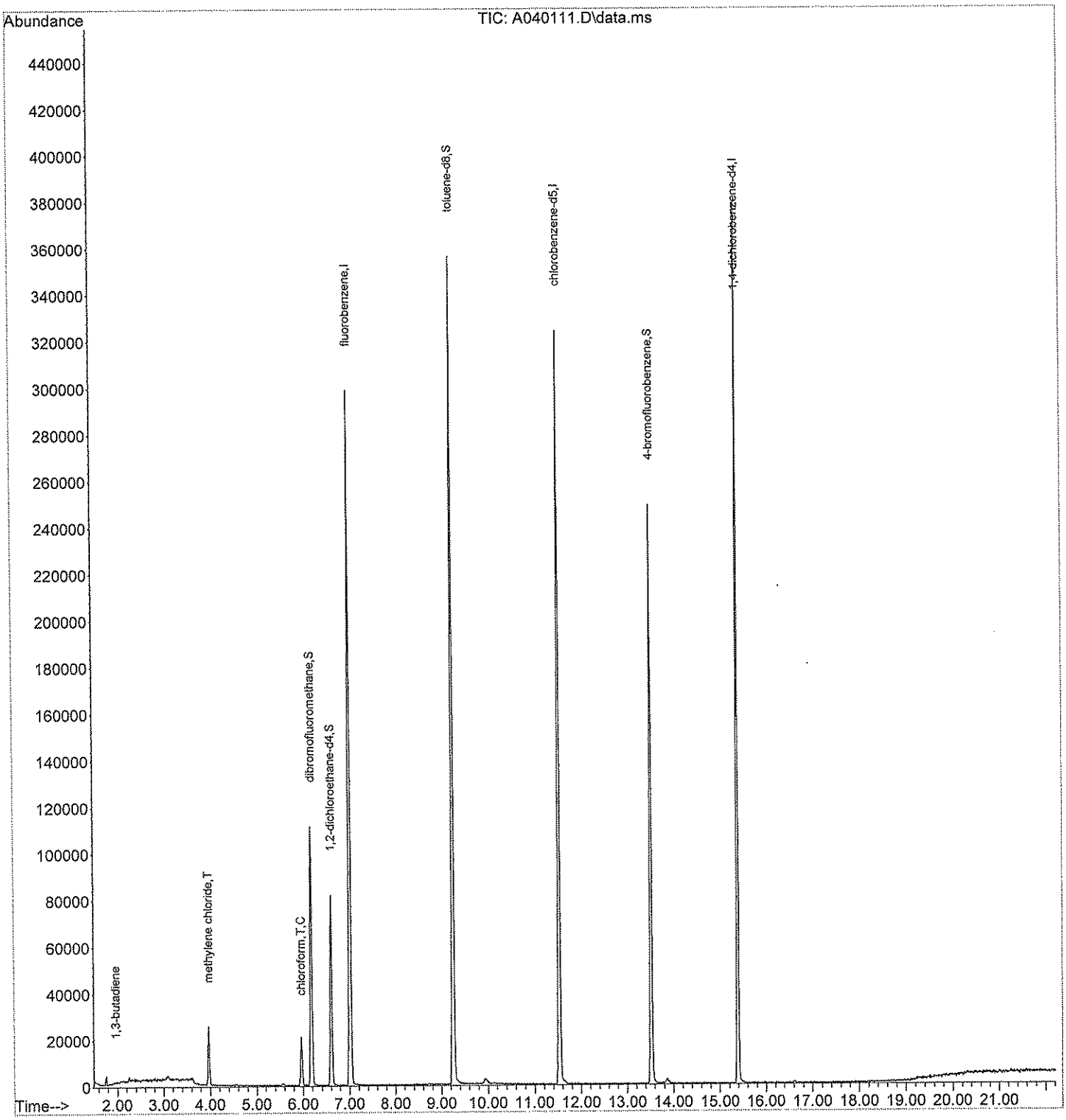
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/2/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040111.D
Acq On : 1 Apr 2008 1:27 pm
Sample : ,SAMP,ME0803A55-01A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 01 15:44:37 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\\
Data File : A040111.D
Acq On : 1 Apr 2008 1:27 pmm
Operator : BRR
Sample : ,SAMP,ME0803A55-01A,1,,
Misc : 8260+_W255
ALS Vial : 11 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********

Chromatograms 4/08/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040111.D
Acq On : 1 Apr 2008 1:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-01A,1,
Misc : 8260+_W25
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040111.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.968 | 401 | 408 | 420 | rBV | 25314 | 54598 | 6.10% | 1.217% |
| 2 | 5.963 | 726 | 736 | 747 | rBV2 | 21094 | 52818 | 5.90% | 1.177% |
| 3 | 6.176 | 759 | 771 | 784 | rBV | 111502 | 285478 | 31.88% | 6.363% |
| 4 | 6.607 | 829 | 842 | 858 | rBV | 81725 | 205360 | 22.94% | 4.577% |
| 5 | 7.015 | 899 | 909 | 922 | rBV | 298783 | 749314 | 83.69% | 16.701% |
| 6 | 9.253 | 1265 | 1277 | 1299 | rBV | 355906 | 895385 | 100.00% | 19.957% |
| 7 | 11.533 | 1639 | 1652 | 1667 | rBV | 324060 | 825824 | 92.23% | 18.406% |
| 8 | 13.528 | 1969 | 1980 | 2000 | rBV | 248967 | 615629 | 68.76% | 13.721% |
| 9 | 15.389 | 2277 | 2286 | 2307 | rBV | 378629 | 802196 | 89.59% | 17.880% |

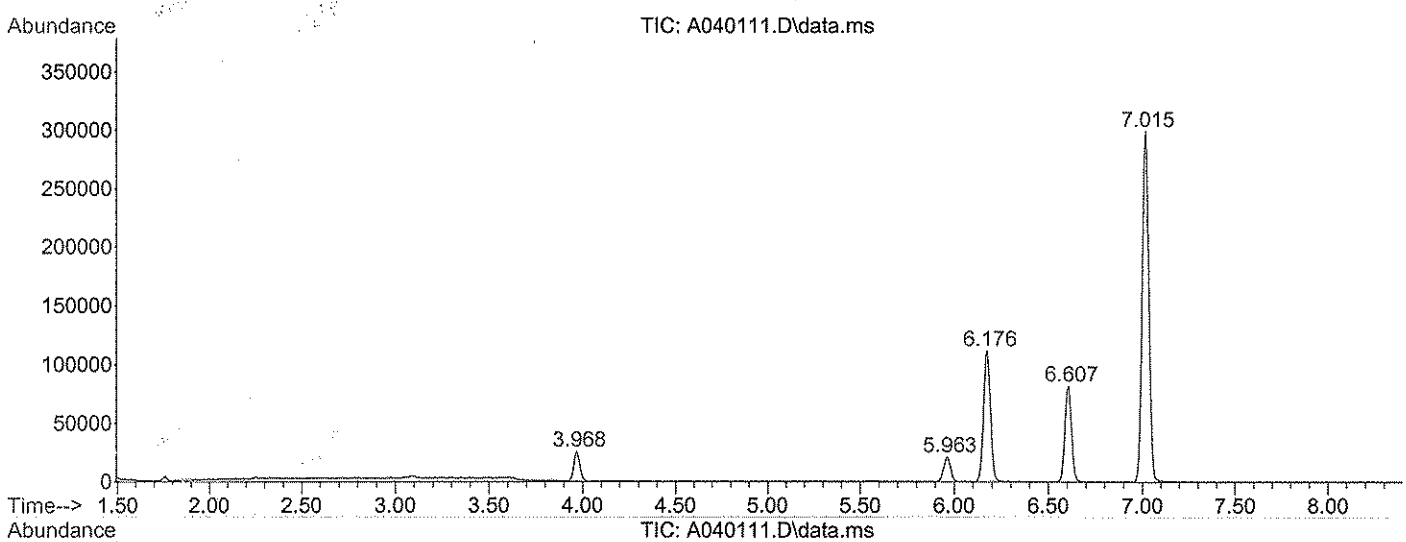
Sum of corrected areas: 4486602

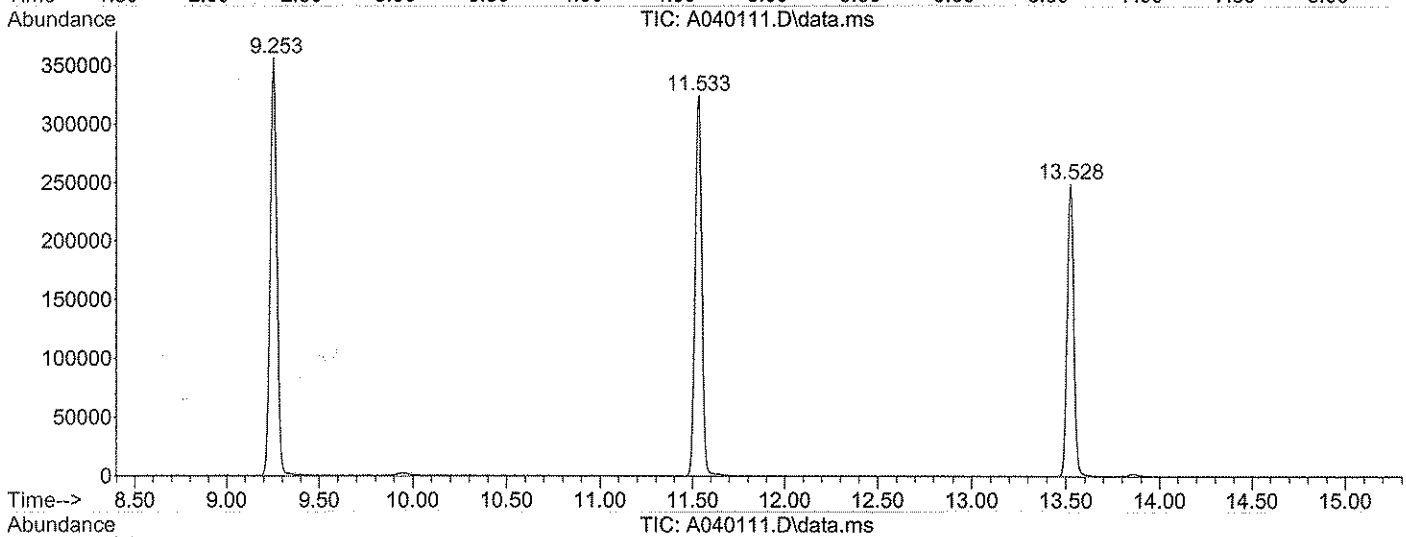
LSC Report - Integrated Chromatogram

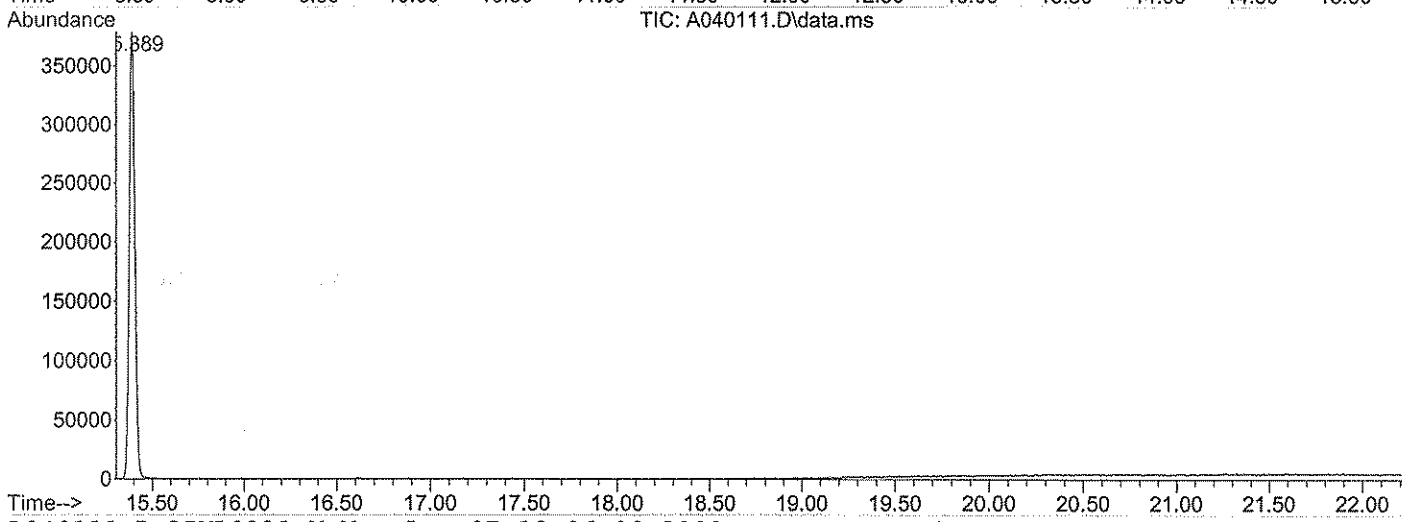
```
Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040111.D
Acq On    :  1 Apr 2008    1:27 pm
Operator  : BR
Sample    : ,SAMP,ME0803A55-01A,1,
Misc      : 8260+_W25
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title  : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040112.D
Acq On : 1 Apr 2008 2:04 pm
Sample : ,SAMP,ME0803A55-02A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 01 15:44:42 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 317094 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 242411 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 129961 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 82588 | 11.30 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 113.00% | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 82085 | 12.87 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 128.70% | | |
| 44) toluene-d8 | 9.254 | 98 | 306642 | 10.09 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.90% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 120138 | 10.75 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 107.50% | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.962 | 39 | 130 | 0.02 | ug/L # | 14 |
| 11) acetone | 3.483 | 43 | 1577 | 2.26 | ug/L | 57 |
| 48) tetrachloroethene | 10.178 | 164 | 6040 | 0.82 | ug/L | 89 |
| 72) sec-butylbenzene | 15.098 | 105 | 7001 | 0.18 | ug/L | 94 |

FIT (1)

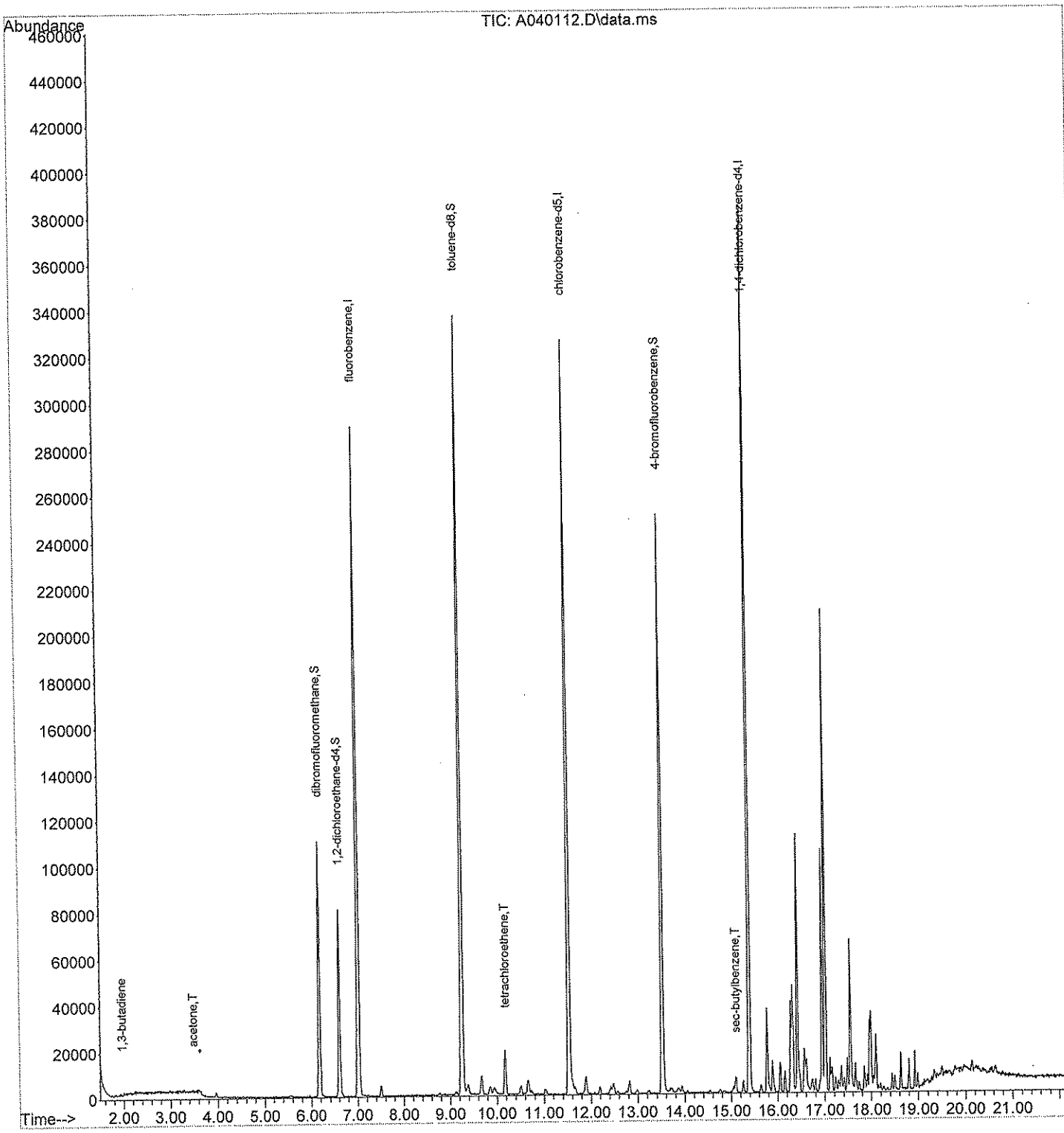
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/2/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040112.D
Acq On : 1 Apr 2008 2:04 pm
Sample : ,SAMP,ME0803A55-02A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 01 15:44:42 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Benzene, 1,3-di... | 15.773 | 1.0 | ug/L | 82233 | 3 | 15.390 | 813564 | 10.0 |
| Benzene, 2-ethy... | 16.284 | 1.1 | ug/L | 85623 | 3 | 15.390 | 813564 | 10.0 |
| Benzene, 2-ethy... | 16.424 | 2.9 | ug/L | 231945 | 3 | 15.390 | 813564 | 10.0 |
| Benzene, 1,2,3,... | 16.947 | 2.4 | ug/L | 199028 | 3 | 15.390 | 813564 | 10.0 |
| Benzene, 1,2,4,... | 17.014 | 4.8 | ug/L | 391951 | 3 | 15.390 | 813564 | 10.0 |
| Benzene, (1-met... | 17.549 | 1.6 | ug/L | 132220 | 3 | 15.390 | 813564 | 10.0 |

Now results on 4/08/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040112.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.171 | 757 | 770 | 792 | rBV2 | 110438 | 280630 | 31.88% | 4.781% |
| 2 | 6.603 | 830 | 841 | 865 | rVB | 81223 | 204762 | 23.26% | 3.488% |
| 3 | 7.010 | 896 | 908 | 928 | rBV | 289409 | 733921 | 83.37% | 12.503% |
| 4 | 9.254 | 1265 | 1277 | 1290 | rBV | 336961 | 880298 | 100.00% | 14.996% |
| 5 | 10.172 | 1417 | 1428 | 1439 | rVB3 | 19144 | 49803 | 5.66% | 0.848% |
| 6 | 11.528 | 1638 | 1651 | 1669 | rBV | 326025 | 827839 | 94.04% | 14.103% |
| 7 | 13.523 | 1968 | 1979 | 2000 | rBV | 250492 | 626894 | 71.21% | 10.679% |
| 8 | 15.390 | 2276 | 2286 | 2307 | rBV | 383696 | 813564 | 92.42% | 13.859% |
| 9 | 15.773 | 2340 | 2349 | 2362 | rBV2 | 36451 | 82233 | 9.34% | 1.401% |
| 10 | 15.889 | 2363 | 2368 | 2381 | rVB4 | 13624 | 28828 | 3.27% | 0.491% |
| 11 | 16.284 | 2422 | 2433 | 2436 | rBV | 39464 | 85623 | 9.73% | 1.459% |
| 12 | 16.320 | 2436 | 2439 | 2447 | rVB | 45005 | 75485 | 8.57% | 1.286% |
| 13 | 16.424 | 2447 | 2456 | 2471 | rVB | 111525 | 231945 | 26.35% | 3.951% |
| 14 | 16.570 | 2471 | 2480 | 2483 | rBV | 18609 | 37559 | 4.27% | 0.640% |
| 15 | 16.947 | 2526 | 2542 | 2547 | rBV | 104842 | 199028 | 22.61% | 3.391% |
| 16 | 17.014 | 2547 | 2553 | 2564 | rVB | 208455 | 391951 | 44.52% | 6.677% |
| 17 | 17.111 | 2564 | 2569 | 2573 | rBV4 | 14363 | 26868 | 3.05% | 0.458% |
| 18 | 17.488 | 2624 | 2631 | 2636 | rBV2 | 14035 | 27476 | 3.12% | 0.468% |
| 19 | 17.549 | 2636 | 2641 | 2654 | rVV | 65425 | 132220 | 15.02% | 2.252% |
| 20 | 17.962 | 2704 | 2709 | 2711 | rBV2 | 28193 | 45151 | 5.13% | 0.769% |
| 21 | 17.993 | 2712 | 2714 | 2720 | rVB2 | 31630 | 42656 | 4.85% | 0.727% |
| 22 | 18.102 | 2726 | 2732 | 2738 | rVB3 | 23492 | 45404 | 5.16% | 0.773% |

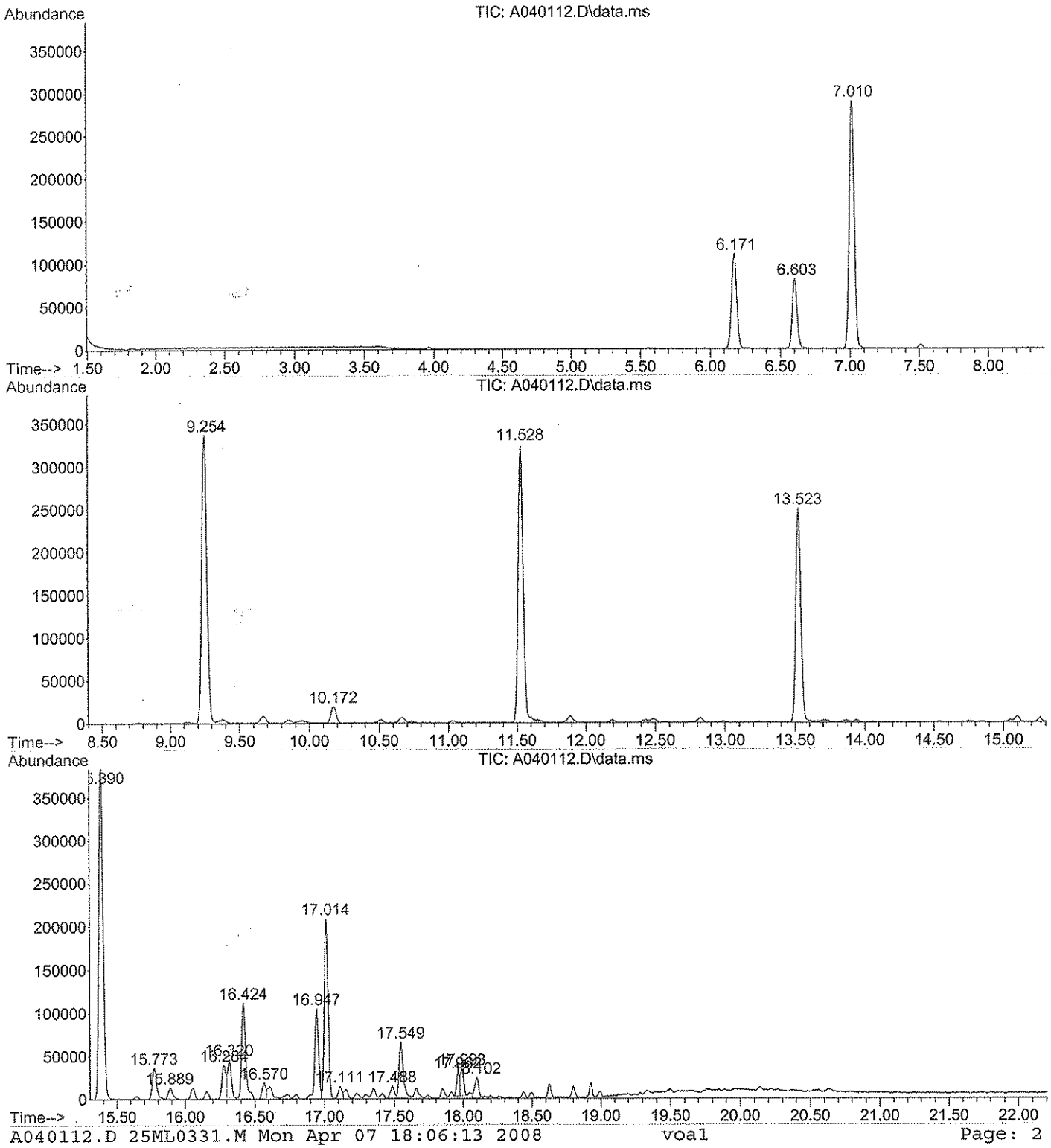
Sum of corrected areas: 5870138

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

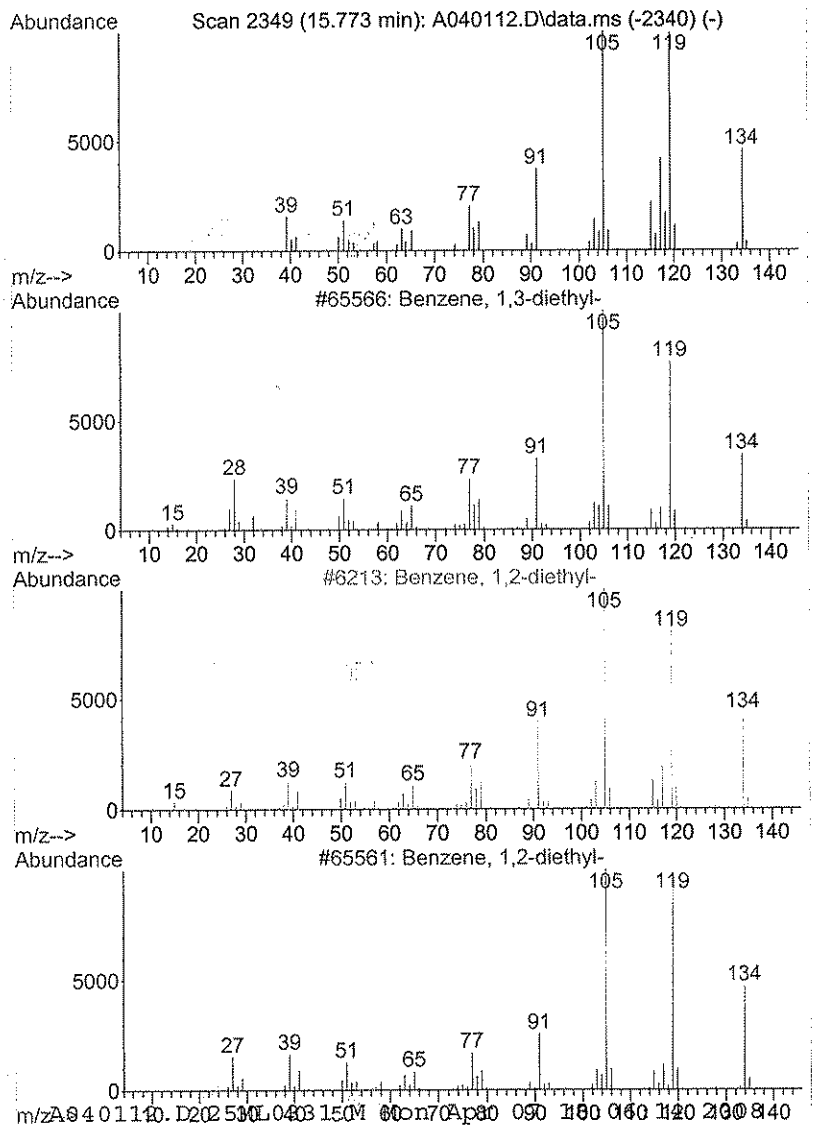
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

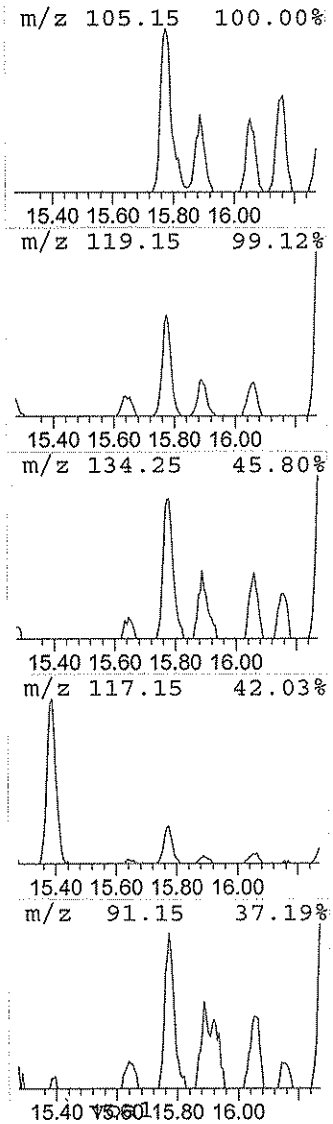
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 1 Benzene, 1,3-diethyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.773 | 1.01 ug/L | 82233 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 95 |
| 2 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 93 |
| 3 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 81 |
| 4 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 76 |
| 5 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 76 |




Page: 3

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

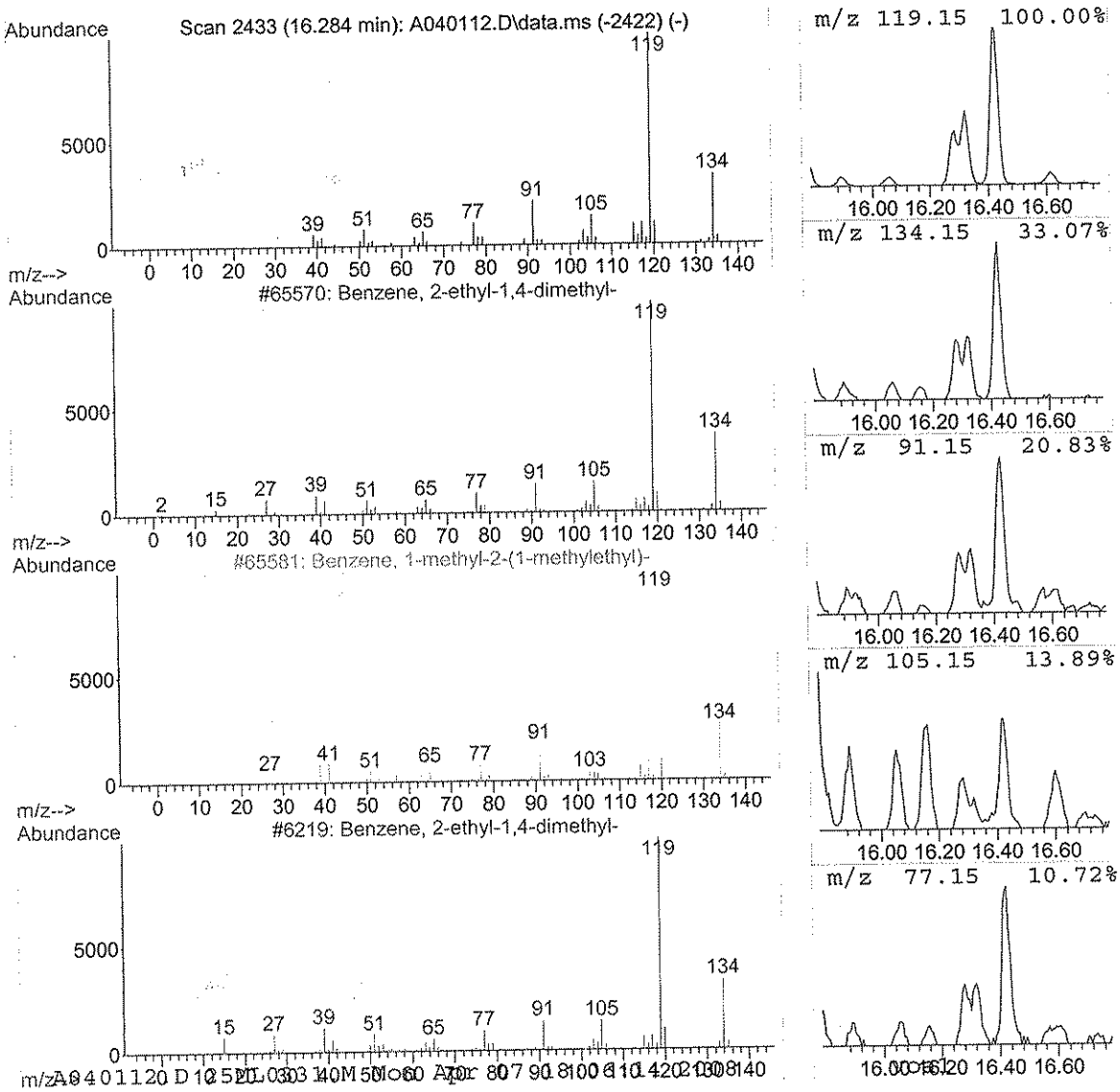
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 2 Benzene, 2-ethyl-1,4-dimethyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.284 | 1.05 ug/L | 85623 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 95 |
| 2 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 95 |
| 3 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 94 |
| 4 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 94 |
| 5 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 94 |



Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

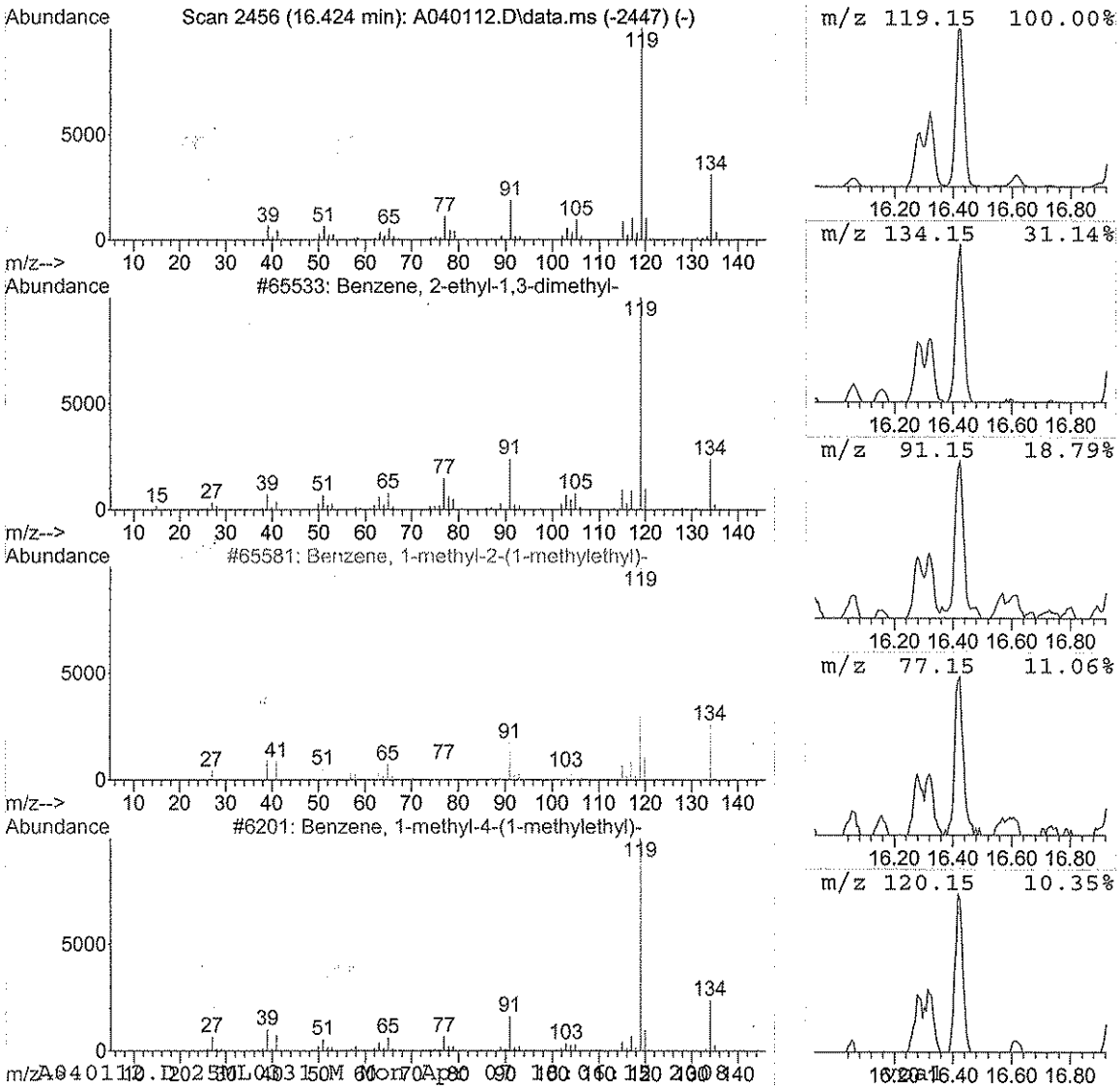
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 3 Benzene, 2-ethyl-1,3-dimethyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.424 | 2.85 ug/L | 231945 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-ethyl-1,3-dimethyl- | 134 | C10H14 | 002870-04-4 | 95 |
| 2 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 95 |
| 3 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 95 |
| 4 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 95 |
| 5 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 95 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

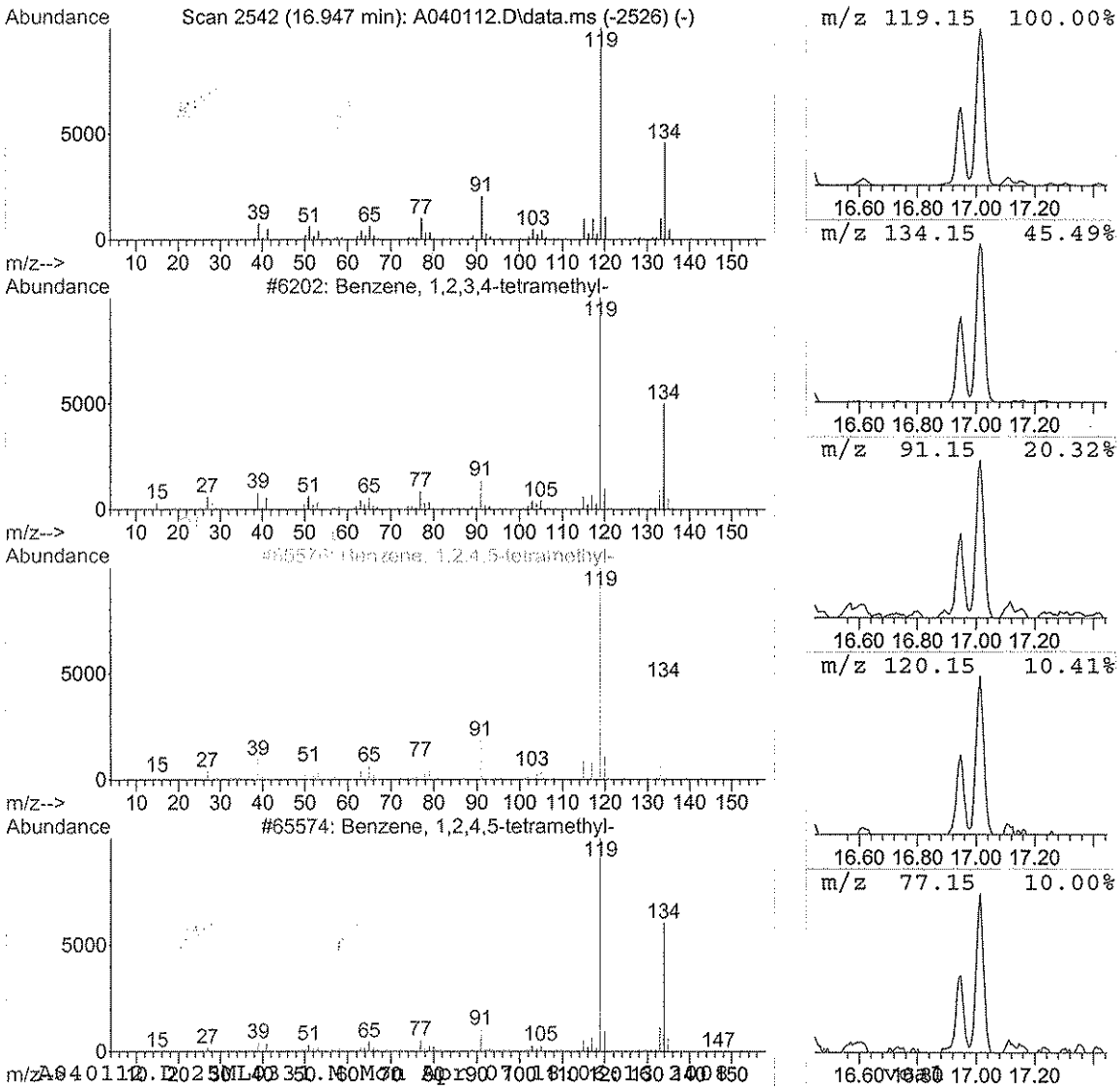
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 4 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.947 | 2.45 ug/L | 199028 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 2 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 95 |
| 3 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 94 |
| 4 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 93 |
| 5 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 93 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

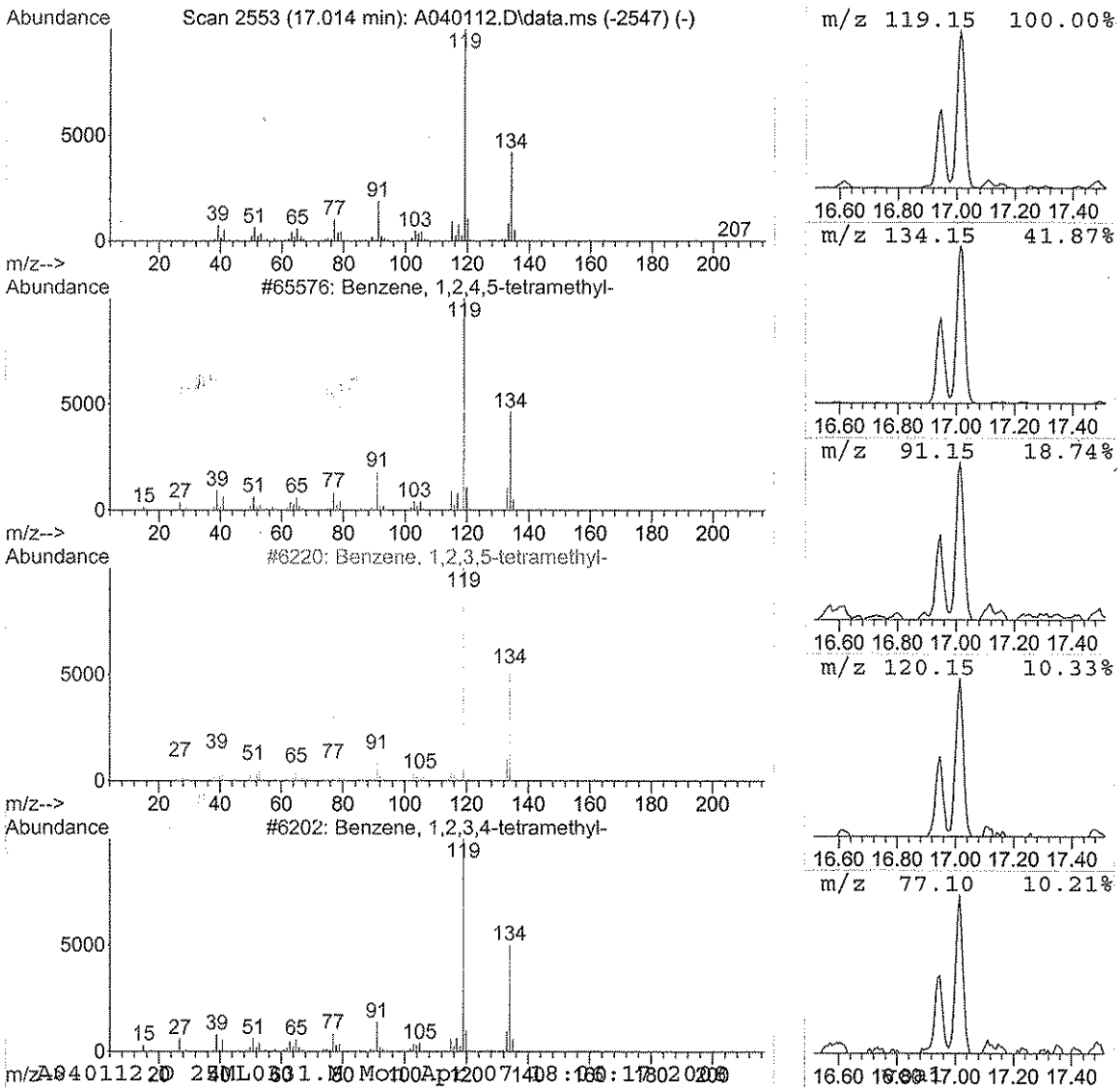
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 5 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.014 | 4.82 ug/L | 391951 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 97 |
| 2 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 96 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 4 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 95 |
| 5 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 95 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

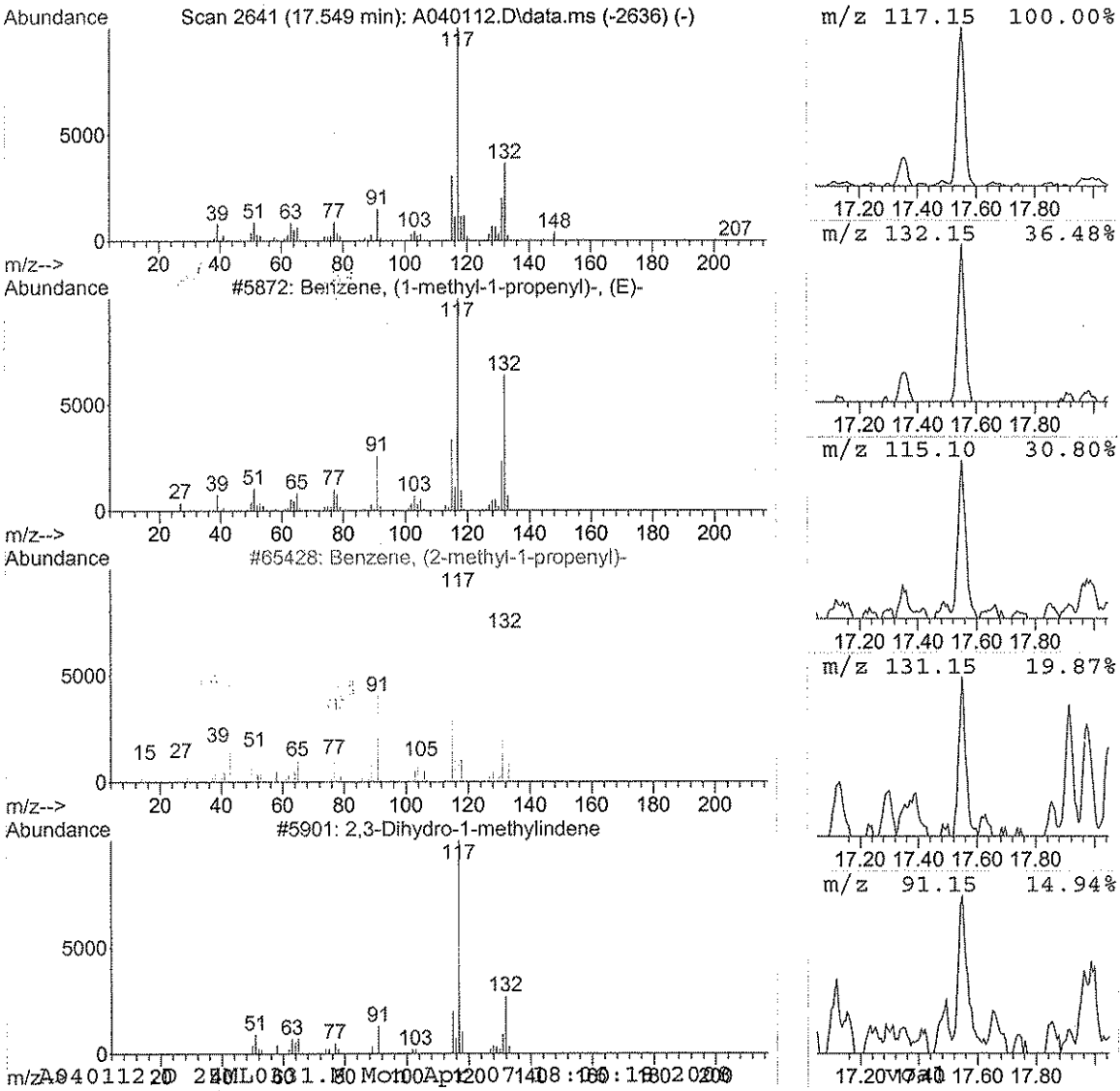
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 6 Benzene, (1-methyl-1-propen... Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.549 | 1.63 ug/L | 132220 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12 | 000768-00-3 | 87 |
| 2 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 83 |
| 3 | 2,3-Dihydro-1-methylindene | 132 | C10H12 | 027133-93-3 | 81 |
| 4 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 74 |
| 5 | Benzene, (2-methyl-2-propenyl)- | 132 | C10H12 | 003290-53-7 | 74 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040113.D
Acq On : 1 Apr 2008 2:40 pm
Sample : ,SAMP,ME0803A55-03A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 01 15:44:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

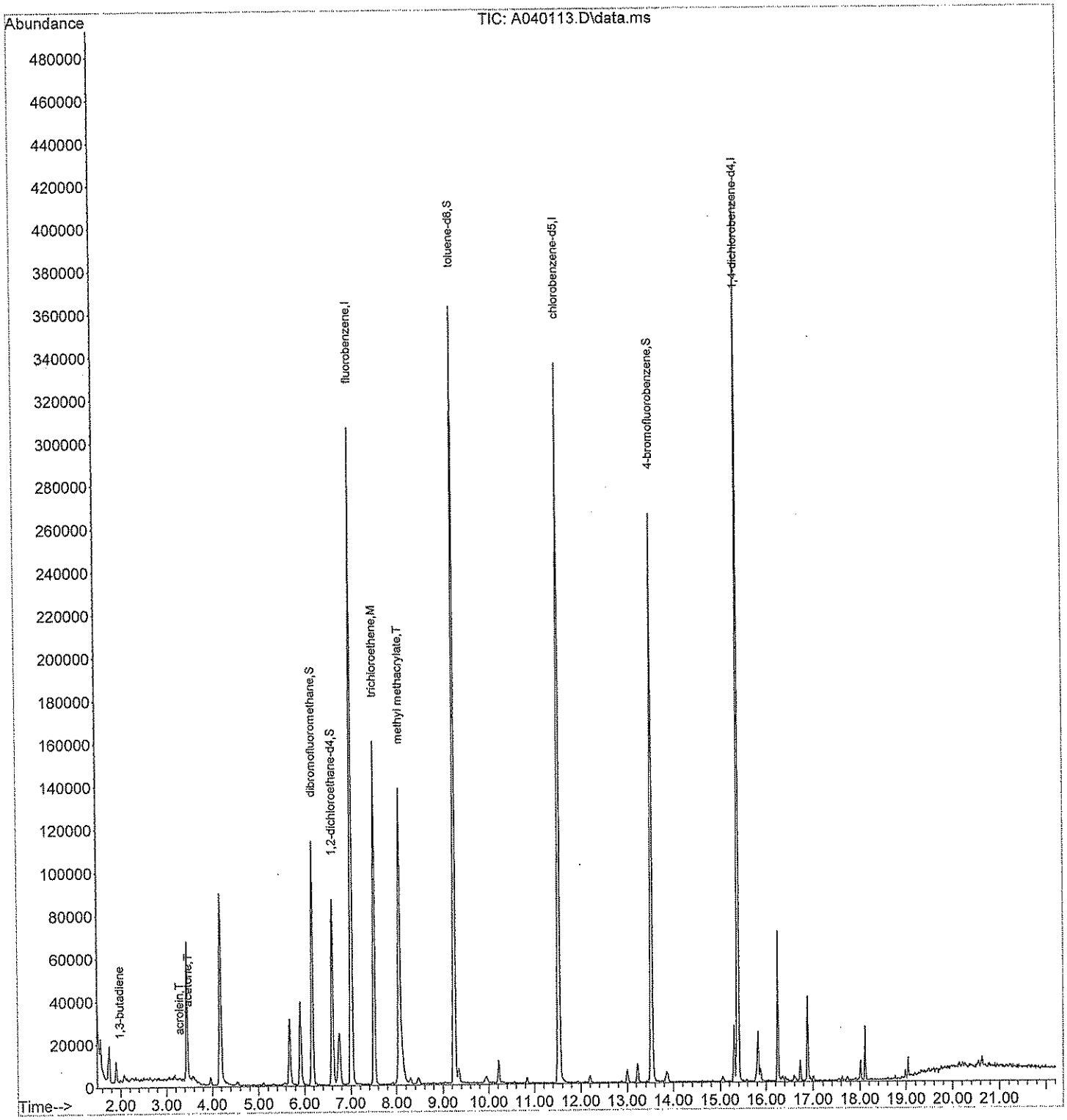
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 334996 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 255917 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 138361 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 86712 | 11.23 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.30% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 85577 | 12.70 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 127.00% | | |
| 44) toluene-d8 | 9.254 | 98 | 322821 | 10.06 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.60% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 126632 | 10.74 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 107.40% | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.987 | 39 | 132 | 0.02 | ug/L # | 14 |
| 9) acrolein | 3.282 | 56 | 580 | 9.19 | ug/L # | 75 |
| 11) acetone | 3.477 | 43 | 3984 | 5.40 | ug/L | 89 |
| 34) trichloroethene | 7.509 | 95 | 71232 | 7.57 | ug/L | 88 |
| 57) methyl methacrylate | 8.068 | 41 | 3619 | 1.17 | ug/L # | 54 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040113.D
Acq On : 1 Apr 2008 2:40 pm
Sample : ,SAMP,ME0803A55-03A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 01 15:44:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| 2-Propanol, 2-m... | 4.176 | 3.6 | ug/L | 274339 | 1 | 7.016 | 767235 | 10.0 |
| 1,3-Dioxolane | 5.678 | 1.0 | ug/L | 79184 | 1 | 7.016 | 767235 | 10.0 |
| Furan, tetrahydro- | 5.915 | 1.3 | ug/L | 103240 | 1 | 7.016 | 767235 | 10.0 |
| 1,3-Dioxolane, ... | 6.755 | 1.2 | ug/L | 89462 | 1 | 7.016 | 767235 | 10.0 |
| 1,4-Dioxane | 8.068 | 6.1 | ug/L | 471120 | 1 | 7.016 | 767235 | 10.0 |
| Hexanoic acid, ... | 16.254 | 1.5 | ug/L | 128051 | 3 | 15.390 | 866529 | 10.0 |

Mw results on 4/10/08

# LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040113.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.567 | 10 | 13 | 30 | rVB2 | 18673 | 45803 | 4.97% | 0.697% |
| 2 | 1.756 | 36 | 44 | 53 | rVB3 | 16793 | 38340 | 4.16% | 0.583% |
| 3 | 3.446 | 312 | 322 | 337 | rBV | 65016 | 154788 | 16.81% | 2.355% |
| 4 | 4.176 | 427 | 442 | 466 | rBV | 89591 | 274339 | 29.80% | 4.174% |
| 5 | 5.678 | 681 | 689 | 706 | rBV2 | 30682 | 79184 | 8.60% | 1.205% |
| 6 | 5.915 | 719 | 728 | 744 | rVB2 | 38932 | 103240 | 11.21% | 1.571% |
| 7 | 6.171 | 760 | 770 | 782 | rBV | 113694 | 292002 | 31.72% | 4.442% |
| 8 | 6.602 | 830 | 841 | 854 | rBV | 86280 | 219398 | 23.83% | 3.338% |
| 9 | 6.755 | 854 | 866 | 879 | rVB6 | 23825 | 89462 | 9.72% | 1.361% |
| 10 | 7.016 | 898 | 909 | 927 | rBV | 306025 | 767235 | 83.33% | 11.672% |
| 11 | 7.509 | 977 | 990 | 1012 | rBV | 160263 | 407789 | 44.29% | 6.204% |
| 12 | 8.068 | 1063 | 1082 | 1112 | rBV | 138224 | 471120 | 51.17% | 7.167% |
| 13 | 9.248 | 1264 | 1276 | 1287 | rBV | 361945 | 920694 | 100.00% | 14.007% |
| 14 | 11.528 | 1638 | 1651 | 1674 | rBV | 335382 | 853376 | 92.69% | 12.982% |
| 15 | 13.523 | 1968 | 1979 | 1994 | rBV | 264987 | 645977 | 70.16% | 9.827% |
| 16 | 15.305 | 2263 | 2272 | 2278 | rBV2 | 26282 | 52756 | 5.73% | 0.803% |
| 17 | 15.390 | 2278 | 2286 | 2300 | rVB | 409862 | 866529 | 94.12% | 13.183% |
| 18 | 15.828 | 2346 | 2358 | 2363 | rBV2 | 23340 | 56563 | 6.14% | 0.860% |
| 19 | 16.254 | 2419 | 2428 | 2439 | rBV | 70044 | 128051 | 13.91% | 1.948% |
| 20 | 16.886 | 2522 | 2532 | 2540 | rBV | 39583 | 70610 | 7.67% | 1.074% |
| 21 | 18.121 | 2729 | 2735 | 2742 | rVV | 24895 | 36056 | 3.92% | 0.549% |

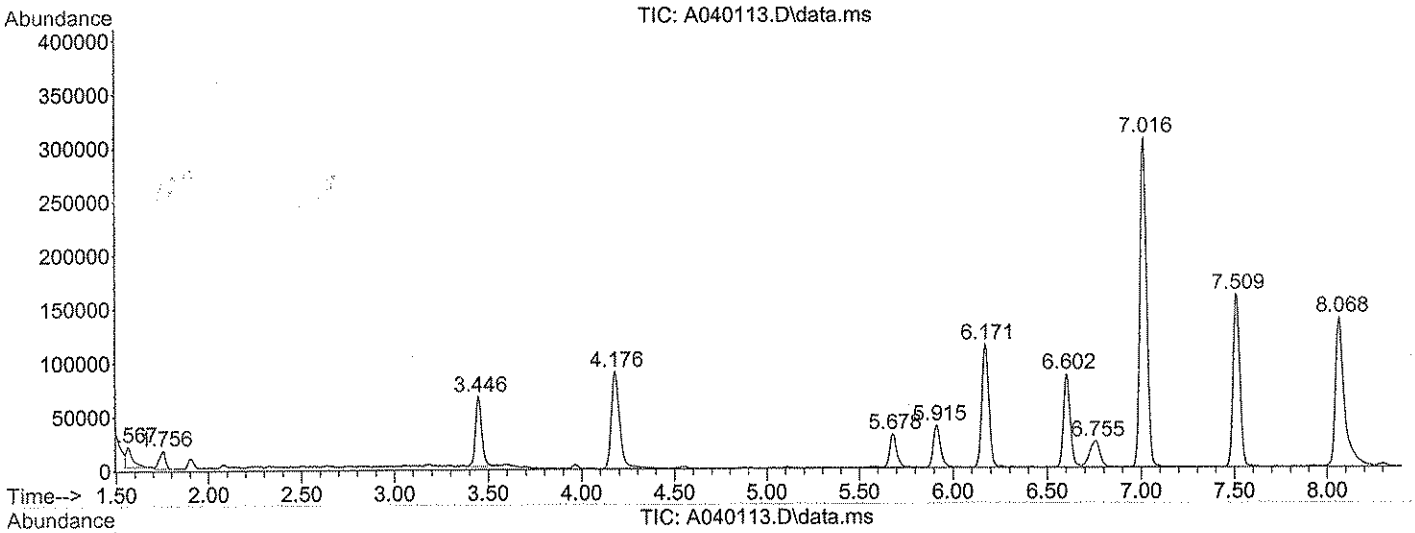
Sum of corrected areas: 6573312

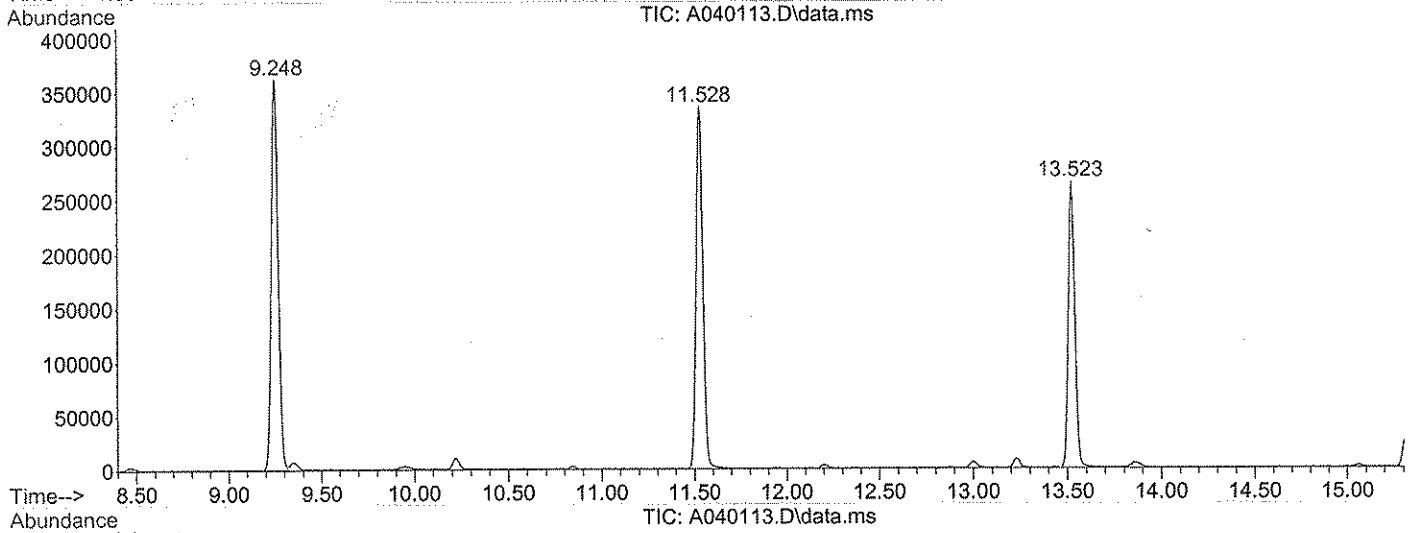
LSC Report - Integrated Chromatogram

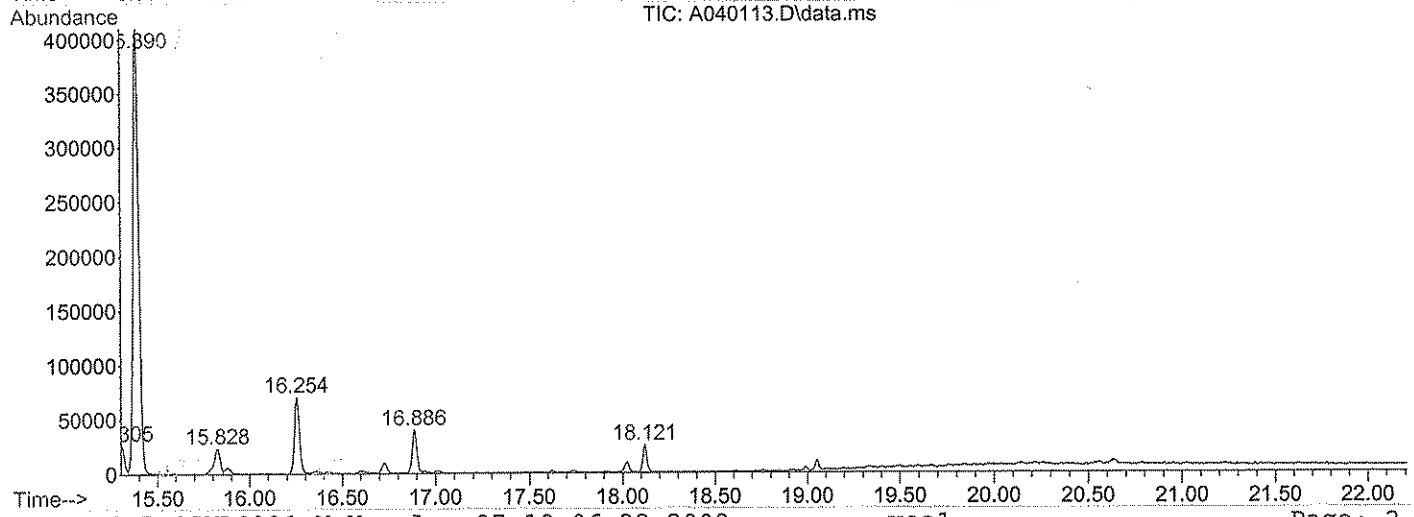
Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040113.D 25ML0331.M Mon Apr 07 18:06:22 2008 voa1 Page: 2

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

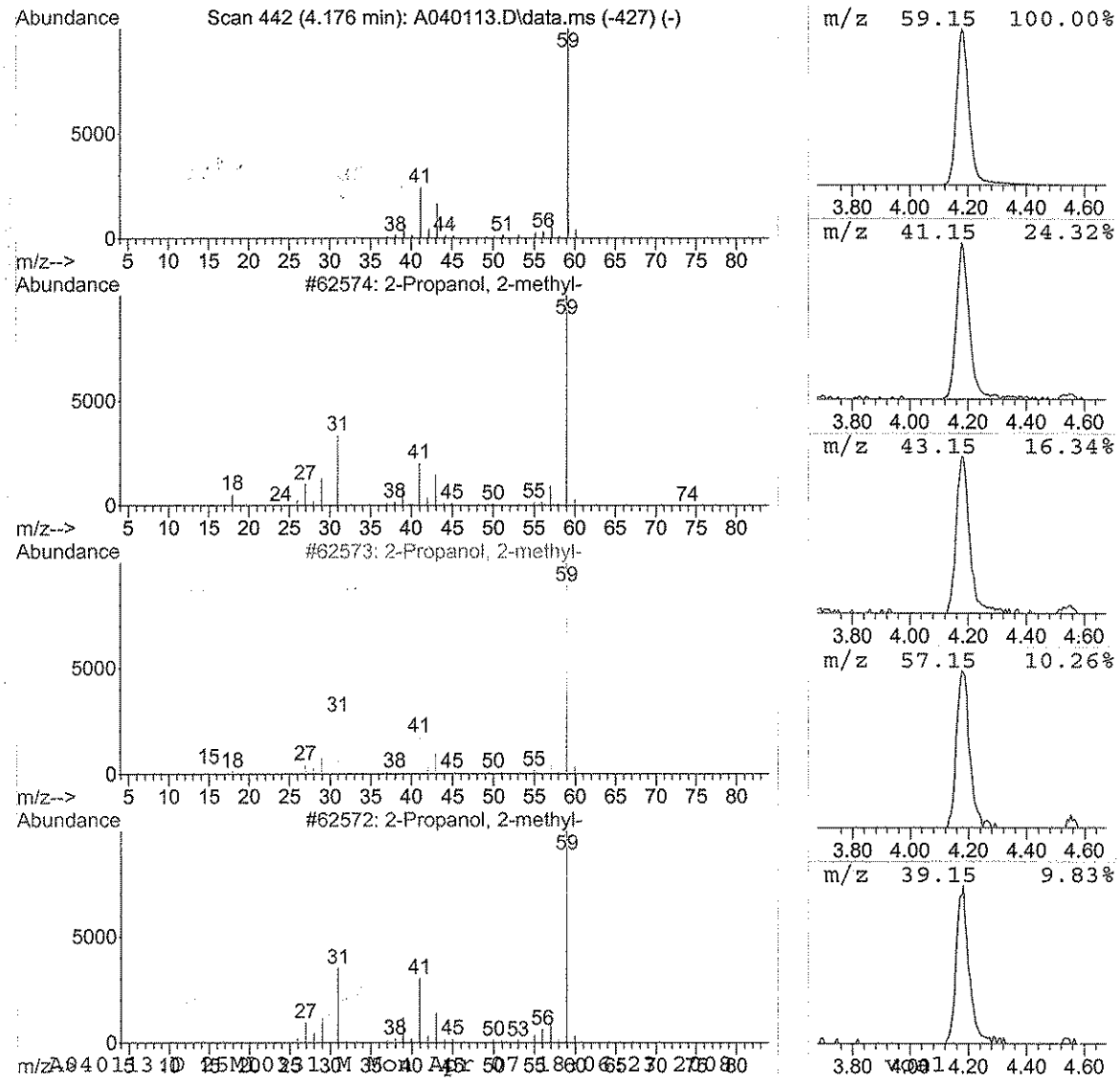
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 2-Propanol, 2-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.176 | 3.58 ug/L | 274339 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 2 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 3 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 72 |
| 4 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 64 |
| 5 | 3-Pentanol | 88 | C5H12O | 000584-02-1 | 64 |



Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

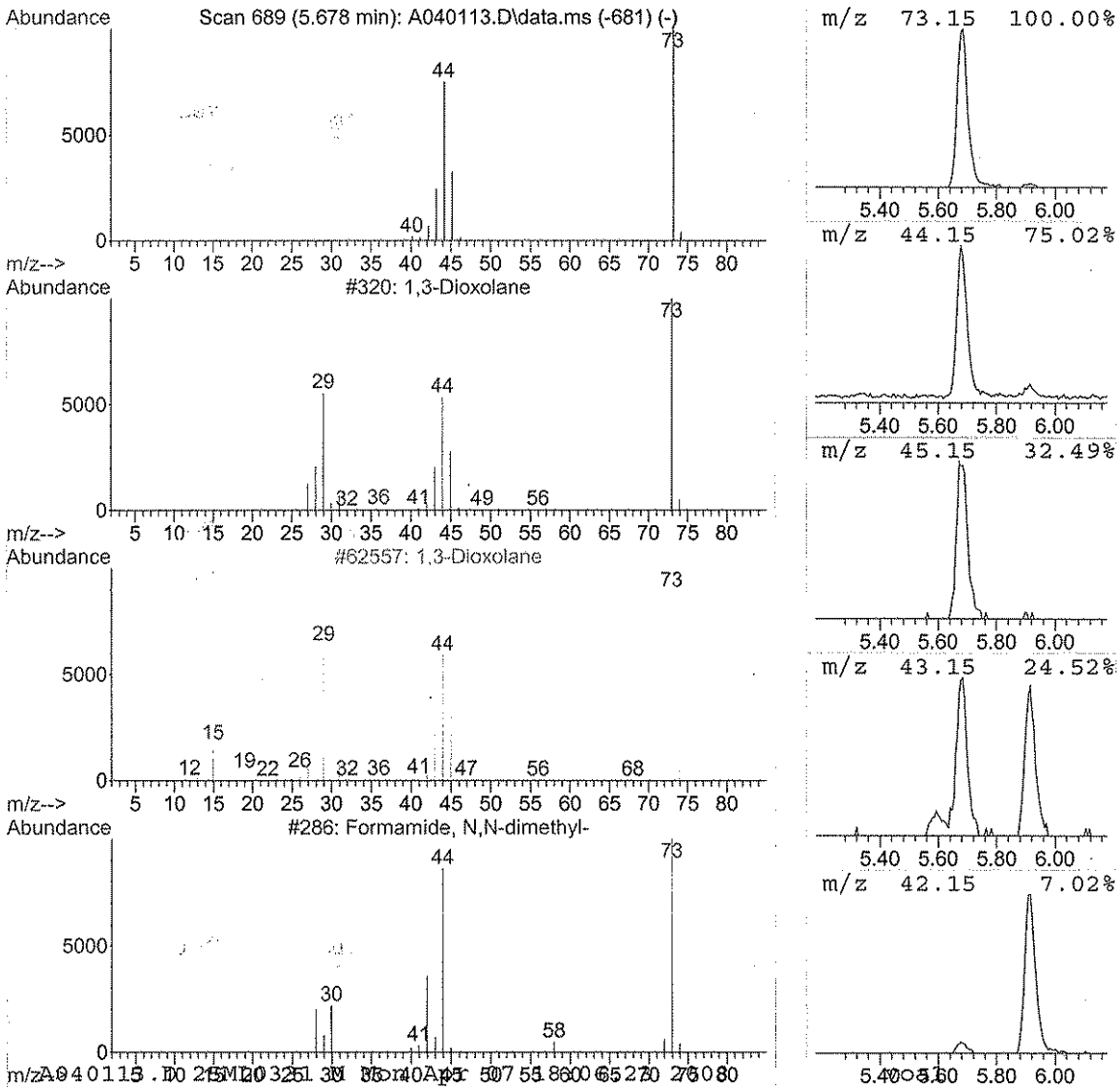
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 2 1,3-Dioxolane Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.678 | 1.03 ug/L | 79184 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 83 |
| 2 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 53 |
| 3 | Formamide, N,N-dimethyl- | 73 | C3H7NO | 000068-12-2 | 9 |
| 4 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 9 |
| 5 | Methanamine, N-methyl- | 45 | C2H7N | 000124-40-3 | 7 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

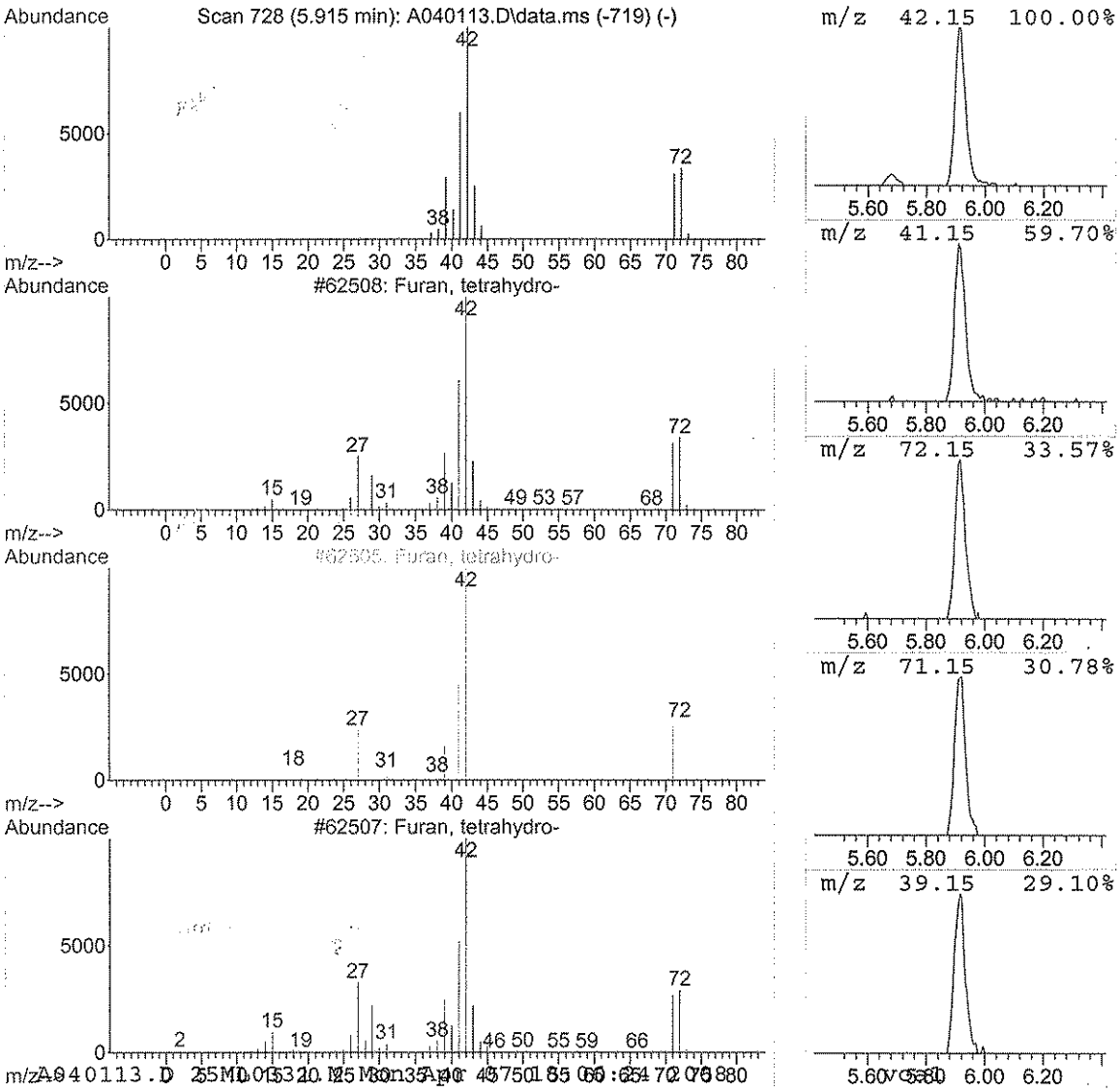
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 3 Furan, tetrahydro- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.915 | 1.35 ug/L | 103240 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 91 |
| 2 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 3 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 4 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 5 | Oxirane, ethyl- | 72 | C4H8O | 000106-88-7 | 83 |



Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

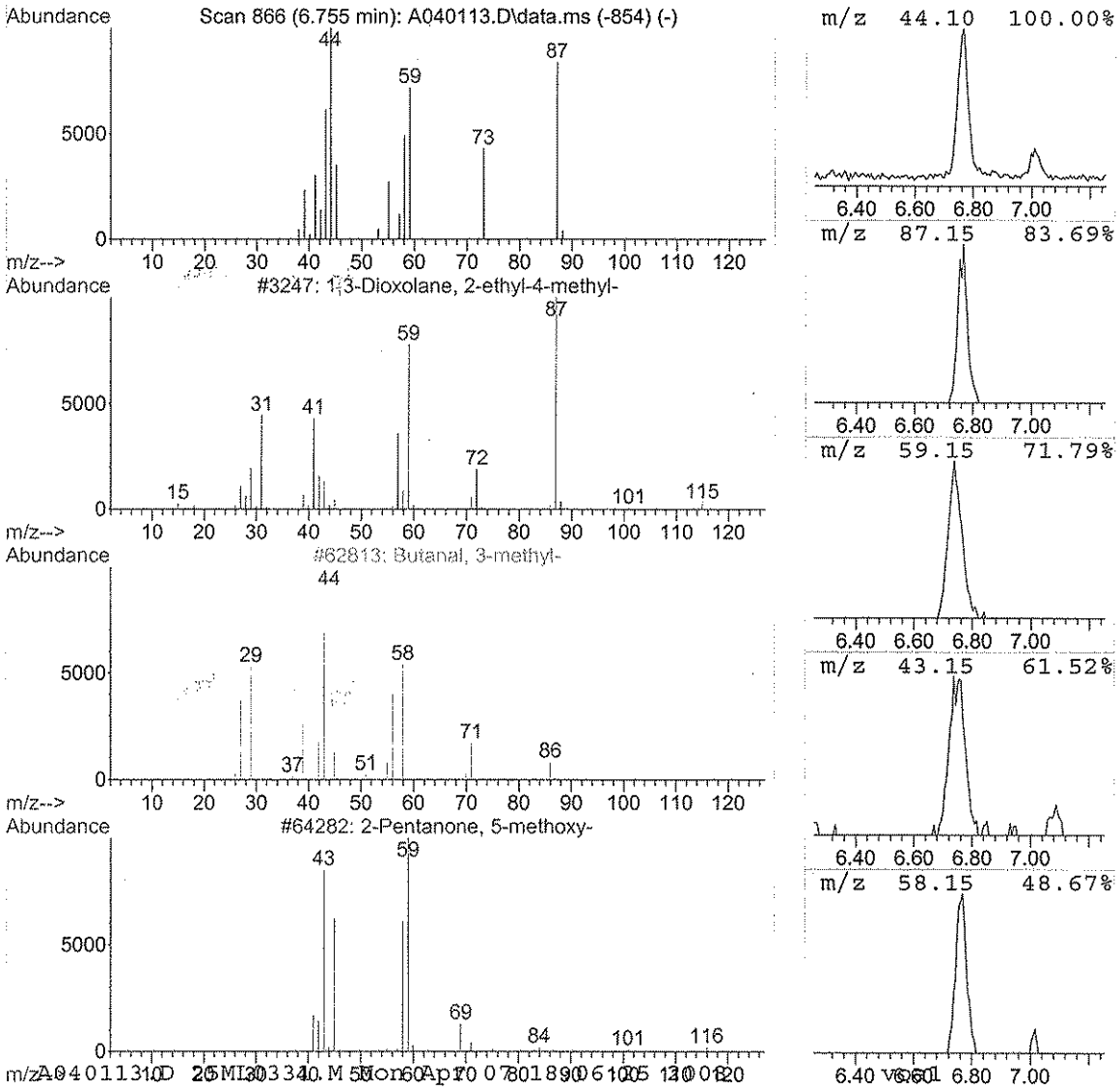
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 4 1,3-Dioxolane, 2-ethyl-4-me... Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.755 | 1.17 ug/L | 89462 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane, 2-ethyl-4-methyl- | 116 | C6H12O2 | 004359-46-0 | 25 |
| 2 | Butanal, 3-methyl- | 86 | C5H10O | 000590-86-3 | 17 |
| 3 | 2-Pentanone, 5-methoxy- | 116 | C6H12O2 | 017429-04-8 | 12 |
| 4 | Methanamine, N-methyl- | 45 | C2H7N | 000124-40-3 | 9 |
| 5 | Guanidine | 59 | CH5N3 | 000113-00-8 | 9 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

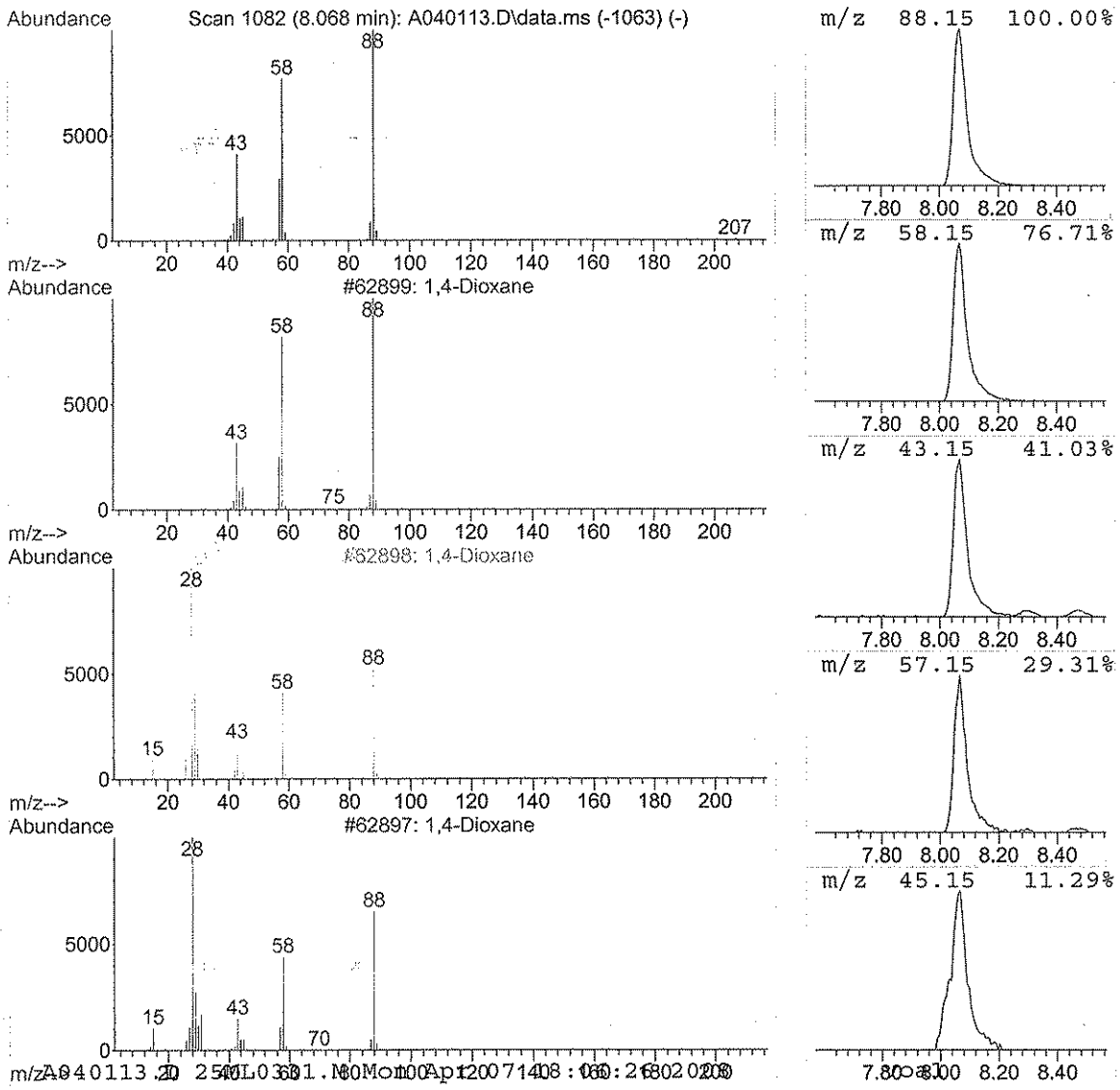
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 5 1,4-Dioxane Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.068 | 6.14 ug/L | 471120 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 5 | 1,3,6-Trioxocane | 118 | C5H10O3 | 001779-19-7 | 39 |



Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

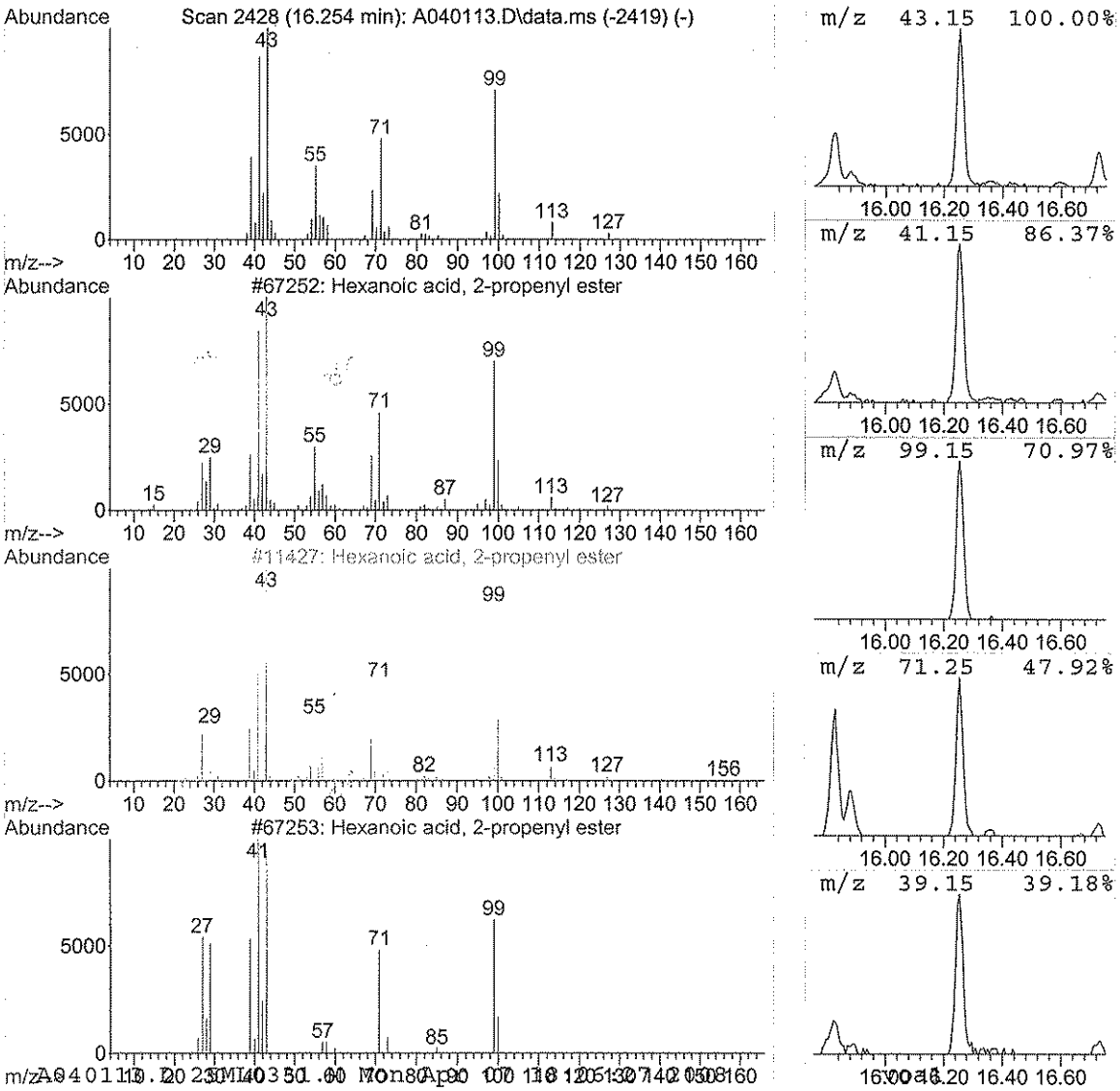
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 6 Hexanoic acid, 2-propenyl e... Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.254 | 1.48 ug/L | 128051 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 58 |
| 2 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 58 |
| 3 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 56 |
| 4 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 50 |
| 5 | 3-Methyl-4-hydroxyoctanoic acid,... | 156 | C9H16O2 | 079081-64-4 | 47 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040121.D
Acq On : 1 Apr 2008 8:27 pm
Sample : ,SAMP,ME0803A55-04A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 02 06:37:38 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 427954 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 321180 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 167922 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.163 | 113 | 105625 | 10.71 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 107.10% | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 96515 | 11.21 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.10% | | |
| 44) toluene-d8 | 9.247 | 98 | 407708 | 10.13 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.30% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 151865 | 10.26 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 102.60% | | |
| Target Compounds | | | | | | Qvalue |
| 6) bromomethane | 2.332 | 94 | 2120 | 0.84 | ug/L # | 70 |
| 9) acrolein | 3.275 | 56 | 996 | 12.36 | ug/L # | 29 |
| 11) acetone | 3.469 | 43 | 5140 | 5.45 | ug/L | 72 |
| 34) trichloroethene | 7.507 | 95 | 104967 | 8.73 | ug/L | 92 |
| 57) methyl methacrylate | 8.061 | 41 | 8866 | 2.24 | ug/L # | 51 |
| 80) 1,2-dibromo-3-chloropr... | 16.885 | 75 | 2327 | 2.66 | ug/L # | 1 |
| 83) naphthalene | 18.259 | 128 | 6432 | 0.39 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 3993 | 0.41 | ug/L | 95 |
| 85) 2-methyl naphthalene | 19.323 | 142 | 9299 | 1.32 | ug/L | 93 |

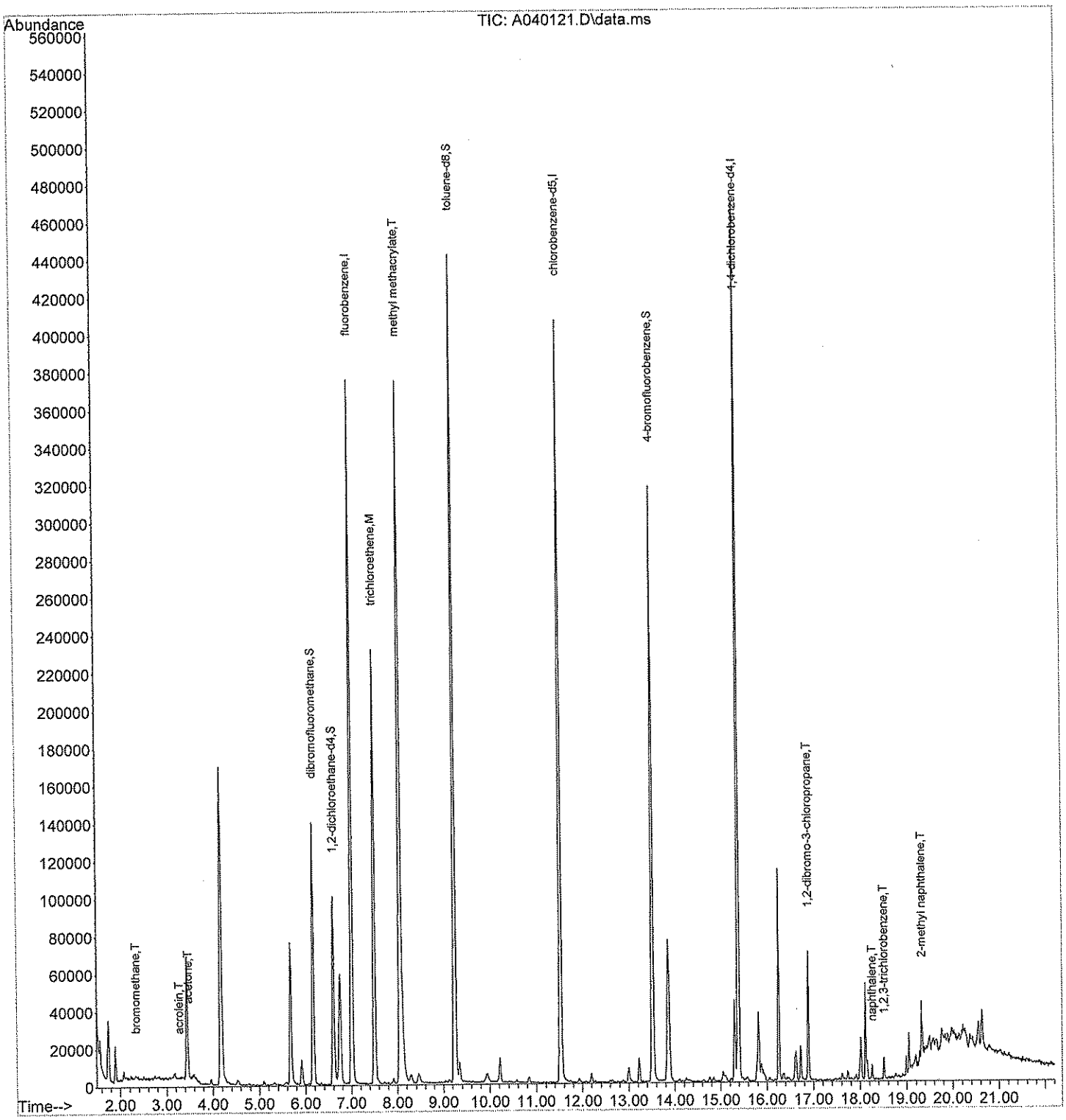
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/2/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040121.D
Acq On : 1 Apr 2008 8:27 pm
Sample : ,SAMP,ME0803A55-04A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 02 06:37:38 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| 2-Propanol, 2-m... | 4.175 | 5.4 | ug/L | 517496 | 1 | 7.009 | 950855 | 10.0 |
| 1,3-Dioxolane | 5.671 | 2.0 | ug/L | 191196 | 1 | 7.009 | 950855 | 10.0 |
| 1,3-Dioxolane, ... | 6.753 | 2.2 | ug/L | 207424 | 1 | 7.009 | 950855 | 10.0 |
| 1,4-Dioxane | 8.061 | 12.8 | ug/L | 1213380 | 1 | 7.009 | 950855 | 10.0 |
| Cyclotetrasilox... | 13.862 | 2.7 | ug/L | 267941 | 3 | 15.389 | 1010020 | 10.0 |
| Hexanoic acid, ... | 16.252 | 2.0 | ug/L | 206662 | 3 | 15.389 | 1010020 | 10.0 |
| Octanoic acid, ... | 16.885 | 1.3 | ug/L | 129910 | 3 | 15.389 | 1010020 | 10.0 |

# LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040121.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.566 | 10 | 13 | 32 | rVB2 | 20432 | 52801 | 4.35% | 0.546% |
| 2 | 1.748 | 35 | 43 | 53 | rVB2 | 32471 | 71876 | 5.92% | 0.743% |
| 3 | 1.894 | 61 | 67 | 75 | rBV3 | 19479 | 38468 | 3.17% | 0.398% |
| 4 | 3.445 | 313 | 322 | 335 | rVB | 65231 | 154608 | 12.74% | 1.598% |
| 5 | 4.175 | 431 | 442 | 463 | rBV | 169357 | 517496 | 42.65% | 5.348% |
| 6 | 5.671 | 679 | 688 | 709 | rVB | 75353 | 191196 | 15.76% | 1.976% |
| 7 | 6.163 | 758 | 769 | 789 | rBV | 139679 | 356556 | 29.39% | 3.685% |
| 8 | 6.601 | 830 | 841 | 853 | rBV | 100022 | 261266 | 21.53% | 2.700% |
| 9 | 6.753 | 853 | 866 | 881 | rVB5 | 58211 | 207424 | 17.09% | 2.144% |
| 10 | 7.009 | 897 | 908 | 924 | rBV | 375097 | 950855 | 78.36% | 9.827% |
| 11 | 7.507 | 979 | 990 | 1009 | rBV | 231251 | 591213 | 48.72% | 6.110% |
| 12 | 8.061 | 1066 | 1081 | 1112 | rBV | 374438 | 1213376 | 100.00% | 12.540% |
| 13 | 9.247 | 1264 | 1276 | 1288 | rBV | 441027 | 1133904 | 93.45% | 11.719% |
| 14 | 11.527 | 1640 | 1651 | 1678 | rBV | 406257 | 1033102 | 85.14% | 10.677% |
| 15 | 13.522 | 1968 | 1979 | 2004 | rBV | 317061 | 772384 | 63.66% | 7.983% |
| 16 | 13.862 | 2022 | 2035 | 2057 | rVB2 | 75782 | 267941 | 22.08% | 2.769% |
| 17 | 15.304 | 2264 | 2272 | 2278 | rBV2 | 43441 | 95164 | 7.84% | 0.984% |
| 18 | 15.389 | 2278 | 2286 | 2299 | rVB | 466633 | 1010017 | 83.24% | 10.439% |
| 19 | 15.821 | 2343 | 2357 | 2364 | rBV2 | 36929 | 97473 | 8.03% | 1.007% |
| 20 | 16.252 | 2418 | 2428 | 2438 | rBV | 113168 | 206662 | 17.03% | 2.136% |
| 21 | 16.623 | 2474 | 2489 | 2499 | rVB2 | 15596 | 45383 | 3.74% | 0.469% |
| 22 | 16.727 | 2499 | 2506 | 2520 | rBV2 | 18319 | 38426 | 3.17% | 0.397% |
| 23 | 16.885 | 2523 | 2532 | 2545 | rVB | 68716 | 129910 | 10.71% | 1.343% |
| 24 | 18.016 | 2709 | 2718 | 2727 | rBV3 | 22529 | 50348 | 4.15% | 0.520% |
| 25 | 18.119 | 2729 | 2735 | 2739 | rBV | 51314 | 79734 | 6.57% | 0.824% |
| 26 | 19.323 | 2929 | 2933 | 2942 | rBV3 | 29802 | 54513 | 4.49% | 0.563% |
| 27 | 20.631 | 3143 | 3148 | 3164 | rVB2 | 20873 | 53644 | 4.42% | 0.554% |

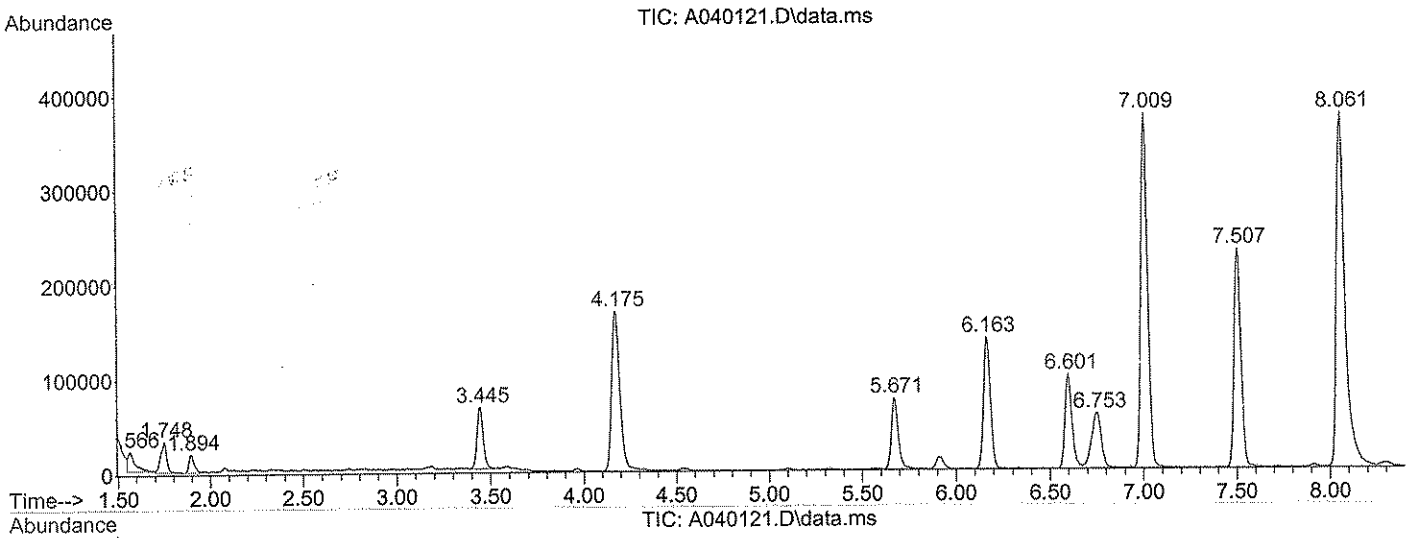
Sum of corrected areas: 9675740

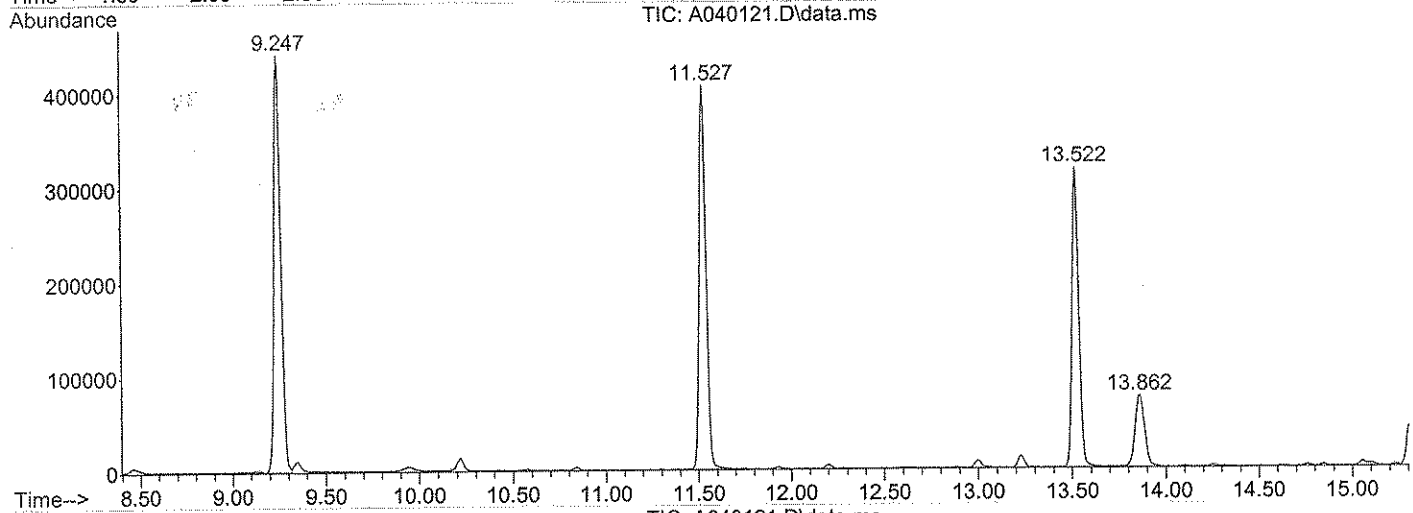
LSC Report - Integrated Chromatogram

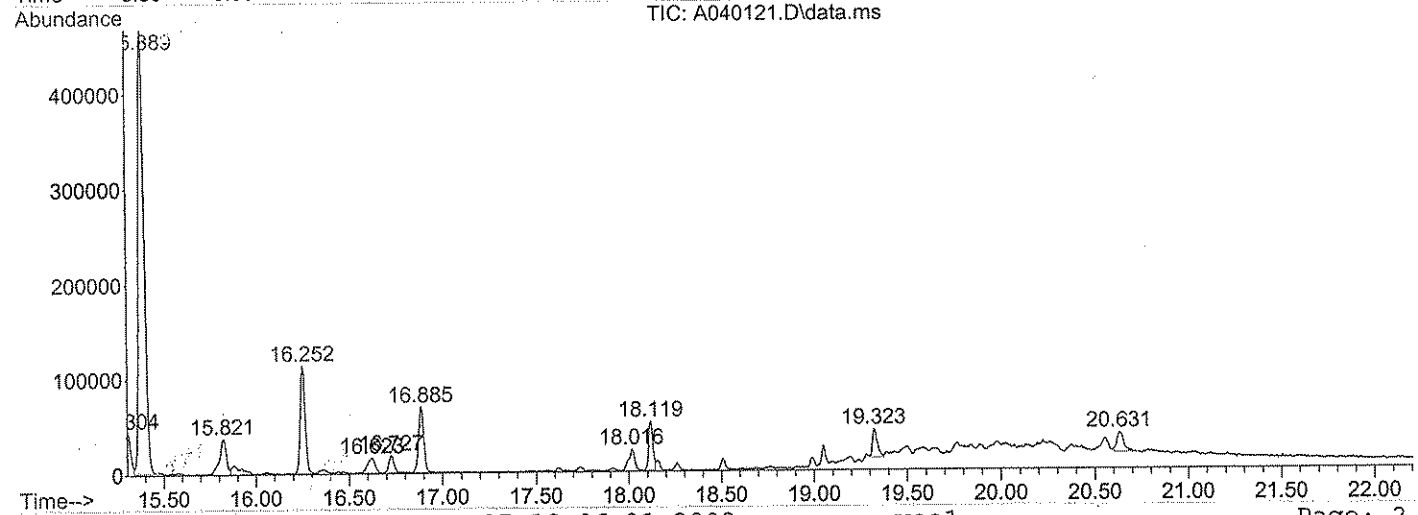
Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040121.D 25ML0331.M Mon Apr 07 18:06:31 2008 voa1 Page: 2

# Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

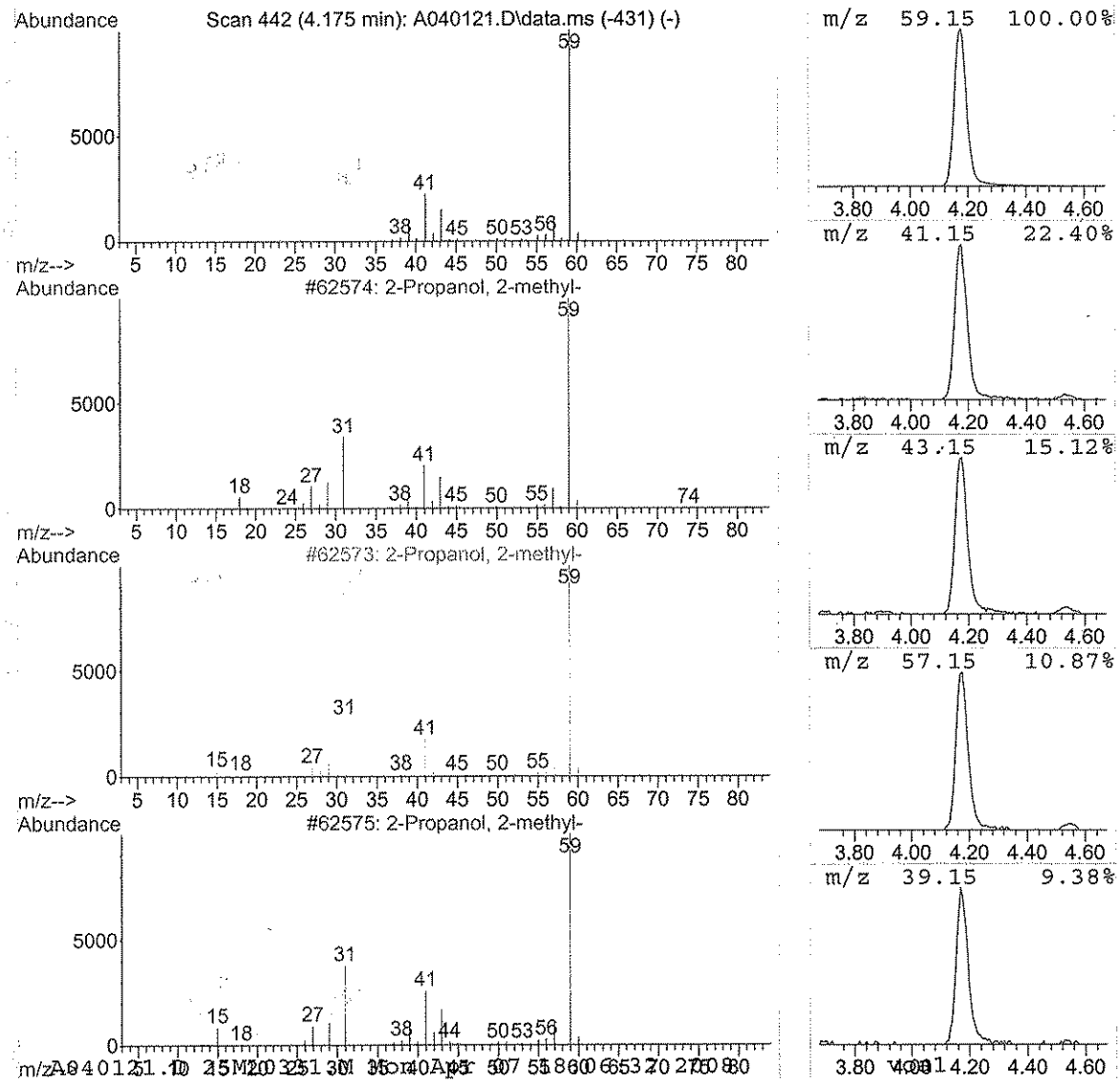
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 2-Propanol, 2-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.175 | 5.44 ug/L | 517496 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 2 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 3 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 4 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 72 |
| 5 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 64 |



Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

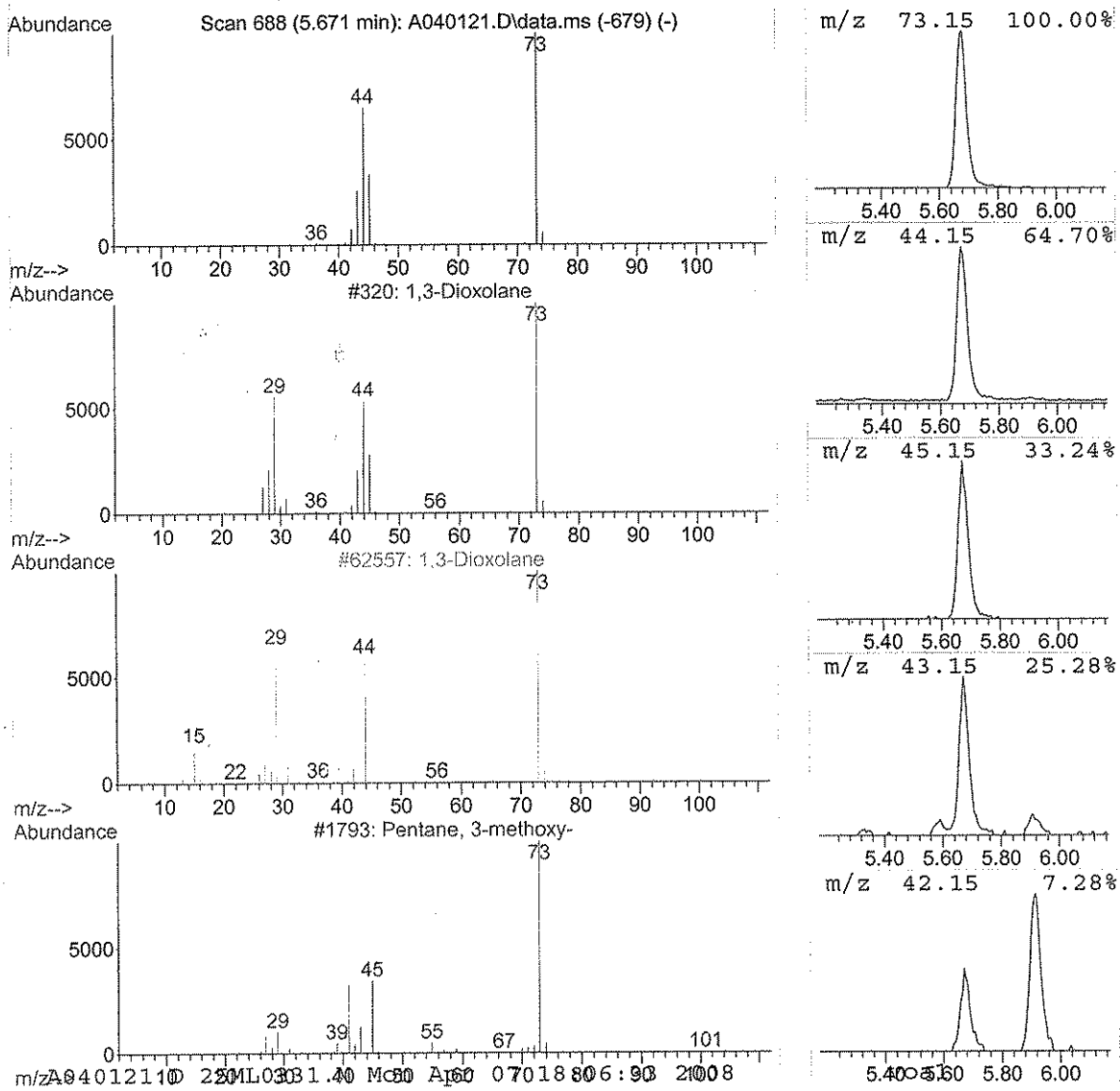
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 2 1,3-Dioxolane Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.671 | 2.01 ug/L | 191196 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 90 |
| 2 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 90 |
| 3 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 9 |
| 4 | Methanamine, N-methyl- | 45 | C2H7N | 000124-40-3 | 7 |
| 5 | Formamide, N,N-dimethyl- | 73 | C3H7NO | 000068-12-2 | 7 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

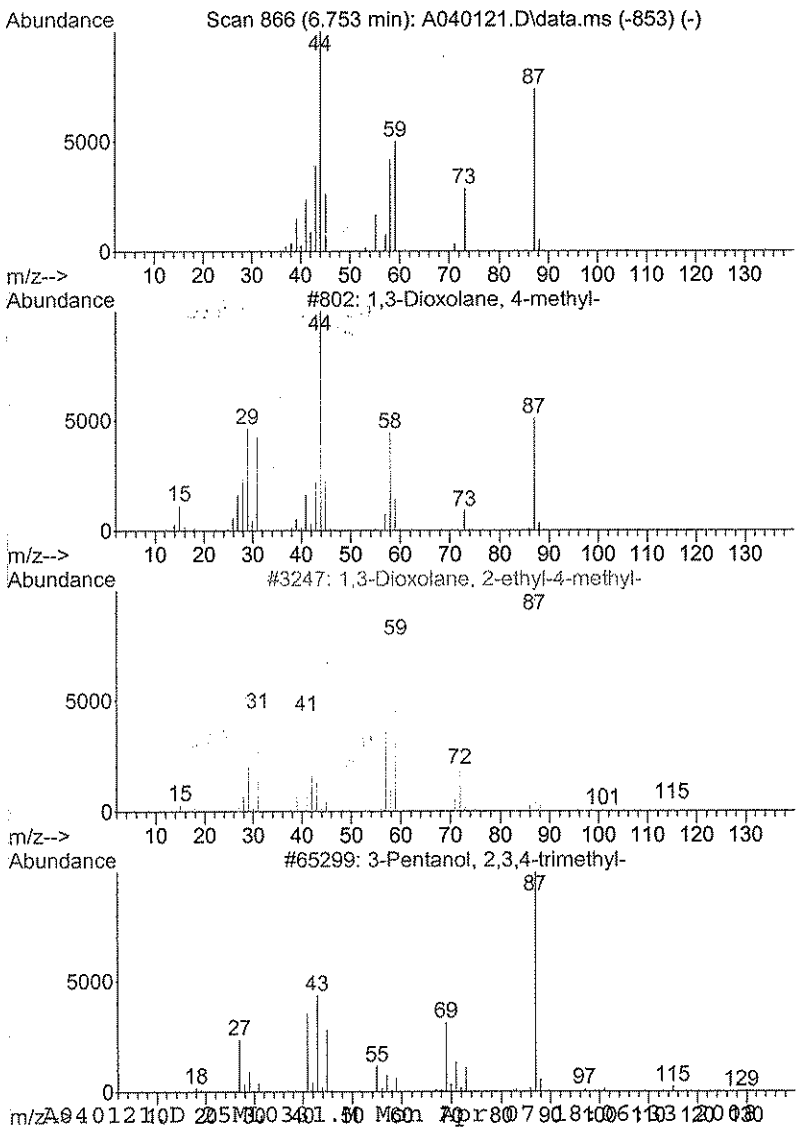
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

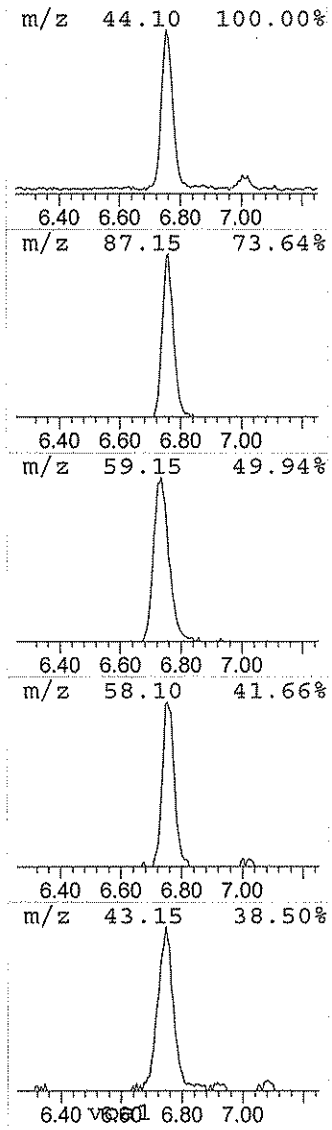
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 3 1,3-Dioxolane, 4-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.753 | 2.18 ug/L | 207424 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane, 4-methyl- | 88 | C4H8O2 | 001072-47-5 | 50 |
| 2 | 1,3-Dioxolane, 2-ethyl-4-methyl- | 116 | C6H12O2 | 004359-46-0 | 17 |
| 3 | 3-Pentanol, 2,3,4-trimethyl- | 130 | C8H18O | 003054-92-0 | 17 |
| 4 | Propanamide, 2-methyl- | 87 | C4H9NO | 000563-83-7 | 9 |
| 5 | Ethanamine, N-methyl- | 59 | C3H9N | 000624-78-2 | 9 |




Page: 5

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

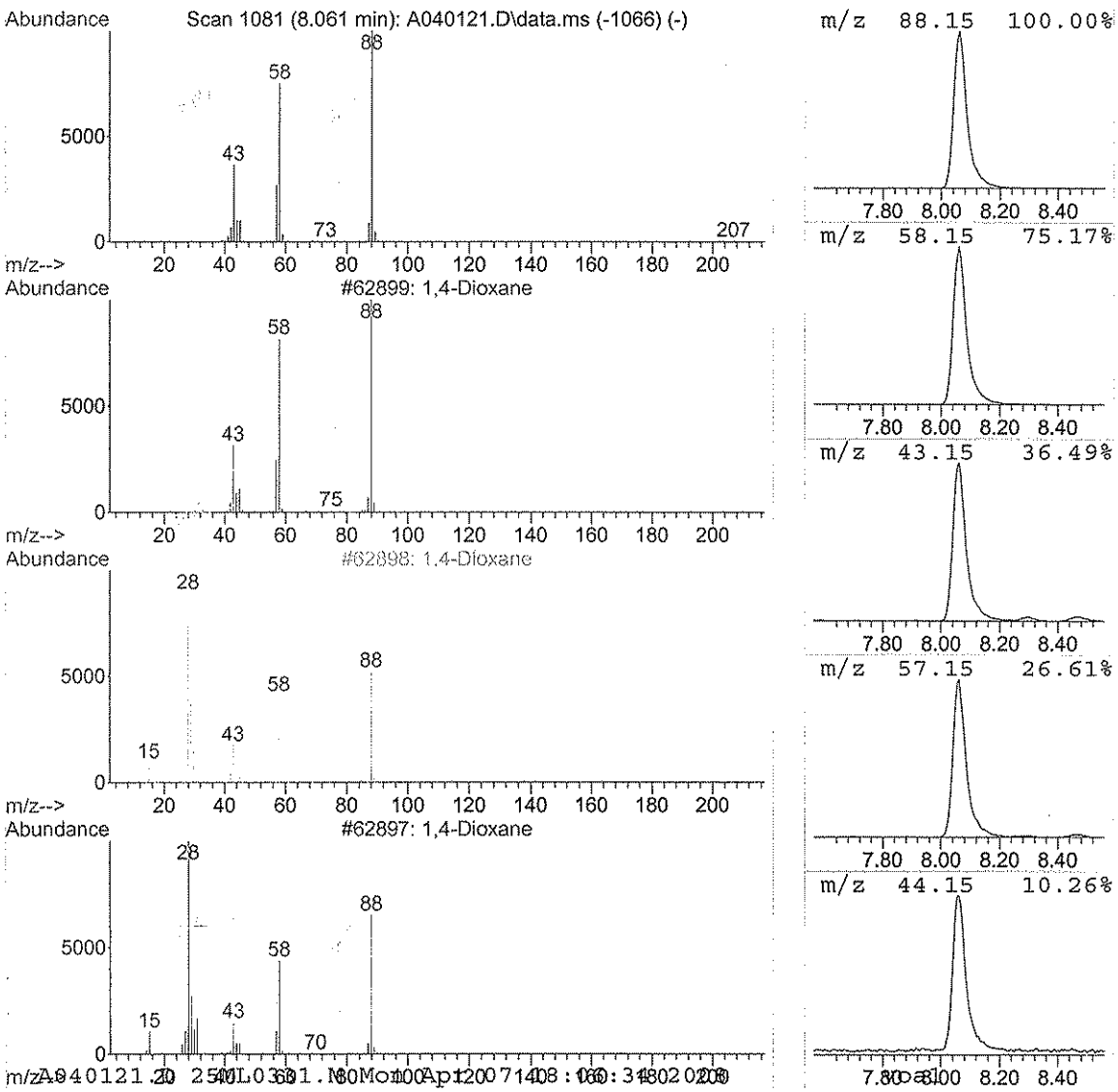
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 4 1,4-Dioxane Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.061 | 12.76 ug/L | 1213380 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 83 |
| 5 | 1-Propanamine, N-ethyl- | 87 | C5H13N | 020193-20-8 | 32 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

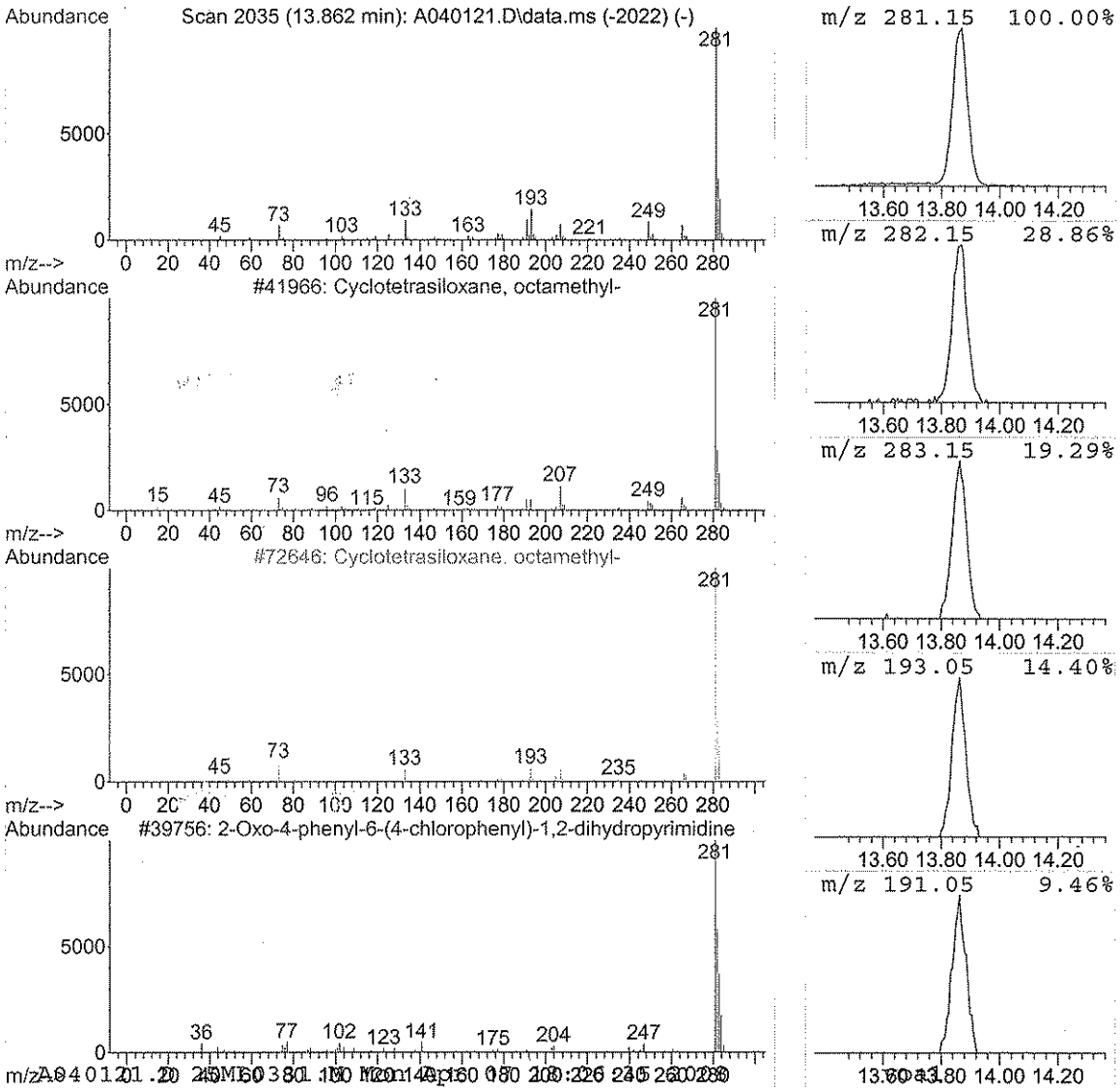
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 5 Cyclotetrasiloxane, octamet... Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.862 | 2.65 ug/L | 267941 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclotetrasiloxane, octamethyl- | 296 | C8H24O4Si4 | 000556-67-2 | 86 |
| 2 | Cyclotetrasiloxane, octamethyl- | 296 | C8H24O4Si4 | 000556-67-2 | 64 |
| 3 | 2-Oxo-4-phenyl-6-(4-chlorophenyl... | 282 | C16H11ClN2O | 000000-00-0 | 9 |
| 4 | Benzene, 1-phenyl-4-(2-cyano-2-p... | 281 | C21H15N | 027869-56-3 | 9 |
| 5 | 6,7-Benzo-phenothiazine-5,5-dioxide | 281 | C16H11NO2S | 000000-00-0 | 5 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

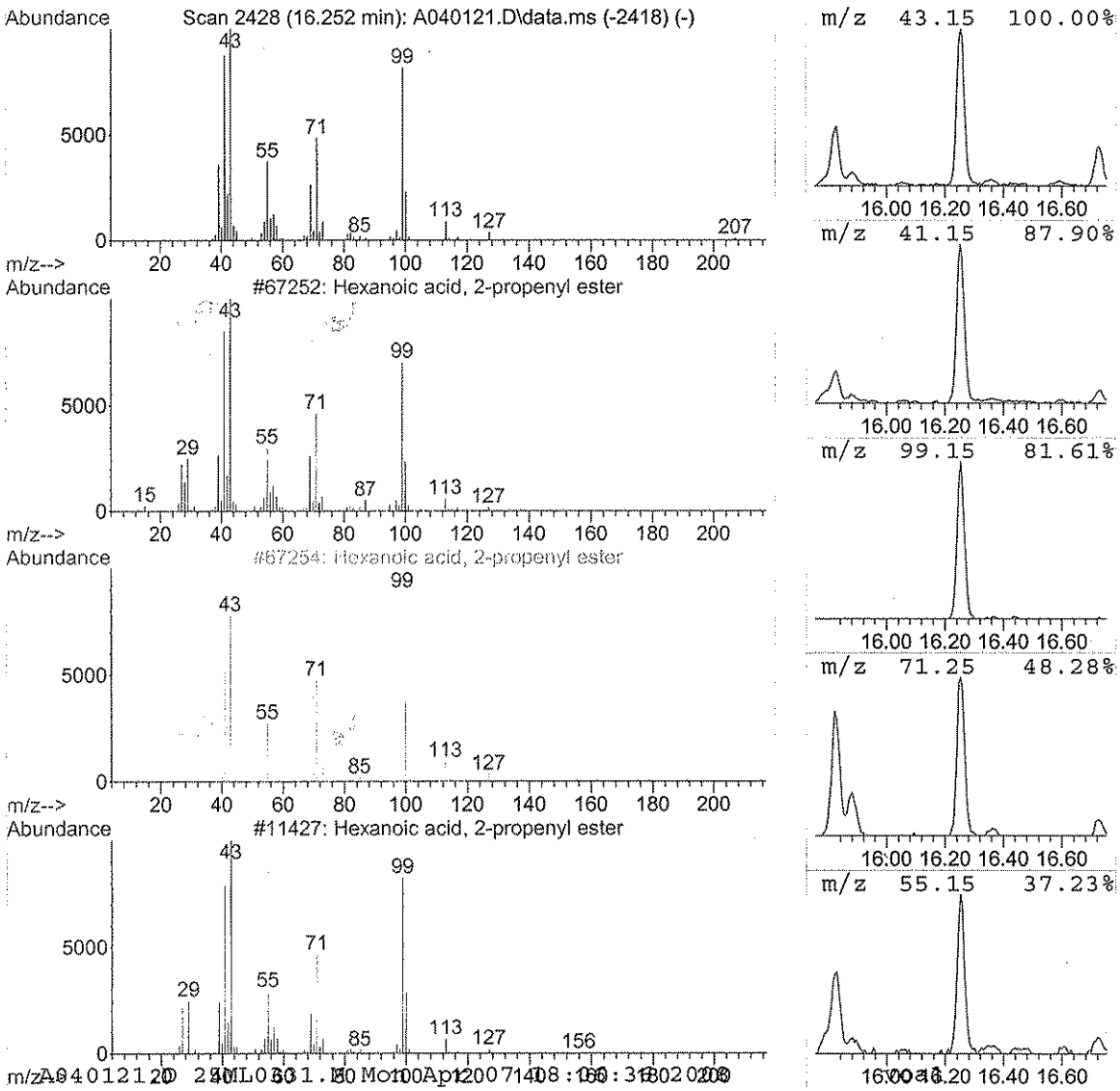
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 6 Hexanoic acid, 2-propenyl e... Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.252 | 2.05 ug/L | 206662 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 90 |
| 2 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 78 |
| 3 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 78 |
| 4 | Phenol-d6- | 100 | C6D6O | 013127-88-3 | 59 |
| 5 | Glycocyanidine | 99 | C3H5N3O | 000503-86-6 | 59 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

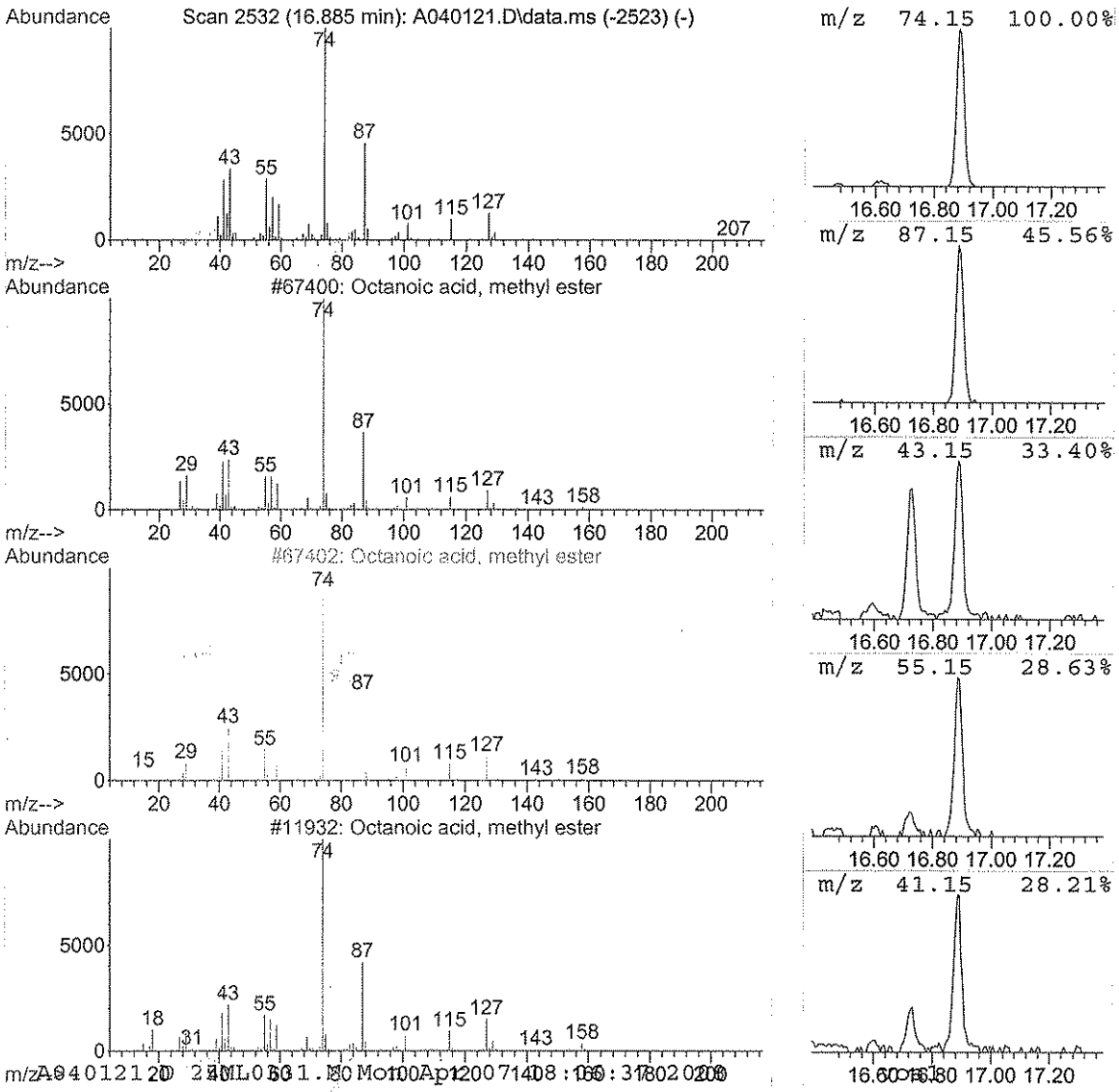
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 7 Octanoic acid, methyl ester Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.885 | 1.29 ug/L | 129910 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 90 |
| 2 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 90 |
| 3 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 90 |
| 4 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 83 |
| 5 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 83 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040122.D
Acq On : 1 Apr 2008 9:02 pm
Sample : ,SAMP,ME0803A55-05A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 02 06:37:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 419164 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 331522 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 174803 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.169 | 113 | 107098 | 11.09 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 110.90% | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 98033 | 11.62 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 116.20% | | |
| 44) toluene-d8 | 9.253 | 98 | 408489 | 9.83 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.30% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 160797 | 10.53 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 105.30% | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.979 | 39 | 216 | 0.02 | ug/L # | 14 |
| 11) acetone | 3.469 | 43 | 2010 | 2.18 | ug/L | 84 |
| 34) trichloroethene | 7.513 | 95 | 3983 | 0.34 | ug/L | 88 |
| 48) tetrachloroethene | 10.177 | 164 | 8370 | 0.83 | ug/L # | 86 |
| 72) sec-butylbenzene | 15.103 | 105 | 11688 | 0.22 | ug/L | 94 |
| 85) 2-methyl naphthalene | 19.317 | 142 | 3645 | 0.50 | ug/L | 95 |

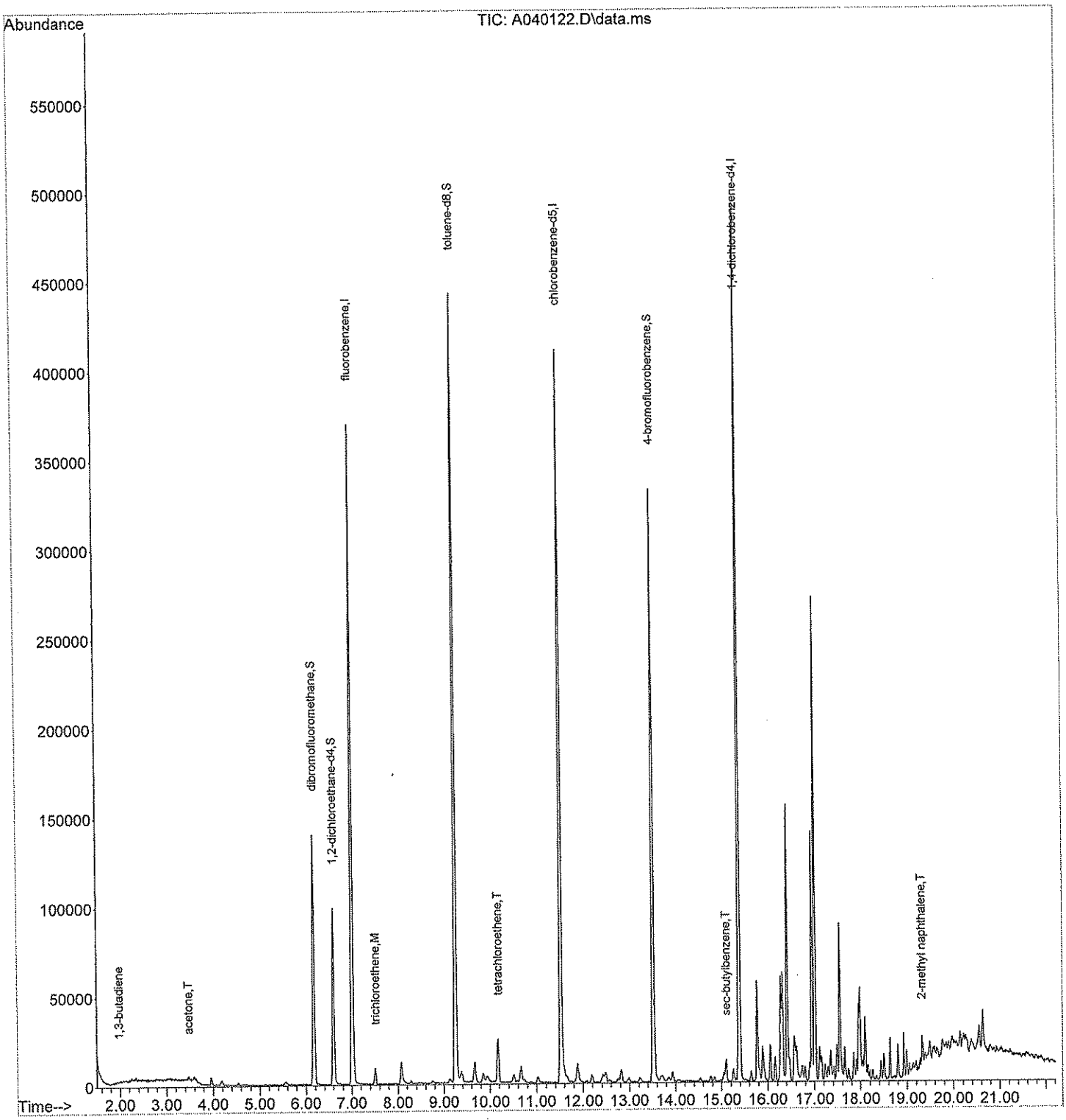
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/2/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040122.D
Acq On : 1 Apr 2008 9:02 pm
Sample : ,SAMP,ME0803A55-05A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 02 06:37:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Benzene, 1,3-di... | 15.772 | 1.2 | ug/L | 128104 | 3 | 15.389 | 1062290 | 10.0 |
| Benzene, 1-meth... | 16.277 | 1.2 | ug/L | 131480 | 3 | 15.389 | 1062290 | 10.0 |
| Benzene, 1-meth... | 16.423 | 3.0 | ug/L | 323367 | 3 | 15.389 | 1062290 | 10.0 |
| Benzene, 1,2,4,... | 16.946 | 2.4 | ug/L | 254157 | 3 | 15.389 | 1062290 | 10.0 |
| Benzene, 1,2,4,... | 17.012 | 4.8 | ug/L | 506736 | 3 | 15.389 | 1062290 | 10.0 |
| Indan, 1-methyl- | 17.548 | 1.7 | ug/L | 183649 | 3 | 15.389 | 1062290 | 10.0 |

4/08/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040122.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.169 | 760 | 770 | 783 | rBV | 139865 | 354404 | 31.23% | 4.439% |
| 2 | 6.601 | 828 | 841 | 857 | rBV | 98852 | 250500 | 22.07% | 3.137% |
| 3 | 7.015 | 894 | 909 | 924 | rBV | 369667 | 935112 | 82.40% | 11.712% |
| 4 | 8.079 | 1076 | 1084 | 1105 | rBV | 12142 | 40865 | 3.60% | 0.512% |
| 5 | 9.253 | 1266 | 1277 | 1289 | rBV | 441596 | 1134822 | 100.00% | 14.213% |
| 6 | 10.177 | 1419 | 1429 | 1437 | rVB4 | 24067 | 62006 | 5.46% | 0.777% |
| 7 | 11.527 | 1639 | 1651 | 1669 | rBV | 410739 | 1074813 | 94.71% | 13.462% |
| 8 | 13.522 | 1969 | 1979 | 1998 | rBV | 331791 | 819822 | 72.24% | 10.268% |
| 9 | 15.389 | 2273 | 2286 | 2298 | rVV | 491635 | 1062285 | 93.61% | 13.305% |
| 10 | 15.772 | 2340 | 2349 | 2362 | rBV | 56313 | 128104 | 11.29% | 1.604% |
| 11 | 15.887 | 2362 | 2368 | 2387 | rVB4 | 19380 | 52047 | 4.59% | 0.652% |
| 12 | 16.052 | 2387 | 2395 | 2403 | rBV2 | 20229 | 40234 | 3.55% | 0.504% |
| 13 | 16.277 | 2423 | 2432 | 2436 | rBV | 58644 | 131480 | 11.59% | 1.647% |
| 14 | 16.319 | 2436 | 2439 | 2448 | rVB | 58320 | 98287 | 8.66% | 1.231% |
| 15 | 16.423 | 2449 | 2456 | 2471 | rVB | 154769 | 323367 | 28.49% | 4.050% |
| 16 | 16.569 | 2471 | 2480 | 2483 | rBV2 | 24793 | 54731 | 4.82% | 0.685% |
| 17 | 16.946 | 2536 | 2542 | 2547 | rVV | 137926 | 254157 | 22.40% | 3.183% |
| 18 | 17.012 | 2547 | 2553 | 2563 | rVB | 270644 | 506736 | 44.65% | 6.347% |
| 19 | 17.110 | 2563 | 2569 | 2573 | rBV3 | 18284 | 38570 | 3.40% | 0.483% |
| 20 | 17.487 | 2624 | 2631 | 2635 | rBV3 | 19074 | 39438 | 3.48% | 0.494% |
| 21 | 17.548 | 2635 | 2641 | 2652 | rVV | 87238 | 183649 | 16.18% | 2.300% |
| 22 | 17.967 | 2704 | 2710 | 2711 | rBV3 | 37819 | 58952 | 5.19% | 0.738% |
| 23 | 17.992 | 2712 | 2714 | 2720 | rVB2 | 45004 | 63815 | 5.62% | 0.799% |
| 24 | 18.101 | 2726 | 2732 | 2738 | rVB4 | 31395 | 63230 | 5.57% | 0.792% |
| 25 | 18.630 | 2808 | 2819 | 2825 | rBV2 | 23049 | 37259 | 3.28% | 0.467% |
| 26 | 18.800 | 2838 | 2847 | 2858 | rBV | 18948 | 36154 | 3.19% | 0.453% |
| 27 | 18.928 | 2860 | 2868 | 2874 | rBV | 25100 | 38241 | 3.37% | 0.479% |
| 28 | 19.323 | 2929 | 2933 | 2940 | rBV5 | 16635 | 36896 | 3.25% | 0.462% |
| 29 | 20.637 | 3143 | 3149 | 3165 | rVB3 | 23411 | 64264 | 5.66% | 0.805% |

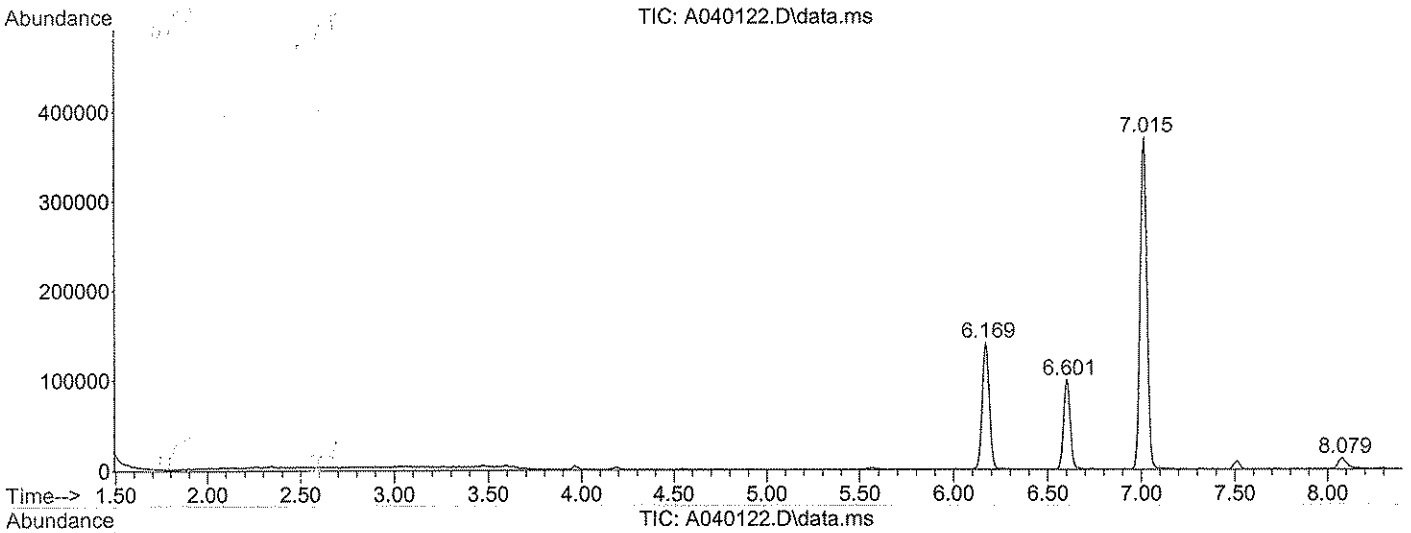
Sum of corrected areas: 7984240

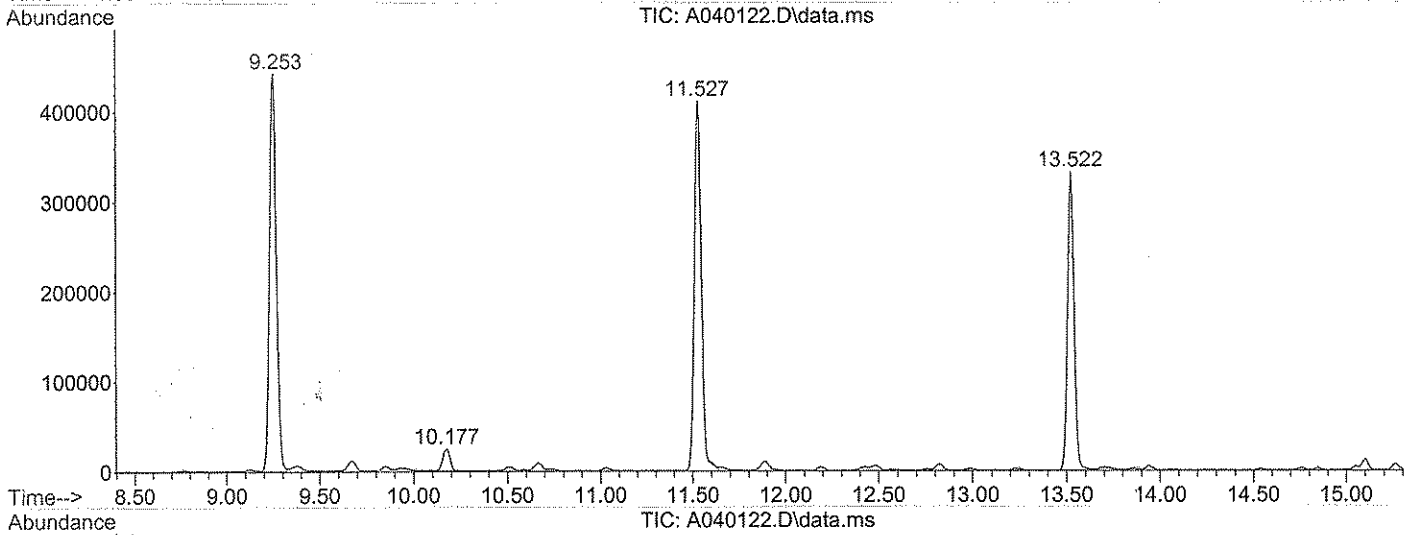
LSC Report - Integrated Chromatogram

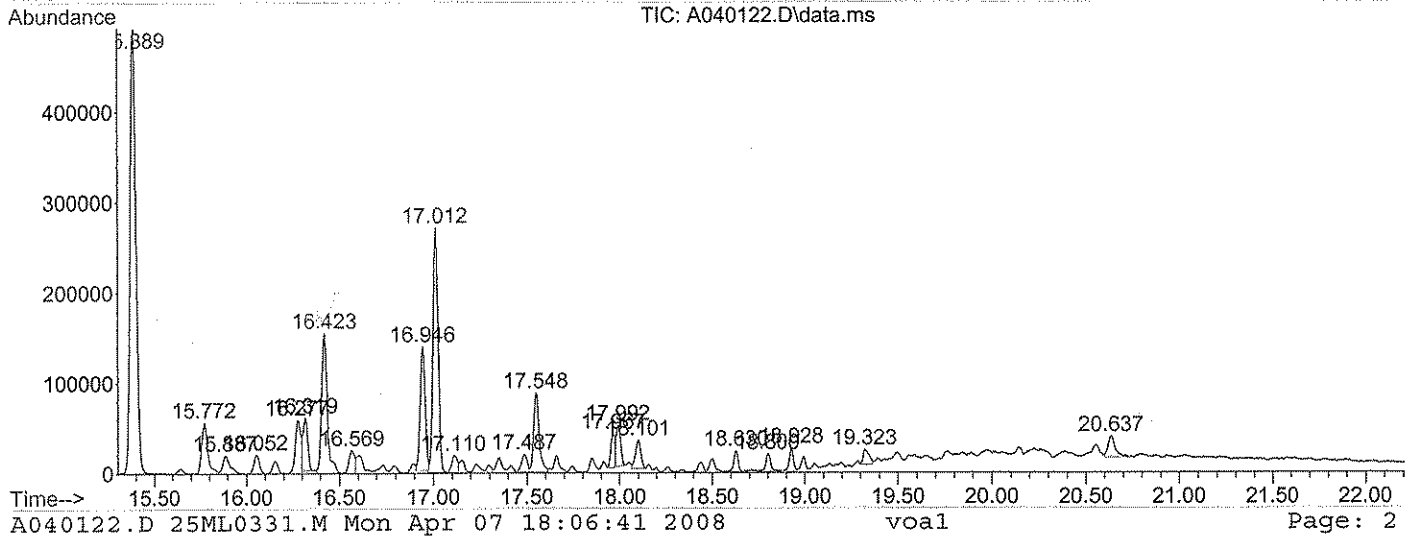
```
Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040122.D
Acq On    :  1 Apr 2008    9:02 pm
Operator  : BR
Sample    : ,SAMP,ME0803A55-05A,1,
Misc      : 8260+_w25
ALS Vial  : 22   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title  : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```



# Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

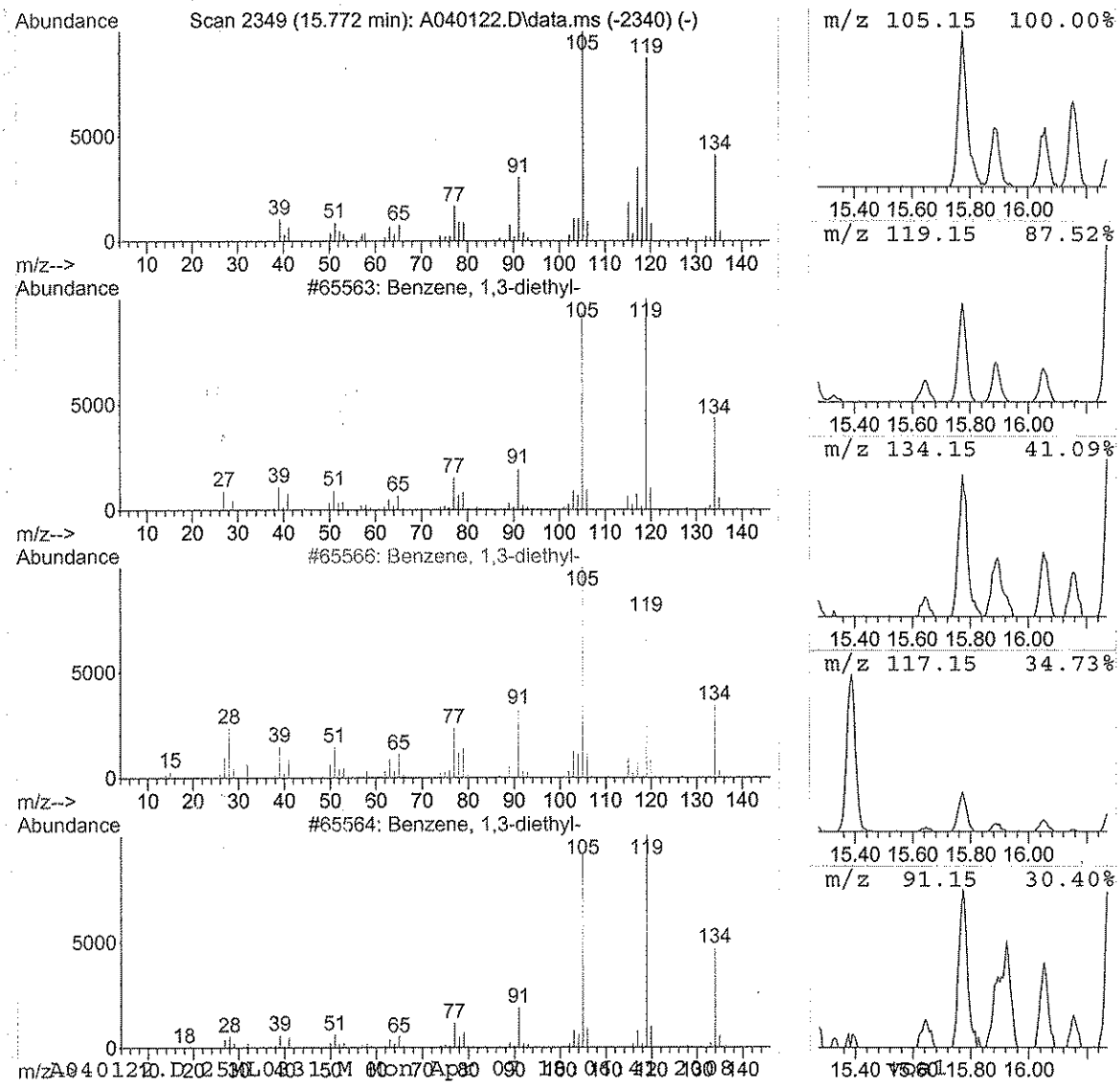
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 Benzene, 1,3-diethyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.772 | 1.21 ug/L | 128104 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 93 |
| 2 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 91 |
| 3 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 90 |
| 4 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 90 |
| 5 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 87 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

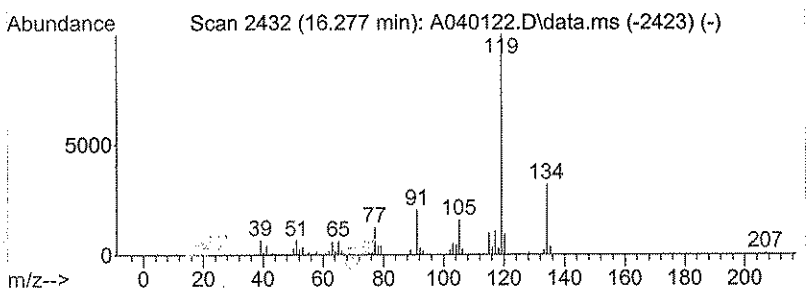
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

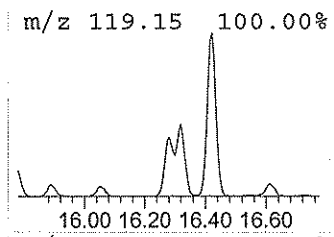
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

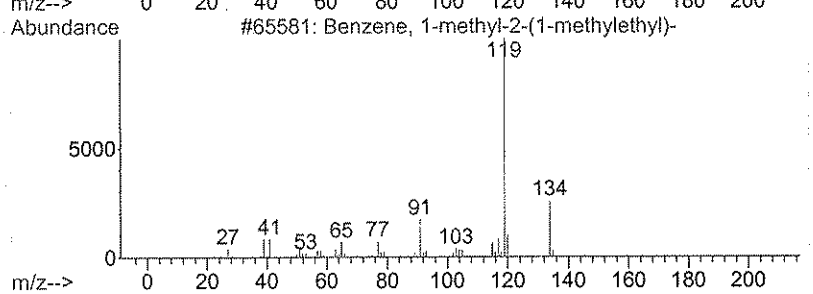
**********
Peak Number 2 Benzene, 1-methyl-2-(1-meth... Concentration Rank 5

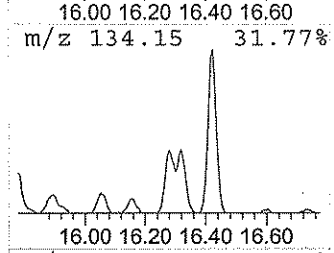
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.277 | 1.24 ug/L | 131480 | 1,4-dichlorobenzene-d4 | 15.389 |

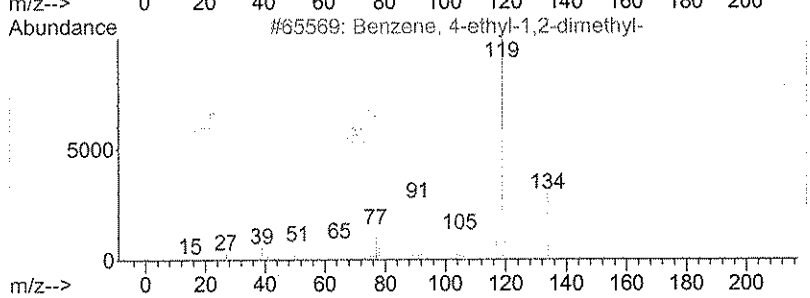
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 95 |
| 2 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 95 |
| 3 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 95 |
| 4 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 94 |
| 5 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 94 |

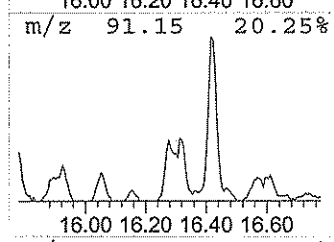


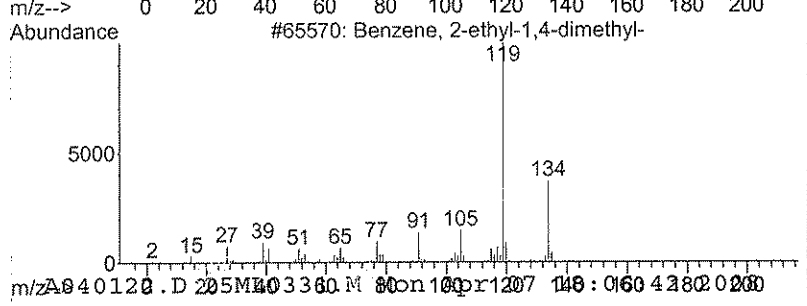



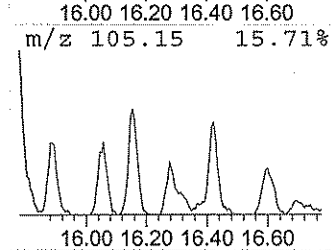



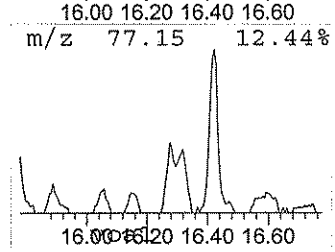



Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

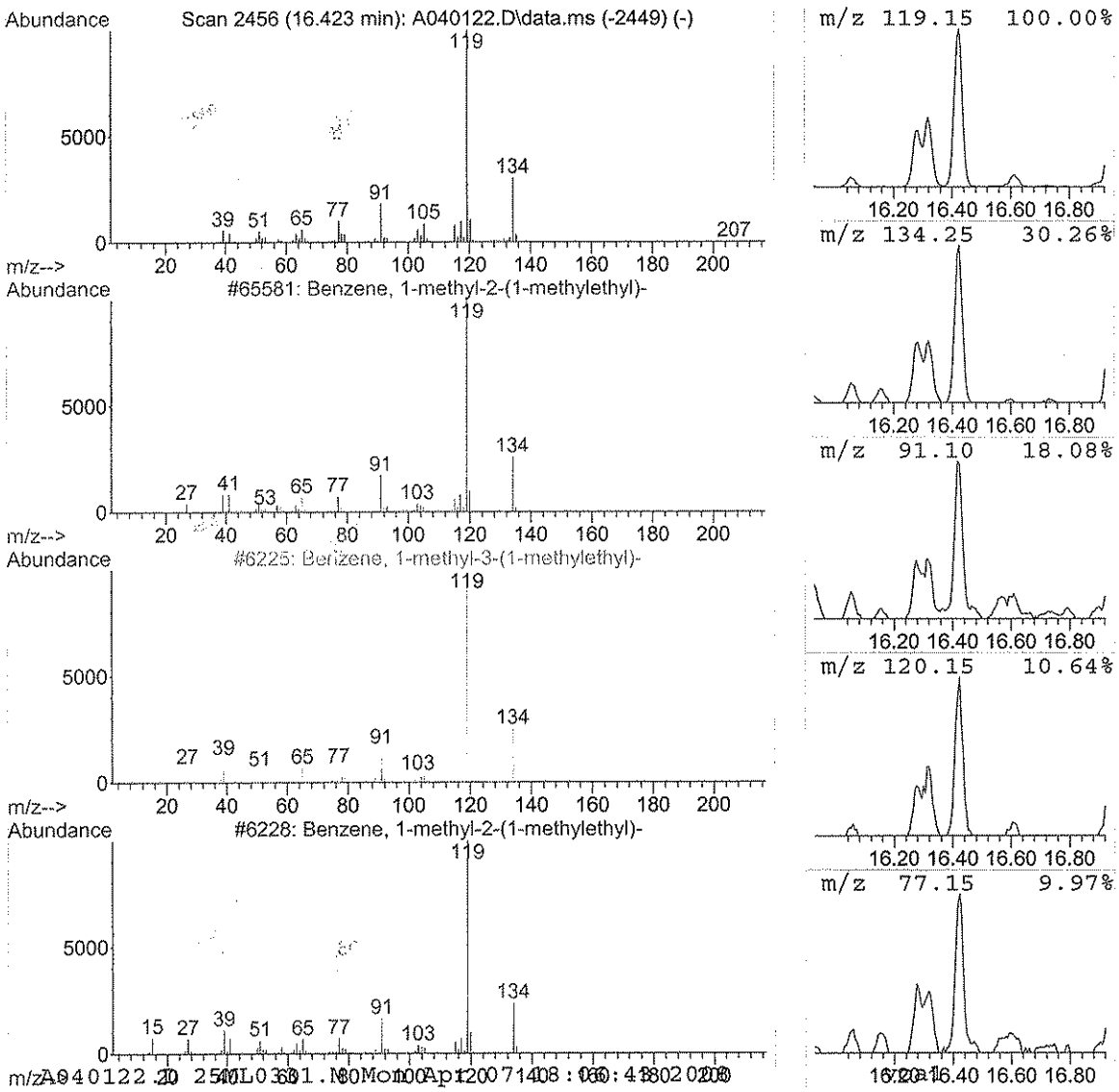
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 3 Benzene, 1-methyl-2-(1-meth... Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.423 | 3.04 ug/L | 323367 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 97 |
| 2 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 97 |
| 3 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 97 |
| 4 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 97 |
| 5 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 97 |



# Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

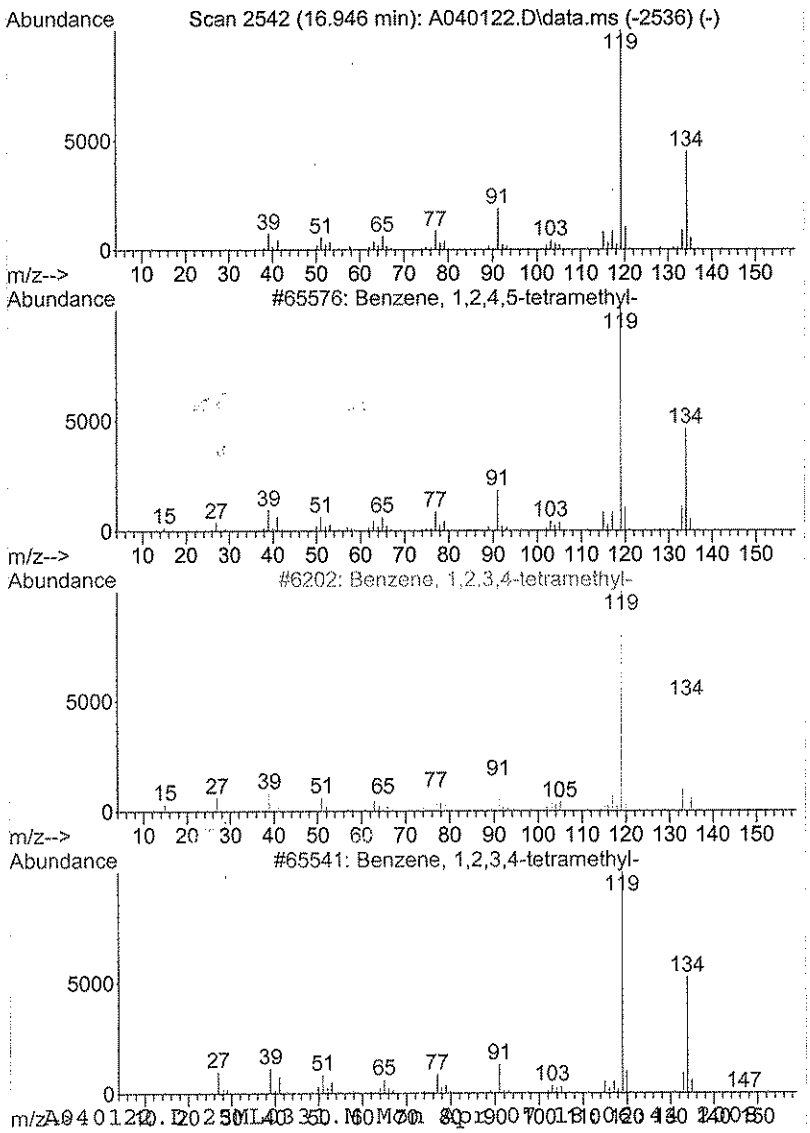
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

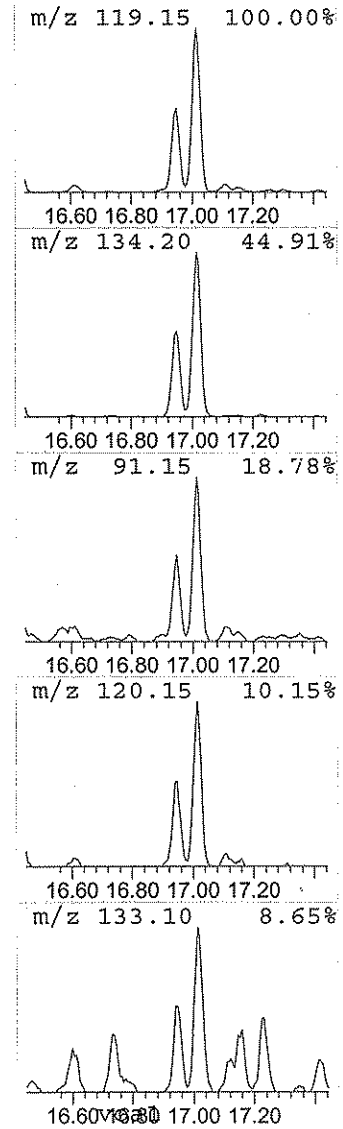
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 4 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.946 | 2.39 ug/L | 254157 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 95 |
| 2 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 94 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 94 |
| 4 | Benzene, 2-ethyl-1,3-dimethyl- | 134 | C10H14 | 002870-04-4 | 94 |
| 5 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 91 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

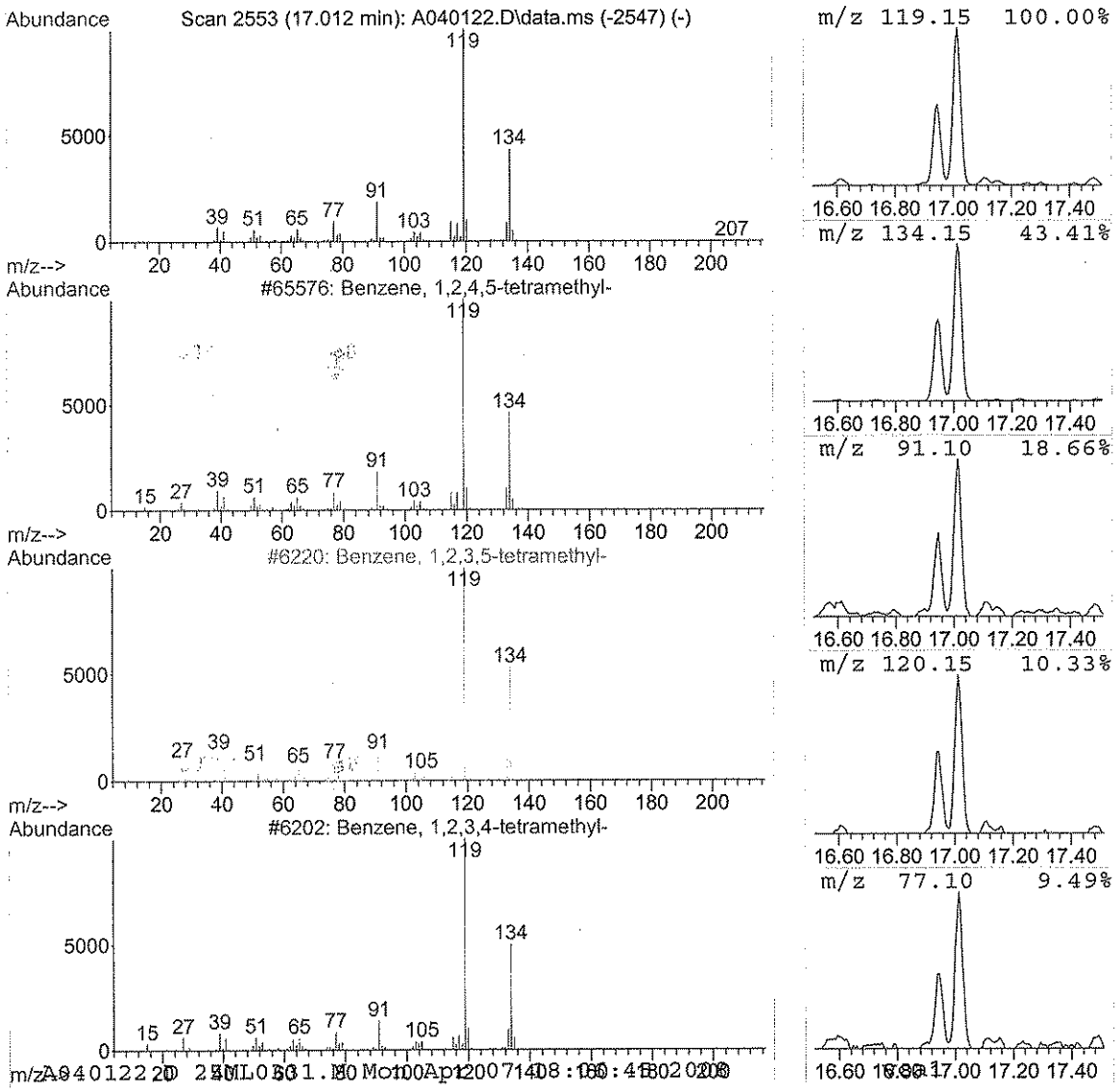
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 5 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.012 | 4.77 ug/L | 506736 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 97 |
| 2 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 96 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 4 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 94 |
| 5 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 94 |



Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

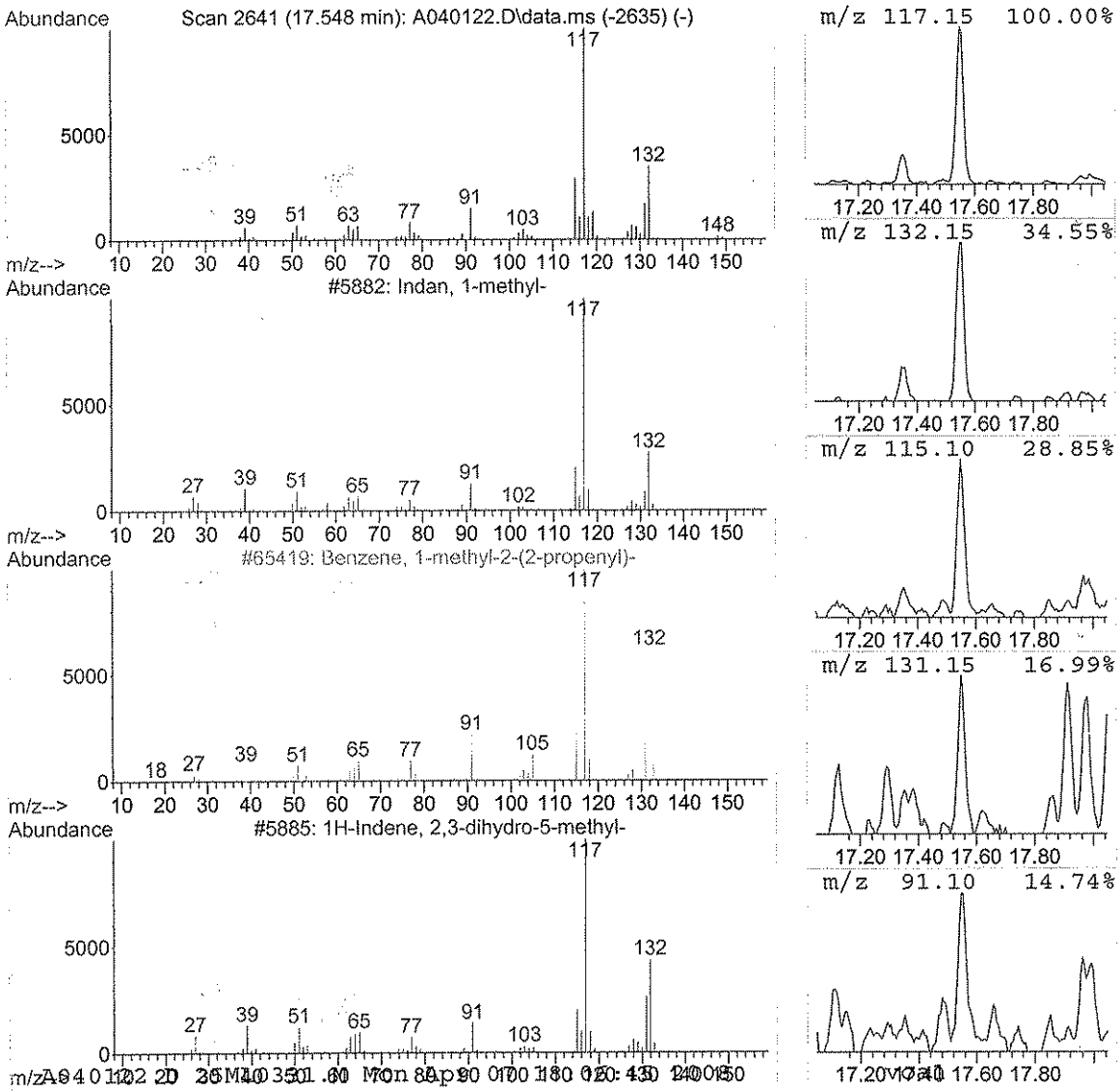
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 6 Indan, 1-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.548 | 1.73 ug/L | 183649 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 90 |
| 2 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 86 |
| 3 | 1H-Indene, 2,3-dihydro-5-methyl- | 132 | C10H12 | 000874-35-1 | 83 |
| 4 | 2,3-Dihydro-1-methylindene | 132 | C10H12 | 027133-93-3 | 81 |
| 5 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 78 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040123.D
Acq On : 1 Apr 2008 9:40 pm
Sample : ,SAMP,ME0803A55-06A,1,
Misc : 8260+_w25
Operator : BR
ALS Vial : 23 Sample Multiplier: 1

Inst : VOA1

Quant Time: Apr 02 06:37:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 435876 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 338702 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 172373 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 107308 | 10.68 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.80% | | |
| 30) 1,2-dichloroethane-d4 | 6.605 | 65 | 98835 | 11.27 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.70% | | |
| 44) toluene-d8 | 9.250 | 98 | 413650 | 9.74 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.40% | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 159553 | 10.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 102.20% | | |
| Target Compounds | | | | | | Qvalue |
| 6) 1,3-butadiene | 1.977 | 39 | 196 | 0.02 | ug/L # | 14 |

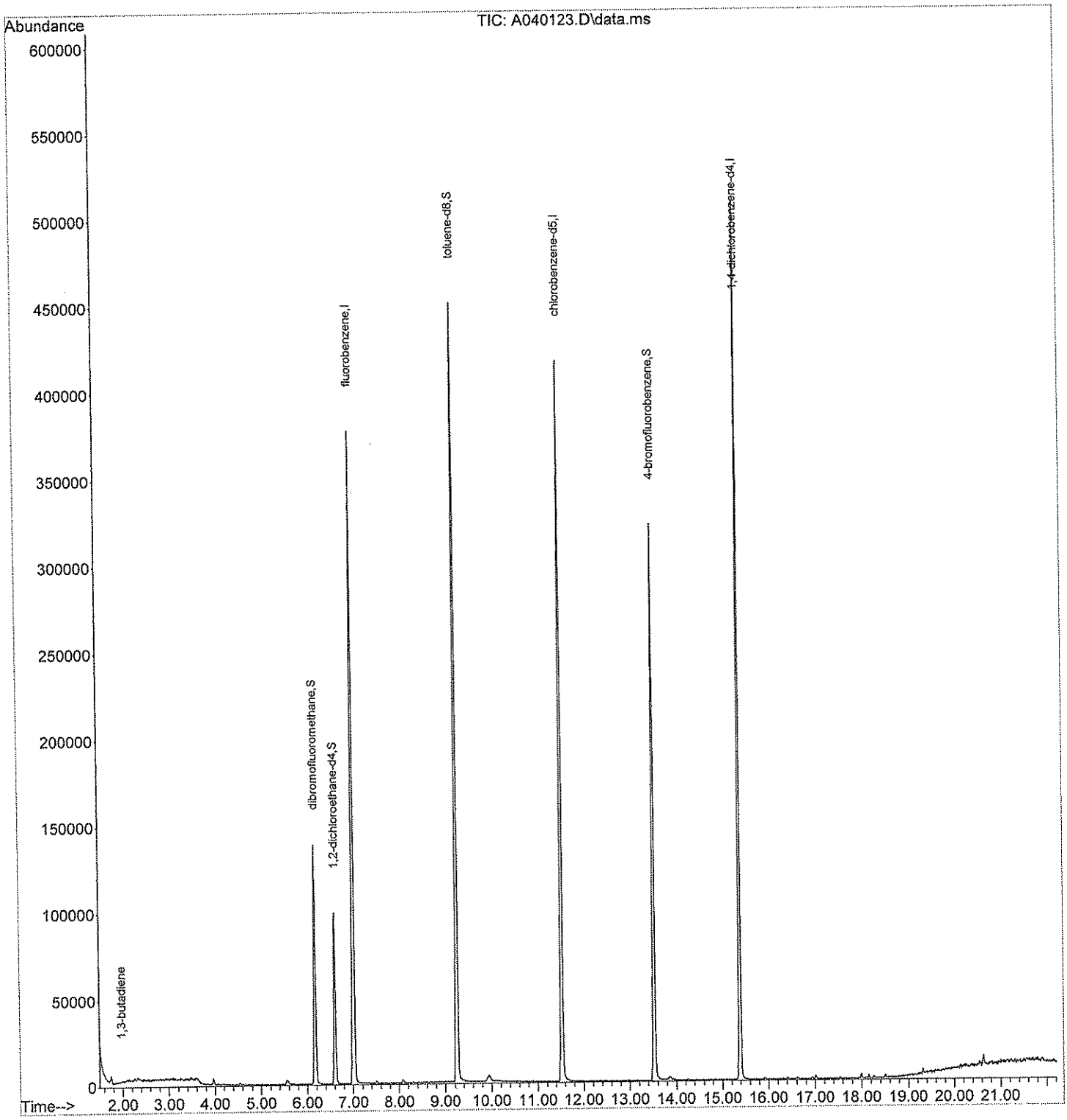
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/2/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040123.D
Acq On : 1 Apr 2008 9:40 pm
Sample : ,SAMP,ME0803A55-06A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 02 06:37:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\\
Data File : A040123.D
Acq On : 1 Apr 2008 9:40 pmm
Operator : BRR
Sample : ,SAMP,ME0803A55-06A,1,,
Misc : 8260+_w255
ALS Vial : 23 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********

Rev reports on 4/10/11

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040123.D
Acq On : 1 Apr 2008 9:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-06A,1,
Misc : 8260+_w25
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040123.D\data.ms

| Peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.173 | 759 | 770 | 792 | rBV | 138069 | 357165 | 30.93% | 6.326% |
| 2 | 6.605 | 831 | 841 | 857 | rVB | 99286 | 248974 | 21.56% | 4.410% |
| 3 | 7.012 | 895 | 908 | 922 | rBV | 377628 | 960512 | 83.18% | 17.013% |
| 4 | 9.250 | 1264 | 1276 | 1290 | rBV | 450319 | 1154715 | 100.00% | 20.453% |
| 5 | 11.530 | 1639 | 1651 | 1671 | rBV | 416784 | 1071967 | 92.83% | 18.987% |
| 6 | 13.525 | 1966 | 1979 | 1998 | rBV | 322171 | 803728 | 69.60% | 14.236% |
| 7 | 15.386 | 2271 | 2285 | 2305 | rBV | 507098 | 1048668 | 90.82% | 18.575% |

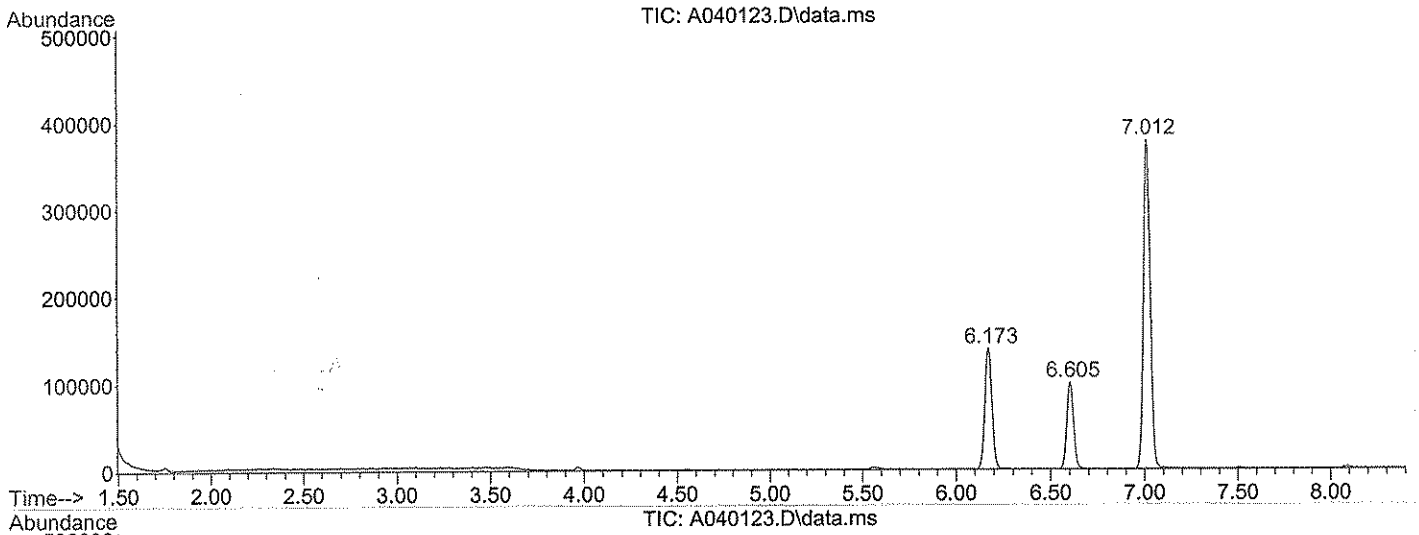
Sum of corrected areas: 5645729

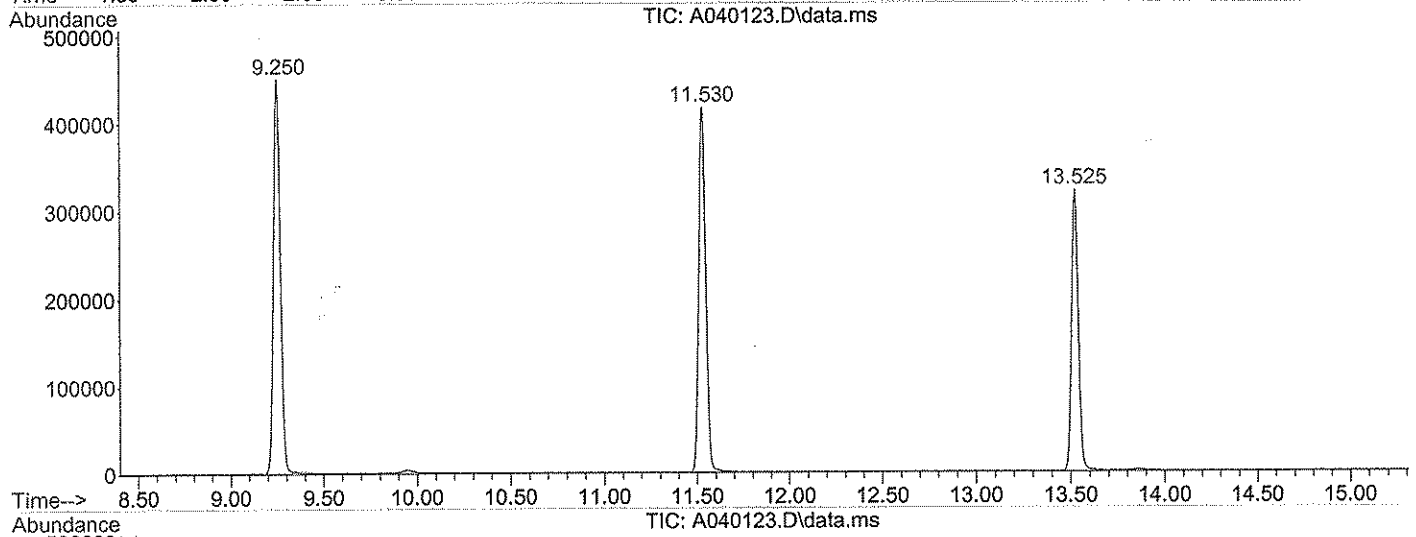
LSC Report - Integrated Chromatogram

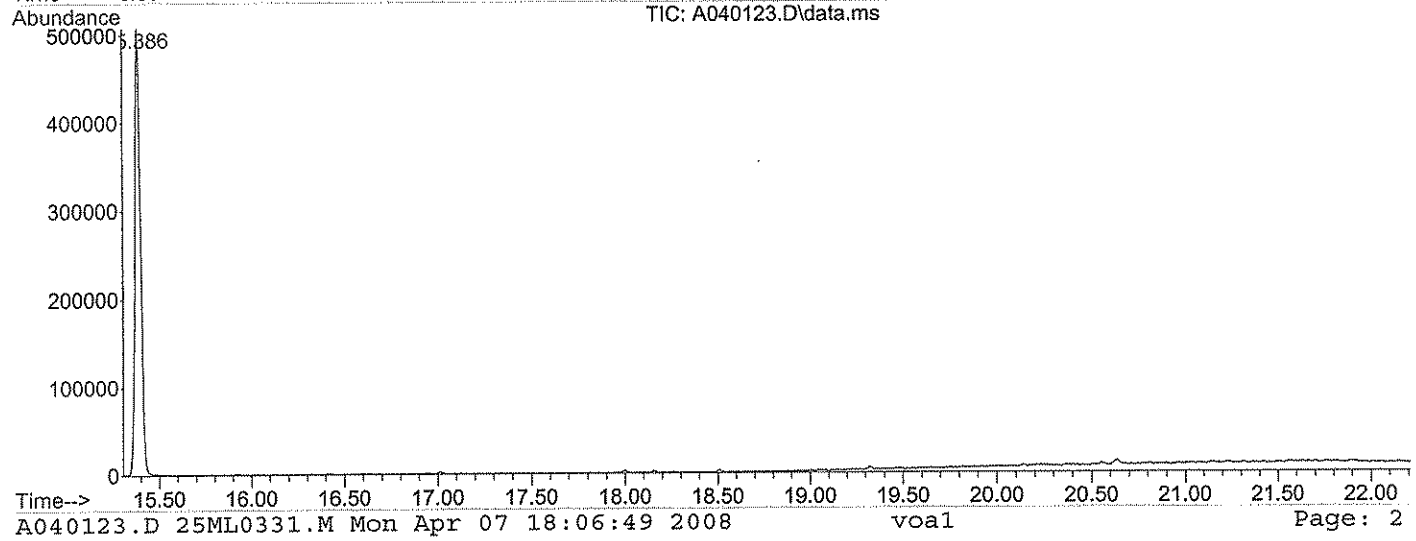
Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040123.D
Acq On : 1 Apr 2008 9:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-06A,1,
Misc : 8260+_w25
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040123.D 25ML0331.M Mon Apr 07 18:06:49 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040124.D
Acq On : 1 Apr 2008 10:19 pm
Sample : ,SAMP,ME0803A55-07A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 02 06:37:51 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.011 | 96 | 414262 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.529 | 117 | 324030 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.385 | 152 | 170915 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 103462 | 10.84 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 108.40% | | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 97806 | 11.73 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 117.30% | | | |
| 44) toluene-d8 | 9.249 | 98 | 397128 | 9.78 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.80% | | | |
| 63) 4-bromofluorobenzene | 13.524 | 95 | 153771 | 10.30 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 6) 1,3-butadiene | 1.994 | 39 | 361 | 0.04 | ug/L # | 14 |
| 11) acetone | 3.478 | 43 | 3546 | 3.89 | ug/L | 97 |
| 34) trichloroethene | 7.510 | 95 | 8201 | 0.70 | ug/L # | 86 |

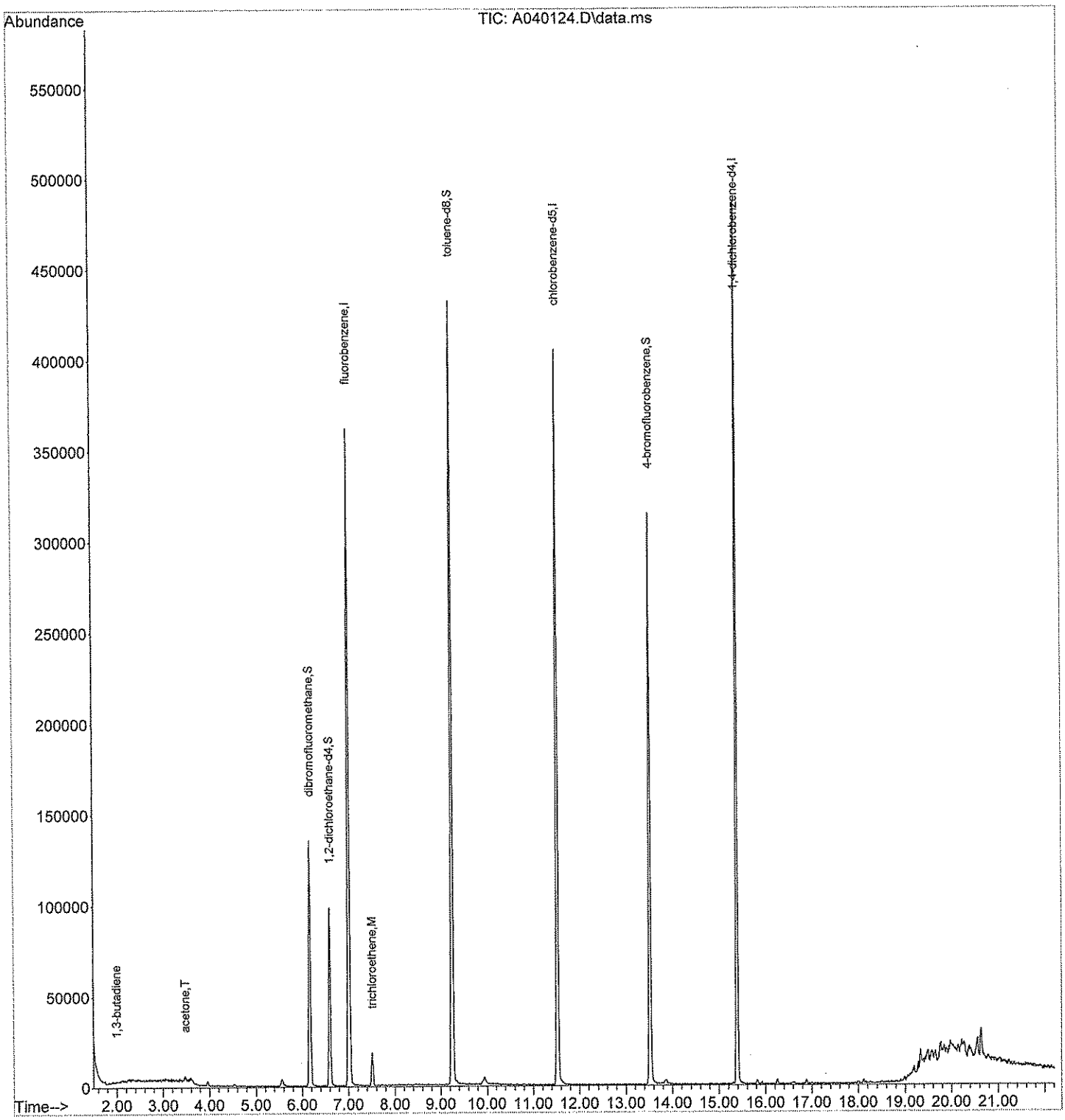
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/2/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040124.D
Acq On : 1 Apr 2008 10:19 pm
Sample : ,SAMP,ME0803A55-07A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 02 06:37:51 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\\
Data File : A040124.D
Acq On : 1 Apr 2008 10:19 pmm
Operator : BRR
Sample : ,SAMP,ME0803A55-07A,1,,
Misc : 8260+_w255
ALS Vial : 24 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

4/1/08

No Library Search Compounds Detected

**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040124.D
Acq On : 1 Apr 2008 10:19 pm
Operator : BR
Sample : ,SAMP,ME0803A55-07A,1,
Misc : 8260+_w25
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040124.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.172 | 759 | 770 | 787 | rBV2 | 135041 | 348820 | 31.48% | 6.258% |
| 2 | 6.603 | 830 | 841 | 859 | rBV | 97999 | 246735 | 22.27% | 4.427% |
| 3 | 7.011 | 896 | 908 | 930 | rBV | 361702 | 921002 | 83.13% | 16.524% |
| 4 | 7.510 | 980 | 990 | 1002 | rBV3 | 18284 | 45039 | 4.06% | 0.808% |
| 5 | 9.249 | 1263 | 1276 | 1290 | rBV | 431338 | 1107972 | 100.00% | 19.878% |
| 6 | 11.529 | 1637 | 1651 | 1680 | rBV | 404719 | 1043182 | 94.15% | 18.716% |
| 7 | 13.524 | 1965 | 1979 | 1999 | rBV | 314374 | 783555 | 70.72% | 14.058% |
| 8 | 15.385 | 2276 | 2285 | 2302 | rBV | 485012 | 1027970 | 92.78% | 18.443% |
| 9 | 20.633 | 3143 | 3148 | 3165 | rVB3 | 16984 | 49562 | 4.47% | 0.889% |

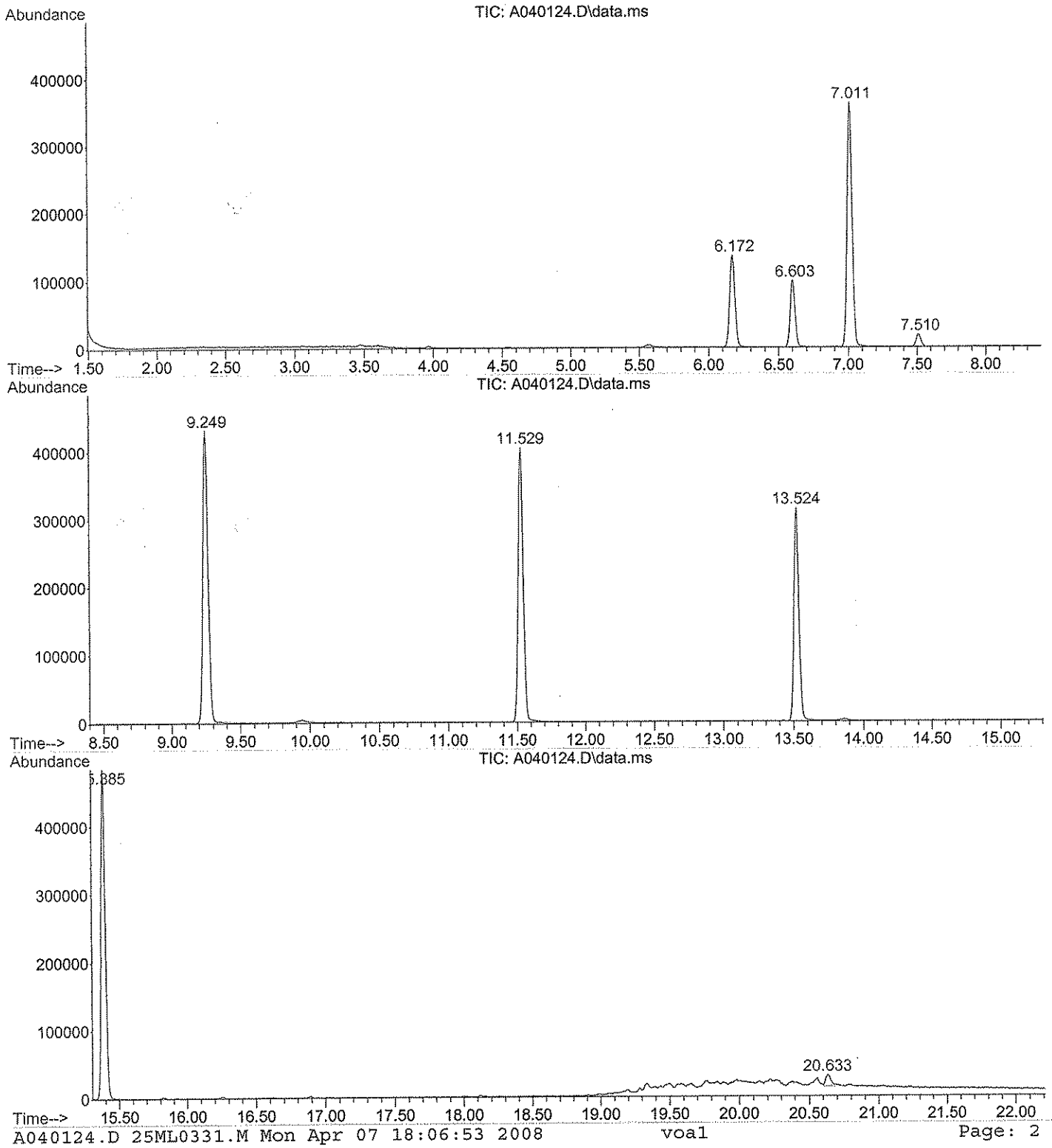
Sum of corrected areas: 5573837

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040124.D
Acq On : 1 Apr 2008 10:19 pm
Operator : BR
Sample : ,SAMP,ME0803A55-07A,1,
Misc : 8260+_w25
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040124.D 25ML0331.M Mon Apr 07 18:06:53 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040125.D
Acq On : 1 Apr 2008 10:56 pm
Sample : ,SAMP,ME0803A55-08A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 02 06:37:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 408859 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.529 | 117 | 316440 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 169129 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 105480 | 11.19 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.90% | | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 97355 | 11.83 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 118.30% | | | |
| 44) toluene-d8 | 9.248 | 98 | 392244 | 9.89 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.90% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 151260 | 10.37 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.963 | 39 | 475 | 0.06 | ug/L # | 14 |
| 11) acetone | 3.471 | 43 | 2542 | 2.82 | ug/L | 81 |
| 34) trichloroethene | 7.509 | 95 | 14024 | 1.22 | ug/L # | 83 |

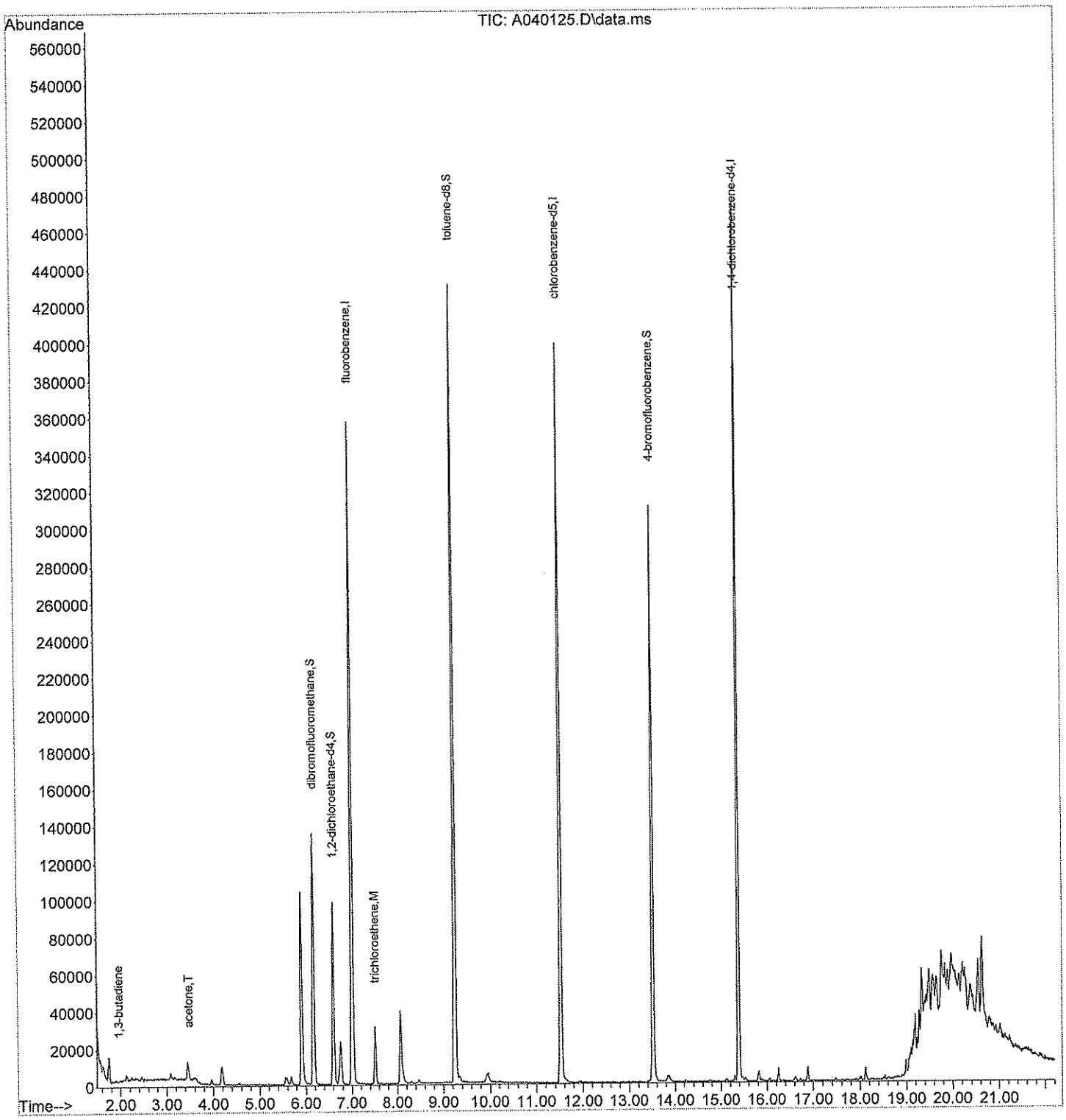
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BC 4/2/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040125.D
Acq On : 1 Apr 2008 10:56 pm
Sample : ,SAMP,ME0803A55-08A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 02 06:37:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Furan, tetrahydro- | 5.909 | 3.1 | ug/L | 279930 | 1 | 7.016 | 912914 | 10.0 |
| 1,4-Dioxane | 8.068 | 1.4 | ug/L | 125005 | 1 | 7.016 | 912914 | 10.0 |
| Dodecane, 2,7,1... | 20.632 | 1.6 | ug/L | 158479 | 3 | 15.390 | 1012680 | 10.0 |

Chromatograms on 4/08/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ;SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040125.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.909 | 718 | 727 | 748 | rBV | 103935 | 279930 | 25.47% | 4.384% |
| 2 | 6.171 | 760 | 770 | 783 | rBV | 135355 | 349056 | 31.76% | 5.466% |
| 3 | 6.603 | 831 | 841 | 855 | rBV2 | 98367 | 253684 | 23.08% | 3.973% |
| 4 | 6.755 | 855 | 866 | 880 | rVB4 | 22567 | 71847 | 6.54% | 1.125% |
| 5 | 7.010 | 897 | 908 | 928 | rBV | 357194 | 912914 | 83.05% | 14.296% |
| 6 | 7.509 | 978 | 990 | 1000 | rBV3 | 31048 | 78746 | 7.16% | 1.233% |
| 7 | 8.068 | 1072 | 1082 | 1108 | rBV2 | 39168 | 125005 | 11.37% | 1.958% |
| 8 | 9.248 | 1264 | 1276 | 1290 | rBV | 430267 | 1099198 | 100.00% | 17.213% |
| 9 | 11.529 | 1639 | 1651 | 1664 | rBV | 398553 | 1010310 | 91.91% | 15.821% |
| 10 | 13.523 | 1960 | 1979 | 1999 | rBV | 310567 | 773298 | 70.35% | 12.109% |
| 11 | 15.390 | 2277 | 2286 | 2297 | rBV | 472947 | 1012679 | 92.13% | 15.858% |
| 12 | 19.100 | 2883 | 2896 | 2899 | rBV5 | 12727 | 42414 | 3.86% | 0.664% |
| 13 | 19.197 | 2905 | 2912 | 2916 | rVB | 18361 | 34544 | 3.14% | 0.541% |
| 14 | 19.331 | 2929 | 2934 | 2941 | rVV2 | 33611 | 82965 | 7.55% | 1.299% |
| 15 | 19.763 | 2999 | 3005 | 3015 | rBV3 | 28641 | 100872 | 9.18% | 1.580% |
| 16 | 20.632 | 3142 | 3148 | 3166 | rVB2 | 49550 | 158479 | 14.42% | 2.482% |

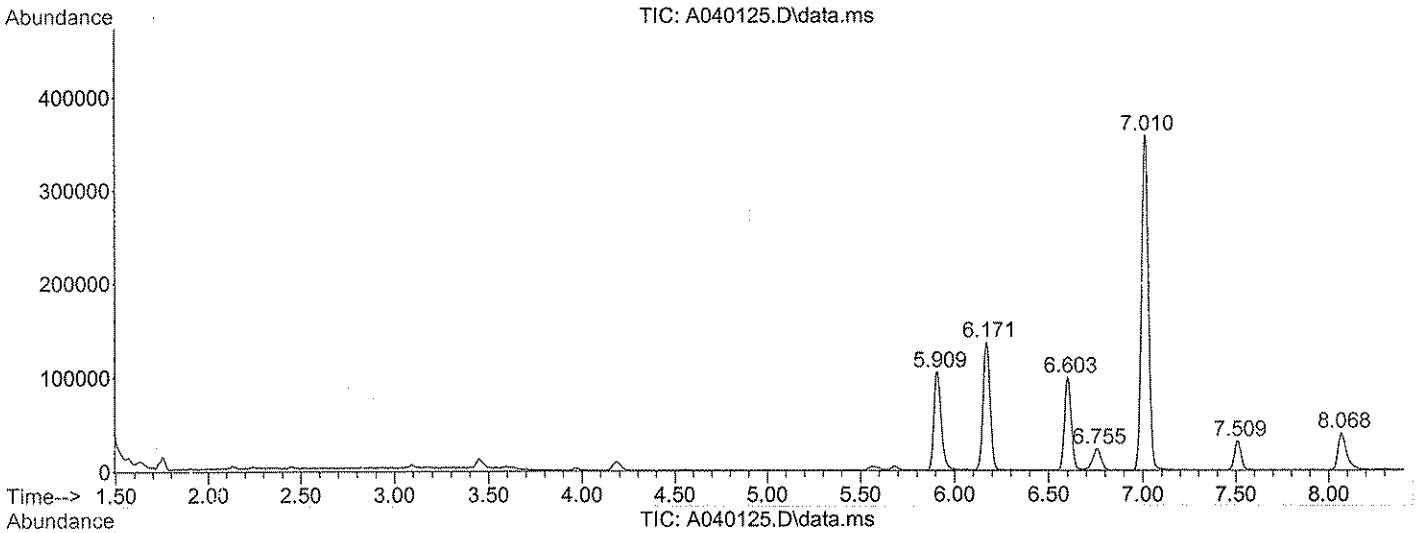
Sum of corrected areas: 6385941

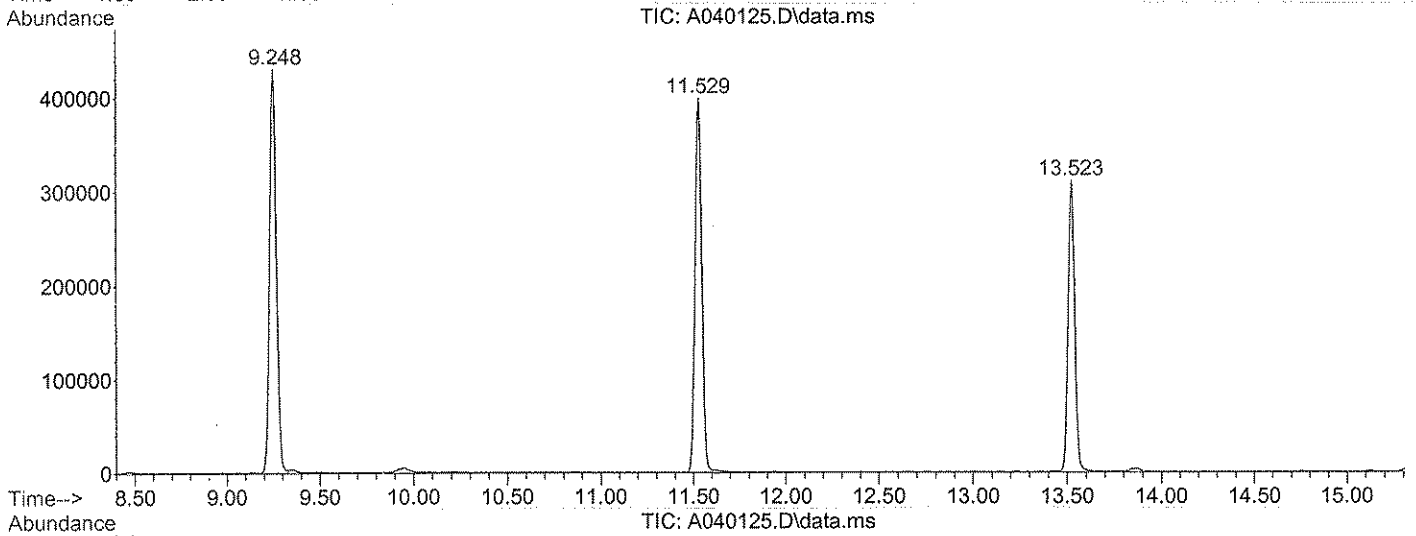
LSC Report - Integrated Chromatogram

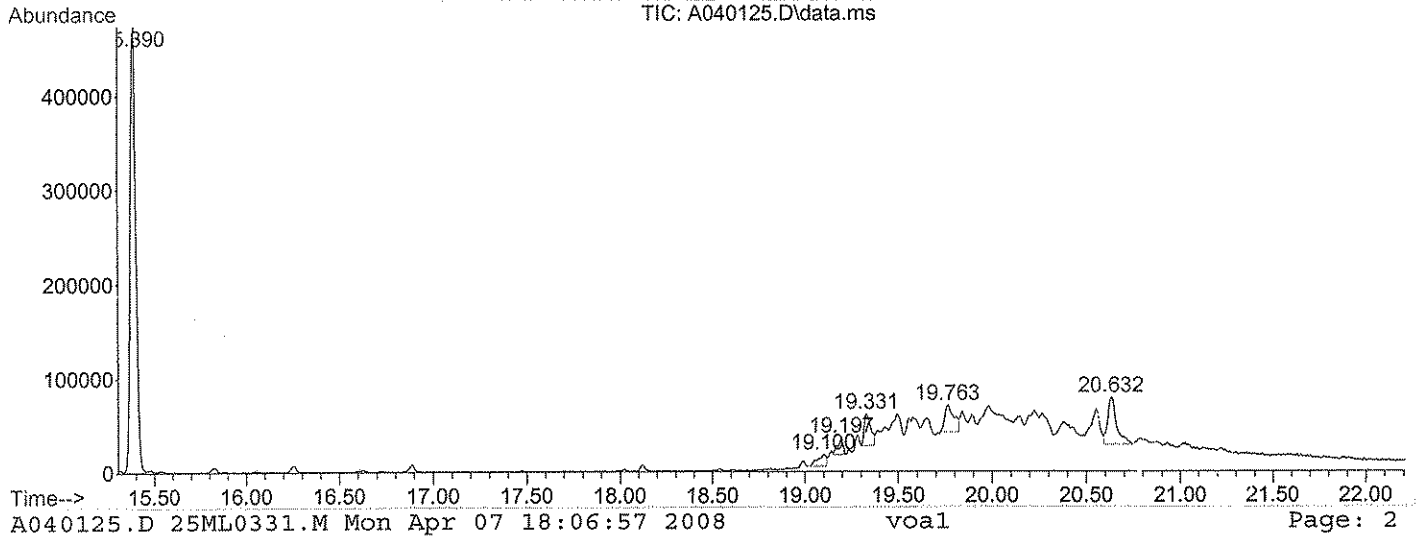
```
Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040125.D
Acq On    :  1 Apr 2008  10:56 pm
Operator  : BR
Sample    : ,SAMP,ME0803A55-08A,1,
Misc      : 8260+_w25
ALS Vial  : 25   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title  : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```



# Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

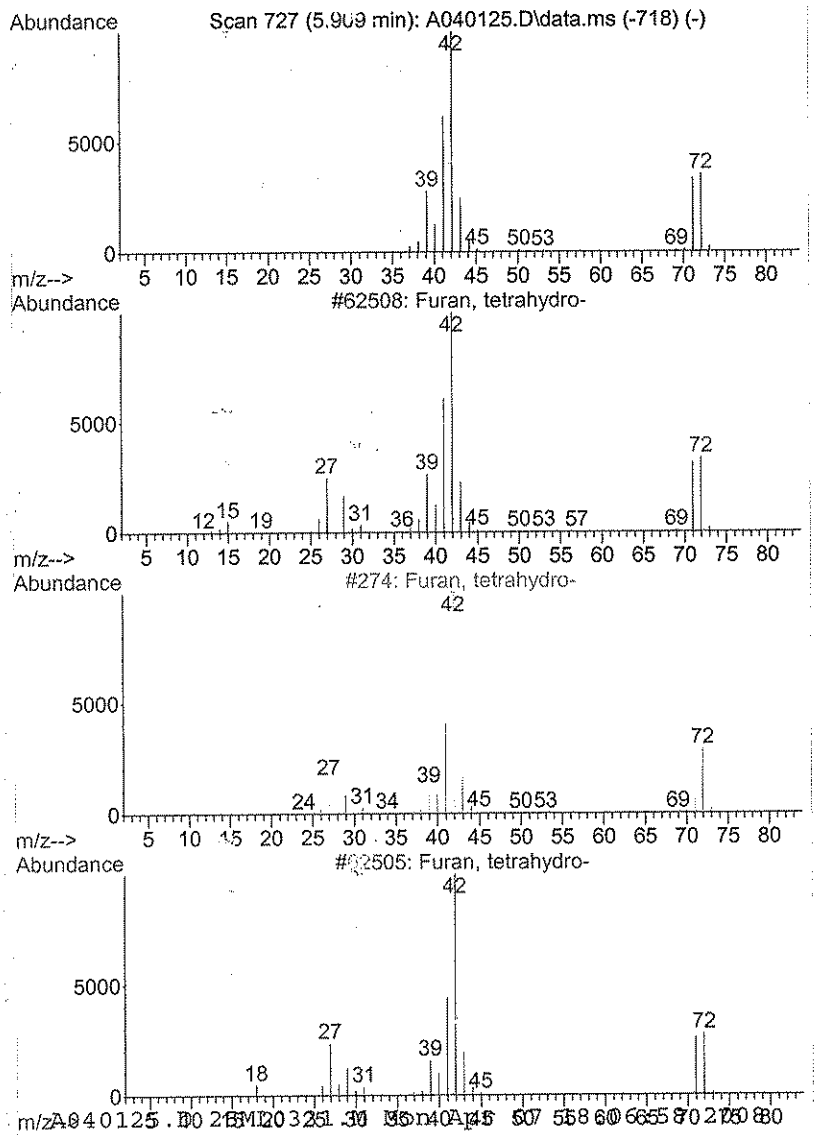
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

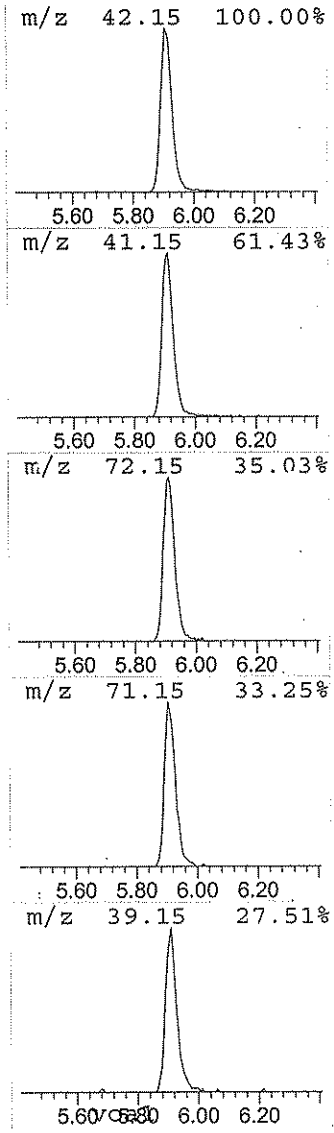
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 1 Furan, tetrahydro- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.909 | 3.07 ug/L | 279930 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 91 |
| 2 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 3 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 4 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 5 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 83 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

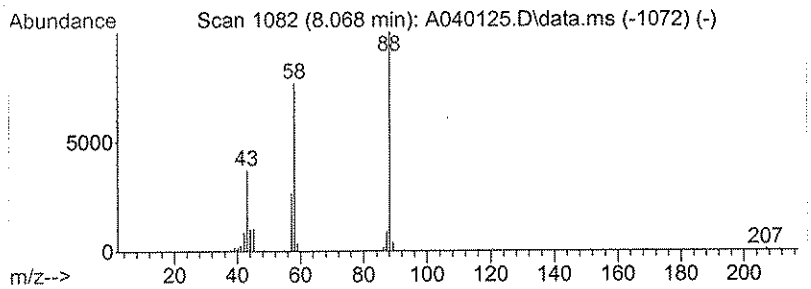
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

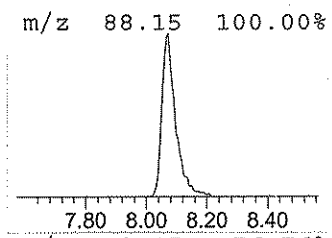
**********

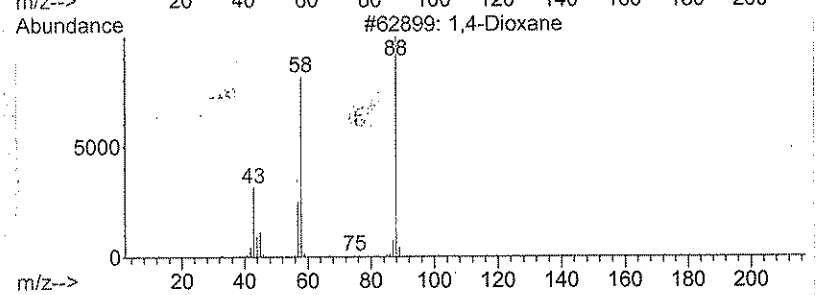
Peak Number 2 1,4-Dioxane Concentration Rank 3

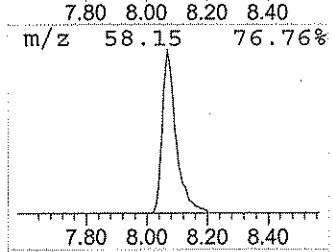
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.068 | 1.37 ug/L | 125005 | fluorobenzene | 7.016 |

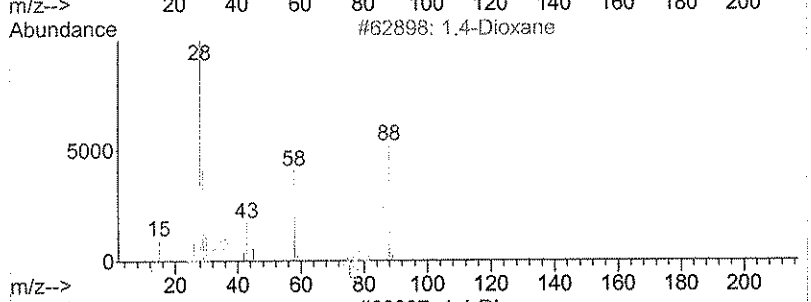
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 74 |
| 5 | 1-Propanamine, N-ethyl- | 87 | C5H13N | 020193-20-8 | 38 |

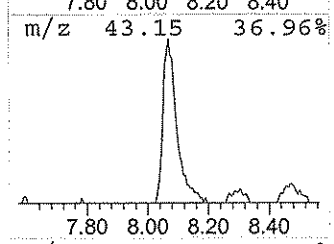


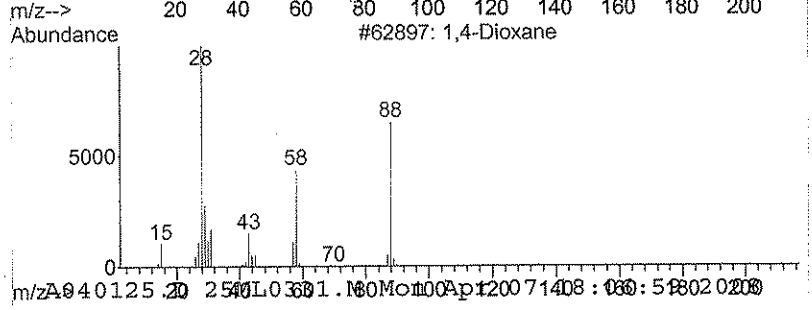



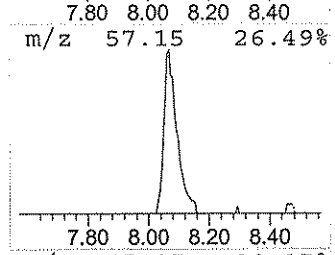



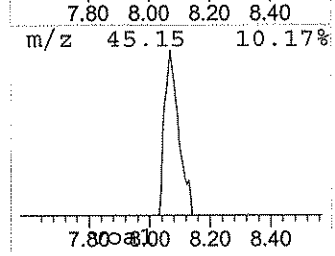



Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

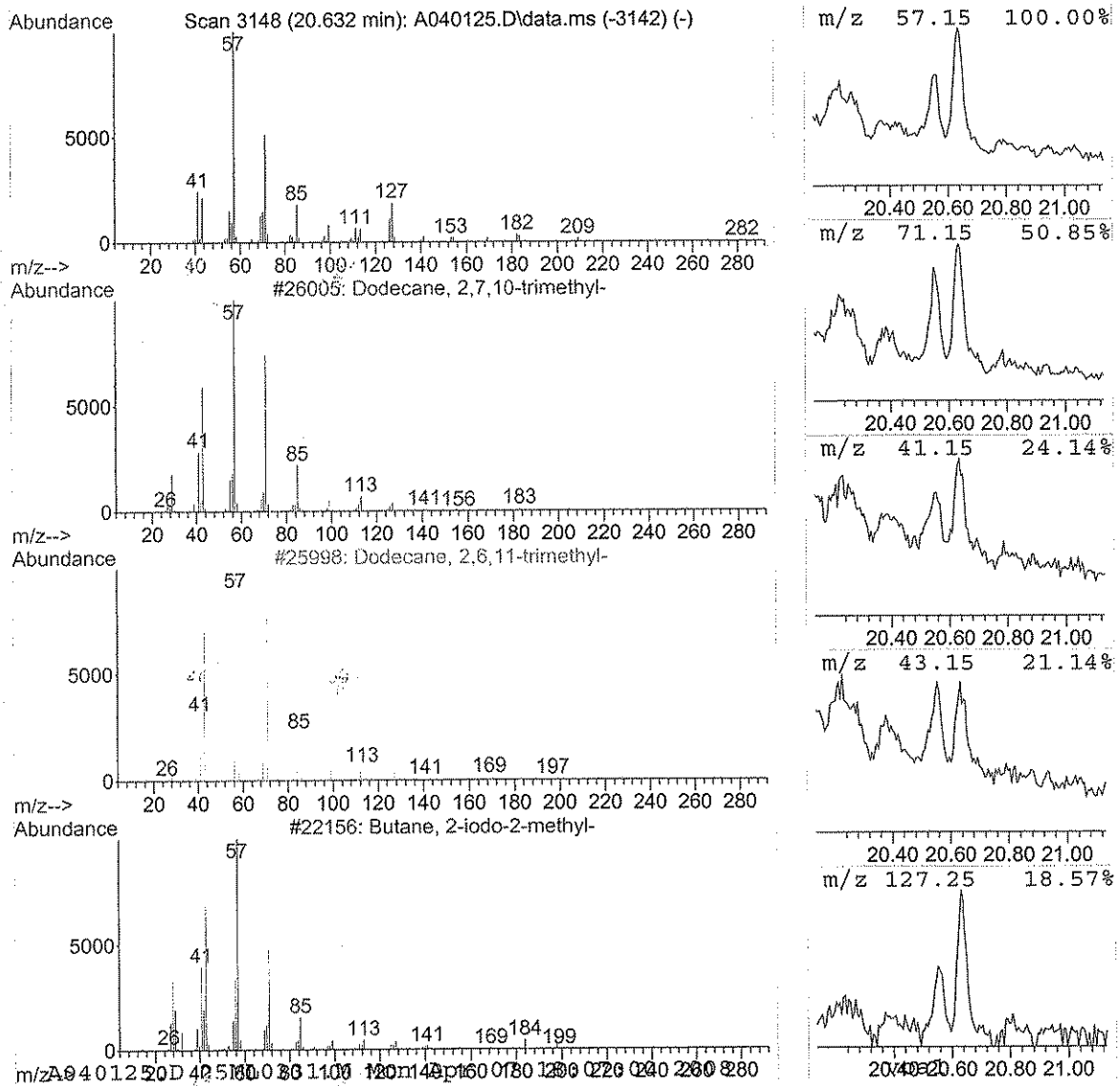
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 3 Dodecane, 2,7,10-trimethyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.632 | 1.56 ug/L | 158479 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dodecane, 2,7,10-trimethyl- | 212 | C15H32 | 074645-98-0 | 78 |
| 2 | Dodecane, 2,6,11-trimethyl- | 212 | C15H32 | 031295-56-4 | 64 |
| 3 | Butane, 2-iodo-2-methyl- | 198 | C5H11I | 000594-38-7 | 59 |
| 4 | Decane, 5-ethyl-5-methyl- | 184 | C13H28 | 017312-74-2 | 59 |
| 5 | Heptadecane, 2,6,10,14-tetramethyl- | 296 | C21H44 | 018344-37-1 | 53 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040126.D
Acq On : 1 Apr 2008 11:32 pm
Sample : ,SAMP,ME0803A55-09A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 02 06:37:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

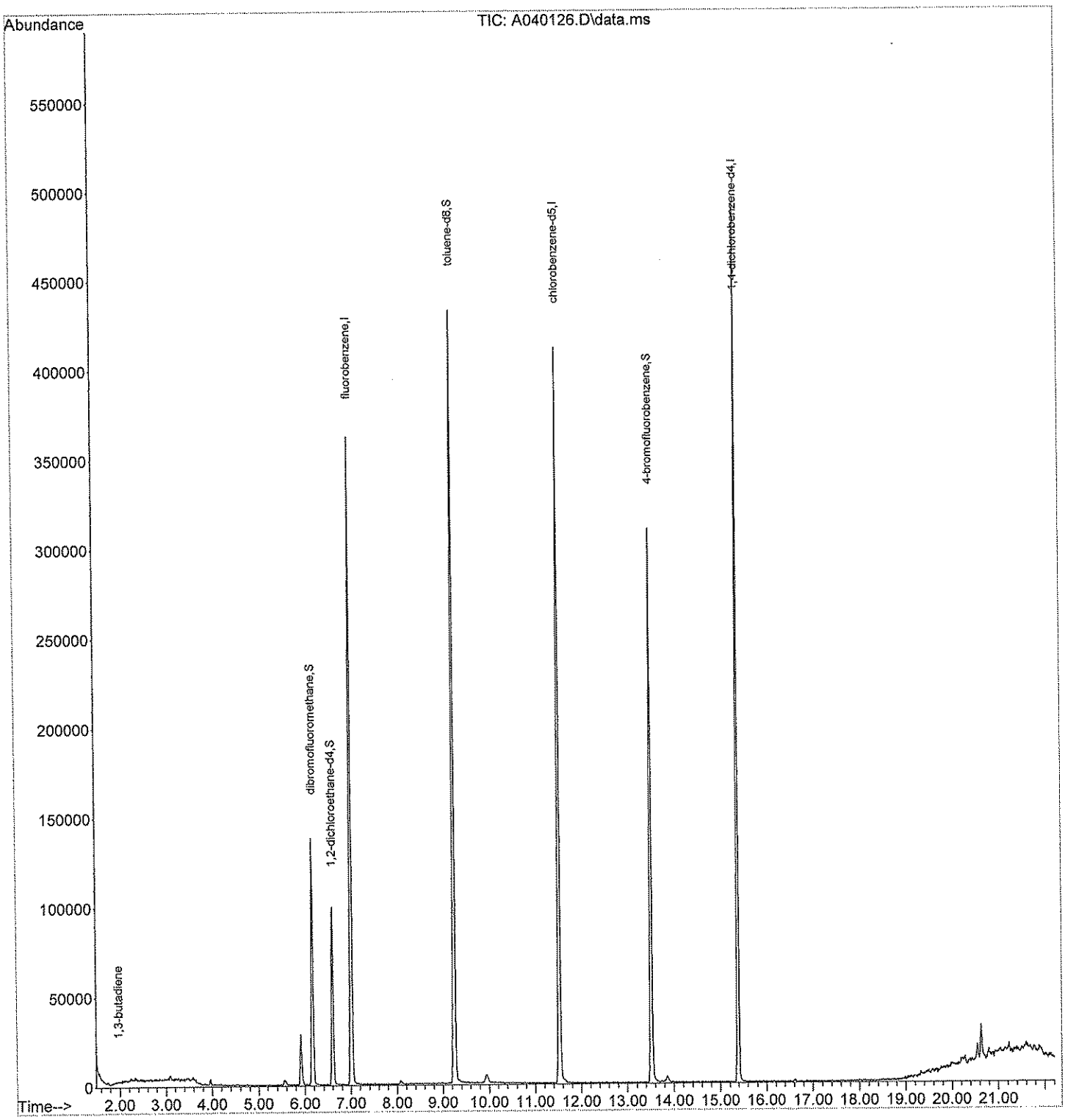
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 417590 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 326544 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 169943 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 105661 | 10.98 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.80% | | |
| 30) 1,2-dichloroethane-d4 | 6.595 | 65 | 98362 | 11.71 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 117.10% | | |
| 44) toluene-d8 | 9.253 | 98 | 402135 | 9.82 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.20% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 153102 | 10.17 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.70% | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.973 | 39 | 352 | 0.04 | ug/L # | 14 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040126.D
Acq On : 1 Apr 2008 11:32 pm
Sample : ,SAMP,ME0803A55-09A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 02 06:37:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\\
Data File : A040126.D
Acq On : 1 Apr 2008 11:32 pmm
Operator : BRR
Sample : ,SAMP,ME0803A55-09A,1,,
Misc : 8260+_w255
ALS Vial : 26 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

4/08/08

No Library Search Compounds Detected

**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040126.D
Acq On : 1 Apr 2008 11:32 pm
Operator : BR
Sample : ,SAMP,ME0803A55-09A,1,
Misc : 8260+_w25
ALS Vial : 26 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040126.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.914 | 719 | 728 | 743 | rVB | 28095 | 73001 | 6.53% | 1.295% |
| 2 | 6.170 | 759 | 770 | 786 | rBV | 137750 | 356021 | 31.83% | 6.317% |
| 3 | 6.601 | 831 | 841 | 857 | rBV | 99193 | 249155 | 22.28% | 4.421% |
| 4 | 7.009 | 894 | 908 | 932 | rBV | 362186 | 930054 | 83.16% | 16.501% |
| 5 | 9.253 | 1266 | 1277 | 1300 | rBV | 432067 | 1118355 | 100.00% | 19.842% |
| 6 | 11.527 | 1637 | 1651 | 1681 | rBV | 411150 | 1048661 | 93.77% | 18.606% |
| 7 | 13.522 | 1969 | 1979 | 2008 | rBV | 309520 | 782157 | 69.94% | 13.877% |
| 8 | 15.389 | 2273 | 2286 | 2306 | rBV | 491419 | 1027193 | 91.85% | 18.225% |
| 9 | 20.631 | 3142 | 3148 | 3164 | rVB5 | 19291 | 51681 | 4.62% | 0.917% |

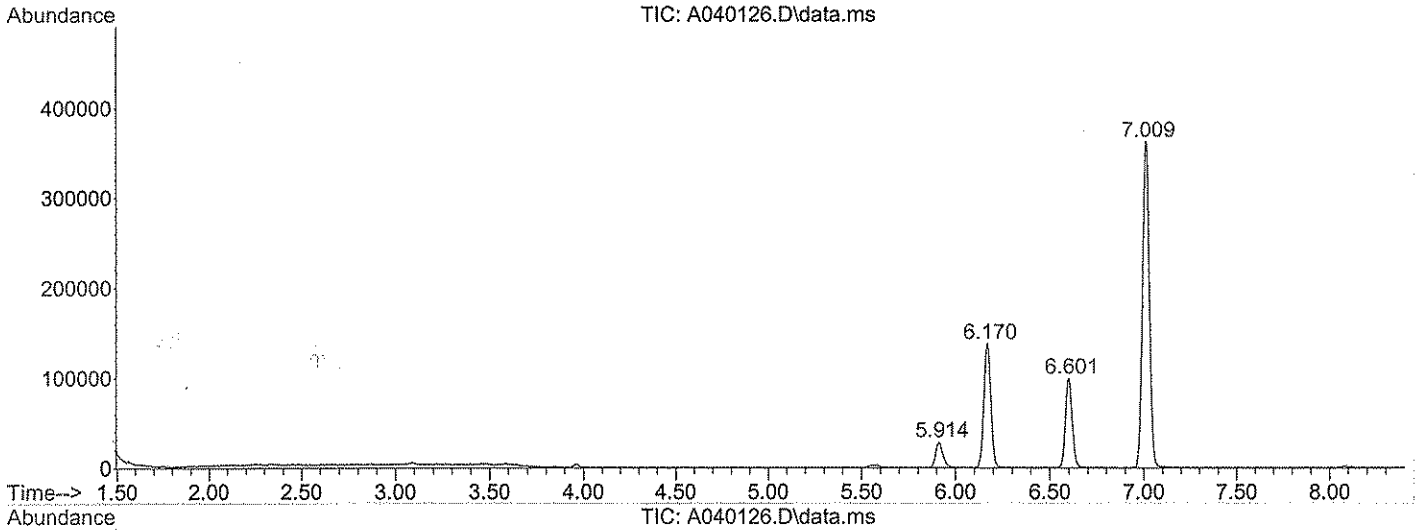
Sum of corrected areas: 5636278

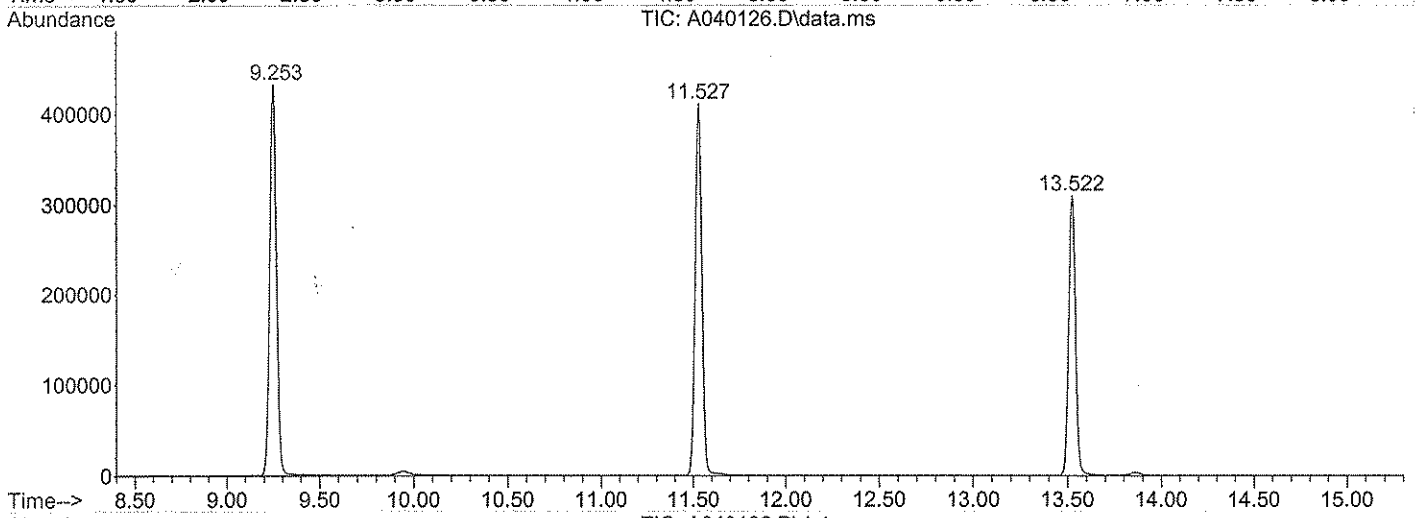
LSC Report - Integrated Chromatogram

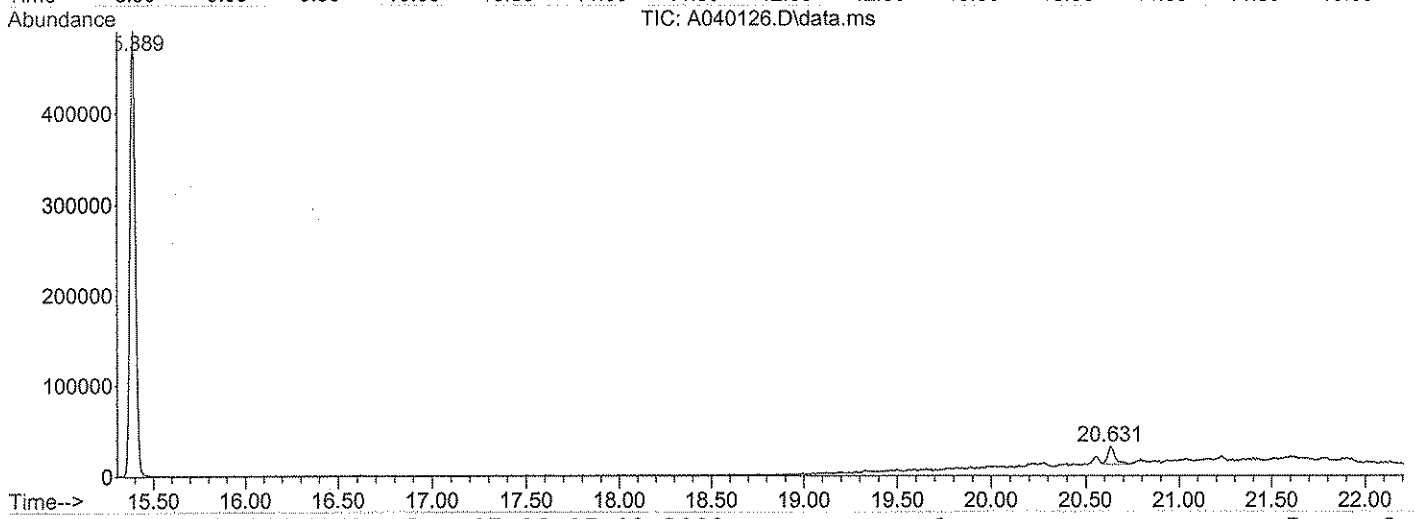
```
Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040126.D
Acq On    :  1 Apr 2008  11:32 pm
Operator  : BR
Sample    : ,SAMP,ME0803A55-09A,1,
Misc      : 8260+_w25
ALS Vial  : 26   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title  : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```




A040126.D 25ML0331.M Mon Apr 07 18:07:03 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040127.D
Acq On : 2 Apr 2008 12:08 am
Sample : ,SAMP,ME0803A55-10A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 02 06:38:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

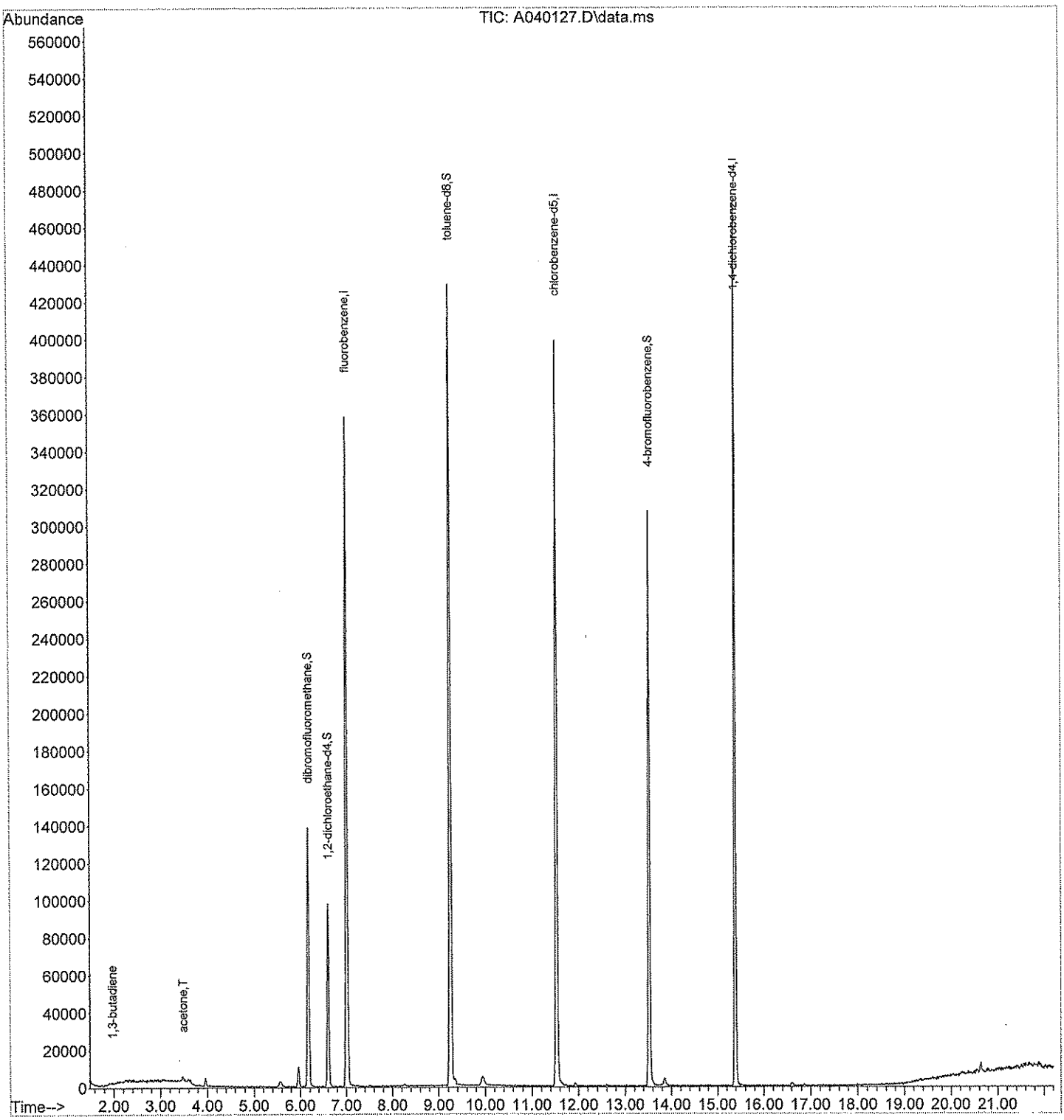
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 410425 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 318190 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 163630 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.173 | 113 | 105146 | 11.12 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 111.20% | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 95450 | 11.56 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 115.60% | | |
| 44) toluene-d8 | 9.250 | 98 | 390935 | 9.80 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.00% | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 148678 | 10.14 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.40% | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.970 | 39 | 374 | 0.04 | ug/L # | 14 |
| 11) acetone | 3.479 | 43 | 3756 | 4.16 | ug/L | 76 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040108\A040127.D
Acq On : 2 Apr 2008 12:08 am
Sample : ,SAMP,ME0803A55-10A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 02 06:38:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040108\\
Data File : A040127.D
Acq On : 2 Apr 2008 12:08 amm
Operator : BRR
Sample : ,SAMP,ME0803A55-10A,1,,
Misc : 8260+_w255
ALS Vial : 27 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

a 4/08/08

No Library Search Compounds Detected

**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040127.D
Acq On : 2 Apr 2008 12:08 am
Operator : BR
Sample : ,SAMP,ME0803A55-10A,1,
Misc : 8260+_w25
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040127.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.173 | 759 | 770 | 796 | rVB2 | 138563 | 350786 | 32.03% | 6.517% |
| 2 | 6.604 | 830 | 841 | 855 | rBV | 97605 | 240980 | 22.00% | 4.477% |
| 3 | 7.012 | 897 | 908 | 921 | rBV | 358132 | 911881 | 83.26% | 16.942% |
| 4 | 9.250 | 1264 | 1276 | 1290 | rBV | 428362 | 1095160 | 100.00% | 20.347% |
| 5 | 11.530 | 1639 | 1651 | 1680 | rVB | 398675 | 1024395 | 93.54% | 19.032% |
| 6 | 13.525 | 1965 | 1979 | 2002 | rBV | 307303 | 763296 | 69.70% | 14.181% |
| 7 | 15.386 | 2272 | 2285 | 2302 | rBV | 472586 | 995873 | 90.93% | 18.502% |

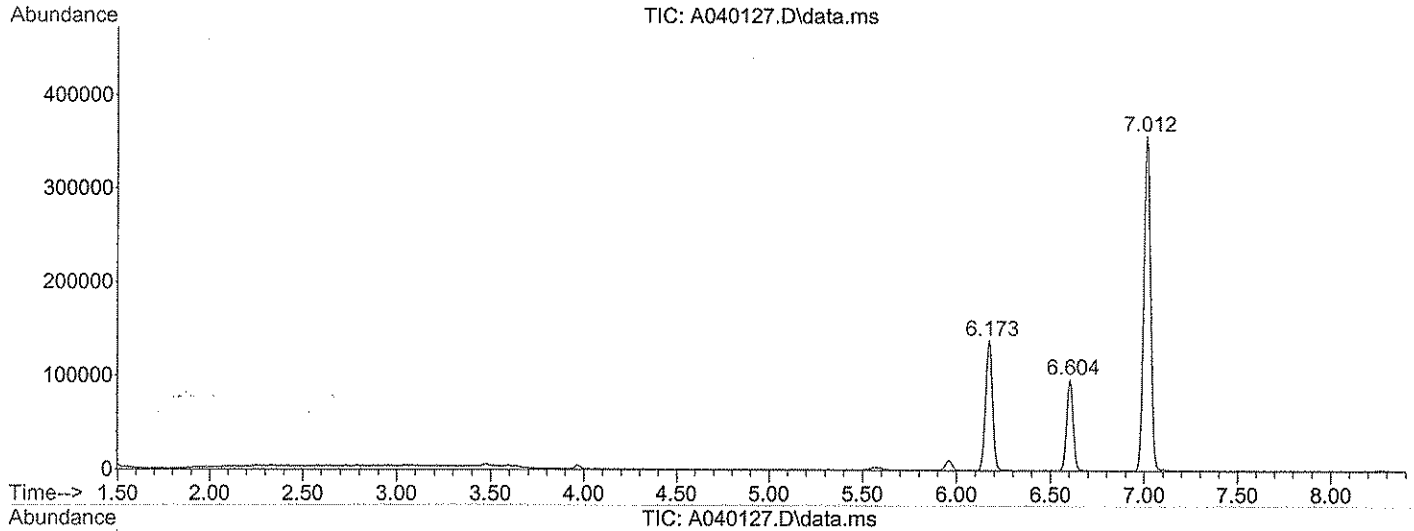
Sum of corrected areas: 5382371

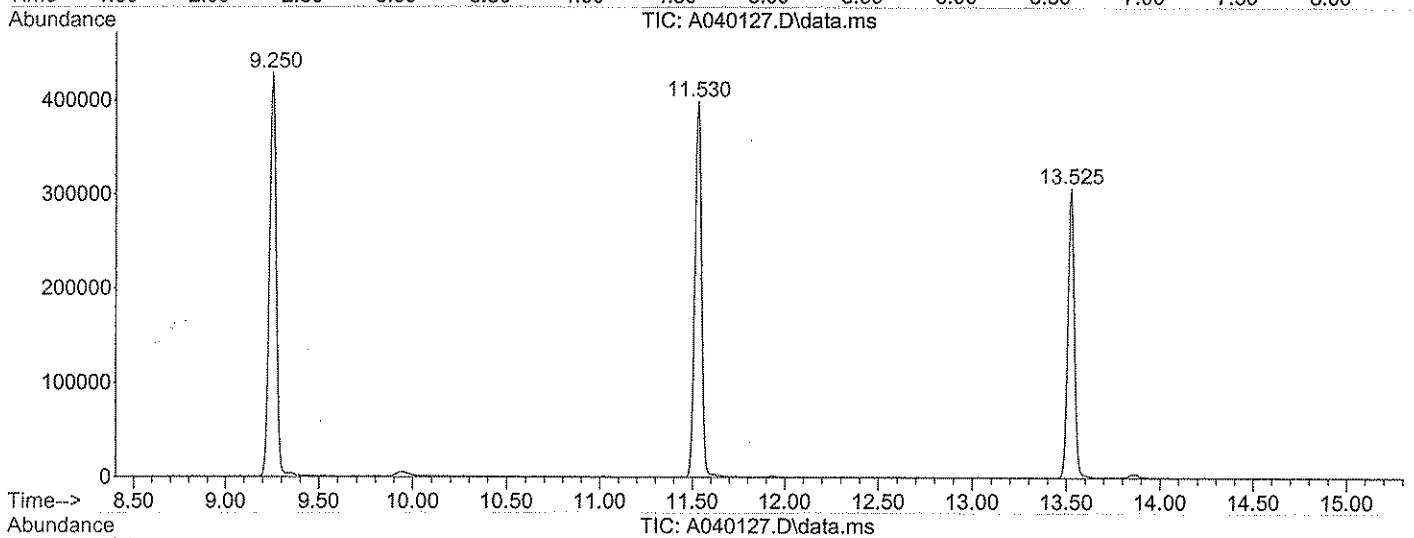
LSC Report - Integrated Chromatogram

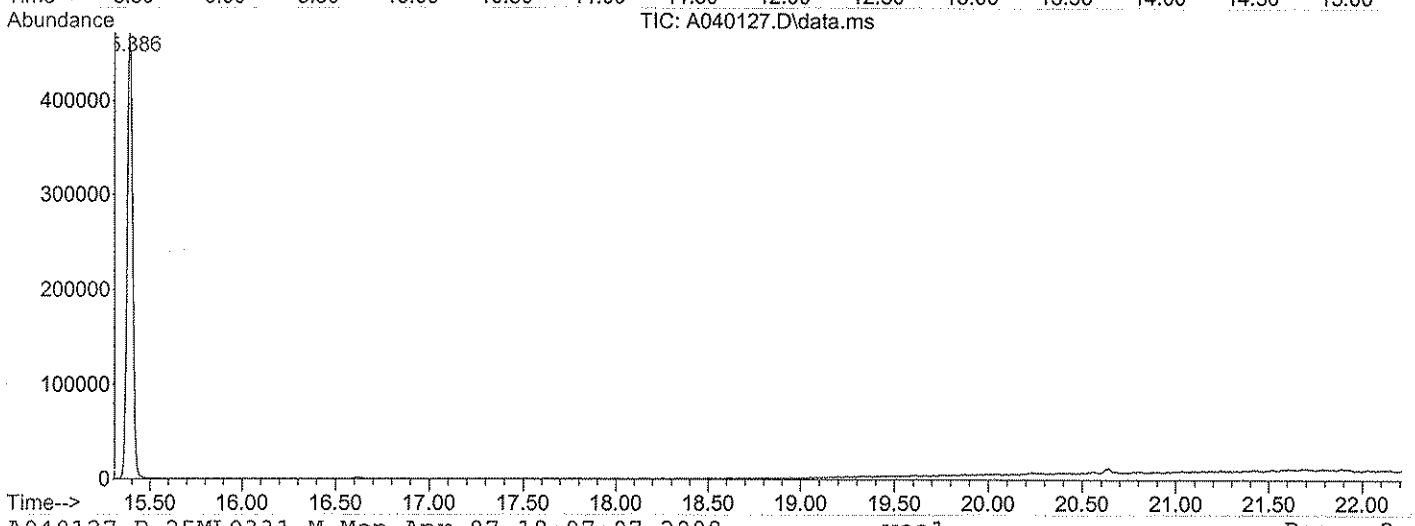
Data Path : C:\msdchem\1\DATA\A040108\
Data File : A040127.D
Acq On : 2 Apr 2008 12:08 am
Operator : BR
Sample : ,SAMP,ME0803A55-10A,1,
Misc : 8260+_w25
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040127.D 25ML0331.M Mon Apr 07 18:07:07 2008 voa1 Page: 2

# INJECTION LOG(S)

# Injection Log

Directory: h:\a040108

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | a040101.d | 1. | ,tune,bfb tune,1, | BFB | 1 Apr 08 06:33 |
| 2 | 2 | a040102.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 1 Apr 08 06:54 |
| 3 | 3 | a040103.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 1 Apr 08 07:44 |
| 4 | 4 | a040104.d | 1. | ,mblk,bk_w25 040108,1, | 8260+_w25 | 1 Apr 08 08:24 |
| 5 | 5 | a040105.d | 1. | ,lcs,lcs_w25 10 ppb,1, | 8260+_w25 | 1 Apr 08 09:00 |
| 6 | 6 | a040106.d | 1. | ,samp,me0803919-01a,1, | 8260_w25 | 1 Apr 08 10:09 |
| 7 | 7 | a040107.d | 1. | ,samp,me0803919-02a,1, | 8260_w25 | 1 Apr 08 10:45 |
| 8 | 8 | a040108.d | 1. | ,samp,me0803919-03a,1, | 8260_w25 | 1 Apr 08 11:21 |
| 9 | 9 | a040109.d | 1. | ,SAMP,ME0803A11-08A,20,RA, | 8260_W25 | 1 Apr 08 12:17 |
| 10 | 9 | a040109a.d | 1. | ,SAMP,ME0803A11-11A,10,RA, | 8260_W25 | 1 Apr 08 12:52 |
| 11 | 11 | a040111.d | 1. | ,SAMP,ME0803A55-01A,1, | 8260+_W25 | 1 Apr 08 13:27 |
| 12 | 12 | a040112.d | 1. | ,SAMP,ME0803A55-02A,1, | 8260+_W25 | 1 Apr 08 14:04 |
| 13 | 13 | a040113.d | 1. | ,SAMP,ME0803A55-03A,1, | 8260+_W25 | 1 Apr 08 14:40 |
| 14 | 14 | a040114.d | 1. | ,MS,ME0803A55-03AMS,1, | 8260+_W25 | 1 Apr 08 15:17 |
| 15 | 15 | a040115.d | 1. | ,MSD,ME0803A55-03AMSD,1, | 8260+_W25 | 1 Apr 08 15:52 |
| 16 | 16 | a040116.d | 1. | ,tune,bfb tune,1, | BFB | 1 Apr 08 16:52 |
| 17 | 16 | a040116a.d | 1. | ,tune,bfb tune,1, | BFB | 1 Apr 08 17:11 |
| 18 | 17 | a040117.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 1 Apr 08 17:31 |
| 19 | 18 | a040118.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 1 Apr 08 18:16 |
| 20 | 19 | a040119.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 1 Apr 08 18:54 |
| 21 | 20 | a040120.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 1 Apr 08 19:46 |
| 22 | 21 | a040121.d | 1. | ,SAMP,ME0803A55-04A,1, | 8260+_w25 | 1 Apr 08 20:27 |
| 23 | 22 | a040122.d | 1. | ,SAMP,ME0803A55-05A,1, | 8260+_w25 | 1 Apr 08 21:02 |
| 24 | 23 | a040123.d | 1. | ,SAMP,ME0803A55-06A,1, | 8260+_w25 | 1 Apr 08 21:40 |
| 25 | 24 | a040124.d | 1. | ,SAMP,ME0803A55-07A,1, | 8260+_w25 | 1 Apr 08 22:19 |
| 26 | 25 | a040125.d | 1. | ,SAMP,ME0803A55-08A,1, | 8260+_w25 | 1 Apr 08 22:56 |
| 27 | 26 | a040126.d | 1. | ,SAMP,ME0803A55-09A,1, | 8260+_w25 | 1 Apr 08 23:32 |
| 28 | 27 | a040127.d | 1. | ,SAMP,ME0803A55-10A,1, | 8260+_w25 | 2 Apr 08 00:08 |
| 29 | 28 | a040128.d | 1. | ,SAMP,ME0803953-01A,1, | 8260_w25 | 2 Apr 08 00:43 |
| 30 | 29 | a040129.d | 1. | ,SAMP,ME0803953-02A,1, | 8260_w25 | 2 Apr 08 01:18 |
| 31 | 30 | a040130.d | 1. | ,SAMP,ME0803A63-01A,1, | 8260_w25 | 2 Apr 08 01:54 |
| 32 | 31 | a040131.d | 1. | ,SAMP,ME0803A63-02A,1, | 8260_w25 | 2 Apr 08 02:29 |
| 33 | 32 | a040132.d | 1. | ,SAMP,ME0803A63-04A,1, | 8260_w25 | 2 Apr 08 03:04 |
| 34 | 33 | a040133.d | 1. | RINSE1 | 8260_w25 | 2 Apr 08 03:40 |
| 35 | 34 | a040134.d | 1. | RINSE2 | 8260_w25 | 2 Apr 08 04:15 |

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

MWH Americas, Inc.
175 West Jackson Blvd, Suite 1900
Chicago, IL 60604-2814
ATTN: Mr. Justin Finger

May 22, 2008

SUBJECT: ACS GW Semi Annual, Data Validation

Dear Mr. Finger,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on May 8, 2008. Attachment 1 is a summary of the samples that were reviewed for each analysis.

**LDC Project # 18716:**

| SDG # | Fraction |
|---|---|
| ME0803A55, ME0803A91, ME0803B85, ME0803C07 | Volatiles, Bis(2-chloroethyl)ether, Arsenic |

The data validation was performed under EPA Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan, April 2007
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

RTC PARCC

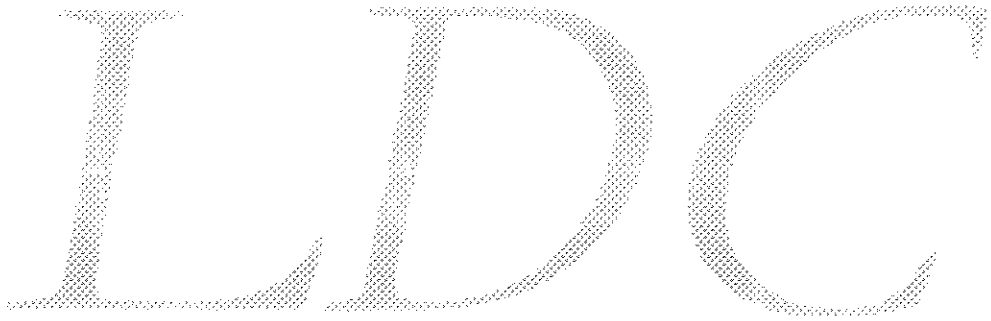
# LDC #18716 (MWH Americas, Inc.-Chicago IL / ACS GW Semi-Annual)

| LDC | SDG# | DATE REC'D | (3) DATE DUE | VOA (8260B) | | BCEE (8270C) | | As (6010B) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix: | Water/Soil | | | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S |
| A | ME0803A55 | 05/08/08 | 05/29/08 | 10 | 0 | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | ME0803A91 | 05/08/08 | 05/29/08 | 6 | 0 | 1 | 0 | 3 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | ME0803A91 | 05/08/08 | 05/29/08 | 5 | 0 | 1 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | ME0803B85 | 05/08/08 | 05/29/08 | 19 | 0 | 2 | 0 | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | ME0803C07 | 05/08/08 | 05/29/08 | 5 | 0 | 1 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | T/LR | | | 45 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

**ACS GW Semi Annual**
**Data Validation Reports**
**LDC# 18716**

ME0803A55



# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS GW Semi-Annual

**Collection Date:** March 25, 2008

**LDC Report Date:** May 21, 2008

**Matrix:** Water

**Parameters:** Volatiles

**Validation Level:** EPA Level III

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** ME0803A55

**Sample Identification**

ACS-GW-TB01-31
ACS-GW-DUP01-31
ACS-GW-MW59-31
ACS-GW-MW58-31
ACS-GW-MW17-31
ACS-GW-MW28-31
ACS-GW-MW31-31
ACS-GW-MW32-31
ACS-GW-MW08-31
ACS-GW-EB01-31
ACS-GW-MW59-31MS
ACS-GW-MW59-31MSD

## Introduction

This data review covers 12 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 3/31/08 | Acetone | 0.022 (≥0.05) | All samples in SDG ME0803A55 | J (all detects)<br>UJ (all non-detects) | A |
| | 2-Butanone | 0.007 (≥0.05) | | J (all detects)<br>UJ (all non-detects) | |

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/1/08 (A040120) | Chloromethane | 33.3 | ACS-GW-MW58-31<br>ACS-GW-MW17-31 | J (all detects)<br>UJ (all non-detects) | P |
| | Bromomethane | 50.8 | ACS-GW-MW28-31<br>ACS-GW-MW31-31<br>ACS-GW-MW32-31<br>ACS-GW-MW08-31<br>ACS-GW-EB01-31<br>R110502-BLK | J (all detects)<br>UJ (all non-detects) | |

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/1/08 (A040120) | Chloromethane | 68.2 | All samples in SDG ME0803A55 | J (all detects)<br>UJ (all non-detects) | A |
| | Bromomethane | 40.4 | | J (all detects)<br>UJ (all non-detects) | |

All of the continuing calibration RRF values were within validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/1/08 (A040103) | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.026 (≥0.05)<br>0.006 (≥0.05)<br>0.265 (≥0.3) | ACS-GW-TB01-31<br>ACS-GW-DUP01-31<br>ACS-GW-MW59-31<br>ACS-GW-EB01-31MS<br>ACS-GW-EB01-31MSD<br>R110502-Blk | J (all detects)<br>UJ (all non-detects) | P |
| 4/1/08 (A040120) | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.025 (≥0.05)<br>0.007 (≥0.05)<br>0.260 (≥0.3) | ACS-GW-MW58-31<br>ACS-GW-MW17-31<br>ACS-GW-MW28-31<br>ACS-GW-MW31-31<br>ACS-GW-MW32-31<br>ACS-GW-MW08-31<br>ACS-GW-EB01-31<br>R110502-BLK | J (all detects)<br>UJ (all non-detects) | P |

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample ACS-GW-TB01-31 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

| Trip Blank ID | Sampling Date | Compound | Concentration | Associated Samples |
|---|---|---|---|---|
| ACS-GW-TB01-31 | 3/25/08 | Chloroform | 1.3 ug/L | ACS-GW-DUP01-31<br>ACS-GW-MW59-31<br>ACS-GW-MW58-31<br>ACS-GW-MW17-31<br>ACS-GW-MW28-31<br>ACS-GW-MW31-31<br>ACS-GW-MW32-31<br>ACS-GW-MW08-31<br>ACS-GW-EB01-31<br>ACS-GW-EB01-31MS<br>ACS-GW-EB01-31MSD |

Sample ACS-GW-EB01-31 was identified as an equipment blank.. No volatile contaminants were found in this blank.

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Compound | MS (%R) (Limits) | MSD (%R) (Limits) | RPD (Limits) | Flag | A or P |
|---|---|---|---|---|---|---|
| ACS-GW-EB01-31MS/MSD<br>(ACS-GW-MW59-31) | Chloromethane<br>Vinyl chloride | 214 (10.8-155)<br>157 (33-151) | 203 (10.8-155)<br>- | -<br>- | J (all detects)<br>J (all detects) | A |

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

| LCS ID | Compound | %R (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| R110502-LCS | Chloromethane | 190 (34.7-130) | All samples in SDG ME0803A55 | J (all detects) | P |

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

All internal standard areas and retention times were within QC limits.

## XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

## XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

## XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

## XIV. System Performance

Raw data were not reviewed for this SDG.

## XV. Overall Assessment of Data

Data flags have been summarized at the end of the report if data has been qualified.

## XVI. Field Duplicates

Samples ACS-GW-DUP01-31 and ACS-GW-MW17-31 were identified as field duplicates. No volatiles were detected in any of the samples.

## ACS GW Semi-Annual
## Volatiles - Data Qualification Summary - SDG ME0803A55

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| ME0803A55 | ACS-GW-TB01-31<br>ACS-GW-DUP01-31<br>ACS-GW-MW59-31<br>ACS-GW-MW58-31<br>ACS-GW-MW17-31<br>ACS-GW-MW28-31<br>ACS-GW-MW31-31<br>ACS-GW-MW32-31<br>ACS-GW-MW08-31<br>ACS-GW-EB01-31 | Acetone<br><br>2-Butanone | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A | Initial calibration (%RRF) |
| ME0803A55 | ACS-GW-MW58-31<br>ACS-GW-MW17-31<br>ACS-GW-MW28-31<br>ACS-GW-MW31-31<br>ACS-GW-MW32-31<br>ACS-GW-MW08-31<br>ACS-GW-EB01-31 | Chloromethane<br><br>Bromomethane | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (%D) |
| ME0803A55 | ACS-GW-TB01-31<br>ACS-GW-DUP01-31<br>ACS-GW-MW59-31<br>ACS-GW-MW58-31<br>ACS-GW-MW17-31<br>ACS-GW-MW28-31<br>ACS-GW-MW31-31<br>ACS-GW-MW32-31<br>ACS-GW-MW08-31<br>ACS-GW-EB01-31 | Chloromethane<br><br>Bromomethane | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (ICV %D) |
| ME0803A55 | ACS-GW-TB01-31<br>ACS-GW-DUP01-31<br>ACS-GW-MW59-31<br>ACS-GW-MW58-31<br>ACS-GW-MW17-31<br>ACS-GW-MW28-31<br>ACS-GW-MW31-31<br>ACS-GW-MW32-31<br>ACS-GW-MW08-31<br>ACS-GW-EB01-31 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (%RRF) |
| ME0803A55 | ACS-GW-MW59-31 | Chloromethane<br>Vinyl chloride | J (all detects)<br>J (all detects) | A | Matrix spike/Matrix spike duplicates (%R) |

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| ME0803A55 | ACS-GW-TB01-31<br>ACS-GW-DUP01-31<br>ACS-GW-MW59-31<br>ACS-GW-MW58-31<br>ACS-GW-MW17-31<br>ACS-GW-MW28-31<br>ACS-GW-MW31-31<br>ACS-GW-MW32-31<br>ACS-GW-MW08-31<br>ACS-GW-EB01-31 | Chloromethane | J (all detects) | P | Laboratory control samples (%R) |

**ACS GW Semi-Annual**
**Volatiles - Laboratory Blank Data Qualification Summary - SDG ME0803A55**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Volatiles - Field Blank Data Qualification Summary - SDG ME0803A55**

No Sample Data Qualified in this SDG

LDC #: 18716A1
SDG #: ME0803A55
Laboratory: Microbac

# VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 5/16/08
Page: 1 of 1
Reviewer: JVG
2nd Reviewer:

**METHOD:** GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 3/25/08 |
| II. | GC/MS Instrument performance check | A | |
| III. | Initial calibration | SW | |
| IV. | Continuing calibration ~~ICV~~/CCV | SW | CCV ≤ 25 % |
| V. | Blanks | A | |
| VI. | Surrogate spikes | A | |
| VII. | Matrix spike/Matrix spike duplicates | SW | |
| VIII. | Laboratory control samples | SW | LCS |
| IX. | Regional Quality Assurance and Quality Control | N | |
| X. | Internal standards | | |
| XI. | Target compound identification | N | |
| XII. | Compound quantitation/CRQLs | N | |
| XIII. | Tentatively identified compounds (TICs) | N | |
| XIV. | System performance | N | |
| XV. | Overall assessment of data | A | |
| XVI. | Field duplicates | ND | D = 2, 5 |
| XVII. | Field blanks | SW | TB = 1 *EB = 10 |

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
X ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

Water

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| + 1 | ACS-GW-TB01-31 | 11 | ACS-GW-MW59-31MS | 21 | R110502-Blk | 31 | |
| - 2 | ACS-GW-DUP01-31 D | 12 | ACS-GW-MW59-31MSD | 22 | | 32 | |
| + 3 | ACS-GW-MW59-31 | 13 | | 23 | | 33 | |
| + 4 | ACS-GW-MW58-31 | 14 | | 24 | | 34 | |
| - 5 | ACS-GW-MW17-31 D | 15 | | 25 | | 35 | |
| - 6 | ACS-GW-MW28-31 | 16 | | 26 | | 36 | |
| - 7 | ACS-GW-MW31-31 | 17 | | 27 | | 37 | |
| + 8 | ACS-GW-MW32-31 | 18 | | 28 | | 38 | |
| - 9 | ACS-GW-MW08-31 | 19 | | 29 | | 39 | |
| - 10 | ACS-GW-EB01-31 | 20 | | 30 | | 40 | |

(~~no ICV~~)

# TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

| | | | | |
|---|---|---|---|---|
| A. Chloromethane* | U. 1,1,2-Trichloroethane | OO. 2,2-Dichloropropane | III. n-Butylbenzene | CCCC.1-Chlorohexane |
| B. Bromomethane | V. Benzene | PP. Bromochloromethane | JJJ. 1,2-Dichlorobenzene | DDDD. Isopropyl alcohol |
| C. Vinyl choride** | W. trans-1,3-Dichloropropene | QQ. 1,1-Dichloropropene | KKK. 1,2,4-Trichlorobenzene | EEEE. Acetonitrile |
| D. Chloroethane | X. Bromoform* | RR. Dibromomethane | LLL. Hexachlorobutadiene | FFFF. Acrolein |
| E. Methylene chloride | Y. 4-Methyl-2-pentanone | SS. 1,3-Dichloropropane | MMM. Naphthalene | GGGG. Acrylonitrile |
| F. Acetone | Z. 2-Hexanone | TT. 1,2-Dibromoethane | NNN. 1,2,3-Trichlorobenzene | HHHH. 1,4-Dioxane |
| G. Carbon disulfide | AA. Tetrachloroethene | UU. 1,1,1,2-Tetrachloroethane | OOO. 1,3,5-Trichlorobenzene | IIII. Isobutyl alcohol |
| H. 1,1-Dichloroethene** | BB. 1,1,2,2-Tetrachloroethane* | VV. Isopropylbenzene | PPP. trans-1,2-Dichloroethene | JJJJ. Methacrylonitrile |
| I. 1,1-Dichloroethane* | CC. Toluene** | WW. Bromobenzene | QQQ. cis-1,2-Dichloroethene | KKKK. Propionitrile |
| J. 1,2-Dichloroethene, total | DD. Chlorobenzene* | XX. 1,2,3-Trichloropropane | RRR. m,p-Xylenes | LLLL. Ethyl ether |
| K. Chloroform** | EE. Ethylbenzene** | YY. n-Propylbenzene | SSS. o-Xylene | MMMM. Benzyl chloride |
| L. 1,2-Dichloroethane | FF. Styrene | ZZ. 2-Chlorotoluene | TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane | NNNN. |
| M. 2-Butanone | GG. Xylenes, total | AAA. 1,3,5-Trimethylbenzene | UUU. 1,2-Dichlorotetrafluoroethane | OOOO. |
| N. 1,1,1-Trichloroethane | HH. Vinyl acetate | BBB. 4-Chlorotoluene | VVV. 4-Ethyltoluene | PPPP. |
| O. Carbon tetrachloride | II. 2-Chloroethylvinyl ether | CCC. tert-Butylbenzene | WWW. Ethanol | QQQQ. |
| P. Bromodichloromethane | JJ. Dichlorodifluoromethane | DDD. 1,2,4-Trimethylbenzene | XXX. Di-isopropyl ether | RRRR. |
| Q. 1,2-Dichloropropane** | KK. Trichlorofluoromethane | EEE. sec-Butylbenzene | YYY. tert-Butanol | SSSS. |
| R. cis-1,3-Dichloropropene | LL. Methyl-tert-butyl ether | FFF. 1,3-Dichlorobenzene | ZZZ. tert-Butyl alcohol | TTTT. |
| S. Trichloroethene | MM. 1,2-Dibromo-3-chloropropane | GGG. p-Isopropyltoluene | AAAA. Ethyl tert-butyl ether | UUUU. |
| T. Dibromochloromethane | NN. Methyl ethyl ketone | HHH. 1,4-Dichlorobenzene | BBBB. tert-Amyl methyl ether | VVVV. |

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 18716A1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Initial Calibration


Reviewer: JVG
2nd Reviewer: [signature]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- (Y) N N/A — Did the laboratory perform a 5 point calibration prior to sample analysis?
- (Y) N N/A — Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
- Y (N) N/A — Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?________
- Y N (N/A) — Did the initial calibration meet the acceptance criteria?
- Y (N) N/A — Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

| # | Date | Standard ID | Compound | Finding %RSD (Limit: <30.0%) | Finding RRF (Limit: >0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 3/31/08 | ICAL | F | | 0.022 | All + Blk | J/UJ/A |
| | | | M | | 0.007 | ↓ | ↓ |

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LDC #: 18716A1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Continuing Calibration

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [signature]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y (N) N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

| # | Date | Standard ID | Compound | Finding %D (Limit: <25.0%) | Finding RRF (Limit: >0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 4/01/08 | A040103 | F | | 0.026 | 1-3, 11, 12, R110502-Blk | J/UJ/P |
| | | (CCV) | M | | 0.006 | ↓ | ↓ |
| | | | BB | | 0.265 (≥0.3) SPCC | | |
| | | | | | | | |
| | | | | | | | |
| | 4/01/08 | A040120 | A | 33.3 | | 4-10 | J/UJ/P |
| | | (CCV) | B | 50.8 | | ↓ | ↓ |
| | | | F | | 0.025 | | |
| | | | M | | 0.007 | | |
| | | | BB | | 0.260 (≥0.30) SPCC ✓ | | |
| | | | ~~DBM~~ | | | | |
| | | | | | | | |
| | | | | | | | |
| | 3/31 | A033115 | A | 68.2 | | All + Blk | J/UJ/A |
| | | (ICV) | B | 40.4 | | ↓ | ↓ |
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CONCAL.1SB

LDC #: 18716 A1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Field Blanks

Page: 1 of 1
Reviewer: SVG
2nd Reviewer: [illegible]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

**Blank units:** ug/L **Associated sample units:** ug/L
**Field blank type:** (circle one) Field Blank / Rinsate / Trip Blank / Other: Associated Samples: All except #1 (ND)

| Compound | Blank ID 1 | Blank ID | Sample Identification | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Date | 3/25/08 | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | | | | | | | | | | |
| Chloroform | 1.3 | | | | | | | | | |
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| CRQL | | | | | | | | | | |

**Blank units:** _____ **Associated sample units:** _____
**Field blank type:** (circle one) Field Blank / Rinsate / Trip Blank / Other: Associated Samples:

| Compound | Blank ID | Blank ID | Sample Identification | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Date | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | | | | | | | | | | |
| Chloroform | | | | | | | | | | |
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| CRQL | | | | | | | | | | |

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 18716 A1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Matrix Spike/Matrix Spike Duplicates


Reviewer: JVC
2nd Reviewer: [signature]

**METHOD** : GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

(Y) N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y (N) N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

| # | Date | MS/MSD ID | Compound | MS %R (Limits) | MSD %R (Limits) | RPD (Limits) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|---|
| | | 11/12 | A | 214 (10.8-155) | 203 (10.8-155) | ( ) | 3 | J dets/A |
| | | | C | 157 (33-151) | ( ) | ( ) | ↓ | ↓ |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
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| | | | | ( ) | ( ) | ( ) | | |
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| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |

| | Compound | QC Limits (Soil) | RPD (Soil) | QC Limits (Water) | RPD (Water) |
|---|---|---|---|---|---|
| H. | 1,1-Dichloroethene | 59-172% | < 22% | 61-145% | < 14% |
| S. | Trichloroethene | 62-137% | < 24% | 71-120% | < 14% |
| V. | Benzene | 66-142% | < 21% | 76-127% | < 11% |
| CC. | Toluene | 59-139% | < 21% | 76-125% | < 13% |
| DD. | Chlorobenzene | 60-133% | < 21% | 75-130% | < 13% |

LDC #: 18716 A1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Laboratory Control Samples (LCS)


Reviewer: JVG
2nd Reviewer: [illegible]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

| # | Date | LCS/LCSD ID | Compound | LCS %R (Limits) | LCSD %R (Limits) | RPD (Limits) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|---|
| | | R110502-LCS | A | 190 (34.7-130) | ( ) | ( ) | All + Blk | J acts/P |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-TB01-31 | **Work Order / ID:** | ME0803A55-01 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/01/08 13:27 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/01/08 13:27 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/01/08 13:27 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/01/08 13:27 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/01/08 13:27 | |
| Chloroform | A | *1.3* | 0.9 | 5.0 | J | µg/L | 1 | 04/01/08 13:27 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/01/08 13:27 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/01/08 13:27 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/01/08 13:27 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/01/08 13:27 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/01/08 13:27 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/01/08 13:27 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/01/08 13:27 | |
| *Surr: 4-Bromofluorobenzene* | S | 105 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 13:27 | |

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-TB01-31 | **Work Order / ID:** | ME0803A55-01 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 114 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 13:27 |
| *Surr: 1,2-Dichloroethane-d4* | S | 127 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 13:27 |
| *Surr: Toluene-d8* | S | 99.9 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 13:27 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** GW - SemiAnnual / ACS
**Client Sample ID:** ACS-GW-DUP01-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A55-02
**Collection Date:** 03/25/08 09:00
**Date Received:** 03/26/08 13:20

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/01/08 14:04 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/01/08 14:04 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/01/08 14:04 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/01/08 14:04 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/01/08 14:04 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/01/08 14:04 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/01/08 14:04 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/01/08 14:04 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/01/08 14:04 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/01/08 14:04 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/01/08 14:04 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/01/08 14:04 | |
| *Surr: 4-Bromofluorobenzene* | S | 108 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 14:04 | |

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5/20/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-DUP01-31 | **Work Order / ID:** | ME0803A55-02 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 113 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 14:04 |
| *Surr: 1,2-Dichloroethane-d4* | S | 129 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 14:04 |
| *Surr: Toluene-d8* | S | 101 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 14:04 |

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4/30/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW59-31 | **Work Order / ID:** | ME0803A55-03 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 10:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/01/08 14:40 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/01/08 14:40 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/01/08 14:40 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/01/08 14:40 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/01/08 14:40 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/01/08 14:40 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/01/08 14:40 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/01/08 14:40 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/01/08 14:40 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Trichloroethene | A | *7.6* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/01/08 14:40 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/01/08 14:40 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/01/08 14:40 | |
| *Surr: 4-Bromofluorobenzene* | S | 107 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 14:40 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW59-31 | **Work Order / ID:** | ME0803A55-03 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 10:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 112 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 14:40 |
| *Surr: 1,2-Dichloroethane-d4* | S | 127 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 14:40 |
| *Surr: Toluene-d8* | S | 101 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 14:40 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW58-31 | **Work Order / ID:** | ME0803A55-04 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 12:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/01/08 20:27 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/01/08 20:27 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/01/08 20:27 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/01/08 20:27 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/01/08 20:27 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/01/08 20:27 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/01/08 20:27 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/01/08 20:27 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/01/08 20:27 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Trichloroethene | A | 8.7 | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/01/08 20:27 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/01/08 20:27 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/01/08 20:27 | |
| *Surr: 4-Bromofluorobenzene* | S | 103 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 20:27 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW58-31 | **Work Order / ID:** | ME0803A55-04 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 12:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 20:27 |
| *Surr: 1,2-Dichloroethane-d4* | S | 112 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 20:27 |
| *Surr: Toluene-d8* | S | 101 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 20:27 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** GW - SemiAnnual / ACS
**Client Sample ID:** ACS-GW-MW17-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A55-05
**Collection Date:** 03/25/08 13:58
**Date Received:** 03/26/08 13:20

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/01/08 21:02 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/01/08 21:02 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/01/08 21:02 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/01/08 21:02 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/01/08 21:02 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/01/08 21:02 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/01/08 21:02 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/01/08 21:02 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/01/08 21:02 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/01/08 21:02 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/01/08 21:02 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/01/08 21:02 | |
| *Surr: 4-Bromofluorobenzene* | S | 105 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 21:02 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW17-31 | **Work Order / ID:** | ME0803A55-05 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 13:58 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 111 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 21:02 |
| *Surr: 1,2-Dichloroethane-d4* | S | 116 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 21:02 |
| *Surr: Toluene-d8* | S | 98.3 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 21:02 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW28-31 | **Work Order / ID:** | ME0803A55-06 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 14:05 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 21:40 | UJ |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 21:40 | UJ |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 21:40 | UJ |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 21:40 | |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 21:40 | |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 21:40 | UJ |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 21:40 | |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 21:40 | |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 21:40 | |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | UJ |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 21:40 | |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 21:40 | |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 21:40 | |
| *Surr: 4-Bromofluorobenzene* | S | 102 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 21:40 | |

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4/3/2008

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW28-31 | **Work Order / ID:** | ME0803A55-06 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 14:05 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 21:40 |
| *Surr: 1,2-Dichloroethane-d4* | S | 113 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 21:40 |
| *Surr: Toluene-d8* | S | 97.4 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 21:40 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** GW - SemiAnnual / ACS
**Client Sample ID:** ACS-GW-MW31-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A55-07
**Collection Date:** 03/25/08 15:30
**Date Received:** 03/26/08 13:20

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/01/08 22:19 | UJ |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/01/08 22:19 | UJ |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/01/08 22:19 | UJ |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 22:19 | |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/01/08 22:19 | |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 22:19 | UJ |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/01/08 22:19 | |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/01/08 22:19 | |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/01/08 22:19 | |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | UJ |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 22:19 | |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/01/08 22:19 | |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/01/08 22:19 | |
| *Surr: 4-Bromofluorobenzene* | S | 103 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 22:19 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW31-31 | **Work Order / ID:** | ME0803A55-07 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 15:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 108 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 22:19 |
| *Surr: 1,2-Dichloroethane-d4* | S | 117 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 22:19 |
| *Surr: Toluene-d8* | S | 97.8 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 22:19 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** GW - SemiAnnual / ACS
**Client Sample ID:** ACS-GW-MW32-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A55-08
**Collection Date:** 03/25/08 15:50
**Date Received:** 03/26/08 13:20

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/01/08 22:56 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/01/08 22:56 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/01/08 22:56 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/01/08 22:56 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/01/08 22:56 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/01/08 22:56 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/01/08 22:56 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/01/08 22:56 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/01/08 22:56 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| Trichloroethene | A | *1.2* | 0.9 | 5.0 | J | µg/L | 1 | 04/01/08 22:56 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/01/08 22:56 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/01/08 22:56 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/01/08 22:56 | |
| *Surr: 4-Bromofluorobenzene* | S | 104 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 22:56 | |

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4/2/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW32-31 | **Work Order / ID:** | ME0803A55-08 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 15:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 112 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 22:56 |
| *Surr: 1,2-Dichloroethane-d4* | S | 118 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 22:56 |
| *Surr: Toluene-d8* | S | 98.9 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 22:56 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW08-31 | **Work Order / ID:** | ME0803A55-09 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 16:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/01/08 23:32 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/01/08 23:32 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/01/08 23:32 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/01/08 23:32 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/01/08 23:32 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/01/08 23:32 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/01/08 23:32 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/01/08 23:32 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/01/08 23:32 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/01/08 23:32 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/01/08 23:32 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/01/08 23:32 | |
| *Surr: 4-Bromofluorobenzene* | S | 102 | 0 | 75.2-115 | | %REC | 1 | 04/01/08 23:32 | |

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4/7-10/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-MW08-31 | **Work Order / ID:** | ME0803A55-09 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 16:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 110 | 0 | 92.7-119 | | %REC | 1 | 04/01/08 23:32 |
| *Surr: 1,2-Dichloroethane-d4* | S | 117 | 0 | 88.2-132 | | %REC | 1 | 04/01/08 23:32 |
| *Surr: Toluene-d8* | S | 98.2 | 0 | 89.3-116 | | %REC | 1 | 04/01/08 23:32 |

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4/30/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - SemiAnnual / ACS | | |
| **Client Sample ID:** | ACS-GW-EB01-31 | **Work Order / ID:** | ME0803A55-10 |
| **Sample Description:** | | **Collection Date:** | 03/25/08 17:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/26/08 13:20 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/02/08 00:08 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/02/08 00:08 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/02/08 00:08 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/02/08 00:08 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/02/08 00:08 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/02/08 00:08 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/02/08 00:08 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/02/08 00:08 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/02/08 00:08 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/02/08 00:08 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/02/08 00:08 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/02/08 00:08 | |
| *Surr: 4-Bromofluorobenzene* | S | 101 | 0 | 75.2-115 | | %REC | 1 | 04/02/08 00:08 | |

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5/20/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** GW - SemiAnnual / ACS
**Client Sample ID:** ACS-GW-EB01-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A55-10
**Collection Date:** 03/25/08 17:00
**Date Received:** 03/26/08 13:20

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 111 | 0 | 92.7-119 | | %REC | 1 | 04/02/08 00:08 |
| *Surr: 1,2-Dichloroethane-d4* | S | 116 | 0 | 88.2-132 | | %REC | 1 | 04/02/08 00:08 |
| *Surr: Toluene-d8* | S | 98.0 | 0 | 89.3-116 | | %REC | 1 | 04/02/08 00:08 |

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# LEVEL IV
# QA/QC DATA PACKAGE

| | |
|---|---|
| **CLIENT:** | MWH, Inc. |
| **PROJECT:** | ACS Groundwater / Griffith, IN |
| **LAB WORKORDER:** | ME0803A91 |
| **DATE PACKAGE ISSUED:** | 04/14/08 |

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**CLIENT:** **MWH, Inc.**

**PROJECT:** **ACS Groundwater / Griffith, IN**

**LAB WORKORDER:** **ME0803A91**

**CHAIN-OF-CUSTODY:** **82593**


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# Case Narrative
# Metals Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803A91

Four groundwater samples were received on 03/27/08 for analysis and reporting in accordance with our Level IV protocol. The samples were received in acceptable physical condition. The samples were analyzed for Arsenic using SW-846 Method 3010A/6010B.

The samples were collected on 03/26/08. The samples were digested on 03/27/08 then analyzed on 03/28/08. All samples were analyzed within the prescribed maximum allowable holding time without exception.

The required instrument calibrations and quality control tests were performed and the acceptance criteria met without exception.

The batch quality control tests were performed and the acceptance criteria met without exception.

Matrix evaluation was performed on the sample ACS-GW-MW43-31. The accuracy and precision criteria were met.

This Case Narrative was prepared by Allyl McCarron, QC Assistant.

# Case Narrative
# SVOA Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803A91

Two groundwater samples were received on 03/27/08 for analysis and reporting in accordance with our Level IV protocol. The samples were received in acceptable physical condition. The samples were analyzed for Semi-volatile Organic Analytes using SW-846 Method 3510/8270C.

The samples were collected on 03/26/08. The samples were extracted and analyzed on 04/02/08. All samples were prepared and analyzed within the prescribed maximum allowable holding times without exception.

The required instrument calibration was performed and the acceptance criteria met. The grand mean average approach was used to assess linearity.

Prior to analysis, the resultant mass spectra for DFTPP met all method criteria, and all samples were analyzed within 12-hour analytical sequences.

Prior to analysis, a CCV standard was analyzed and the acceptance criteria met for all CCCs and SPCCs.

The batch quality control tests were performed and the acceptance criteria met without exception.

Three acid surrogate compounds and three base/neutral surrogate compounds are spiked into each sample to evaluate the extraction and analysis efficiency. One surrogate per fraction (acid versus base/neutral) is allowed to be outside of the acceptance criteria. All environmental samples yielded acceptable surrogate recovery.

Internal standards are spiked into each CCV standard and environmental sample. All internal standard responses met the criteria established for the CCVs. The internal standard responses in the environmental samples were evaluated and deemed adequate.

Matrix evaluation was performed on a sample submitted in another delivery group. The accuracy and precision criteria were met as noted.

This Case Narrative was prepared by Allyl McCarron, QC Assistant.

# Case Narrative
# VOA Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803A91

Eleven groundwater samples were received on 03/27/08 for analysis and reporting in accordance with our Level IV protocol. The samples were received in acceptable physical condition. The samples were analyzed for Volatile Organic Analytes using SW-846 Method 8260B. To achieve lower reporting limits these samples were analyzed using a 25-ml sample size.

The samples were collected on 03/26/08. The samples were analyzed on 04/02/08 and 04/03/08. All samples were analyzed within the prescribed maximum allowable holding time without exception.

The required instrument calibrations were performed and the acceptance criteria met with the following listed exception. The grand mean average approach was used to assess linearity.

- 1,1,2,2-Tetrachloroethane failed to meet the minimum average response criteria. This criterion is based on a 5-ml sample size. These standards were analyzed using a 25-ml purge volume. This data is typical for a 25-ml purge and considered acceptable.

Prior to analysis, the resultant mass spectra for BFB met all method criteria, and all samples were analyzed within 12-hour analytical sequences.

Prior to analysis, a CCV standard was analyzed and the acceptance criteria met for all CCCs and SPCCs with the following exceptions.

- 1,1,2,2-Tetrachloroethane failed to meet the minimum response criteria in A040204, A040219 and A040312. This criterion is based on a 5-ml sample size. These standards were analyzed using a 25-ml purge volume. This data is typical for a 25-ml purge and considered acceptable.
- CCV A040204 failed for 1,1-Dichloroethene. This is considered insignificant, as the bias was high yet the concentration in the associated samples remained below the reporting limit.
- CCV A040219 failed for 1,1-Dichloroethene and Vinyl Chloride. This is considered insignificant, as the bias was high yet the concentration in the associated samples remained below the reporting limit.

# Case Narrative
# VOA Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803A91

The batch quality control tests were performed and the acceptance criteria met with the following exceptions.

- Laboratory Control Samples (SeqNos 1763026 and 1765099) failed for Chloromethane. This is considered insignificant, as the bias was high yet the concentration in the associated samples remained below the reporting limit.

Surrogate compounds are spiked into each sample to evaluate analysis efficiency. All samples yielded acceptable surrogate recovery.

Internal standards are spiked into each CCV standard and environmental sample. All internal standard responses met the criteria established for the CCVs. The internal standard responses in the environmental samples were evaluated and deemed adequate.

Matrix evaluation was performed on samples submitted in other delivery groups. The accuracy and precision criteria were met as noted.

This Case Narrative was prepared by Allyl McCarron, QC Assistant.

April 10, 2008

Christopher Daly
MWH, Inc.
175 West Jackson Boulevard, Suite 1900
Chicago, IL 60604

Work Order No.: ME0803A91

RE: ACS Groundwater / Griffith, IN

Dear Christopher Daly:

Microbac Laboratories, Inc. received 11 samples on 3/27/2008 10:34:00 AM for the analyses presented in the following report.

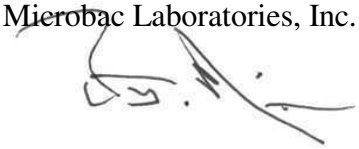
The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,
Microbac Laboratories, Inc.



Ronald J. Misiunas
Client Services Manager

Enclosures

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# WORK ORDER SAMPLE SUMMARY

**Date:** *Thursday, April 10, 2008*

**CLIENT:** MWH, Inc.
**Project:** ACS Groundwater / Griffith, IN
**Lab Order:** ME0803A91

| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---|---|---|---|---|
| ME0803A91-01A | ACS-GW-TB02-31 | | 3/26/2008 7:45:00 AM | 3/27/2008 |
| ME0803A91-02A | ACS-GW-MW42-31 | | 3/26/2008 8:45:00 AM | 3/27/2008 |
| ME0803A91-03A | ACS-GW-DUP02-31 | | 3/26/2008 9:00:00 AM | 3/27/2008 |
| ME0803A91-03B | ACS-GW-DUP02-31 | | 3/26/2008 9:00:00 AM | 3/27/2008 |
| ME0803A91-04A | ACS-GW-MW43-31 | | 3/26/2008 9:30:00 AM | 3/27/2008 |
| ME0803A91-04B | ACS-GW-MW43-31 | | 3/26/2008 9:30:00 AM | 3/27/2008 |
| ME0803A91-05A | ACS-GW-MW45-31 | | 3/26/2008 10:30:00 AM | 3/27/2008 |
| ME0803A91-06A | ACS-GW-MW15-31 | | 3/26/2008 11:10:00 AM | 3/27/2008 |
| ME0803A91-06B | ACS-GW-MW15-31 | | 3/26/2008 11:10:00 AM | 3/27/2008 |
| ME0803A91-07A | ACS-GW-MW19-31 | | 3/26/2008 1:20:00 PM | 3/27/2008 |
| ME0803A91-07B | ACS-GW-MW19-31 | | 3/26/2008 1:20:00 PM | 3/27/2008 |
| ME0803A91-08A | ACS-GW-MW12-31 | | 3/26/2008 2:10:00 PM | 3/27/2008 |
| ME0803A91-09A | ACS-GW-MW11-31 | | 3/26/2008 3:45:00 PM | 3/27/2008 |
| ME0803A91-10A | ACS-GW-MW23-31 | | 3/26/2008 4:35:00 PM | 3/27/2008 |
| ME0803A91-11A | ACS-GW-EB02-31 | | 3/26/2008 5:00:00 PM | 3/27/2008 |
| ME0803A91-11B | ACS-GW-EB02-31 | | 3/26/2008 5:00:00 PM | 3/27/2008 |
| ME0803A91-11C | ACS-GW-EB02-31 | | 3/26/2008 5:00:00 PM | 3/27/2008 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB02-31 | **Work Order / ID:** | ME0803A91-01 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 07:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/02/08 21:07 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| Chloroform | A | ***1.4*** | 0.9 | 5.0 | J | µg/L | 1 | 04/02/08 21:07 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/02/08 21:07 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/02/08 21:07 |
| *Surr: 4-Bromofluorobenzene* | S | 106 | 0 | 75.2-115 | | %REC | 1 | 04/02/08 21:07 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB02-31 | **Work Order / ID:** | ME0803A91-01 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 07:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 115 | 0 | 92.7-119 | | %REC | 1 | 04/02/08 21:07 |
| *Surr: 1,2-Dichloroethane-d4* | S | 129 | 0 | 88.2-132 | | %REC | 1 | 04/02/08 21:07 |
| *Surr: Toluene-d8* | S | 94.9 | 0 | 89.3-116 | | %REC | 1 | 04/02/08 21:07 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW42-31 | **Work Order / ID:** | ME0803A91-02 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 08:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 17:31 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 17:31 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 17:31 |
| *Surr: 4-Bromofluorobenzene* | S | 94.2 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 17:31 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW42-31 | **Work Order / ID:** | ME0803A91-02 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 08:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 99.4 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 17:31 |
| *Surr: 1,2-Dichloroethane-d4* | S | 101 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 17:31 |
| *Surr: Toluene-d8* | S | 96.6 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 17:31 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP02-31 | **Work Order / ID:** | ME0803A91-03 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | | Prep Date/Time: **03/27/08 18:00** | | Analyst: **AVC** | |
| Arsenic | A | ***3.7*** | 2.5 | 10 | J | µg/L | 1 | 03/28/08 15:58 |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | | Analyst: **NLT** | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 18:06 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP02-31 | **Work Order / ID:** | ME0803A91-03 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| *Surr: 4-Bromofluorobenzene* | S | 96.4 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 18:06 |
| *Surr: Dibromofluoromethane* | S | 105 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 18:06 |
| *Surr: 1,2-Dichloroethane-d4* | S | 104 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 18:06 |
| *Surr: Toluene-d8* | S | 95.5 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 18:06 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW43-31
**Work Order / ID:** ME0803A91-04
**Sample Description:**
**Collection Date:** 03/26/08 09:30
**Sample Matrix:** Aqueous
**Date Received:** 03/27/08 10:34

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | | Prep Date/Time: **03/27/08 18:00** | | Analyst: **AVC** | |
| Arsenic | A | ***ND*** | 2.5 | 10 | | µg/L | 1 | 03/28/08 16:03 |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | | Analyst: **NLT** | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 18:42 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 18:42 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW43-31 | **Work Order / ID:** | ME0803A91-04 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 09:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| *Surr: 4-Bromofluorobenzene* | S | 94.3 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 18:42 |
| *Surr: Dibromofluoromethane* | S | 104 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 18:42 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 18:42 |
| *Surr: Toluene-d8* | S | 94.2 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 18:42 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW45-31 | **Work Order / ID:** | ME0803A91-05 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 19:18 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Chlorobenzene | A | ***7.0*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 19:18 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 19:18 |
| *Surr: 4-Bromofluorobenzene* | S | 98.1 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 19:18 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW45-31 | **Work Order / ID:** | ME0803A91-05 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 102 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 19:18 |
| *Surr: 1,2-Dichloroethane-d4* | S | 105 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 19:18 |
| *Surr: Toluene-d8* | S | 93.5 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 19:18 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW15-31
**Work Order / ID:** ME0803A91-06
**Sample Description:**
**Collection Date:** 03/26/08 11:10
**Sample Matrix:** Aqueous
**Date Received:** 03/27/08 10:34

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | | Prep Date/Time: **03/27/08 18:00** | | Analyst: **AVC** | |
| Arsenic | A | ***32*** | 2.5 | 10 | | µg/L | 1 | 03/28/08 16:19 |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | | Analyst: **NLT** | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 19:53 |
| Benzene | A | ***1*** | 0.8 | 5.0 | J | µg/L | 1 | 04/03/08 19:53 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 19:53 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW15-31 | **Work Order / ID:** | ME0803A91-06 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 11:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| *Surr: 4-Bromofluorobenzene* | S | 97.8 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 19:53 |
| *Surr: Dibromofluoromethane* | S | 103 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 19:53 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 19:53 |
| *Surr: Toluene-d8* | S | 95.2 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 19:53 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW19-31 | **Work Order / ID:** | ME0803A91-07 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 13:20 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANICS** | Method: **SW8270C** | | | | Prep Date/Time: **04/02/08 06:22** | Analyst: **BEM** | | |
| Bis(2-chloroethyl)ether | A | ***6*** | 0.92 | 10 | J | µg/L | 1 | 04/02/08 21:52 |
| *Surr: Nitrobenzene-d5* | S | 56.8 | 0 | 10-121 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: 2-Fluorobiphenyl* | S | 66.7 | 0 | 10-109 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: Terphenyl-d14* | S | 51.2 | 0 | 10-130 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: Phenol-d5* | S | 20.4 | 0 | 10-100 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: 2-Fluorophenol* | S | 30.3 | 0 | 10-84.7 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: 2,4,6-Tribromophenol* | S | 70.5 | 0 | 10-120 | | %REC | 1 | 04/02/08 21:52 |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | | Analyst: **NLT** | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 20:30 |
| Benzene | A | ***6.5*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Chloroethane | A | ***8.4*** | 2.3 | 10 | J | µg/L | 1 | 04/03/08 20:30 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW19-31 | **Work Order / ID:** | ME0803A91-07 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 13:20 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| *Surr: 4-Bromofluorobenzene* | S | 98.9 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 20:30 |
| *Surr: Dibromofluoromethane* | S | 104 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 20:30 |
| *Surr: 1,2-Dichloroethane-d4* | S | 106 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 20:30 |
| *Surr: Toluene-d8* | S | 95.4 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 20:30 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW12-31 | **Work Order / ID:** | ME0803A91-08 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 14:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 21:09 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Chlorobenzene | A | ***2.9*** | 0.8 | 5.0 | J | µg/L | 1 | 04/03/08 21:09 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 21:09 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 21:09 |
| *Surr: 4-Bromofluorobenzene* | S | 97.9 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 21:09 |

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW12-31 | **Work Order / ID:** | ME0803A91-08 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 14:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 21:09 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 21:09 |
| *Surr: Toluene-d8* | S | 94.9 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 21:09 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW11-31 | **Work Order / ID:** | ME0803A91-09 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 15:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 21:50 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 21:50 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 21:50 |
| *Surr: 4-Bromofluorobenzene* | S | 99.3 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 21:50 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW11-31 | **Work Order / ID:** | ME0803A91-09 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 15:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 21:50 |
| *Surr: 1,2-Dichloroethane-d4* | S | 114 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 21:50 |
| *Surr: Toluene-d8* | S | 95.5 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 21:50 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW23-31 | **Work Order / ID:** | ME0803A91-10 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 16:35 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 22:29 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 22:29 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 22:29 |
| *Surr: 4-Bromofluorobenzene* | S | 98.0 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 22:29 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW23-31 | **Work Order / ID:** | ME0803A91-10 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 16:35 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 110 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 22:29 |
| *Surr: 1,2-Dichloroethane-d4* | S | 116 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 22:29 |
| *Surr: Toluene-d8* | S | 94.1 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 22:29 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB02-31 | **Work Order / ID:** | ME0803A91-11 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 17:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | | Prep Date/Time: **03/27/08 18:00** | Analyst: **AVC** | | |
| Arsenic | A | ***ND*** | 2.5 | 10 | | µg/L | 1 | 03/28/08 16:25 |
| **SEMIVOLATILE ORGANICS** | Method: **SW8270C** | | | | Prep Date/Time: **04/02/08 06:22** | Analyst: **BEM** | | |
| Bis(2-chloroethyl)ether | A | ***ND*** | 0.91 | 10 | | µg/L | 1 | 04/02/08 22:18 |
| *Surr: Nitrobenzene-d5* | S | 49.3 | 0 | 10-121 | | %REC | 1 | 04/02/08 22:18 |
| *Surr: 2-Fluorobiphenyl* | S | 60.1 | 0 | 10-109 | | %REC | 1 | 04/02/08 22:18 |
| *Surr: Terphenyl-d14* | S | 67.2 | 0 | 10-130 | | %REC | 1 | 04/02/08 22:18 |
| *Surr: Phenol-d5* | S | 16.8 | 0 | 10-100 | | %REC | 1 | 04/02/08 22:18 |
| *Surr: 2-Fluorophenol* | S | 26.9 | 0 | 10-84.7 | | %REC | 1 | 04/02/08 22:18 |
| *Surr: 2,4,6-Tribromophenol* | S | 69.0 | 0 | 10-120 | | %REC | 1 | 04/02/08 22:18 |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | Analyst: **NLT** | | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/03/08 23:06 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/03/08 23:06 |

# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB02-31 | **Work Order / ID:** | ME0803A91-11 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 17:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| *Surr: 4-Bromofluorobenzene* | S | 98.2 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 23:06 |
| *Surr: Dibromofluoromethane* | S | 108 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 23:06 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 23:06 |
| *Surr: Toluene-d8* | S | 94.5 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 23:06 |

**FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NA | = | Not Analyzed | N/A | = | Not Applicable | | | |
| mg/L | = | Milligrams per Liter (ppm) | ug/L | = | Micrograms per Liter (ppb) | cfu | = | Colony Forming Unit |
| mg/Kg | = | Milligrams per Kilogram (ppm) | ug/Kg | = | Micrograms per Kilogram (ppb) | ng/L | = | Nanograms per Liter (ppt) |

| | | |
|---|---|---|
| U | = | Undetected |
| J | = | Analyte concentration detected between RL and MDL (Metals / Organics) |
| B | = | Detected in the associated Method Blank at a concentration above the routine PQL/RL |
| b | = | Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL |
| D | = | Surrogate recoveries are not calculated due to sample dilution |
| ND | = | Not Detected at the Reporting Limit (or the Method Detection Limit, if listed) |
| E | = | Value above quantitation range |
| H | = | Analyte was prepared and/or analyzed outside of the analytical method holding time |
| I | = | Matrix Interference |
| R | = | RPD outside accepted recovery limits |
| S | = | Spike recovery outside recovery limits |
| Surr | = | Surrogate |

DF = Dilution Factor RL = Reporting Limit ST = Sample Type MDL = Method Detection Limit

**SAMPLE TYPES**

| | | |
|---|---|---|
| A | = | Analyte |
| I | = | Internal Standard |
| S | = | Surrogate |
| T | = | Tentatively Identified Compound (TIC, concentration estimated) |

**QC SAMPLE IDENTIFICATIONS**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MBLK | = | Method Blank | ICSA | = | Interference Check Standard "A" | OPR | = | Ongoing Precision and Recovery Standard |
| DUP | = | Method Duplicate | ICSAB | = | Interference Check Standard "AB" | | | |
| LCS | = | Laboratory Control Sample | LCSD | = | Laboratory Control Sample Duplicate | | | |
| MS | = | Matrix Spike | MSD | = | Matrix Spike Duplicate | | | |
| ICB | = | Initial Calibration Blank | CCB | = | Continuing Calibration Blank | | | |
| ICV | = | Initial Calibration Verification | CCV | = | Continuing Calibration Verification | | | |
| PDS | = | Post Digestion Spike | SD | = | Serial Dilution | | | |

**CERTIFICATIONS**

*Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.*

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

**MICROBAC LOCATIONS, SERVICE CENTERS (SC) AND SATELLITE OFFICES (Sat)**

**Baltimore Division** - Baltimore, MD
**Camp Hill Division** - Camp Hill, PA
**Camp Hill Division (SC)** - Pittston, PA
**Chicagoland Division** - Merrillville, IN
**Chicagoland Division (SC)** - Indianapolis, IN
**Corona Division** - Corona, CA
**Erie Division** - Erie, PA
**Fayetteville Division** - Fayetteville, NC
**Hauser Division** - Boulder, CO
**Kentucky Division** - Louisville, KY
**Kentucky Division (Sat)** - Evansville, IN
**Kentucky Division (Sat)** - Lexington, KY
**Kentucky Division (Sat)** - Paducah, KY
**Knoxville Division** - Maryville, TN
**Massachusetts Division** - Marlborough, MA
**Microbac Corporate Office** - Wexford, PA
**Microbac NY - Cortland Office** - Cortland, NY
**Microbac NY - Waverly Office** - Waverly, NY
**New Castle Division** - New Castle, PA
**Pittsburgh Division** - Warrendale, PA
**Richmond Division** - Richmond, VA
**South Carolina Division** - New Ellenton, SC
**South Jersey Division** - Turnersville, NJ
**Southern Headquarters** - Poquoson, VA
**Southern Testing Division** - Wilson, NC
**Southern Testing Division (Sat)** - Greensboro, NC
**Venice Division** - Venice, FL

# COOLER INSPECTION

**Date:** Thursday, April 10, 2008

Client Name: ***MWH, Inc.***

Work Order Number ***ME0803A91***

Checklist completed by SPM | 3/27/2008 12:02:47 PM

Date / Time Received: ***3/27/2008 10:34:00 AM***

Received by: SPM

Reviewed by RJM | 3/31/2008 2:02:11 PM

Carrier name: Microbac

| | | | |
|---|---|---|---|
| After-Hour Arrival? | Yes ☐ | No ☑ | |
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on shippping container/cooler? | Yes ☐ | No ☐ | Not Present ☑ |
| Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☑ |
| Chain of custody present? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient client identification? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient sample collector information? | Yes ☑ | No ☐ | |
| Chain of custody included a sample description? | Yes ☑ | No ☐ | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate matrix? | Yes ☑ | No ☐ | |
| Chain of custody included date of collection? | Yes ☑ | No ☐ | |
| Chain of custody included time of collection? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate number of containers? | Yes ☑ | No ☐ | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | |
| Sample containers intact? | Yes ☑ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | |
| All samples received within holding time? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate preservatives (if preserved)? | Yes ☑ | No ☐ | |
| Samples properly preserved? | Yes ☑ | No ☐ | |

If No, adjusted by? _____ Date/Time _____

| | | | |
|---|---|---|---|
| Chain of custody included the requested analyses? | Yes ☑ | No ☐ | |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | |
| Samples received on ice? | Yes ☑ | No ☐ | |

| Container/Temp Blank temperatures | Cooler | Temp |
|---|---|---|
| | 1 | 1 ºC |

VOA vials for aqueous samples have zero headspace? No VOA vials submitted ☐ Yes ☑ No ☐

**ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.**

General Comments:

| Sample ID | Client Sample ID | Comments |
|---|---|---|
| ME0803A91-01A | ACS-GW-TB02-31 | |
| ME0803A91-02A | ACS-GW-MW42-31 | |
| ME0803A91-03A | ACS-GW-DUP02-31 | |
| ME0803A91-03B | ACS-GW-DUP02-31 | |
| ME0803A91-04A | ACS-GW-MW43-31 | |
| ME0803A91-04B | ACS-GW-MW43-31 | |
| ME0803A91-05A | ACS-GW-MW45-31 | |
| ME0803A91-06A | ACS-GW-MW15-31 | |
| ME0803A91-06B | ACS-GW-MW15-31 | |
| ME0803A91-07A | ACS-GW-MW19-31 | |
| ME0803A91-07B | ACS-GW-MW19-31 | |
| ME0803A91-08A | ACS-GW-MW12-31 | |
| ME0803A91-09A | ACS-GW-MW11-31 | |
| ME0803A91-10A | ACS-GW-MW23-31 | |

| Sample ID | Client Sample ID | Comments |
|---|---|---|
| ME0803A91-11A | ACS-GW-EB02-31 | |
| ME0803A91-11B | ACS-GW-EB02-31 | |
| ME0803A91-11C | ACS-GW-EB02-31 | |

ME0803A91 MONT. WATSON-IL-CHICAG 4/3/2008 RJM
ACS Groundwater / Griffith, IN
Christopher Daly

# Microbac

Samples Submitted to:
[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

## Chain of Custody Record

Number 82593

Instructions on back

| | | | |
|---|---|---|---|
| Client Name: MWH | Project: ACS GROUNDWATER | Turnaround Time | Report Type |
| Address: 175 W. JACKSON BLVD SUITE 1900 | Location: GRIFFITH, IN | [X] Routine (7 working days) | [ ] Results Only [ ] Level II |
| City, State, Zip: CHICAGO, IL 60604 | PO #: 4505577. 0301050] | [ ] RUSH* (notify lab) | [ ] Level III [ ] Level III CLP-like |
| Contact: JUSTIN ENGER | Compliance Monitoring? [ ] Yes(1) [ ] No | (needed by) | [ ] Level IV [ ] Level IV CLP-like |
| Telephone #: (312) 831-3447 | (1)Agency/Program | | [ ] EDD |

Sampled by (PRINT): JUSTIN ENGER/ AMANDA BUTLER  Sampler Signature:  Sampler Phone #: (312) 831-3447

Send Report via [X] Mail [ ] Telephone [ ] Fax (fax #)  [X] e-mail (address): JUSTIN.E.ENGER@MWHGLOBAL.COM

* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** **Preservative Types:** (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

| Client Sample ID | Matrix* | Grab | Composite | Filtered | Date Collected | Time Collected | No. of Containers | Requested Analyses → Preservative Types ** | VOCs + TICs | ARSENIC | BIS(2-CHLOROETHYL) ETHER | | | | | | For Lab Use Only: ME0803A91 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACS-GW-TB02-31 | GW | X | | | 3/26/08 | 0745 | 1 | 3 | X | | | | | | | | 1A |
| ACS-GW-MW42-31 | GW | X | | | 3/26/08 | 0845 | 3 | 3 | X | | | | | | | | 2A |
| ACS-GW-DUP02-31 | GW | X | | | 3/26/08 | 0900 | 4 | 3, 1 | X | X | | | | | | | 3A-B |
| ACS-GW-MW43-31 | GW | X | | | 3/26/08 | 0930 | 4 | 3, 1 | X | X | | | | | | | 4A-B |
| ACS-GW-MW45-31 | GW | X | | | 3/26/08 | 1030 | 3/1 | 3, 1 (U) | X | | | | | | | | 5A |
| ACS-GW-MW15-31 | GW | X | | | 3/26/08 | 1110 | 4 | 3, 1 | X | X | | | | | | | 6A-B |
| ACS-GW-MW19-31 | GW | X | | | 3/26/08 | 1320 | 5 | 3, U | X | | X | | | | | | 7A-B |
| ACS-GW-MW12-31 | GW | X | | | 3/26/08 | 1410 | 3 | 3 | X | | | | | | | | 8A |
| ACS-GW-MW11-31 | GW | X | | | 3/26/08 | 1545 | 3 | 3 | X | | | | | | | | 9A |
| ACS-GW-MW23-31 | GW | X | | | 3/26/08 | 1635 | 3 | 3 | X | | | | | | | | 10A |
| ACS-GW-EB02-31 | GW | X | | | 3/26/08 | 1700 | 6 | 3, 1, U | X | X | X | | | | | | 11A-C |

**Possible Hazard Identification** [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive  **Sample Disposition** [ ] Dispose as appropriate [ ] Return [ ] Archive

**Comments:** ANALYZE ACS-GW-MW45-31 FOR VOCs ONLY

| Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
|---|---|---|---|
| | 3/27/08 0800 | | 3/27/08 1012 AM |
| Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
| | 3/27/08 1034 AM | | |
| Relinquished By (signature) | Date/Time | Received for Lab By (signature) | Date/Time |
| | | Scott Mecard | 3/27/08 10:34 |

Sample temperature upon receipt in degrees C = 1°

rev. 11/04/04

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60649**

Sample ID: **MB080327-1** SampType: **MBLK** TestCode: **2007** Units: **mg/L** Prep Date: **3/27/2008 6:00:00 PM** Run ID: **ICP-2_080327A**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/27/2008 3:37:00 PM** SeqNo: **1759688**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | |

Sample ID: **LCS080327-1** SampType: **LCS** TestCode: **2007** Units: **mg/L** Prep Date: **3/27/2008 6:00:00 PM** Run ID: **ICP-2_080327A**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/27/2008 3:42:00 PM** SeqNo: **1759689**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.029 | 0.010 | 2 | 0 | 101 | 85 | 115 | 0 | 0 | | |

Sample ID: **ICV** SampType: **ICV** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080327A**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/27/2008 6:25:00 AM** SeqNo: **1758635**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.033 | 0.010 | 1 | 0 | 103 | 95 | 105 | 0 | 0 | | |

Sample ID: **ICB** SampType: **CCB** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080327A**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/27/2008 6:30:00 AM** SeqNo: **1758636**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0036 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | J |

Sample ID: **CCB** SampType: **CCB** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080327A**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/27/2008 3:27:00 PM** SeqNo: **1759687**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | |

**Qualifiers:**

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60649**

| Sample ID: CCB | SampType: CCB | TestCode: 2007 | Units: mg/L | Prep Date: | Run ID: ICP-2_080327A |
|---|---|---|---|---|---|
| Client ID: ZZZZZ | Batch ID: 60649 | TestNo: E200.7_r4.4 | | Analysis Date: 3/27/2008 3:59:00 PM | SeqNo: 1759692 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | |

| Sample ID: ICV | SampType: ICV | TestCode: 2007 | Units: mg/L | Prep Date: | Run ID: ICP-2_080328C |
|---|---|---|---|---|---|
| Client ID: ZZZZZ | Batch ID: 60649 | TestNo: E200.7_r4.4 | | Analysis Date: 3/28/2008 10:02:00 AM | SeqNo: 1759967 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.035 | 0.010 | 1 | 0 | 104 | 95 | 105 | 0 | 0 | | |

| Sample ID: ICB | SampType: CCB | TestCode: 2007 | Units: mg/L | Prep Date: | Run ID: ICP-2_080328C |
|---|---|---|---|---|---|
| Client ID: ZZZZZ | Batch ID: 60649 | TestNo: E200.7_r4.4 | | Analysis Date: 3/28/2008 10:07:00 AM | SeqNo: 1759969 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | |

| Sample ID: CCB | SampType: CCB | TestCode: 2007 | Units: mg/L | Prep Date: | Run ID: ICP-2_080328C |
|---|---|---|---|---|---|
| Client ID: ZZZZZ | Batch ID: 60649 | TestNo: E200.7_r4.4 | | Analysis Date: 3/28/2008 3:29:00 PM | SeqNo: 1760385 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | |

| Sample ID: CCB | SampType: CCB | TestCode: 2007 | Units: mg/L | Prep Date: | Run ID: ICP-2_080328C |
|---|---|---|---|---|---|
| Client ID: ZZZZZ | Batch ID: 60649 | TestNo: E200.7_r4.4 | | Analysis Date: 3/28/2008 4:47:00 PM | SeqNo: 1760996 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | |

| Sample ID: CCB | SampType: CCB | TestCode: 2007 | Units: mg/L | Prep Date: | Run ID: ICP-2_080328C |
|---|---|---|---|---|---|
| Client ID: ZZZZZ | Batch ID: 60649 | TestNo: E200.7_r4.4 | | Analysis Date: 3/28/2008 5:58:00 PM | SeqNo: 1761009 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | |

**Qualifiers:**

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60649**

Sample ID: **CCV** SampType: **CCV** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080327A**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/27/2008 3:22:00 PM** SeqNo: **1759686**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.925 | 0.010 | 5 | 0 | 98.5 | 90 | 110 | 0 | 0 | | |

Sample ID: **CCV** SampType: **CCV** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080327A**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/27/2008 3:53:00 PM** SeqNo: **1759691**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.981 | 0.010 | 5 | 0 | 99.6 | 90 | 110 | 0 | 0 | | |

Sample ID: **CCV** SampType: **CCV** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080328C**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/28/2008 3:24:00 PM** SeqNo: **1760384**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 5.086 | 0.010 | 5 | 0 | 102 | 90 | 110 | 0 | 0 | | |

Sample ID: **CCV** SampType: **CCV** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080328C**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/28/2008 4:36:00 PM** SeqNo: **1760994**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 5.045 | 0.010 | 5 | 0 | 101 | 90 | 110 | 0 | 0 | | |

Sample ID: **CCV** SampType: **CCV** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080328C**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/28/2008 5:47:00 PM** SeqNo: **1761007**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.965 | 0.010 | 5 | 0 | 99.3 | 90 | 110 | 0 | 0 | | |

Sample ID: **ICSAB** SampType: **ICSAB** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080327A**
Client ID: **ZZZZZ** Batch ID: **60649** TestNo: **E200.7_r4.4** Analysis Date: **3/27/2008 6:58:00 AM** SeqNo: **1758640**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.057 | 0.010 | 1 | 0 | 106 | 80 | 120 | 0 | 0 | | |

**Qualifiers:**
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R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60649**

| Sample ID: ICSAB | SampType: ICSAB | TestCode: 2007 | Units: mg/L | Prep Date: | Run ID: ICP-2_080328C |
|---|---|---|---|---|---|
| Client ID: ZZZZZ | Batch ID: 60649 | TestNo: E200.7_r4.4 | | Analysis Date: 3/28/2008 10:19:00 AM | SeqNo: 1759972 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.053 | 0.010 | 1 | 0 | 105 | 80 | 120 | 0 | 0 | | |

| Sample ID: ME0803A91-04BMS | SampType: MS | TestCode: 6010W | Units: mg/L | Prep Date: 3/27/2008 6:00:00 PM | Run ID: ICP-2_080328C |
|---|---|---|---|---|---|
| Client ID: ACS-GW-MW43-31 | Batch ID: 60649 | TestNo: SW6010B | | Analysis Date: 3/28/2008 4:09:00 PM | SeqNo: 1760989 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.044 | 0.010 | 2 | 0 | 102 | 75 | 125 | 0 | 0 | | |

| Sample ID: ME0803A91-04BMS | SampType: MSD | TestCode: 6010W | Units: mg/L | Prep Date: 3/27/2008 6:00:00 PM | Run ID: ICP-2_080328C |
|---|---|---|---|---|---|
| Client ID: ACS-GW-MW43-31 | Batch ID: 60649 | TestNo: SW6010B | | Analysis Date: 3/28/2008 4:14:00 PM | SeqNo: 1760990 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.092 | 0.010 | 2 | 0 | 105 | 75 | 125 | 2.044 | 2.32 | 20 | |

**Qualifiers:**
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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60802**

Sample ID: **bk-1-040208** SampType: **mblk** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080402A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/2/2008 5:30:00 PM** SeqNo: **1764064**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | 10 | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 10 | | | | | | | | | |
| 4-Chloro-3-methylphenol | ND | 20 | | | | | | | | | |
| 2-Chlorophenol | ND | 10 | | | | | | | | | |
| 1,4-Dichlorobenzene | 1.31 | 10 | | | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 10 | | | | | | | | | |
| 4-Nitrophenol | ND | 50 | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 10 | | | | | | | | | |
| Pentachlorophenol | ND | 50 | | | | | | | | | |
| Phenol | ND | 10 | | | | | | | | | |
| Pyrene | ND | 10 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 10 | | | | | | | | | |
| Surr: Nitrobenzene-d5 | 46.49 | 0 | 100 | 0 | 46.5 | 10 | 121 | 0 | 0 | | |
| Surr: 2-Fluorobiphenyl | 55.87 | 0 | 100 | 0 | 55.9 | 10 | 109 | 0 | 0 | | |
| Surr: Terphenyl-d14 | 64.22 | 0 | 100 | 0 | 64.2 | 10 | 130 | 0 | 0 | | |
| Surr: Phenol-d5 | 25.16 | 0 | 150 | 0 | 16.8 | 10 | 100 | 0 | 0 | | |
| Surr: 2-Fluorophenol | 39.19 | 0 | 150 | 0 | 26.1 | 10 | 84.7 | 0 | 0 | | |
| Surr: 2,4,6-Tribromophenol | 82.92 | 0 | 150 | 0 | 55.3 | 10 | 120 | 0 | 0 | | |

Sample ID: **lcs-1-040208** SampType: **lcs** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080402A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/2/2008 6:23:00 PM** SeqNo: **1764066**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 69.2 | 10 | 100 | 0 | 69.2 | 28.6 | 88.6 | 0 | 0 | | |
| 4-Chloro-3-methylphenol | 65.38 | 20 | 100 | 0 | 65.4 | 27.2 | 97.7 | 0 | 0 | | |
| 2-Chlorophenol | 52.39 | 10 | 100 | 0 | 52.4 | 31.3 | 81.3 | 0 | 0 | | |
| 1,4-Dichlorobenzene | 52.69 | 10 | 100 | 0 | 52.7 | 20.6 | 82 | 0 | 0 | | b |
| 2,4-Dinitrotoluene | 83.76 | 10 | 100 | 0 | 83.8 | 23.5 | 95.4 | 0 | 0 | | |
| 4-Nitrophenol | 26.9 | 50 | 100 | 0 | 26.9 | 5 | 56.2 | 0 | 0 | | J |

**Qualifiers:**
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R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60802**

Sample ID: **lcs-1-040208** SampType: **lcs** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080402A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/2/2008 6:23:00 PM** SeqNo: **1764066**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N-Nitrosodi-n-propylamine | 61.86 | 10 | 100 | 0 | 61.9 | 15.9 | 119 | 0 | 0 | | |
| Pentachlorophenol | 80.17 | 50 | 100 | 0 | 80.2 | 5 | 114 | 0 | 0 | | |
| Phenol | 20.48 | 10 | 100 | 0 | 20.5 | 5 | 46.7 | 0 | 0 | | |
| Pyrene | 73.17 | 10 | 100 | 0 | 73.2 | 25.3 | 103 | 0 | 0 | | |
| 1,2,4-Trichlorobenzene | 54.2 | 10 | 100 | 0 | 54.2 | 19.7 | 80.9 | 0 | 0 | | |
| Surr: Nitrobenzene-d5 | 55.79 | 0 | 100 | 0 | 55.8 | 10 | 121 | 0 | 0 | | |
| Surr: 2-Fluorobiphenyl | 65.69 | 0 | 100 | 0 | 65.7 | 10 | 109 | 0 | 0 | | |
| Surr: Terphenyl-d14 | 74.69 | 0 | 100 | 0 | 74.7 | 10 | 130 | 0 | 0 | | |
| Surr: Phenol-d5 | 29.44 | 0 | 150 | 0 | 19.6 | 10 | 100 | 0 | 0 | | |
| Surr: 2-Fluorophenol | 43.65 | 0 | 150 | 0 | 29.1 | 10 | 84.7 | 0 | 0 | | |
| Surr: 2,4,6-Tribromophenol | 104.8 | 0 | 150 | 0 | 69.9 | 10 | 120 | 0 | 0 | | |

Sample ID: **me0803c07-02bms** SampType: **ms** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080403A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/4/2008 4:38:00 AM** SeqNo: **1765824**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 124.8 | 21 | 212.8 | 0 | 58.7 | 14.5 | 96.6 | 0 | 0 | | |
| 4-Chloro-3-methylphenol | 127 | 43 | 212.8 | 0 | 59.7 | 9.03 | 111 | 0 | 0 | | |
| 2-Chlorophenol | 80.77 | 21 | 212.8 | 0 | 38 | 5 | 106 | 0 | 0 | | |
| 1,4-Dichlorobenzene | 82.3 | 21 | 212.8 | 0 | 38.7 | 12.1 | 93.1 | 0 | 0 | | |
| 2,4-Dinitrotoluene | 141.8 | 21 | 212.8 | 0 | 66.7 | 18.7 | 96.2 | 0 | 0 | | |
| 4-Nitrophenol | 100.2 | 21 | 212.8 | 0 | 47.1 | 5 | 95.2 | 0 | 0 | | |
| N-Nitrosodi-n-propylamine | 96.32 | 21 | 212.8 | 0 | 45.3 | 6.65 | 116 | 0 | 0 | | |
| Pentachlorophenol | 156 | 110 | 212.8 | 0 | 73.3 | 5 | 135 | 0 | 0 | | |
| Phenol | 53.11 | 21 | 212.8 | 0 | 25 | 5 | 70.4 | 0 | 0 | | |
| Pyrene | 145.5 | 21 | 212.8 | 0 | 68.4 | 14.3 | 107 | 0 | 0 | | |
| 1,2,4-Trichlorobenzene | 85.51 | 21 | 212.8 | 0 | 40.2 | 6.56 | 93.1 | 0 | 0 | | |
| Surr: Nitrobenzene-d5 | 87.72 | 0 | 212.8 | 0 | 41.2 | 10 | 121 | 0 | 0 | | |
| Surr: 2-Fluorobiphenyl | 116.7 | 0 | 212.8 | 0 | 54.9 | 10 | 109 | 0 | 0 | | |
| Surr: Terphenyl-d14 | 139.6 | 0 | 212.8 | 0 | 65.6 | 10 | 130 | 0 | 0 | | |
| Surr: Phenol-d5 | 80 | 0 | 319.1 | 0 | 25.1 | 10 | 100 | 0 | 0 | | |

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R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank
H - Analyte was prepared and/or analyzed outside of the analytical method holding time

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60802**

Sample ID: **me0803c07-02bms** SampType: **ms** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080403A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/4/2008 4:38:00 AM** SeqNo: **1765824**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: 2-Fluorophenol | 91.34 | 0 | 319.1 | 0 | 28.6 | 10 | 84.7 | 0 | 0 | | |
| Surr: 2,4,6-Tribromophenol | 209.6 | 0 | 319.1 | 0 | 65.7 | 10 | 120 | 0 | 0 | | |

Sample ID: **me0803c07-02bmsd** SampType: **msd** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080403A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/4/2008 5:03:00 AM** SeqNo: **1765825**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 136.6 | 21 | 208.3 | 0 | 65.6 | 14.5 | 96.6 | 124.8 | 9.02 | 41.3 | |
| 4-Chloro-3-methylphenol | 141.2 | 42 | 208.3 | 0 | 67.8 | 9.03 | 111 | 127 | 10.6 | 43.6 | |
| 2-Chlorophenol | 89.96 | 21 | 208.3 | 0 | 43.2 | 5 | 106 | 80.77 | 10.8 | 44.3 | |
| 1,4-Dichlorobenzene | 89.25 | 21 | 208.3 | 0 | 42.8 | 12.1 | 93.1 | 82.3 | 8.11 | 39.7 | |
| 2,4-Dinitrotoluene | 147.2 | 21 | 208.3 | 0 | 70.7 | 18.7 | 96.2 | 141.8 | 3.72 | 36.5 | |
| 4-Nitrophenol | 92.33 | 21 | 208.3 | 0 | 44.3 | 5 | 95.2 | 100.2 | 8.16 | 16.6 | |
| N-Nitrosodi-n-propylamine | 104.9 | 21 | 208.3 | 0 | 50.4 | 6.65 | 116 | 96.32 | 8.54 | 42.7 | |
| Pentachlorophenol | 158.8 | 100 | 208.3 | 0 | 76.2 | 5 | 135 | 156 | 1.80 | 29.2 | |
| Phenol | 56.71 | 21 | 208.3 | 0 | 27.2 | 5 | 70.4 | 53.11 | 6.56 | 55 | |
| Pyrene | 158.6 | 21 | 208.3 | 0 | 76.1 | 14.3 | 107 | 145.5 | 8.60 | 37.7 | |
| 1,2,4-Trichlorobenzene | 99.77 | 21 | 208.3 | 0 | 47.9 | 6.56 | 93.1 | 85.51 | 15.4 | 44.8 | |
| Surr: Nitrobenzene-d5 | 94.02 | 0 | 208.3 | 0 | 45.1 | 10 | 121 | 0 | 0 | 0 | |
| Surr: 2-Fluorobiphenyl | 128.6 | 0 | 208.3 | 0 | 61.7 | 10 | 109 | 0 | 0 | 0 | |
| Surr: Terphenyl-d14 | 146.4 | 0 | 208.3 | 0 | 70.3 | 10 | 130 | 0 | 0 | 0 | |
| Surr: Phenol-d5 | 84.17 | 0 | 312.5 | 0 | 26.9 | 10 | 100 | 0 | 0 | 0 | |
| Surr: 2-Fluorophenol | 92.15 | 0 | 312.5 | 0 | 29.5 | 10 | 84.7 | 0 | 0 | 0 | |
| Surr: 2,4,6-Tribromophenol | 227.2 | 0 | 312.5 | 0 | 72.7 | 10 | 120 | 0 | 0 | 0 | |

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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110560**

Sample ID: **bk_w25 040208** SampType: **mblk** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080402A**
Client ID: **ZZZZZ** Batch ID: **R110560** TestNo: **SW8260B** Analysis Date: **4/2/2008 10:07:00 AM** SeqNo: **1763025**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | 2.46 | 5.0 | | | | | | | | | J |
| Benzene | ND | 1.0 | | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | | |
| Bromomethane | 0.69 | 2.0 | | | | | | | | | J |
| 2-Butanone | ND | 2.0 | | | | | | | | | |
| Carbon Disulfide | ND | 2.0 | | | | | | | | | |
| Carbon tetrachloride | ND | 1.0 | | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | | |
| Chloromethane | ND | 2.0 | | | | | | | | | |
| Dibromochloromethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | | |
| 2-Hexanone | ND | 2.0 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 1.0 | | | | | | | | | |
| Methylene chloride | ND | 2.0 | | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | | | | | | | | | |
| Tetrachloroethene | ND | 1.0 | | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | | |

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110560**

Sample ID: **bk_w25 040208** SampType: **mblk** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080402A**
Client ID: **ZZZZZ** Batch ID: **R110560** TestNo: **SW8260B** Analysis Date: **4/2/2008 10:07:00 AM** SeqNo: **1763025**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | 1.0 | | | | | | | | | |
| Vinyl chloride | ND | 2.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| Total Xylenes | ND | 1.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 10.35 | 0 | 10 | 0 | 104 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.75 | 0 | 10 | 0 | 108 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 11.62 | 0 | 10 | 0 | 116 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 9.92 | 0 | 10 | 0 | 99.2 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **lcs_w25 10 ppb** SampType: **lcs** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080402A**
Client ID: **ZZZZZ** Batch ID: **R110560** TestNo: **SW8260B** Analysis Date: **4/2/2008 10:42:00 AM** SeqNo: **1763026**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 9.01 | 1.0 | 10 | 0 | 90.1 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 9.29 | 1.0 | 10 | 0 | 92.9 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 8.59 | 1.0 | 10 | 0 | 85.9 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 11.07 | 1.0 | 10 | 0 | 111 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 8.27 | 1.0 | 10 | 0 | 82.7 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 9.92 | 1.0 | 10 | 0 | 99.2 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 18.81 | 2.0 | 10 | 0 | 188 | 22.5 | 147 | 0 | 0 | | S |
| Dibromochloromethane | 8.66 | 1.0 | 10 | 0 | 86.6 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 9.76 | 1.0 | 10 | 0 | 97.6 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 10 | 1.0 | 10 | 0 | 100 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 10.25 | 1.0 | 10 | 0 | 103 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 9.43 | 1.0 | 10 | 0 | 94.3 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 8.3 | 1.0 | 10 | 0 | 83 | 74.4 | 126 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 8.8 | 1.0 | 10 | 0 | 88 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 8.12 | 1.0 | 10 | 0 | 81.2 | 69.1 | 126 | 0 | 0 | | |

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**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110560**

Sample ID: **lcs_w25 10 ppb** SampType: **lcs** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080402A**
Client ID: **ZZZZZ** Batch ID: **R110560** TestNo: **SW8260B** Analysis Date: **4/2/2008 10:42:00 AM** SeqNo: **1763026**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 8.81 | 1.0 | 10 | 0 | 88.1 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 10.7 | 2.0 | 10 | 0 | 107 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 7.22 | 1.0 | 10 | 0 | 72.2 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 8.61 | 1.0 | 10 | 0 | 86.1 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 8.43 | 1.0 | 10 | 0 | 84.3 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 10.43 | 1.0 | 10 | 0 | 104 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 7.89 | 1.0 | 10 | 0 | 78.9 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 8.84 | 1.0 | 10 | 0 | 88.4 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 13.81 | 2.0 | 10 | 0 | 138 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 11.13 | 0 | 10 | 0 | 111 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.92 | 0 | 10 | 0 | 109 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 12.12 | 0 | 10 | 0 | 121 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 9.87 | 0 | 10 | 0 | 98.7 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **me0803a63-03aMS** SampType: **MS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080402A**
Client ID: **ZZZZZ** Batch ID: **R110560** TestNo: **SW8260B** Analysis Date: **4/2/2008 4:08:00 PM** SeqNo: **1763724**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 10.31 | 1.0 | 10 | 0 | 103 | 60.6 | 130 | 0 | 0 | | |
| Bromodichloromethane | 10.48 | 1.0 | 10 | 0 | 105 | 65.8 | 126 | 0 | 0 | | |
| Bromoform | 8.99 | 1.0 | 10 | 0 | 89.9 | 40.5 | 146 | 0 | 0 | | |
| Bromomethane | 26.82 | 2.0 | 10 | 0 | 268 | 0 | 243 | 0 | 0 | | bS |
| Carbon tetrachloride | 13.61 | 1.0 | 10 | 0 | 136 | 47.2 | 149 | 0 | 0 | | |
| Chlorobenzene | 9.1 | 1.0 | 10 | 0 | 91 | 75.6 | 127 | 0 | 0 | | |
| Chloroethane | 17.6 | 2.0 | 10 | 0 | 176 | 0 | 357 | 0 | 0 | | |
| Chloroform | 11.73 | 1.0 | 10 | 0 | 117 | 71.2 | 120 | 0 | 0 | | |
| Chloromethane | 22.06 | 2.0 | 10 | 0 | 221 | 10.8 | 155 | 0 | 0 | | S |
| Dibromochloromethane | 9.37 | 1.0 | 10 | 0 | 93.7 | 60.1 | 136 | 0 | 0 | | |
| 1,1-Dichloroethane | 11.28 | 1.0 | 10 | 0 | 113 | 68 | 119 | 0 | 0 | | |
| 1,2-Dichloroethane | 11.76 | 1.0 | 10 | 0 | 118 | 67.7 | 133 | 0 | 0 | | |
| 1,1-Dichloroethene | 12.75 | 1.0 | 10 | 0 | 128 | 50.1 | 125 | 0 | 0 | | S |

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110560**

Sample ID: **me0803a63-03aMS** SampType: **MS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080402A**
Client ID: **ZZZZZ** Batch ID: **R110560** TestNo: **SW8260B** Analysis Date: **4/2/2008 4:08:00 PM** SeqNo: **1763724**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 11.01 | 1.0 | 10 | 0 | 110 | 56.9 | 132 | 0 | 0 | | |
| 1,2-Dichloropropane | 9.21 | 1.0 | 10 | 0 | 92.1 | 71.4 | 125 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 9.41 | 1.0 | 10 | 0 | 94.1 | 69.9 | 130 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 8.59 | 1.0 | 10 | 0 | 85.9 | 66.9 | 134 | 0 | 0 | | |
| Ethylbenzene | 10.2 | 1.0 | 10 | 0 | 102 | 60.6 | 144 | 0 | 0 | | |
| Methylene chloride | 9.37 | 2.0 | 10 | 0 | 93.7 | 55.4 | 130 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 7.73 | 1.0 | 10 | 0 | 77.3 | 46.8 | 168 | 0 | 0 | | |
| Tetrachloroethene | 9.91 | 1.0 | 10 | 0 | 99.1 | 60.1 | 144 | 0 | 0 | | |
| Toluene | 9.68 | 1.0 | 10 | 0 | 96.8 | 69.7 | 130 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 12.87 | 1.0 | 10 | 0 | 129 | 63 | 136 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 8.42 | 1.0 | 10 | 0 | 84.2 | 40.6 | 165 | 0 | 0 | | |
| Trichloroethene | 10.31 | 1.0 | 10 | 0 | 103 | 48.6 | 139 | 0 | 0 | | |
| Vinyl chloride | 17.18 | 2.0 | 10 | 0 | 172 | 33 | 151 | 0 | 0 | | S |
| Surr: 4-Bromofluorobenzene | 11.19 | 0 | 10 | 0 | 112 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 11.18 | 0 | 10 | 0 | 112 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 12.33 | 0 | 10 | 0 | 123 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 10.04 | 0 | 10 | 0 | 100 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **me0803a63-03aMSD** SampType: **MSD** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080402A**
Client ID: **ZZZZZ** Batch ID: **R110560** TestNo: **SW8260B** Analysis Date: **4/2/2008 4:43:00 PM** SeqNo: **1763725**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 10.34 | 1.0 | 10 | 0 | 103 | 60.6 | 130 | 10.31 | 0.291 | 23.7 | |
| Bromodichloromethane | 10.73 | 1.0 | 10 | 0 | 107 | 65.8 | 126 | 10.48 | 2.36 | 28.4 | |
| Bromoform | 9.6 | 1.0 | 10 | 0 | 96 | 40.5 | 146 | 8.99 | 6.56 | 28.8 | |
| Bromomethane | 28.22 | 2.0 | 10 | 0 | 282 | 0 | 243 | 26.82 | 5.09 | 52.8 | bS |
| Carbon tetrachloride | 13.38 | 1.0 | 10 | 0 | 134 | 47.2 | 149 | 13.61 | 1.70 | 31.1 | |
| Chlorobenzene | 9.14 | 1.0 | 10 | 0 | 91.4 | 75.6 | 127 | 9.1 | 0.439 | 23 | |
| Chloroethane | 18.2 | 2.0 | 10 | 0 | 182 | 0 | 357 | 17.6 | 3.35 | 29.3 | |
| Chloroform | 11.79 | 1.0 | 10 | 0 | 118 | 71.2 | 120 | 11.73 | 0.510 | 25 | |
| Chloromethane | 23.1 | 2.0 | 10 | 0 | 231 | 10.8 | 155 | 22.06 | 4.61 | 90.9 | S |

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110560**

Sample ID: **me0803a63-03aMSD** SampType: **MSD** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080402A**
Client ID: **ZZZZZ** Batch ID: **R110560** TestNo: **SW8260B** Analysis Date: **4/2/2008 4:43:00 PM** SeqNo: **1763725**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dibromochloromethane | 9.74 | 1.0 | 10 | 0 | 97.4 | 60.1 | 136 | 9.37 | 3.87 | 27.1 | |
| 1,1-Dichloroethane | 11.54 | 1.0 | 10 | 0 | 115 | 68 | 119 | 11.28 | 2.28 | 14.2 | |
| 1,2-Dichloroethane | 12.19 | 1.0 | 10 | 0 | 122 | 67.7 | 133 | 11.76 | 3.59 | 23.3 | |
| 1,1-Dichloroethene | 12.3 | 1.0 | 10 | 0 | 123 | 50.1 | 125 | 12.75 | 3.59 | 31 | |
| trans-1,2-Dichloroethene | 10.97 | 1.0 | 10 | 0 | 110 | 56.9 | 132 | 11.01 | 0.364 | 66.1 | |
| 1,2-Dichloropropane | 9.65 | 1.0 | 10 | 0 | 96.5 | 71.4 | 125 | 9.21 | 4.67 | 26 | |
| trans-1,3-Dichloropropene | 9.83 | 1.0 | 10 | 0 | 98.3 | 69.9 | 130 | 9.41 | 4.37 | 27.9 | |
| cis-1,3-Dichloropropene | 8.82 | 1.0 | 10 | 0 | 88.2 | 66.9 | 134 | 8.59 | 2.64 | 28.7 | |
| Ethylbenzene | 9.9 | 1.0 | 10 | 0 | 99 | 60.6 | 144 | 10.2 | 2.99 | 25.2 | |
| Methylene chloride | 9.96 | 2.0 | 10 | 0 | 99.6 | 55.4 | 130 | 9.37 | 6.10 | 28.7 | |
| 1,1,2,2-Tetrachloroethane | 8.03 | 1.0 | 10 | 0 | 80.3 | 46.8 | 168 | 7.73 | 3.81 | 22.3 | |
| Tetrachloroethene | 9.64 | 1.0 | 10 | 0 | 96.4 | 60.1 | 144 | 9.91 | 2.76 | 29.7 | |
| Toluene | 9.52 | 1.0 | 10 | 0 | 95.2 | 69.7 | 130 | 9.68 | 1.67 | 25.4 | |
| 1,1,1-Trichloroethane | 12.81 | 1.0 | 10 | 0 | 128 | 63 | 136 | 12.87 | 0.467 | 29 | |
| 1,1,2-Trichloroethane | 9.02 | 1.0 | 10 | 0 | 90.2 | 40.6 | 165 | 8.42 | 6.88 | 25.9 | |
| Trichloroethene | 10.16 | 1.0 | 10 | 0 | 102 | 48.6 | 139 | 10.31 | 1.47 | 26.9 | |
| Vinyl chloride | 18.16 | 2.0 | 10 | 0 | 182 | 33 | 151 | 17.18 | 5.55 | 31.2 | S |
| Surr: 4-Bromofluorobenzene | 11.19 | 0 | 10 | 0 | 112 | 75.2 | 115 | 0 | 0 | 0 | |
| Surr: Dibromofluoromethane | 11.5 | 0 | 10 | 0 | 115 | 92.7 | 119 | 0 | 0 | 0 | |
| Surr: 1,2-Dichloroethane-d4 | 12.78 | 0 | 10 | 0 | 128 | 88.2 | 132 | 0 | 0 | 0 | |
| Surr: Toluene-d8 | 9.79 | 0 | 10 | 0 | 97.9 | 89.3 | 116 | 0 | 0 | 0 | |

**Qualifiers:**
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R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110661**

Sample ID: **bk_w25-40308** SampType: **mblk** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080403B**
Client ID: **ZZZZZ** Batch ID: **R110661** TestNo: **SW8260B** Analysis Date: **4/3/2008 4:51:00 PM** SeqNo: **1765085**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | 5.0 | | | | | | | | | |
| Benzene | ND | 1.0 | | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | | |
| Bromomethane | ND | 2.0 | | | | | | | | | |
| 2-Butanone | ND | 2.0 | | | | | | | | | |
| Carbon Disulfide | ND | 2.0 | | | | | | | | | |
| Carbon tetrachloride | ND | 1.0 | | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | | |
| Chloromethane | 0.61 | 2.0 | | | | | | | | | J |
| Dibromochloromethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | | |
| 2-Hexanone | ND | 2.0 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 1.0 | | | | | | | | | |
| Methylene chloride | ND | 2.0 | | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | | | | | | | | | |
| Tetrachloroethene | ND | 1.0 | | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | | |

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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110661**

Sample ID: **bk_w25-40308** SampType: **mblk** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080403B**
Client ID: **ZZZZZ** Batch ID: **R110661** TestNo: **SW8260B** Analysis Date: **4/3/2008 4:51:00 PM** SeqNo: **1765085**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | 1.0 | | | | | | | | | |
| Vinyl chloride | ND | 2.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| Total Xylenes | ND | 1.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 9.56 | 0 | 10 | 0 | 95.6 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.93 | 0 | 10 | 0 | 99.3 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 9.79 | 0 | 10 | 0 | 97.9 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 9.68 | 0 | 10 | 0 | 96.8 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **LCS/icv_w25-10 ppb** SampType: **LCS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080403B**
Client ID: **ZZZZZ** Batch ID: **R110661** TestNo: **SW8260B** Analysis Date: **4/3/2008 1:53:00 PM** SeqNo: **1765082**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8.86 | 1.0 | 10 | 0 | 88.6 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 8.5 | 1.0 | 10 | 0 | 85 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 8.74 | 1.0 | 10 | 0 | 87.4 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 8.28 | 1.0 | 10 | 0 | 82.8 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 8.95 | 1.0 | 10 | 0 | 89.5 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 8.92 | 1.0 | 10 | 0 | 89.2 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 11.86 | 2.0 | 10 | 0 | 119 | 22.5 | 147 | 0 | 0 | | b |
| Dibromochloromethane | 8.78 | 1.0 | 10 | 0 | 87.8 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 8.73 | 1.0 | 10 | 0 | 87.3 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 8.33 | 1.0 | 10 | 0 | 83.3 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 6.84 | 1.0 | 10 | 0 | 68.4 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 8.65 | 1.0 | 10 | 0 | 86.5 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 8.8 | 1.0 | 10 | 0 | 88 | 74.4 | 126 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 9.24 | 1.0 | 10 | 0 | 92.4 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 8.8 | 1.0 | 10 | 0 | 88 | 69.1 | 126 | 0 | 0 | | |

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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110661**

Sample ID: **LCS/icv_w25-10 ppb** SampType: **LCS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080403B**
Client ID: **ZZZZZ** Batch ID: **R110661** TestNo: **SW8260B** Analysis Date: **4/3/2008 1:53:00 PM** SeqNo: **1765082**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 8.92 | 1.0 | 10 | 0 | 89.2 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 7.92 | 2.0 | 10 | 0 | 79.2 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 9.33 | 1.0 | 10 | 0 | 93.3 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 8.69 | 1.0 | 10 | 0 | 86.9 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 8.77 | 1.0 | 10 | 0 | 87.7 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 8.46 | 1.0 | 10 | 0 | 84.6 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 8.58 | 1.0 | 10 | 0 | 85.8 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 8.34 | 1.0 | 10 | 0 | 83.4 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 8.93 | 2.0 | 10 | 0 | 89.3 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 9.61 | 0 | 10 | 0 | 96.1 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.88 | 0 | 10 | 0 | 98.8 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 9.35 | 0 | 10 | 0 | 93.5 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 9.75 | 0 | 10 | 0 | 97.5 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080403B**
Client ID: **ZZZZZ** Batch ID: **R110661** TestNo: **SW8260B** Analysis Date: **4/4/2008 2:02:00 AM** SeqNo: **1765099**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 9.61 | 1.0 | 10 | 0 | 96.1 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 9.97 | 1.0 | 10 | 0 | 99.7 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 9.44 | 1.0 | 10 | 0 | 94.4 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 10.14 | 1.0 | 10 | 0 | 101 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 9.14 | 1.0 | 10 | 0 | 91.4 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 10.51 | 1.0 | 10 | 0 | 105 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 16.33 | 2.0 | 10 | 0 | 163 | 22.5 | 147 | 0 | 0 | | bS |
| Dibromochloromethane | 9.29 | 1.0 | 10 | 0 | 92.9 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 9.99 | 1.0 | 10 | 0 | 99.9 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 10.34 | 1.0 | 10 | 0 | 103 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 8.85 | 1.0 | 10 | 0 | 88.5 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 9.57 | 1.0 | 10 | 0 | 95.7 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 9.5 | 1.0 | 10 | 0 | 95 | 74.4 | 126 | 0 | 0 | | |

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803A91
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110661**

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080403B**
Client ID: **ZZZZZ** Batch ID: **R110661** TestNo: **SW8260B** Analysis Date: **4/4/2008 2:02:00 AM** SeqNo: **1765099**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | 9.27 | 1.0 | 10 | 0 | 92.7 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 8.32 | 1.0 | 10 | 0 | 83.2 | 69.1 | 126 | 0 | 0 | | |
| Ethylbenzene | 9.25 | 1.0 | 10 | 0 | 92.5 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 10.26 | 2.0 | 10 | 0 | 103 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 8.08 | 1.0 | 10 | 0 | 80.8 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 8.92 | 1.0 | 10 | 0 | 89.2 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 8.96 | 1.0 | 10 | 0 | 89.6 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 10.06 | 1.0 | 10 | 0 | 101 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 9.12 | 1.0 | 10 | 0 | 91.2 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 9.71 | 1.0 | 10 | 0 | 97.1 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 9.85 | 2.0 | 10 | 0 | 98.5 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.9 | 0 | 10 | 0 | 109 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.67 | 0 | 10 | 0 | 107 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.93 | 0 | 10 | 0 | 109 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 9.55 | 0 | 10 | 0 | 95.5 | 89.3 | 116 | 0 | 0 | | |

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b - Analyte detected below reporting limit in the Method Blank
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# ICP
# DATA

# RAW DATA

Method: NEWM06 Sample Name: Blank Operator:
Comment:
Run Time: 03/27/08 06:02 Type: Std Mode: IR Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0011 | .0004 | .0010 | .0005 |
| Stddev | .0000 | .0002 | .0001 | .0003 |
| %RSD | 2.533 | 47.40 | 6.609 | 65.27 |
| #1 | -.0011 | .0006 | .0010 | .0007 |
| #2 | -.0011 | .0003 | .0009 | .0002 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0016 | .0057 | .0030 | .0036 |
| Stddev | .0001 | .0006 | .0010 | .0007 |
| %RSD | 8.232 | 10.57 | 33.47 | 20.58 |
| #1 | .0015 | .0061 | .0037 | .0042 |
| #2 | .0017 | .0053 | .0023 | .0031 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0055 | .0166 | .0012 | .0004 |
| Stddev | .0003 | .0010 | .0000 | .0001 |
| %RSD | 6.234 | 6.085 | 2.075 | 20.20 |
| #1 | -.0052 | .0159 | .0012 | .0004 |
| #2 | -.0057 | .0174 | .0012 | .0003 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0018 | .0020 | .0010 | -.0005 |
| Stddev | .0001 | .0000 | .0002 | .0002 |
| %RSD | 4.970 | 1.269 | 15.72 | 40.40 |
| #1 | .0018 | .0020 | .0009 | -.0004 |
| #2 | .0017 | .0020 | .0011 | -.0006 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0016 | .0030 | .0034 | .0008 |
| Stddev | .0001 | .0000 | .0000 | .0001 |
| %RSD | 3.611 | .8569 | .0907 | 18.29 |
| #1 | .0015 | .0029 | .0034 | .0007 |
| #2 | .0016 | .0030 | .0034 | .0009 |

Sample Name: Blank Run Time: 03/27/08 06:02

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0007 | .0038 | .0024 | -.0731 |
| Stddev | .0003 | .0003 | .0010 | .0020 |
| %RSD | 33.66 | 6.707 | 40.85 | 2.670 |
| #1 | -.0006 | .0036 | .0031 | -.0745 |
| #2 | -.0009 | .0039 | .0017 | -.0717 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0001 | -.0010 | .0002 | .0005 |
| Stddev | .0000 | .0000 | .0001 | .0000 |
| %RSD | 47.15 | .6121 | 33.67 | 1.163 |
| #1 | .0000 | -.0010 | .0002 | .0005 |
| #2 | -.0001 | -.0010 | .0001 | .0005 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0002 | .0010 | .0095 | .0198 |
| Stddev | .0002 | .0003 | .0001 | .0001 |
| %RSD | 114.5 | 28.78 | 1.399 | .3222 |
| #1 | .0000 | .0012 | .0094 | .0198 |
| #2 | -.0003 | .0008 | .0096 | .0199 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0003 | -.0006 | -.0001 | .0005 |
| Stddev | .0000 | .0002 | .0001 | .0000 |
| %RSD | 9.188 | 36.21 | 141.4 | 8.324 |
| #1 | .0003 | -.0005 | .0000 | .0004 |
| #2 | .0004 | -.0008 | -.0001 | .0005 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0001 | .0000 | .0009 | .0019 |
| Stddev | .0001 | .0000 | .0001 | .0000 |
| %RSD | 141.4 | 141.4 | 10.21 | 2.006 |
| #1 | .0001 | .0000 | .0008 | .0019 |
| #2 | .0000 | .0000 | .0009 | .0018 |

Sample Name: Blank Run Time: 03/27/08 06:02

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 62.460 | 117.61 |
| Stddev | .000 | 2.97 |
| %RSD | .00056 | 2.5241 |
| | | |
| #1 | 62.460 | 115.51 |
| #2 | 62.460 | 119.71 |

Method: NEWM06 Sample Name: std. 5 Operator:
Comment:
Run Time: 03/27/08 06:11 Type: Std Mode: IR Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0169 | .0751 | .0920 | .1149 |
| Stddev | .0002 | .0006 | .0002 | .0005 |
| %RSD | 1.174 | .7682 | .1885 | .4438 |
| #1 | .0167 | .0755 | .0921 | .1153 |
| #2 | .0170 | .0747 | .0919 | .1146 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .4521 | 1.744 | 4.964 | 9.054 |
| Stddev | .0000 | .004 | .022 | .009 |
| %RSD | .0110 | .2044 | .4382 | .1009 |
| #1 | .4521 | 1.746 | 4.980 | 9.060 |
| #2 | .4522 | 1.741 | 4.949 | 9.047 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.419 | .0508 | 1.555 | 3.444 |
| Stddev | .002 | .0004 | .004 | .005 |
| %RSD | .1042 | .7255 | .2616 | .1482 |
| #1 | 1.420 | .0505 | 1.558 | 3.447 |
| #2 | 1.418 | .0511 | 1.552 | 3.440 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.879 | .8930 | .4241 | .4042 |
| Stddev | .001 | .0019 | .0002 | .0012 |
| %RSD | .0637 | .2136 | .0583 | .2923 |
| #1 | 1.880 | .8944 | .4243 | .4033 |
| #2 | 1.878 | .8917 | .4239 | .4050 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.104 | 4.514 | .8850 | .7152 |
| Stddev | .000 | .005 | .0016 | .0036 |
| %RSD | .0031 | .1066 | .1841 | .5066 |
| #1 | 1.104 | 4.517 | .8861 | .7126 |
| #2 | 1.104 | 4.510 | .8838 | .7177 |

Sample Name: std. 5 Run Time: 03/27/08 06:11

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .1496 | .9636 | .9498 | 6.764 |
| Stddev | .0007 | .0015 | .0007 | .008 |
| %RSD | .4631 | .1564 | .0739 | .1246 |
| #1 | .1491 | .9647 | .9503 | 6.770 |
| #2 | .1501 | .9626 | .9493 | 6.758 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .4189 | 1.516 | .1907 | .2525 |
| Stddev | .0014 | .000 | .0007 | .0007 |
| %RSD | .3248 | .0209 | .3905 | .2660 |
| #1 | .4199 | 1.516 | .1902 | .2530 |
| #2 | .4179 | 1.516 | .1912 | .2520 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .2233 | .0984 | .4591 | 1.145 |
| Stddev | .0005 | .0001 | .0004 | .001 |
| %RSD | .2117 | .0540 | .0824 | .0960 |
| #1 | .2230 | .0984 | .4594 | 1.146 |
| #2 | .2237 | .0984 | .4589 | 1.144 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0418 | 2.895 | .7617 | .0732 |
| Stddev | .0001 | .001 | .0019 | .0004 |
| %RSD | .2231 | .0232 | .2489 | .5579 |
| #1 | .0419 | 2.894 | .7603 | .0729 |
| #2 | .0417 | 2.895 | .7630 | .0735 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0872 | .0415 | .3706 | .9477 |
| Stddev | .0005 | .0005 | .0006 | .0027 |
| %RSD | .5697 | 1.155 | .1583 | .2843 |
| #1 | .0869 | .0412 | .3710 | .9496 |
| #2 | .0876 | .0419 | .3702 | .9458 |

Sample Name: std. 5 Run Time: 03/27/08 06:11

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 62.341 | 114.59 |
| Stddev | .057 | .23 |
| %RSD | .09203 | .19759 |
| | | |
| #1 | 62.381 | 114.75 |
| #2 | 62.300 | 114.43 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ag3280 | 0.0359 | -0.0011 | 0.9999993 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -4.0231e-060 | 0 | | -0.0011048 |
| std. 10 | 1 | 0.9992 | -0.000805 | -0.0805 | 0.034719 |
| std. 5 | 0.5 | 0.5008 | 0.000805 | 0.161 | 0.01685 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Al3944 | 0.0149 | 0.0004 | 0.9999999 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 8.7439e-060 | 0 | | 0.00044633 |
| std. 5 | 5 | 5.0028 | 0.00281 | 0.0561 | 0.07508 |
| std. 10 | 10 | 10.011 | 0.0109 | 0.109 | 0.14979 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Al3961 | 0.0181 | 0.0010 | 0.9999858 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000186740 | 0 | | 0.00098253 |
| std. 10 | 10 | 9.9627 | -0.0373 | -0.373 | 0.18099 |
| std. 5 | 5 | 5.0373 | 0.0373 | 0.747 | 0.091998 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| As1890 | 0.0226 | 0.0005 | 0.9999493 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000353340 | 0 | | 0.00046232 |
| std. 10 | 10 | 9.9287 | -0.0713 | -0.713 | 0.2246 |
| std. 5 | 5 | 5.0704 | 0.0704 | 1.41 | 0.11493 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| B_2089 | 0.0890 | 0.0016 | 0.9999583 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000320280 | 0 | | 0.0016048 |
| std. 10 | 10 | 9.9359 | -0.0641 | -0.641 | 0.88555 |
| std. 5 | 5 | 5.0641 | 0.0641 | 1.28 | 0.45214 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| B_2496 | 0.3434 | 0.0058 | 0.9999627 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000303050 | 0 | | 0.005708 |
| std. 10 | 10 | 9.9394 | -0.0606 | -0.606 | 3.419 |
| std. 5 | 5 | 5.0606 | 0.0606 | 1.21 | 1.7436 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ba2335 | 0.9759 | 0.0034 | 0.9999296 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000416410 | 0 | | 0.0030051 |
| std. 10 | 10 | 9.917 | -0.083 | -0.83 | 9.6816 |
| std. 5 | 5 | 5.0834 | 0 | | 4.9644 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ba4554 | 1.7672 | 0.0047 | 0.9998528 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000602090 | 0 | | 0.0036248 |
| std. 10 | 10 | 9.8795 | -0.12 | -1.2 | 17.464 |
| std. 5 | 5 | 5.1204 | 0.12 | 2.41 | 9.0537 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Be2348 | 11.1980 | -0.0053 | 0.9999360 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -9.9411e-060 | 0 | | -0.0054501 |
| std. 10 | 0.25 | 0.24836 | -0.00164 | -0.655 | 2.7758 |
| std. 5 | 0.125 | 0.12716 | 0.00216 | 1.73 | 1.4186 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ca1840 | 0.0068 | 0.0166 | 0.9999986 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 5.9575e-050 | 0 | | 0.016648 |
| std. 10 | 10 | 10.012 | 0.0119 | 0.119 | 0.0852 |
| std. 5 | 5 | 4.9881 | -0.0119 | -0.238 | 0.050802 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cd2144 | 0.3027 | 0.0014 | 0.9998232 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000660150 | 0 | | 0.0012092 |
| std. 10 | 10 | 9.8684 | -0.132 | -1.32 | 2.9887 |
| std. 5 | 5 | 5.1323 | 0.132 | 2.65 | 1.555 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cd2265 | 0.6743 | 0.0007 | 0.9998896 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000521550 | 0 | | 0.00037342 |
| std. 10 | 10 | 9.8982 | -0.102 | -1.02 | 6.6753 |
| std. 5 | 5 | 5.1056 | 0.106 | 2.11 | 3.4435 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Co2286 | 0.3700 | 0.0019 | 0.9999461 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000364580 | 0 | | 0.0017693 |
| std. 10 | 10 | 9.9273 | -0.0727 | -0.727 | 3.6749 |
| std. 5 | 5 | 5.073 | 0.073 | 1.46 | 1.8789 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cr2061 | 0.1759 | 0.0020 | 0.9999562 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000328450 | 0 | | 0.0019738 |
| std. 10 | 10 | 9.9343 | - | | ..7494 |

| | | | | | |
|---|---|---|---|---|---|
| std. 5 | 5 | 5.0657 | 0.0657 | 1.31 | 0.89305 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cu2247 | 0.0833 | 0.0010 | 0.9999381 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000390710 | 0 | | 0.00096022 |
| std. 10 | 10 | 9.9249 | -0.0751 | -0.751 | 0.82767 |
| std. 5 | 5 | 5.0796 | 0.0796 | 1.59 | 0.42409 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cu3247 | 0.0798 | -0.0005 | 0.9999520 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000343780 | 0 | | -0.00049768 |
| std. 10 | 10 | 9.9307 | -0.0693 | -0.693 | 0.79233 |
| std. 5 | 5 | 5.0685 | 0.0685 | 1.37 | 0.40416 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Fe2404 | 0.2169 | 0.0017 | 0.9999334 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000405070 | 0 | | 0.0015693 |
| std. 10 | 10 | 9.919 | -0.081 | -0.81 | 2.1535 |
| std. 5 | 5 | 5.081 | 0.081 | 1.62 | 1.104 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Fe2599 | 0.8924 | 0.0032 | 0.9999699 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.00027220 | 0 | | 0.0029518 |
| std. 10 | 10 | 9.9456 | -0.0544 | -0.544 | 8.8786 |
| std. 5 | 5 | 5.0544 | 0.0544 | 1.09 | 4.5138 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| K_7664 | 0.0171 | 0.0035 | 0.9997836 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.00730250 | 0 | | 0.0033585 |
| std. 10 | 100 | 98.539 | -1.46 | -1.46 | 1.6914 |
| std. 5 | 50 | 51.46 | 1.46 | 2.92 | 0.88499 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mg2802 | 0.1406 | 0.0008 | 0.9999327 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000407110 | 0 | | 0.00075542 |
| std. 10 | 10 | 9.9186 | -0.0814 | -0.814 | 1.3952 |
| std. 5 | 5 | 5.0814 | 0.0814 | 1.63 | 0.71515 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mg2852 | 0.0298 | -0.0007 | 0.9999853 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000190480 | 0 | | -0.00074652 |
| std. 10 | 10 | 9.9619 | -0.0381 | -0.381 | 0.29658 |
| std. 5 | 5 | 5.0381 | 0.0381 | 0.762 | 0.14963 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mn2576 | 1.9019 | 0.0038 | 0.9999781 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -2.3214e-050 | 0 | | 0.003752 |
| std. 10 | 1 | 0.99541 | -0.00459 | -0.459 | 1.897 |
| std. 5 | 0.5 | 0.50467 | 0.00467 | 0.934 | 0.96363 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mo2020 | 0.1866 | 0.0025 | 0.9999418 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000378610 | 0 | | 0.0024005 |
| std. 10 | 10 | 9.9243 | -0.0757 | -0.757 | 1.8548 |
| std. 5 | 5 | 5.0757 | 0.0757 | 1.51 | 0.94983 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Na5889 | 0.1390 | -0.0737 | 0.9999330 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.0040623 | 0 | 0 | -0.073119 |
| std. 10 | 100 | 100.81 | 0.812 | 0.812 | 13.941 |
| std. 5 | 50 | 49.188 | -0.812 | -1.62 | 6.7644 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ni2216 | 0.0827 | 0.0000 | 0.9999564 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000327550 | 0 | | -5.3347e-05 |
| std. 10 | 10 | 9.9345 | -0.0655 | -0.655 | 0.82159 |
| std. 5 | 5 | 5.0655 | 0.0655 | 1.31 | 0.41891 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ni2316 | 0.2981 | -0.0009 | 0.9999208 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000441670 | 0 | | -0.0010358 |
| std. 10 | 10 | 9.9117 | -0.0883 | -0.883 | 2.9539 |
| std. 5 | 5 | 5.0883 | 0.0883 | 1.77 | 1.516 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Pb2203 | 0.0378 | 0.0002 | 0.9999860 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000185920 | 0 | | 0.00018671 |
| std. 5 | 5 | 5.038 | 0.038 | 0.76 | 0.19069 |
| std. 10 | 10 | 9.9645 | - | | ).37697 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sb2068 | 0.0500 | 0.0005 | 0.9999824 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000207980 | 0 | | 0.0005379 |
| std. 10 | 10 | 9.9584 | -0.0416 | -0.416 | 0.49825 |
| std. 5 | 5 | 5.0416 | 0.0416 | 0.832 | 0.25252 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sb2175 | 0.0441 | -0.0002 | 0.9999548 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000333630 | 0 | | -0.00018671 |
| std. 10 | 10 | 9.9333 | -0.0667 | -0.667 | 0.43803 |
| std. 5 | 5 | 5.0667 | 0.0667 | 1.33 | 0.22335 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Se1960 | 0.0191 | 0.0010 | 0.9999104 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.00046980 | 0 | | 0.0010047 |
| std. 10 | 10 | 9.9072 | -0.0928 | -0.928 | 0.19042 |
| std. 5 | 5 | 5.0946 | 0.0946 | 1.89 | 0.09841 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Si2124 | 0.0890 | 0.0095 | 0.9999748 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000248880 | 0 | | 0.0094733 |
| std. 10 | 10 | 9.9502 | -0.0498 | -0.498 | 0.89546 |
| std. 5 | 5 | 5.0498 | 0.0498 | 0.995 | 0.45913 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Si2516 | 0.2224 | 0.0199 | 0.9999654 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000291940 | 0 | | 0.019818 |
| std. 10 | 10 | 9.9416 | -0.0584 | -0.584 | 2.2312 |
| std. 5 | 5 | 5.0584 | 0.0584 | 1.17 | 1.145 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sn1899 | 0.0083 | 0.0003 | 0.9999999 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 1.269e-05 | 0 | 0 | 0.0003423 |
| std. 10 | 10 | 10.006 | 0.00629 | 0.0629 | 0.08335 |
| std. 5 | 5 | 4.9993 | -0.000663 | -0.0133 | 0.041814 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sr4077 | 5.7410 | -0.0005 | 0.9999871 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -1.7872e-050 | 0 | | -0.00062016 |
| std. 10 | 1 | 0.99796 | - | | .7287 |

| | | | | | |
|---|---|---|---|---|---|
| std. 5 | 0.5 | 0.50434 | 0.00434 | 0.868 | 2.8949 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ti3349 | 0.1512 | 0.0000 | 0.9999845 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000195390 | 0 | | -6.4914e-05 |
| std. 10 | 10 | 9.9609 | -0.0391 | -0.391 | 1.5057 |
| std. 5 | 5 | 5.0391 | 0.0391 | 0.782 | 0.76169 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Tl1908 | 0.0143 | 0.0005 | 0.9999355 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000398620 | 0 | | 0.00045344 |
| std. 10 | 10 | 9.9203 | -0.0797 | -0.797 | 0.1425 |
| std. 5 | 5 | 5.0797 | 0.0797 | 1.59 | 0.07319 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Tl1908 | 0.0173 | 0.0001 | 0.9999864 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000183550 | 0 | | 5.3344e-05 |
| std. 10 | 10 | 9.9633 | -0.0367 | -0.367 | 0.17253 |
| std. 5 | 5 | 5.0367 | 0.0367 | 0.734 | 0.087245 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| V_2924 | 0.0084 | 0.0000 | 0.9999771 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000237630 | 0 | | 1.8547e-05 |
| std. 10 | 10 | 10.048 | 0.0477 | 0.477 | 0.08421 |
| std. 5 | 5 | 4.9525 | -0.0475 | -0.949 | 0.041516 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Zn2062 | 0.0726 | 0.0009 | 0.9999132 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.00046260 | 0 | | 0.00086242 |
| std. 10 | 10 | 9.9083 | -0.0917 | -0.917 | 0.72013 |
| std. 5 | 5 | 5.0929 | 0.0929 | 1.86 | 0.37059 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Zn2062 | 0.1864 | 0.0019 | 0.9999416 | 03/27/08 06:23:40 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000379280 | 0 | | 0.001876 |
| std. 10 | 10 | 9.9221 | -0.0779 | -0.779 | 1.8511 |
| std. 5 | 5 | 5.0749 | 0.0749 | 1.5 | 0.94773 |

Method: NEWM06 Sample Name: std. 10 Operator:
Comment:
Run Time: 03/27/08 06:19 Type: Std Mode: IR Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0347 | .1498 | .1810 | .2246 |
| Stddev | .0003 | .0008 | .0000 | .0003 |
| %RSD | .7850 | .5453 | .0047 | .1462 |
| #1 | .0349 | .1504 | .1810 | .2244 |
| #2 | .0345 | .1492 | .1810 | .2248 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .8855 | 3.419 | 9.682 | 17.46 |
| Stddev | .0031 | .011 | .002 | .08 |
| %RSD | .3552 | .3248 | .0200 | .4511 |
| #1 | .8833 | 3.411 | 9.683 | 17.52 |
| #2 | .8878 | 3.427 | 9.680 | 17.41 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2.776 | .0852 | 2.989 | 6.675 |
| Stddev | .003 | .0018 | .007 | .009 |
| %RSD | .1065 | 2.092 | .2413 | .1335 |
| #1 | 2.774 | .0839 | 2.984 | 6.669 |
| #2 | 2.778 | .0865 | 2.994 | 6.682 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3.675 | 1.749 | .8277 | .7923 |
| Stddev | .001 | .002 | .0030 | .0014 |
| %RSD | .0262 | .1209 | .3644 | .1794 |
| #1 | 3.674 | 1.748 | .8255 | .7933 |
| #2 | 3.676 | 1.751 | .8298 | .7913 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2.154 | 8.879 | 1.691 | 1.395 |
| Stddev | .008 | .023 | .006 | .001 |
| %RSD | .3657 | .2624 | .3396 | .0564 |
| #1 | 2.148 | 8.895 | 1.696 | 1.395 |
| #2 | 2.159 | 8.862 | 1.687 | 1.396 |

Sample Name: std. 10 Run Time: 03/27/08 06:19

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .2966 | 1.897 | 1.855 | 13.94 |
| Stddev | .0009 | .006 | .006 | .08 |
| %RSD | .3090 | .3068 | .3410 | .5390 |
| #1 | .2972 | 1.893 | 1.850 | 13.89 |
| #2 | .2959 | 1.901 | 1.859 | 13.99 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .8216 | 2.954 | .3770 | .4982 |
| Stddev | .0009 | .012 | .0006 | .0004 |
| %RSD | .1052 | .3975 | .1519 | .0758 |
| #1 | .8210 | 2.946 | .3766 | .4980 |
| #2 | .8222 | 2.962 | .3774 | .4985 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .4380 | .1904 | .8955 | 2.231 |
| Stddev | .0014 | .0003 | .0018 | .008 |
| %RSD | .3196 | .1405 | .1994 | .3473 |
| #1 | .4370 | .1906 | .8942 | 2.226 |
| #2 | .4390 | .1902 | .8967 | 2.237 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0833 | 5.729 | 1.506 | .1425 |
| Stddev | .0003 | .001 | .004 | .0016 |
| %RSD | .3120 | .0188 | .2396 | 1.108 |
| #1 | .0832 | 5.729 | 1.508 | .1414 |
| #2 | .0835 | 5.728 | 1.503 | .1436 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .1725 | .0842 | .7201 | 1.851 |
| Stddev | .0003 | .0002 | .0012 | .006 |
| %RSD | .1919 | .2055 | .1697 | .3179 |
| #1 | .1723 | .0841 | .7193 | 1.847 |
| #2 | .1728 | .0843 | .7210 | 1.855 |

Sample Name: std. 10 Run Time: 03/27/08 06:19

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 62.403 | 113.99 |
| Stddev | .003 | .13 |
| %RSD | .00510 | .11025 |
| | | |
| #1 | 62.400 | 114.08 |
| #2 | 62.405 | 113.90 |

Method: NEWM06 Sample Name: ICV Operator:
Comment:
Run Time: 03/27/08 06:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2518 | 2.083 | 1.972 | 1.033 |
| Stddev | .0076 | .009 | .017 | .002 |
| %RSD | 2.999 | .4187 | .8376 | .1555 |
| #1 | .2465 | 2.089 | 1.984 | 1.032 |
| #2 | .2571 | 2.077 | 1.960 | 1.035 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.019 | 1.025 | 2.112 | 2.166 |
| Stddev | .001 | .007 | .027 | .009 |
| %RSD | .1126 | .6666 | 1.265 | .4228 |
| #1 | 1.018 | 1.020 | 2.094 | 2.160 |
| #2 | 1.020 | 1.030 | 2.131 | 2.173 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0515 | 5.262 | .5288 | .5207 |
| Stddev | .0003 | .111 | .0009 | .0017 |
| %RSD | .6396 | 2.102 | .1766 | .3328 |
| #1 | .0513 | 5.184 | .5281 | .5195 |
| #2 | .0517 | 5.340 | .5294 | .5220 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5110 | .2017 | .2614 | .2470 |
| Stddev | .0003 | .0020 | .0038 | .0032 |
| %RSD | .0559 | .9786 | 1.458 | 1.284 |
| #1 | .5108 | .2003 | .2587 | .2448 |
| #2 | .5112 | .2031 | .2641 | .2493 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.035 | 1.045 | 5.129 | 5.129 |
| Stddev | .002 | .010 | .007 | .046 |
| %RSD | .1647 | .9237 | .1308 | .9064 |
| #1 | 1.034 | 1.039 | 5.134 | 5.096 |
| #2 | 1.036 | 1.052 | 5.124 | 5.162 |

Sample Name: ICV Run Time: 03/27/08 06:25

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.041 | .5095 | 1.009 | 10.78 |
| Stddev | .021 | .0004 | .004 | .02 |
| %RSD | .4269 | .0793 | .3790 | .1643 |
| #1 | 5.026 | .5092 | 1.006 | 10.79 |
| #2 | 5.057 | .5098 | 1.012 | 10.76 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5191 | .5162 | 1.005 | 1.001 |
| Stddev | .0006 | .0023 | .006 | .006 |
| %RSD | .1072 | .4519 | .6114 | .6284 |
| #1 | .5195 | .5178 | 1.000 | .9965 |
| #2 | .5188 | .5145 | 1.009 | 1.005 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.010 | 1.038 | 1.027 | 1.031 |
| Stddev | .012 | .023 | .004 | .006 |
| %RSD | 1.232 | 2.185 | .3610 | .6112 |
| #1 | 1.019 | 1.022 | 1.024 | 1.026 |
| #2 | 1.001 | 1.054 | 1.029 | 1.035 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .9121 | .2066 | .9930 | .9879 |
| Stddev | .0110 | .0026 | .0058 | .0140 |
| %RSD | 1.208 | 1.273 | .5882 | 1.415 |
| #1 | .9199 | .2084 | .9888 | .9978 |
| #2 | .9043 | .2047 | .9971 | .9780 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .9665 | .4171 | .5211 | .5215 |
| Stddev | .0218 | .0245 | .0029 | .0023 |
| %RSD | 2.255 | 5.880 | .5543 | .4340 |
| #1 | .9819 | .3998 | .5191 | .5199 |
| #2 | .9511 | .4345 | .5231 | .5231 |

Sample Name: ICV Run Time: 03/27/08 06:25

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 63.306 | 116.63 |
| Stddev | .261 | .12 |
| %RSD | .41246 | .10410 |
| | | |
| #1 | 63.491 | 116.72 |
| #2 | 63.122 | 116.55 |

Method: NEWM06 Sample Name: ICB Operator:
Comment:
Run Time: 03/27/08 06:30 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0008 | .0100 | -.0123 | .0036 |
| Stddev | .0044 | .0115 | .0000 | .0005 |
| %RSD | 541.4 | 114.2 | .3804 | 15.11 |
| #1 | .0040 | .0019 | -.0122 | .0040 |
| #2 | -.0023 | .0181 | -.0123 | .0032 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0005 | -.0010 | -.0014 | -.0014 |
| Stddev | .0003 | .0012 | .0000 | .0000 |
| %RSD | 67.46 | 116.6 | .8920 | 2.516 |
| #1 | .0003 | -.0002 | -.0014 | -.0015 |
| #2 | .0008 | -.0018 | -.0014 | -.0014 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.1205 | -.0003 | -.0010 |
| Stddev | .000 | .1421 | .0005 | .0002 |
| %RSD | 109.7 | 118.0 | 156.9 | 24.93 |
| #1 | -.0001 | -.2210 | -.0007 | -.0011 |
| #2 | .0000 | -.0200 | .0000 | -.0008 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0006 | -.0048 | .0007 | .0022 |
| Stddev | .0049 | .0003 | .0000 | .0028 |
| %RSD | 789.1 | 6.552 | .0321 | 130.0 |
| #1 | -.0028 | -.0046 | .0007 | .0002 |
| #2 | .0040 | -.0051 | .0007 | .0041 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0032 | -.0012 | -.0058 | .0005 |
| Stddev | .0003 | .0006 | .0096 | .0012 |
| %RSD | 9.915 | 48.53 | 165.6 | 271.0 |
| #1 | .0034 | -.0008 | .0010 | -.0004 |
| #2 | .0030 | -.0017 | -.0125 | .0013 |

Sample Name: ICB Run Time: 03/27/08 06:30

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0072 | -.0001 | -.0058 | -.0160 |
| Stddev | .0066 | .0003 | .0010 | .0038 |
| %RSD | 92.33 | 254.1 | 17.27 | 23.47 |
| #1 | .0119 | -.0004 | -.0051 | -.0134 |
| #2 | .0025 | .0001 | -.0065 | -.0187 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0019 | -.0010 | -.0007 | .0024 |
| Stddev | .0013 | .0014 | .0016 | .0022 |
| %RSD | 70.73 | 146.1 | 227.7 | 94.49 |
| #1 | .0010 | -.0020 | -.0019 | .0039 |
| #2 | .0029 | .0000 | .0004 | .0008 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0053 | -.0049 | -.0010 | -.0029 |
| Stddev | .0037 | .0201 | .0018 | .0000 |
| %RSD | 69.08 | 413.7 | 186.3 | .8817 |
| #1 | .0027 | -.0191 | .0003 | -.0029 |
| #2 | .0079 | .0094 | -.0023 | -.0029 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0191 | .0000 | -.0001 | -.0045 |
| Stddev | .0149 | .0001 | .0010 | .0026 |
| %RSD | 78.45 | 243.4 | 1253. | 57.61 |
| #1 | -.0296 | .0001 | .0006 | -.0063 |
| #2 | -.0085 | .0000 | -.0008 | -.0027 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0104 | .0160 | .0019 | -.0005 |
| Stddev | .0107 | .0063 | .0038 | .0002 |
| %RSD | 103.2 | 39.60 | 196.7 | 30.71 |
| #1 | .0028 | .0115 | -.0007 | -.0007 |
| #2 | .0180 | .0205 | .0046 | -.0004 |

Sample Name: ICB Run Time: 03/27/08 06:30

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 63.324 | 117.71 |
| Stddev | .002 | .13 |
| %RSD | .00250 | .11043 |
| | | |
| #1 | 63.323 | 117.61 |
| #2 | 63.326 | 117.80 |

Method: NEWM06 Sample Name: ICSA Operator:
Comment:
Run Time: 03/27/08 06:49 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0099 | 546.9 | 517.2 | .0001 |
| Stddev | .0000 | 6.1 | .1 | .0045 |
| %RSD | .4055 | 1.113 | .0124 | 6892. |
| #1 | .0099 | 551.2 | 517.2 | .0032 |
| #2 | .0099 | 542.6 | 517.3 | -.0031 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0070 | -.0170 | -.0017 | -.0009 |
| Stddev | .0007 | .0012 | .0001 | .0004 |
| %RSD | 9.507 | 7.043 | 7.047 | 48.85 |
| #1 | -.0065 | -.0178 | -.0016 | -.0012 |
| #2 | -.0075 | -.0161 | -.0017 | -.0006 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0014 | 423.6 | -.0028 | -.0033 |
| Stddev | .0001 | 1.1 | .0006 | .0001 |
| %RSD | 5.364 | .2588 | 20.79 | 1.542 |
| #1 | -.0014 | 424.3 | -.0032 | -.0032 |
| #2 | -.0013 | 422.8 | -.0024 | -.0033 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0041 | .0007 | -.0071 | -.0017 |
| Stddev | .0002 | .0026 | .0042 | .0004 |
| %RSD | 5.663 | 351.3 | 59.35 | 20.95 |
| #1 | -.0040 | -.0011 | -.0101 | -.0020 |
| #2 | -.0043 | .0026 | -.0041 | -.0015 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 178.4 | 160.4 | -.0549 | 290.3 |
| Stddev | 1.0 | .4 | .0229 | 2.2 |
| %RSD | .5652 | .2688 | 41.65 | .7495 |
| #1 | 179.1 | 160.7 | -.0388 | 291.9 |
| #2 | 177.7 | 160.1 | -.0711 | 288.8 |

Sample Name: ICSA Run Time: 03/27/08 06:49

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 488.2 | .0004 | -.0118 | -.0507 |
| Stddev | .8 | .0000 | .0025 | .0034 |
| %RSD | .1724 | 8.325 | 21.16 | 6.662 |
| #1 | 487.6 | .0004 | -.0136 | -.0531 |
| #2 | 488.8 | .0004 | -.0100 | -.0484 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0034 | -.0068 | -.0158 | .0022 |
| Stddev | .0005 | .0001 | .0011 | .0096 |
| %RSD | 15.24 | 2.138 | 6.809 | 431.6 |
| #1 | -.0038 | -.0069 | -.0150 | -.0046 |
| #2 | -.0031 | -.0067 | -.0165 | .0090 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0068 | -.0689 | .0343 | -.0168 |
| Stddev | .0009 | .0138 | .0011 | .0022 |
| %RSD | 13.82 | 19.98 | 3.293 | 13.07 |
| #1 | -.0061 | -.0787 | .0335 | -.0153 |
| #2 | -.0074 | -.0592 | .0351 | -.0184 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0443 | -.0039 | -.0029 | .1313 |
| Stddev | .0100 | .0001 | .0004 | .0055 |
| %RSD | 22.64 | 1.992 | 13.68 | 4.178 |
| #1 | -.0372 | -.0038 | -.0026 | .1275 |
| #2 | -.0514 | -.0039 | -.0032 | .1352 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0189 | -.0206 | -.0115 | -.0179 |
| Stddev | .0024 | .0074 | .0000 | .0005 |
| %RSD | 12.77 | 35.78 | .1946 | 2.702 |
| #1 | -.0172 | -.0154 | -.0114 | -.0182 |
| #2 | -.0206 | -.0258 | -.0115 | -.0175 |

Sample Name: ICSA Run Time: 03/27/08 06:49

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 55.536 | 102.18 |
| Stddev | .148 | .20 |
| %RSD | .26653 | .19185 |
| | | |
| #1 | 55.431 | 102.04 |
| #2 | 55.641 | 102.32 |

Method: NEWM06 Sample Name: ICSAB Operator:
Comment:
Run Time: 03/27/08 06:58 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.160 | 559.6 | 530.4 | 1.057 |
| Stddev | .035 | 22.8 | 20.2 | .029 |
| %RSD | 3.044 | 4.070 | 3.807 | 2.783 |
| #1 | 1.185 | 575.7 | 544.7 | 1.078 |
| #2 | 1.135 | 543.5 | 516.2 | 1.036 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.047 | 1.081 | .5557 | .5895 |
| Stddev | .012 | .011 | .0063 | .0214 |
| %RSD | 1.126 | 1.023 | 1.141 | 3.622 |
| #1 | 1.056 | 1.089 | .5602 | .6046 |
| #2 | 1.039 | 1.073 | .5512 | .5744 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5289 | 426.3 | 1.024 | 1.026 |
| Stddev | .0049 | 4.4 | .011 | .010 |
| %RSD | .9296 | 1.033 | 1.053 | .9955 |
| #1 | .5324 | 429.5 | 1.032 | 1.033 |
| #2 | .5254 | 423.2 | 1.017 | 1.018 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5184 | .5297 | .5319 | .5340 |
| Stddev | .0080 | .0059 | .0010 | .0006 |
| %RSD | 1.537 | 1.111 | .1932 | .1069 |
| #1 | .5240 | .5338 | .5326 | .5336 |
| #2 | .5128 | .5255 | .5312 | .5344 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 180.0 | 161.3 | 58.38 | 291.0 |
| Stddev | 2.0 | 1.3 | 2.05 | 1.9 |
| %RSD | 1.113 | .8150 | 3.511 | .6632 |
| #1 | 181.4 | 162.2 | 59.83 | 292.4 |
| #2 | 178.6 | 160.4 | 56.93 | 289.6 |

Sample Name: ICSAB Run Time: 03/27/08 06:58

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 489.7 | .5273 | 1.019 | 55.30 |
| Stddev | 10.3 | .0067 | .013 | 1.86 |
| %RSD | 2.100 | 1.270 | 1.281 | 3.355 |
| #1 | 497.0 | .5321 | 1.028 | 56.62 |
| #2 | 482.4 | .5226 | 1.009 | 53.99 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.035 | 1.039 | 1.041 | 1.031 |
| Stddev | .007 | .011 | .015 | .013 |
| %RSD | .7196 | 1.023 | 1.413 | 1.303 |
| #1 | 1.040 | 1.046 | 1.051 | 1.040 |
| #2 | 1.030 | 1.031 | 1.030 | 1.021 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.047 | .9267 | .0734 | .0173 |
| Stddev | .021 | .0084 | .0033 | .0004 |
| %RSD | 2.059 | .9013 | 4.509 | 2.168 |
| #1 | 1.062 | .9326 | .0757 | .0171 |
| #2 | 1.031 | .9208 | .0710 | .0176 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .9521 | 1.070 | 1.049 | 4.838 |
| Stddev | .0332 | .035 | .030 | .048 |
| %RSD | 3.483 | 3.300 | 2.890 | .9966 |
| #1 | .9755 | 1.095 | 1.070 | 4.872 |
| #2 | .9286 | 1.045 | 1.028 | 4.804 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.870 | .3943 | .9537 | .9418 |
| Stddev | .003 | .0108 | .0194 | .0091 |
| %RSD | .0644 | 2.743 | 2.036 | .9679 |
| #1 | 4.872 | .4020 | .9674 | .9483 |
| #2 | 4.868 | .3867 | .9400 | .9354 |

Sample Name: ICSAB Run Time: 03/27/08 06:58

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 55.566 | 100.85 |
| Stddev | .482 | 2.73 |
| %RSD | .86709 | 2.7103 |
| | | |
| #1 | 55.226 | 98.920 |
| #2 | 55.907 | 102.79 |

Method: NEWM06 Sample Name: CCV Operator:
Comment:
Run Time: 03/27/08 15:22 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.250 | 9.810 | 9.598 | 4.925 |
| Stddev | .004 | .053 | .031 | .010 |
| %RSD | .3237 | .5381 | .3268 | .1996 |
| #1 | 1.253 | 9.847 | 9.620 | 4.932 |
| #2 | 1.248 | 9.772 | 9.576 | 4.918 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.875 | 4.915 | 9.956 | 10.03 |
| Stddev | .000 | .026 | .003 | .14 |
| %RSD | .0041 | .5362 | .0248 | 1.385 |
| #1 | 4.875 | 4.897 | 9.955 | 10.13 |
| #2 | 4.875 | 4.934 | 9.958 | 9.935 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2428 | 25.52 | 2.487 | 2.481 |
| Stddev | .0000 | .07 | .003 | .003 |
| %RSD | .0169 | .2723 | .1218 | .1088 |
| #1 | .2428 | 25.47 | 2.485 | 2.479 |
| #2 | .2427 | 25.57 | 2.489 | 2.483 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.462 | .9885 | 1.242 | 1.198 |
| Stddev | .006 | .0014 | .005 | .001 |
| %RSD | .2528 | .1385 | .4061 | .0908 |
| #1 | 2.466 | .9895 | 1.246 | 1.197 |
| #2 | 2.458 | .9875 | 1.239 | 1.198 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.926 | 4.898 | 24.20 | 23.85 |
| Stddev | .005 | .021 | .21 | .10 |
| %RSD | .1092 | .4203 | .8869 | .4049 |
| #1 | 4.930 | 4.883 | 24.35 | 23.92 |
| #2 | 4.922 | 4.912 | 24.05 | 23.78 |

Sample Name: CCV Run Time: 03/27/08 15:22

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 24.25 | 2.408 | 4.915 | 24.20 |
| Stddev | .11 | .005 | .014 | .35 |
| %RSD | .4705 | .1933 | .2827 | 1.466 |
| | | | | |
| #1 | 24.33 | 2.412 | 4.905 | 24.45 |
| #2 | 24.17 | 2.405 | 4.925 | 23.95 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.477 | 2.474 | 4.856 | 4.739 |
| Stddev | .008 | .001 | .005 | .029 |
| %RSD | .3154 | .0495 | .1142 | .6019 |
| | | | | |
| #1 | 2.472 | 2.475 | 4.852 | 4.719 |
| #2 | 2.483 | 2.473 | 4.860 | 4.759 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.781 | 4.894 | 4.879 | 4.824 |
| Stddev | .003 | .021 | .009 | .015 |
| %RSD | .0588 | .4240 | .1739 | .3133 |
| | | | | |
| #1 | 4.779 | 4.879 | 4.873 | 4.814 |
| #2 | 4.783 | 4.909 | 4.885 | 4.835 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.730 | .9872 | 4.914 | 4.886 |
| Stddev | .039 | .0125 | .057 | .047 |
| %RSD | .8176 | 1.264 | 1.153 | .9583 |
| | | | | |
| #1 | 4.703 | .9960 | 4.954 | 4.853 |
| #2 | 4.758 | .9784 | 4.874 | 4.919 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.801 | 2.361 | 2.507 | 2.475 |
| Stddev | .007 | .007 | .010 | .004 |
| %RSD | .1386 | .3075 | .4015 | .1632 |
| | | | | |
| #1 | 4.797 | 2.356 | 2.500 | 2.478 |
| #2 | 4.806 | 2.366 | 2.515 | 2.472 |

Sample Name: CCV Run Time: 03/27/08 15:22

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 64.533 | 116.31 |
| Stddev | .145 | 1.59 |
| %RSD | .22520 | 1.3648 |
| | | |
| #1 | 64.636 | 115.19 |
| #2 | 64.430 | 117.43 |

Method: NEWM06 Sample Name: CCB Operator:
Comment:
Run Time: 03/27/08 15:27 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0060 | -.0113 | -.0004 | -.0032 |
| Stddev | .0001 | .0282 | .0052 | .0037 |
| %RSD | 2.253 | 249.5 | 1370. | 113.0 |
| #1 | .0060 | .0086 | .0033 | -.0006 |
| #2 | .0059 | -.0312 | -.0040 | -.0058 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0036 | -.0028 | -.0007 | -.0009 |
| Stddev | .0006 | .0008 | .0005 | .0002 |
| %RSD | 16.14 | 29.85 | 67.09 | 22.50 |
| #1 | -.0040 | -.0022 | -.0004 | -.0007 |
| #2 | -.0032 | -.0033 | -.0011 | -.0010 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0381 | -.0011 | -.0006 |
| Stddev | .0000 | .1028 | .0007 | .0006 |
| %RSD | 35.69 | 270.0 | 61.94 | 95.15 |
| #1 | .0000 | -.1108 | -.0016 | -.0010 |
| #2 | .0000 | .0346 | -.0006 | -.0002 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0011 | -.0018 | .0009 | .0082 |
| Stddev | .0003 | .0005 | .0017 | .0015 |
| %RSD | 26.30 | 29.85 | 193.0 | 18.10 |
| #1 | -.0014 | -.0022 | .0021 | .0093 |
| #2 | -.0009 | -.0014 | -.0003 | .0072 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0008 | .0019 | -.0076 | .0053 |
| Stddev | .0005 | .0001 | .0130 | .0004 |
| %RSD | 56.97 | 7.400 | 171.5 | 7.325 |
| #1 | .0005 | .0020 | -.0168 | .0056 |
| #2 | .0012 | .0018 | .0016 | .0051 |

Sample Name: CCB Run Time: 03/27/08 15:27

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0206 | .0000 | -.0017 | -.0086 |
| Stddev | .0020 | .0002 | .0040 | .0044 |
| %RSD | 9.799 | 894.1 | 236.4 | 50.88 |
| #1 | .0220 | -.0001 | .0011 | -.0055 |
| #2 | .0191 | .0002 | -.0045 | -.0117 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0024 | -.0004 | .0022 | .0005 |
| Stddev | .0000 | .0001 | .0066 | .0012 |
| %RSD | .2761 | 20.17 | 294.2 | 229.2 |
| #1 | .0024 | -.0005 | .0069 | -.0003 |
| #2 | .0024 | -.0004 | -.0024 | .0014 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0039 | -.0030 | .0043 | -.0019 |
| Stddev | .0027 | .0114 | .0015 | .0019 |
| %RSD | 69.46 | 379.1 | 33.60 | 98.77 |
| #1 | .0020 | -.0111 | .0054 | -.0006 |
| #2 | .0058 | .0051 | .0033 | -.0033 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0367 | .0000 | .0006 | -.0126 |
| Stddev | .0022 | .000 | .0023 | .0076 |
| %RSD | 5.939 | 235.9 | 378.3 | 60.34 |
| #1 | -.0382 | .0000 | .0022 | -.0179 |
| #2 | -.0351 | .0000 | -.0010 | -.0072 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0143 | -.0053 | .0041 | .0017 |
| Stddev | .0124 | .0079 | .0002 | .0019 |
| %RSD | 86.56 | 147.6 | 5.372 | 110.9 |
| #1 | .0231 | .0002 | .0039 | .0004 |
| #2 | .0055 | -.0109 | .0042 | .0031 |

Sample Name: CCB Run Time: 03/27/08 15:27

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 65.667 | 119.60 |
| Stddev | .207 | .66 |
| %RSD | .31513 | .55104 |
| | | |
| #1 | 65.814 | 120.07 |
| #2 | 65.521 | 119.14 |

Method: NEWM06 Sample Name: MB0327-1 Operator:
Comment:
Run Time: 03/27/08 15:37 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0030 | .0062 | -.0161 | -.0092 |
| Stddev | .0018 | .0203 | .0038 | .0098 |
| %RSD | 58.98 | 328.3 | 23.41 | 106.0 |
| #1 | .0017 | .0205 | -.0187 | -.0162 |
| #2 | .0042 | -.0082 | -.0134 | -.0023 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0031 | -.0017 | -.0017 | -.0020 |
| Stddev | .0008 | .0004 | .0015 | .0000 |
| %RSD | 27.41 | 26.46 | 86.35 | .4817 |
| #1 | -.0037 | -.0014 | -.0007 | -.0020 |
| #2 | -.0025 | -.0020 | -.0027 | -.0020 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0002 | .0320 | -.0008 | -.0015 |
| Stddev | .0000 | .1736 | .0003 | .0003 |
| %RSD | 3.015 | 542.9 | 33.35 | 20.82 |
| #1 | -.0002 | -.0908 | -.0010 | -.0017 |
| #2 | -.0002 | .1547 | -.0006 | -.0013 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0028 | -.0050 | -.0003 | .0094 |
| Stddev | .0038 | .0007 | .0004 | .0037 |
| %RSD | 137.2 | 14.51 | 141.5 | 39.57 |
| #1 | -.0001 | -.0045 | -.0006 | .0120 |
| #2 | -.0054 | -.0055 | .0000 | .0068 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0082 | .0056 | -.0457 | .0021 |
| Stddev | .0022 | .0013 | .0071 | .0001 |
| %RSD | 27.10 | 23.46 | 15.61 | 5.424 |
| #1 | .0098 | .0065 | -.0508 | .0022 |
| #2 | .0066 | .0046 | -.0407 | .0020 |

Sample Name: MB0327-1 Run Time: 03/27/08 15:37

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0163 | .0002 | -.0064 | -.0149 |
| Stddev | .0029 | .0001 | .0006 | .0089 |
| %RSD | 17.54 | 44.61 | 9.733 | 59.49 |
| #1 | .0184 | .0002 | -.0059 | -.0212 |
| #2 | .0143 | .0003 | -.0068 | -.0087 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0005 | -.0023 | .0041 | .0056 |
| Stddev | .0042 | .0006 | .0020 | .0062 |
| %RSD | 801.7 | 26.25 | 48.31 | 110.6 |
| #1 | -.0024 | -.0019 | .0055 | .0100 |
| #2 | .0035 | -.0027 | .0027 | .0012 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0003 | -.0010 | .1143 | .1045 |
| Stddev | .0031 | .0056 | .0010 | .0009 |
| %RSD | 1177. | 582.0 | .8506 | .8189 |
| #1 | -.0025 | -.0049 | .1150 | .1039 |
| #2 | .0019 | .0030 | .1137 | .1051 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0397 | -.0001 | -.0006 | -.0211 |
| Stddev | .0052 | .0001 | .0008 | .0104 |
| %RSD | 13.12 | 85.18 | 138.1 | 49.29 |
| #1 | -.0434 | .0000 | .0000 | -.0137 |
| #2 | -.0360 | -.0001 | -.0012 | -.0284 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0088 | -.0042 | .0035 | .0011 |
| Stddev | .0085 | .0032 | .0018 | .0007 |
| %RSD | 96.52 | 75.14 | 49.61 | 68.30 |
| #1 | .0028 | -.0065 | .0048 | .0005 |
| #2 | .0148 | -.0020 | .0023 | .0016 |

Sample Name: MB0327-1 Run Time: 03/27/08 15:37

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 63.595 | 120.34 |
| Stddev | .220 | 2.93 |
| %RSD | .34568 | 2.4384 |
| | | |
| #1 | 63.440 | 118.26 |
| #2 | 63.751 | 122.41 |

Method: NEWM06 Sample Name: LCS0327-1 Operator:
Comment:
Run Time: 03/27/08 15:42 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2028 | 2.090 | 2.063 | 2.029 |
| Stddev | .0006 | .012 | .003 | .014 |
| %RSD | .3086 | .5642 | .1574 | .6732 |
| #1 | .2032 | 2.099 | 2.061 | 2.019 |
| #2 | .2023 | 2.082 | 2.065 | 2.039 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.927 | 1.999 | 2.404 | 2.399 |
| Stddev | .005 | .002 | .002 | .009 |
| %RSD | .2494 | .1029 | .0833 | .3587 |
| #1 | 1.923 | 2.000 | 2.406 | 2.405 |
| #2 | 1.930 | 1.997 | 2.403 | 2.393 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .1989 | 21.02 | .2074 | .2071 |
| Stddev | .0002 | .24 | .0004 | .0017 |
| %RSD | .0787 | 1.134 | .1842 | .8163 |
| #1 | .1988 | 20.85 | .2071 | .2059 |
| #2 | .1990 | 21.19 | .2077 | .2083 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2042 | 2.098 | .1953 | .2003 |
| Stddev | .0001 | .004 | .0007 | .0099 |
| %RSD | .0443 | .2136 | .3407 | 4.930 |
| #1 | .2041 | 2.094 | .1957 | .1933 |
| #2 | .2042 | 2.101 | .1948 | .2073 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.096 | 2.120 | 20.31 | 20.26 |
| Stddev | .006 | .002 | .11 | .06 |
| %RSD | .3002 | .1089 | .5299 | .3145 |
| #1 | 2.092 | 2.119 | 20.39 | 20.31 |
| #2 | 2.101 | 2.122 | 20.24 | 20.22 |

Sample Name: LCS0327-1 Run Time: 03/27/08 15:42

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 20.13 | .2082 | 2.062 | 20.27 |
| Stddev | .04 | .0001 | .008 | .13 |
| %RSD | .2008 | .0512 | .4091 | .6370 |
| #1 | 20.16 | .2082 | 2.056 | 20.36 |
| #2 | 20.10 | .2083 | 2.068 | 20.18 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.095 | 2.065 | 2.026 | 1.993 |
| Stddev | .006 | .003 | .007 | .004 |
| %RSD | .2925 | .1529 | .3361 | .2235 |
| #1 | 2.091 | 2.062 | 2.030 | 1.990 |
| #2 | 2.100 | 2.067 | 2.021 | 1.996 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.995 | 1.866 | 2.153 | 2.121 |
| Stddev | .003 | .005 | .003 | .003 |
| %RSD | .1366 | .2770 | .1375 | .1315 |
| #1 | 1.997 | 1.870 | 2.151 | 2.123 |
| #2 | 1.993 | 1.863 | 2.155 | 2.119 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.069 | .2072 | 2.084 | 1.977 |
| Stddev | .005 | .0010 | .003 | .001 |
| %RSD | .2540 | .4958 | .1278 | .0631 |
| #1 | 2.073 | .2064 | 2.086 | 1.978 |
| #2 | 2.065 | .2079 | 2.082 | 1.976 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.954 | 1.941 | 2.038 | 2.006 |
| Stddev | .002 | .020 | .013 | .010 |
| %RSD | .1012 | 1.029 | .6456 | .4904 |
| #1 | 1.956 | 1.927 | 2.028 | 1.999 |
| #2 | 1.953 | 1.955 | 2.047 | 2.013 |

Sample Name: LCS0327-1 Run Time: 03/27/08 15:42

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 63.706 | 117.43 |
| Stddev | .205 | .05 |
| %RSD | .32202 | .03863 |
| | | |
| #1 | 63.561 | 117.39 |
| #2 | 63.851 | 117.46 |

Method: NEWM06 Sample Name: CCV Operator:
Comment:
Run Time: 03/27/08 15:53 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.250 | 9.825 | 9.595 | 4.981 |
| Stddev | .001 | .019 | .004 | .007 |
| %RSD | .0992 | .1960 | .0440 | .1323 |
| #1 | 1.250 | 9.838 | 9.592 | 4.986 |
| #2 | 1.251 | 9.811 | 9.598 | 4.977 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.839 | 4.936 | 9.988 | 9.982 |
| Stddev | .013 | .004 | .074 | .008 |
| %RSD | .2647 | .0804 | .7426 | .0785 |
| #1 | 4.830 | 4.939 | 10.04 | 9.988 |
| #2 | 4.848 | 4.933 | 9.936 | 9.977 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2431 | 25.51 | 2.515 | 2.508 |
| Stddev | .0005 | .32 | .002 | .001 |
| %RSD | .2185 | 1.239 | .0661 | .0488 |
| #1 | .2435 | 25.29 | 2.514 | 2.507 |
| #2 | .2428 | 25.73 | 2.516 | 2.509 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.471 | .9924 | 1.235 | 1.185 |
| Stddev | .003 | .0031 | .005 | .004 |
| %RSD | .1082 | .3138 | .4350 | .3152 |
| #1 | 2.469 | .9902 | 1.231 | 1.188 |
| #2 | 2.473 | .9946 | 1.239 | 1.183 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.928 | 4.881 | 23.88 | 23.64 |
| Stddev | .000 | .015 | .04 | .04 |
| %RSD | .0071 | .3018 | .1747 | .1796 |
| #1 | 4.928 | 4.892 | 23.85 | 23.61 |
| #2 | 4.929 | 4.871 | 23.91 | 23.67 |

Sample Name: CCV Run Time: 03/27/08 15:53

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 23.93 | 2.408 | 4.928 | 23.96 |
| Stddev | .12 | .003 | .009 | .10 |
| %RSD | .5074 | .1375 | .1887 | .4181 |
| #1 | 23.85 | 2.405 | 4.921 | 23.89 |
| #2 | 24.02 | 2.410 | 4.935 | 24.03 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.482 | 2.475 | 4.907 | 4.743 |
| Stddev | .007 | .007 | .008 | .003 |
| %RSD | .2652 | .2731 | .1707 | .0715 |
| #1 | 2.486 | 2.470 | 4.901 | 4.741 |
| #2 | 2.477 | 2.480 | 4.913 | 4.746 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.752 | 4.973 | 4.902 | 4.848 |
| Stddev | .033 | .020 | .006 | .003 |
| %RSD | .6893 | .3984 | .1232 | .0709 |
| #1 | 4.728 | 4.959 | 4.898 | 4.851 |
| #2 | 4.775 | 4.987 | 4.907 | 4.846 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.789 | .9896 | 5.000 | 4.939 |
| Stddev | .039 | .0065 | .001 | .084 |
| %RSD | .8228 | .6532 | .0107 | 1.699 |
| #1 | 4.761 | .9851 | 5.000 | 4.879 |
| #2 | 4.817 | .9942 | 5.000 | 4.998 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.871 | 2.336 | 2.508 | 2.483 |
| Stddev | .027 | .008 | .000 | .001 |
| %RSD | .5577 | .3585 | .0033 | .0582 |
| #1 | 4.852 | 2.342 | 2.508 | 2.481 |
| #2 | 4.890 | 2.330 | 2.508 | 2.484 |

Sample Name: CCV Run Time: 03/27/08 15:53

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 64.697 | 116.25 |
| Stddev | .165 | .07 |
| %RSD | .25521 | .06106 |
| | | |
| #1 | 64.814 | 116.30 |
| #2 | 64.580 | 116.20 |

Method: NEWM06 Sample Name: CCB Operator:
Comment:
Run Time: 03/27/08 15:59 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0028 | -.0337 | -.0091 | -.0074 |
| Stddev | .0006 | .0091 | .0111 | .0023 |
| %RSD | 20.15 | 27.00 | 121.6 | 30.93 |
| #1 | .0032 | -.0272 | -.0170 | -.0090 |
| #2 | .0024 | -.0401 | -.0013 | -.0058 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0012 | -.0002 | -.0002 | -.0010 |
| Stddev | .0007 | .0026 | .0012 | .0004 |
| %RSD | 60.09 | 1059. | 645.4 | 36.83 |
| #1 | -.0007 | .0016 | .0007 | -.0007 |
| #2 | -.0017 | -.0021 | -.0011 | -.0013 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0338 | -.0005 | -.0010 |
| Stddev | .000 | .1604 | .0005 | .0004 |
| %RSD | 130.5 | 474.5 | 111.4 | 39.99 |
| #1 | .0000 | -.1472 | -.0008 | -.0007 |
| #2 | .0000 | .0796 | -.0001 | -.0013 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0004 | -.0013 | -.0010 | .0059 |
| Stddev | .0003 | .0002 | .0019 | .0024 |
| %RSD | 69.82 | 17.41 | 190.4 | 40.59 |
| #1 | -.0002 | -.0015 | -.0023 | .0076 |
| #2 | -.0006 | -.0012 | .0003 | .0042 |

| Elem | Fe2599 | K_7664 | Mg2802 | Mg2852 |
|---|---|---|---|---|
| Line | 259.940 {129} | 766.490 { 44} | 280.270 {119} | 285.213 {117} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0001 | -.0060 | .0021 | .0104 |
| Stddev | .0002 | .0192 | .0009 | .0014 |
| %RSD | 258.6 | 320.0 | 41.40 | 13.24 |
| #1 | .0001 | .0076 | .0015 | .0114 |
| #2 | -.0002 | -.0195 | .0027 | .0094 |

Sample Name: CCB Run Time: 03/27/08 15:59

| Elem | Mn2576 | Mo2020 | Na5889 | Ni2216 |
|---|---|---|---|---|
| Line | 257.610 {131} | 202.030 {166} | 588.995 { 57} | 221.647 {152} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0024 | -.0277 | .0023 |
| Stddev | .000 | .0002 | .0034 | .0007 |
| %RSD | 560.2 | 10.38 | 12.22 | 32.98 |
| #1 | .0001 | -.0022 | -.0301 | .0017 |
| #2 | -.0001 | -.0026 | -.0253 | .0028 |

| Elem | Ni2316 | Pb2203 | Sb2068 | Sb2175 |
|---|---|---|---|---|
| Line | 231.604 {145} | 220.353 {152} | 206.833 {162} | 217.581 {154} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0003 | .0091 | .0039 | .0001 |
| Stddev | .0008 | .0055 | .0023 | .0010 |
| %RSD | 243.2 | 60.29 | 59.92 | 1257. |
| #1 | -.0009 | .0130 | .0022 | -.0006 |
| #2 | .0002 | .0052 | .0055 | .0008 |

| Elem | Se1960 | Si2124 | Si2516 | Sn1899 |
|---|---|---|---|---|
| Line | 196.090 {171} | 212.412 {158} | 251.612 {134} | 189.989 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0036 | .0019 | -.0036 | -.0342 |
| Stddev | .0044 | .0007 | .0013 | .0028 |
| %RSD | 120.3 | 35.73 | 37.53 | 8.161 |
| #1 | -.0005 | .0014 | -.0045 | -.0322 |
| #2 | -.0067 | .0024 | -.0026 | -.0361 |

| Elem | Sr4077 | Ti3349 | Tl1908 | Tl1908 |
|---|---|---|---|---|
| Line | 407.771 { 82} | 334.941 {100} | 190.864 {175} | 190.864 {176} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0002 | -.0162 | .0260 |
| Stddev | .0001 | .0022 | .0023 | .0086 |
| %RSD | 314.5 | 1087. | 14.22 | 33.17 |
| #1 | .0001 | .0014 | -.0146 | .0199 |
| #2 | -.0001 | -.0018 | -.0178 | .0321 |

| Elem | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | .0048 | .0021 | .0001 |
| Stddev | .0319 | .0041 | .0014 |
| %RSD | 666.2 | 197.3 | 1728. |
| #1 | -.0177 | -.0008 | -.0009 |
| #2 | .0273 | .0050 | .0011 |

Sample Name: CCB Run Time: 03/27/08 15:59

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 65.850 | 117.62 |
| Stddev | .816 | .01 |
| %RSD | 1.2396 | .00553 |
| | | |
| #1 | 66.427 | 117.61 |
| #2 | 65.273 | 117.62 |

Method: NEWM06 Sample Name: Blank Operator:
Comment:
Run Time: 03/28/08 09:47 Type: Std Mode: IR Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0008 | .0006 | .0010 | .0007 |
| Stddev | .0000 | .0001 | .0002 | .0002 |
| %RSD | 2.376 | 12.73 | 15.45 | 27.04 |
| #1 | -.0008 | .0006 | .0011 | .0008 |
| #2 | -.0008 | .0005 | .0009 | .0006 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0012 | .0044 | .0026 | .0024 |
| Stddev | .0004 | .0007 | .0007 | .0005 |
| %RSD | 30.33 | 16.59 | 26.20 | 22.26 |
| #1 | .0015 | .0050 | .0030 | .0028 |
| #2 | .0010 | .0039 | .0021 | .0020 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0052 | .0154 | .0011 | .0004 |
| Stddev | .0003 | .0009 | .0001 | .0001 |
| %RSD | 5.250 | 6.111 | 6.304 | 33.07 |
| #1 | -.0054 | .0147 | .0010 | .0003 |
| #2 | -.0050 | .0161 | .0011 | .0005 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0012 | .0016 | .0009 | .0002 |
| Stddev | .0001 | .0003 | .0001 | .0003 |
| %RSD | 4.839 | 16.25 | 7.828 | 169.7 |
| #1 | .0012 | .0014 | .0008 | .0004 |
| #2 | .0011 | .0017 | .0009 | .0000 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0016 | .0017 | .0026 | .0011 |
| Stddev | .0002 | .0004 | .0003 | .0000 |
| %RSD | 13.77 | 21.00 | 12.93 | 2.122 |
| #1 | .0015 | .0019 | .0029 | .0011 |
| #2 | .0018 | .0014 | .0024 | .0011 |

Sample Name: Blank Run Time: 03/28/08 09:47

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0003 | .0035 | .0030 | -.0642 |
| Stddev | .0002 | .0002 | .0013 | .0003 |
| %RSD | 49.46 | 4.471 | 43.45 | .4923 |
| #1 | -.0002 | .0034 | .0040 | -.0644 |
| #2 | -.0004 | .0036 | .0021 | -.0640 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0000 | -.0007 | .0009 | .0005 |
| Stddev | .0001 | .0002 | .0001 | .0001 |
| %RSD | 424.5 | 34.98 | 7.742 | 14.41 |
| #1 | .0000 | -.0009 | .0009 | .0005 |
| #2 | .0001 | -.0005 | .0008 | .0004 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0002 | .0010 | .0094 | .0189 |
| Stddev | .0003 | .0001 | .0003 | .0003 |
| %RSD | 178.3 | 11.76 | 3.107 | 1.828 |
| #1 | -.0004 | .0009 | .0096 | .0191 |
| #2 | .0000 | .0010 | .0092 | .0186 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0001 | -.0007 | .0000 | .0002 |
| Stddev | .0000 | .0002 | .0002 | .0002 |
| %RSD | 66.02 | 30.18 | 2367. | 78.59 |
| #1 | .0001 | -.0009 | -.0001 | .0003 |
| #2 | .0000 | -.0006 | .0002 | .0001 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0000 | -.0001 | .0010 | .0024 |
| Stddev | .0001 | .0001 | .0005 | .0003 |
| %RSD | 424.0 | 113.2 | 48.60 | 13.13 |
| #1 | .0001 | .0000 | .0014 | .0021 |
| #2 | .0000 | -.0002 | .0007 | .0026 |

Sample Name: Blank Run Time: 03/28/08 09:47

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.400 | 128.53 |
| Stddev | .022 | .18 |
| %RSD | .03105 | .14194 |
| | | |
| #1 | 69.384 | 128.65 |
| #2 | 69.415 | 128.40 |

Method: NEWM06 Sample Name: std. 5 Operator:
Comment:
Run Time: 03/28/08 09:51 Type: Std Mode: IR Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0157 | .0694 | .0862 | .1038 |
| Stddev | .0002 | .0003 | .0000 | .0001 |
| %RSD | 1.052 | .3934 | .0355 | .1307 |
| #1 | .0156 | .0692 | .0862 | .1037 |
| #2 | .0158 | .0696 | .0862 | .1039 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .4236 | 1.578 | 4.799 | 8.360 |
| Stddev | .0002 | .008 | .008 | .010 |
| %RSD | .0474 | .5177 | .1745 | .1195 |
| #1 | .4234 | 1.584 | 4.793 | 8.367 |
| #2 | .4237 | 1.572 | 4.805 | 8.353 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.287 | .0490 | 1.454 | 3.202 |
| Stddev | .001 | .0009 | .003 | .001 |
| %RSD | .1038 | 1.879 | .2191 | .0399 |
| #1 | 1.288 | .0483 | 1.457 | 3.203 |
| #2 | 1.286 | .0496 | 1.452 | 3.201 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.760 | .8275 | .3965 | .3784 |
| Stddev | .004 | .0020 | .0005 | .0006 |
| %RSD | .2421 | .2371 | .1227 | .1488 |
| #1 | 1.763 | .8289 | .3969 | .3788 |
| #2 | 1.757 | .8261 | .3962 | .3780 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.040 | 4.114 | .8140 | .6533 |
| Stddev | .001 | .001 | .0001 | .0008 |
| %RSD | .0541 | .0218 | .0162 | .1250 |
| #1 | 1.040 | 4.114 | .8141 | .6539 |
| #2 | 1.041 | 4.115 | .8139 | .6527 |

Sample Name: std. 5 Run Time: 03/28/08 09:51

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .1394 | .9054 | .8801 | 6.395 |
| Stddev | .0004 | .0017 | .0001 | .008 |
| %RSD | .2834 | .1853 | .0084 | .1220 |
| #1 | .1391 | .9066 | .8802 | 6.400 |
| #2 | .1396 | .9042 | .8801 | 6.389 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .3802 | 1.435 | .1864 | .2294 |
| Stddev | .0001 | .001 | .0006 | .0004 |
| %RSD | .0224 | .0488 | .3256 | .1666 |
| #1 | .3802 | 1.435 | .1868 | .2296 |
| #2 | .3801 | 1.434 | .1860 | .2291 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .2111 | .0899 | .4279 | 1.061 |
| Stddev | .0002 | .0007 | .0014 | .002 |
| %RSD | .0776 | .7962 | .3285 | .1453 |
| #1 | .2110 | .0904 | .4289 | 1.062 |
| #2 | .2112 | .0894 | .4269 | 1.060 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0389 | 2.958 | .7138 | .0697 |
| Stddev | .0004 | .015 | .0001 | .0003 |
| %RSD | .9301 | .5063 | .0196 | .4580 |
| #1 | .0386 | 2.947 | .7137 | .0695 |
| #2 | .0391 | 2.968 | .7139 | .0700 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0831 | .0400 | .3386 | .8852 |
| Stddev | .0002 | .0002 | .0003 | .0021 |
| %RSD | .2556 | .5882 | .0806 | .2403 |
| #1 | .0833 | .0399 | .3388 | .8837 |
| #2 | .0830 | .0402 | .3384 | .8867 |

Sample Name: std. 5 Run Time: 03/28/08 09:51

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.491 | 126.16 |
| Stddev | .124 | .43 |
| %RSD | .17837 | .33991 |
| | | |
| #1 | 69.403 | 126.47 |
| #2 | 69.578 | 125.86 |

Method: NEWM06 Sample Name: std. 10 Operator:
Comment:
Run Time: 03/28/08 09:56 Type: Std Mode: IR Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0327 | .1401 | .1706 | .2034 |
| Stddev | .0001 | .0004 | .0015 | .0003 |
| %RSD | .3240 | .2680 | .9018 | .1538 |
| #1 | .0328 | .1404 | .1695 | .2032 |
| #2 | .0326 | .1399 | .1716 | .2036 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .8350 | 3.096 | 9.360 | 16.30 |
| Stddev | .0011 | .009 | .005 | .06 |
| %RSD | .1300 | .2971 | .0513 | .3420 |
| #1 | .8342 | 3.090 | 9.357 | 16.26 |
| #2 | .8358 | 3.103 | 9.363 | 16.34 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2.517 | .0837 | 2.778 | 6.225 |
| Stddev | .011 | .0013 | .000 | .001 |
| %RSD | .4443 | 1.601 | .0157 | .0183 |
| #1 | 2.509 | .0827 | 2.777 | 6.224 |
| #2 | 2.525 | .0846 | 2.778 | 6.225 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3.458 | 1.622 | .7783 | .7448 |
| Stddev | .003 | .003 | .0017 | .0030 |
| %RSD | .0819 | .1541 | .2149 | .3965 |
| #1 | 3.456 | 1.620 | .7795 | .7469 |
| #2 | 3.460 | 1.624 | .7771 | .7427 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2.035 | 8.086 | 1.578 | 1.278 |
| Stddev | .001 | .014 | .002 | .003 |
| %RSD | .0569 | .1713 | .1263 | .2192 |
| #1 | 2.036 | 8.076 | 1.577 | 1.280 |
| #2 | 2.034 | 8.096 | 1.580 | 1.276 |

Sample Name: std. 10 Run Time: 03/28/08 09:56

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .2788 | 1.788 | 1.721 | 13.33 |
| Stddev | .0003 | .002 | .006 | .10 |
| %RSD | .1215 | .1060 | .3802 | .7209 |
| #1 | .2790 | 1.789 | 1.717 | 13.26 |
| #2 | .2785 | 1.787 | 1.726 | 13.40 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .7515 | 2.815 | .3665 | .4542 |
| Stddev | .0000 | .000 | .0004 | .0002 |
| %RSD | .0052 | .0068 | .1035 | .0352 |
| #1 | .7515 | 2.815 | .3662 | .4541 |
| #2 | .7514 | 2.815 | .3667 | .4543 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .4168 | .1758 | .8430 | 2.079 |
| Stddev | .0009 | .0006 | .0025 | .008 |
| %RSD | .2193 | .3643 | .2983 | .3689 |
| #1 | .4162 | .1753 | .8412 | 2.073 |
| #2 | .4175 | .1762 | .8447 | 2.084 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0780 | 5.845 | 1.418 | .1364 |
| Stddev | .0001 | .032 | .004 | .0008 |
| %RSD | .1053 | .5496 | .3052 | .5972 |
| #1 | .0780 | 5.822 | 1.415 | .1358 |
| #2 | .0779 | 5.868 | 1.421 | .1370 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .1642 | .0823 | .6591 | 1.729 |
| Stddev | .0011 | .0007 | .0023 | .005 |
| %RSD | .6702 | .8759 | .3423 | .2729 |
| #1 | .1634 | .0818 | .6575 | 1.726 |
| #2 | .1650 | .0828 | .6607 | 1.733 |

Sample Name: std. 10 Run Time: 03/28/08 09:56

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.149 | 124.22 |
| Stddev | .033 | .82 |
| %RSD | .04835 | .66388 |
| | | |
| #1 | 69.173 | 124.80 |
| #2 | 69.126 | 123.63 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ag3280 | 0.0334 | -0.0008 | 0.9999804 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 2.1952e-050 | 0 | | -0.00081629 |
| std. 10 | 1 | 1.0044 | 0.00439 | 0.439 | 0.032719 |
| std. 5 | 0.5 | 0.49561 | -0.00439 | -0.878 | 0.015731 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Al3944 | 0.0139 | 0.0006 | 0.9999809 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.0002168 | 0 | 0 | 0.00057005 |
| std. 5 | 5 | 4.9612 | -0.0388 | -0.776 | 0.069443 |
| std. 10 | 10 | 10.052 | 0.0525 | 0.525 | 0.14012 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Al3961 | 0.0170 | 0.0010 | 0.9999968 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -8.8761e-050 | | 0 | 0.00098029 |
| std. 10 | 10 | 9.9822 | -0.0178 | -0.178 | 0.17055 |
| std. 5 | 5 | 5.0178 | 0.0178 | 0.355 | 0.08622 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| As1890 | 0.0204 | 0.0007 | 0.9999660 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000289580 | | 0 | 0.00071215 |
| std. 10 | 10 | 9.9415 | -0.0585 | -0.585 | 0.20343 |
| std. 5 | 5 | 5.0576 | 0.0576 | 1.15 | 0.10384 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| B_2089 | 0.0837 | 0.0013 | 0.9999810 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000216280 | | 0 | 0.0012323 |
| std. 10 | 10 | 9.9567 | -0.0433 | -0.433 | 0.83499 |
| std. 5 | 5 | 5.0433 | 0.0433 | 0.865 | 0.42356 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| B_2496 | 0.3110 | 0.0045 | 0.9999644 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000295980 | | 0 | 0.0044409 |
| std. 10 | 10 | 9.9408 | -0.0592 | -0.592 | 3.0964 |
| std. 5 | 5 | 5.0592 | 0.0592 | 1.18 | 1.5781 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ba2335 | 0.9435 | 0.0030 | 0.9999305 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000413750 | | 0 | 0.0025725 |
| std. 10 | 10 | 9.9176 | -0.0824 | -0.824 | 9.36 |
| std. 5 | 5 | 5.0829 | 0 | | 4.7986 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ba4554 | 1.6434 | 0.0031 | 0.9999269 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000424280 | 0 | | 0.002401 |
| std. 10 | 10 | 9.9151 | -0.0849 | -0.849 | 16.298 |
| std. 5 | 5 | 5.0848 | 0.0848 | 1.7 | 8.3597 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Be2348 | 10.1573 | -0.0051 | 0.9999332 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -1.0152e-050 | 0 | | -0.005201 |
| std. 10 | 0.25 | 0.24832 | -0.00168 | -0.672 | 2.5172 |
| std. 5 | 0.125 | 0.12721 | 0.00221 | 1.76 | 1.287 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ca1840 | 0.0068 | 0.0154 | 0.9999710 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.0002673 | 0 | 0 | 0.015391 |
| std. 10 | 10 | 10.053 | 0.0535 | 0.535 | 0.083694 |
| std. 5 | 5 | 4.9465 | -0.0535 | -1.07 | 0.048996 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cd2144 | 0.2820 | 0.0013 | 0.9997613 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000766910 | 0 | | 0.0010722 |
| std. 10 | 10 | 9.8471 | -0.153 | -1.53 | 2.7777 |
| std. 5 | 5 | 5.1536 | 0.154 | 3.07 | 1.4544 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cd2265 | 0.6282 | 0.0007 | 0.9999090 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000473650 | 0 | | 0.00037605 |
| std. 10 | 10 | 9.9078 | -0.0922 | -0.922 | 6.2246 |
| std. 5 | 5 | 5.096 | 0.096 | 1.92 | 3.2019 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Co2286 | 0.3477 | 0.0013 | 0.9999661 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000289110 | 0 | | 0.0011762 |
| std. 10 | 10 | 9.9424 | -0.0576 | -0.576 | 3.4581 |
| std. 5 | 5 | 5.0579 | 0.0579 | 1.16 | 1.7598 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cr2061 | 0.1631 | 0.0016 | 0.9999582 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000320910 | 0 | | 0.0015642 |
| std. 10 | 10 | 9.9354 | - | | ..622 |

| | | | | | |
|---|---|---|---|---|---|
| std. 5 | 5 | 5.064 | 0.064 | 1.28 | 0.82751 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cu2247 | 0.0782 | 0.0009 | 0.9999645 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000295730 | 0 | | 0.00086414 |
| std. 10 | 10 | 9.9439 | -0.0561 | -0.561 | 0.77831 |
| std. 5 | 5 | 5.0606 | 0.0606 | 1.21 | 0.39653 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cu3247 | 0.0749 | 0.0002 | 0.9999722 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000261680 | 0 | | 0.00016003 |
| std. 10 | 10 | 9.9471 | -0.0529 | -0.529 | 0.74483 |
| std. 5 | 5 | 5.0521 | 0.0521 | 1.04 | 0.37838 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Fe2404 | 0.2048 | 0.0017 | 0.9999483 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000356960 | 0 | | 0.0016403 |
| std. 10 | 10 | 9.9286 | -0.0714 | -0.714 | 2.035 |
| std. 5 | 5 | 5.0714 | 0.0714 | 1.43 | 1.0403 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Fe2599 | 0.8131 | 0.0019 | 0.9999663 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000287890 | 0 | | 0.0016723 |
| std. 10 | 10 | 9.9424 | -0.0576 | -0.576 | 8.0862 |
| std. 5 | 5 | 5.0576 | 0.0576 | 1.15 | 4.1143 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| K_7664 | 0.0159 | 0.0027 | 0.9999017 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.00492050 | 0 | | 0.0026378 |
| std. 10 | 100 | 99.016 | -0.984 | -0.984 | 1.5784 |
| std. 5 | 50 | 50.984 | 0.984 | 1.97 | 0.81403 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mg2802 | 0.1286 | 0.0011 | 0.9999502 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000350270 | 0 | | 0.0010878 |
| std. 10 | 10 | 9.9299 | -0.0701 | -0.701 | 1.2784 |
| std. 5 | 5 | 5.0701 | 0.0701 | 1.4 | 0.6533 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mg2852 | 0.0279 | -0.0003 | 0.9999999 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -1.4664e-050 | 0 | | -0.00031991 |
| std. 10 | 10 | 9.9971 | -0.00293 | -0.0293 | 0.27878 |
| std. 5 | 5 | 5.0029 | 0.00293 | 0.0587 | 0.13936 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mn2576 | 1.7909 | 0.0036 | 0.9999871 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -1.7838e-050 | 0 | | 0.0035206 |
| std. 10 | 1 | 0.99648 | -0.00352 | -0.352 | 1.7881 |
| std. 5 | 0.5 | 0.50359 | 0.00359 | 0.719 | 0.90542 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mo2020 | 0.1730 | 0.0031 | 0.9999514 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000345860 | 0 | | 0.0030487 |
| std. 10 | 10 | 9.9308 | -0.0692 | -0.692 | 1.7212 |
| std. 5 | 5 | 5.0692 | 0.0692 | 1.38 | 0.8801 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Na5889 | 0.1324 | -0.0650 | 0.9998544 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.0059894 | 0 | 0 | -0.064198 |
| std. 10 | 100 | 101.2 | 1.2 | 1.2 | 13.33 |
| std. 5 | 50 | 48.802 | -1.2 | -2.4 | 6.3947 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ni2216 | 0.0754 | 0.0000 | 0.9999844 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000195730 | 0 | | 1.5994e-05 |
| std. 10 | 10 | 9.9609 | -0.0391 | -0.391 | 0.75146 |
| std. 5 | 5 | 5.0391 | 0.0391 | 0.783 | 0.38018 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ni2316 | 0.2834 | -0.0006 | 0.9999573 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000324540 | 0 | | -0.00071216 |
| std. 10 | 10 | 9.9351 | -0.0649 | -0.649 | 2.8153 |
| std. 5 | 5 | 5.0649 | 0.0649 | 1.3 | 1.4349 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Pb2203 | 0.0367 | 0.0009 | 0.9999751 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000247370 | 0 | | 0.00088016 |
| std. 5 | 5 | 5.0503 | 0.0503 | 1.01 | 0.18641 |
| std. 10 | 10 | 9.9522 | - | | .36648 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sb2068 | 0.0455 | 0.0005 | 0.9999912 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000146740 | 0 | | 0.00047209 |
| std. 10 | 10 | 9.9707 | -0.0293 | -0.293 | 0.45424 |
| std. 5 | 5 | 5.0293 | 0.0293 | 0.587 | 0.22936 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sb2175 | 0.0419 | -0.0002 | 0.9999800 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000221670 | 0 | | -0.00018408 |
| std. 10 | 10 | 9.9557 | -0.0443 | -0.443 | 0.41683 |
| std. 5 | 5 | 5.0443 | 0.0443 | 0.887 | 0.21111 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Se1960 | 0.0176 | 0.0010 | 0.9999659 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000289910 | 0 | | 0.00096015 |
| std. 10 | 10 | 9.9432 | -0.0568 | -0.568 | 0.17577 |
| std. 5 | 5 | 5.0586 | 0.0586 | 1.17 | 0.089897 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Si2124 | 0.0835 | 0.0094 | 0.9999982 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -6.7882e-050 | 0 | | 0.0093737 |
| std. 10 | 10 | 9.9864 | -0.0136 | -0.136 | 0.84296 |
| std. 5 | 5 | 5.0136 | 0.0136 | 0.272 | 0.42787 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Si2516 | 0.2068 | 0.0189 | 0.9999849 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000193140 | 0 | | 0.018859 |
| std. 10 | 10 | 9.9614 | -0.0386 | -0.386 | 2.0789 |
| std. 5 | 5 | 5.0386 | 0.0386 | 0.773 | 1.0609 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sn1899 | 0.0078 | 0.0001 | 0.9999990 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 5.0015e-050 | 0 | | 6.0016e-05 |
| std. 10 | 10 | 10.014 | 0.0138 | 0.138 | 0.077952 |
| std. 5 | 5 | 4.9919 | -0.00813 | -0.163 | 0.038889 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sr4077 | 5.8601 | -0.0006 | 0.9999835 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -2.0194e-050 | 0 | | -0.00072544 |
| std. 10 | 1 | 0.99749 | - | | .8448 |

| | | | | | |
|---|---|---|---|---|---|
| std. 5 | 0.5 | 0.5048 | 0.0048 | 0.961 | 2.9576 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ti3349 | 0.1421 | 0.0000 | 0.9999951 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000110550 | 0 | | 8.7737e-06 |
| std. 10 | 10 | 9.9779 | -0.0221 | -0.221 | 1.4181 |
| std. 5 | 5 | 5.0221 | 0.0221 | 0.442 | 0.71376 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Tl1908 | 0.0137 | 0.0002 | 0.9999515 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000345720 | 0 | | 0.00021606 |
| std. 10 | 10 | 9.9309 | -0.0691 | -0.691 | 0.1364 |
| std. 5 | 5 | 5.0691 | 0.0691 | 1.38 | 0.069732 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Tl1908 | 0.0165 | 0.0000 | 0.9999828 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000206090 | 0 | | 2.4019e-05 |
| std. 10 | 10 | 9.9588 | -0.0412 | -0.412 | 0.1642 |
| std. 5 | 5 | 5.0412 | 0.0412 | 0.824 | 0.083132 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| V_2924 | 0.0082 | -0.0001 | 0.9999244 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000431670 | 0 | | -8.6442e-05 |
| std. 10 | 10 | 10.086 | 0.0865 | 0.865 | 0.082303 |
| std. 5 | 5 | 4.9137 | -0.0863 | -1.73 | 0.040049 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Zn2062 | 0.0664 | 0.0011 | 0.9999258 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000427590 | 0 | | 0.0010483 |
| std. 10 | 10 | 9.9153 | -0.0847 | -0.847 | 0.65913 |
| std. 5 | 5 | 5.0859 | 0.0859 | 1.72 | 0.33862 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Zn2062 | 0.1740 | 0.0024 | 0.9999450 | 03/28/08 10:01:10 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000367990 | 0 | | 0.0023644 |
| std. 10 | 10 | 9.9244 | -0.0756 | -0.756 | 1.7295 |
| std. 5 | 5 | 5.0726 | 0.0726 | 1.45 | 0.88517 |

Method: NEWM06 Sample Name: ICV Operator:
Comment:
Run Time: 03/28/08 10:02 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2583 | 2.104 | 2.046 | 1.035 |
| Stddev | .0060 | .036 | .074 | .015 |
| %RSD | 2.342 | 1.721 | 3.611 | 1.495 |
| #1 | .2625 | 2.129 | 2.099 | 1.046 |
| #2 | .2540 | 2.078 | 1.994 | 1.024 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.041 | 1.030 | 2.147 | 2.185 |
| Stddev | .007 | .012 | .014 | .077 |
| %RSD | .6484 | 1.153 | .6481 | 3.535 |
| #1 | 1.045 | 1.038 | 2.156 | 2.240 |
| #2 | 1.036 | 1.021 | 2.137 | 2.131 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0518 | 5.383 | .5366 | .5244 |
| Stddev | .0005 | .140 | .0025 | .0050 |
| %RSD | .9440 | 2.602 | .4687 | .9628 |
| #1 | .0522 | 5.284 | .5384 | .5280 |
| #2 | .0515 | 5.482 | .5348 | .5208 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5156 | .2045 | .2638 | .2486 |
| Stddev | .0053 | .0001 | .0014 | .0006 |
| %RSD | 1.030 | .0539 | .5145 | .2546 |
| #1 | .5193 | .2044 | .2628 | .2490 |
| #2 | .5118 | .2046 | .2647 | .2481 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.043 | 1.054 | 5.314 | 5.203 |
| Stddev | .002 | .008 | .144 | .068 |
| %RSD | .1965 | .7619 | 2.705 | 1.300 |
| #1 | 1.045 | 1.060 | 5.416 | 5.250 |
| #2 | 1.042 | 1.048 | 5.212 | 5.155 |

Sample Name: ICV Run Time: 03/28/08 10:02

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.166 | .5148 | 1.032 | 11.25 |
| Stddev | .034 | .0033 | .011 | .31 |
| %RSD | .6621 | .6504 | 1.062 | 2.763 |
| #1 | 5.190 | .5172 | 1.040 | 11.47 |
| #2 | 5.142 | .5124 | 1.025 | 11.03 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5174 | .5237 | .9990 | 1.013 |
| Stddev | .0050 | .0047 | .0094 | .007 |
| %RSD | .9628 | .9052 | .9371 | .7184 |
| #1 | .5209 | .5270 | 1.006 | 1.018 |
| #2 | .5138 | .5203 | .9924 | 1.008 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.024 | 1.030 | 1.021 | 1.031 |
| Stddev | .003 | .005 | .009 | .009 |
| %RSD | .3147 | .4586 | .8541 | .9233 |
| #1 | 1.021 | 1.033 | 1.027 | 1.038 |
| #2 | 1.026 | 1.026 | 1.015 | 1.024 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .9761 | .2244 | 1.024 | 1.021 |
| Stddev | .0064 | .0087 | .036 | .014 |
| %RSD | .6512 | 3.872 | 3.522 | 1.352 |
| #1 | .9716 | .2306 | 1.049 | 1.031 |
| #2 | .9806 | .2183 | .9983 | 1.011 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .9981 | .4003 | .5189 | .5223 |
| Stddev | .0082 | .0012 | .0019 | .0010 |
| %RSD | .8214 | .2903 | .3690 | .1993 |
| #1 | 1.004 | .4012 | .5203 | .5230 |
| #2 | .9923 | .3995 | .5176 | .5215 |

Sample Name: ICV Run Time: 03/28/08 10:02

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.236 | 124.61 |
| Stddev | .425 | 3.82 |
| %RSD | .61363 | 3.0685 |
| | | |
| #1 | 68.935 | 121.91 |
| #2 | 69.536 | 127.32 |

Method: NEWM06 Sample Name: ICB Operator:
Comment:
Run Time: 03/28/08 10:07 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0024 | -.0334 | -.0009 | -.0083 |
| Stddev | .0027 | .0016 | .0075 | .0105 |
| %RSD | 112.5 | 4.878 | 827.2 | 126.6 |
| #1 | -.0005 | -.0345 | -.0062 | -.0156 |
| #2 | -.0043 | -.0322 | .0044 | -.0009 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0007 | -.0008 | -.0009 | -.0005 |
| Stddev | .0021 | .0013 | .0004 | .0006 |
| %RSD | 314.9 | 169.8 | 45.96 | 111.6 |
| #1 | -.0008 | .0002 | -.0006 | -.0001 |
| #2 | .0022 | -.0017 | -.0012 | -.0009 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | .0007 | -.0008 | -.0001 |
| Stddev | .000 | .1361 | .0001 | .0001 |
| %RSD | 100.9 | 20920. | 10.36 | 125.5 |
| #1 | .0000 | -.0956 | -.0008 | -.0001 |
| #2 | .0000 | .0969 | -.0009 | .0000 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0005 | .0005 | .0000 | -.0007 |
| Stddev | .0002 | .0008 | .001 | .0036 |
| %RSD | 33.65 | 148.8 | 4135. | 521.2 |
| #1 | .0004 | .0000 | .0009 | .0019 |
| #2 | .0007 | .0011 | -.0010 | -.0032 |

| Elem | Fe2599 | K_7664 | Mg2802 | Mg2852 |
|---|---|---|---|---|
| Line | 259.940 {129} | 766.490 { 44} | 280.270 {119} | 285.213 {117} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0009 | .0182 | -.0009 | -.0048 |
| Stddev | .0004 | .0218 | .0002 | .0060 |
| %RSD | 51.56 | 119.7 | 18.13 | 125.0 |
| #1 | -.0012 | .0028 | -.0010 | -.0006 |
| #2 | -.0005 | .0336 | -.0008 | -.0091 |

Sample Name: ICB Run Time: 03/28/08 10:07

| Elem | Mn2576 | Mo2020 | Na5889 | Ni2216 |
|---|---|---|---|---|
| Line | 257.610 {131} | 202.030 {166} | 588.995 { 57} | 221.647 {152} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0077 | .0009 | -.0014 |
| Stddev | .000 | .0020 | .0025 | .0016 |
| %RSD | 13.78 | 25.49 | 280.2 | 121.0 |
| #1 | .0000 | -.0063 | .0027 | -.0025 |
| #2 | .0000 | -.0091 | -.0009 | -.0002 |

| Elem | Ni2316 | Pb2203 | Sb2068 | Sb2175 |
|---|---|---|---|---|
| Line | 231.604 {145} | 220.353 {152} | 206.833 {162} | 217.581 {154} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0003 | -.0014 | .0033 | .0004 |
| Stddev | .0005 | .0003 | .0032 | .0059 |
| %RSD | 150.1 | 18.72 | 96.47 | 1586. |
| #1 | .0000 | -.0016 | .0011 | .0046 |
| #2 | -.0007 | -.0012 | .0056 | -.0038 |

| Elem | Se1960 | Si2124 | Si2516 | Sn1899 |
|---|---|---|---|---|
| Line | 196.090 {171} | 212.412 {158} | 251.612 {134} | 189.989 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0023 | -.0016 | -.0009 | .0149 |
| Stddev | .0027 | .0012 | .0002 | .0029 |
| %RSD | 115.2 | 78.19 | 17.94 | 19.75 |
| #1 | -.0004 | -.0024 | -.0008 | .0170 |
| #2 | -.0042 | -.0007 | -.0010 | .0128 |

| Elem | Sr4077 | Ti3349 | Tl1908 | Tl1908 |
|---|---|---|---|---|
| Line | 407.771 { 82} | 334.941 {100} | 190.864 {175} | 190.864 {176} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0002 | .0083 | -.0031 |
| Stddev | .0000 | .0010 | .0000 | .0020 |
| %RSD | 80.37 | 604.5 | .5239 | 65.84 |
| #1 | .0001 | .0006 | .0083 | -.0017 |
| #2 | .0000 | -.0009 | .0083 | -.0046 |

| Elem | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | .0025 | .0024 | -.0007 |
| Stddev | .0120 | .0025 | .0024 |
| %RSD | 472.9 | 105.1 | 361.0 |
| #1 | .0110 | .0006 | -.0024 |
| #2 | -.0059 | .0042 | .0010 |

Sample Name: ICB Run Time: 03/28/08 10:07

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.675 | 128.07 |
| Stddev | .127 | .24 |
| %RSD | .18230 | .18424 |
| | | |
| #1 | 69.586 | 127.90 |
| #2 | 69.765 | 128.23 |

Method: NEWM06 Sample Name: ICSA Operator:
Comment:
Run Time: 03/28/08 10:13 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0031 | 541.1 | 512.5 | -.0216 |
| Stddev | .0025 | .1 | 1.3 | .0031 |
| %RSD | 79.50 | .0241 | .2441 | 14.29 |
| #1 | -.0048 | 541.2 | 513.4 | -.0238 |
| #2 | -.0014 | 541.0 | 511.7 | -.0194 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0027 | -.0084 | -.0020 | .0001 |
| Stddev | .0009 | .0016 | .0002 | .0001 |
| %RSD | 33.71 | 18.79 | 11.13 | 145.4 |
| #1 | -.0033 | -.0073 | -.0018 | .0002 |
| #2 | -.0020 | -.0095 | -.0021 | .0000 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0013 | 413.4 | -.0014 | -.0007 |
| Stddev | .0000 | .3 | .0013 | .0002 |
| %RSD | .4123 | .0818 | 95.41 | 30.53 |
| #1 | -.0013 | 413.7 | -.0023 | -.0005 |
| #2 | -.0013 | 413.2 | -.0004 | -.0008 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0025 | .0005 | -.0177 | -.0058 |
| Stddev | .0002 | .0005 | .0009 | .0111 |
| %RSD | 7.526 | 96.47 | 5.134 | 190.5 |
| #1 | -.0027 | .0002 | -.0171 | -.0137 |
| #2 | -.0024 | .0009 | -.0184 | .0020 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 176.4 | 159.6 | -.0203 | 282.7 |
| Stddev | .2 | .6 | .0177 | .2 |
| %RSD | .0969 | .3709 | 87.37 | .0644 |
| #1 | 176.5 | 159.2 | -.0328 | 282.9 |
| #2 | 176.3 | 160.1 | -.0078 | 282.6 |

Sample Name: ICSA Run Time: 03/28/08 10:13

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 479.5 | .0001 | -.0133 | -.0521 |
| Stddev | .6 | .0001 | .0031 | .0017 |
| %RSD | .1161 | 34.66 | 22.96 | 3.300 |
| #1 | 479.2 | .0001 | -.0112 | -.0533 |
| #2 | 479.9 | .0002 | -.0155 | -.0509 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0067 | -.0073 | -.0062 | .0028 |
| Stddev | .0008 | .0002 | .0130 | .0050 |
| %RSD | 12.54 | 3.073 | 208.5 | 177.8 |
| #1 | -.0061 | -.0071 | .0030 | .0063 |
| #2 | -.0073 | -.0074 | -.0154 | -.0007 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0033 | -.0564 | .0266 | -.0164 |
| Stddev | .0105 | .0003 | .0067 | .0026 |
| %RSD | 321.4 | .5826 | 25.04 | 15.72 |
| #1 | .0042 | -.0562 | .0219 | -.0182 |
| #2 | -.0107 | -.0566 | .0313 | -.0145 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0251 | -.0078 | -.0011 | .0971 |
| Stddev | .0155 | .0003 | .0002 | .0000 |
| %RSD | 61.67 | 3.625 | 17.34 | .0161 |
| #1 | -.0360 | -.0080 | -.0010 | .0970 |
| #2 | -.0141 | -.0076 | -.0013 | .0971 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0455 | .0156 | -.0107 | -.0208 |
| Stddev | .0069 | .0137 | .0002 | .0006 |
| %RSD | 15.15 | 87.58 | 1.611 | 2.972 |
| #1 | -.0406 | .0253 | -.0106 | -.0204 |
| #2 | -.0504 | .0060 | -.0109 | -.0213 |

Sample Name: ICSA Run Time: 03/28/08 10:13

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 62.268 | 112.15 |
| Stddev | .009 | .22 |
| %RSD | .01379 | .19652 |
| | | |
| #1 | 62.274 | 112.31 |
| #2 | 62.262 | 112.00 |

Method: NEWM06 Sample Name: ICSAB Operator:
Comment:
Run Time: 03/28/08 10:19 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.090 | 527.1 | 498.1 | 1.053 |
| Stddev | .054 | 26.2 | 26.3 | .043 |
| %RSD | 4.982 | 4.975 | 5.274 | 4.049 |
| #1 | 1.051 | 508.6 | 479.5 | 1.023 |
| #2 | 1.128 | 545.6 | 516.7 | 1.083 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.036 | 1.085 | .5449 | .5524 |
| Stddev | .007 | .004 | .0008 | .0292 |
| %RSD | .6381 | .3241 | .1455 | 5.280 |
| #1 | 1.032 | 1.082 | .5443 | .5317 |
| #2 | 1.041 | 1.087 | .5454 | .5730 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5262 | 414.6 | 1.030 | 1.020 |
| Stddev | .0023 | 3.0 | .004 | .004 |
| %RSD | .4402 | .7118 | .3495 | .3505 |
| #1 | .5246 | 412.5 | 1.027 | 1.018 |
| #2 | .5279 | 416.7 | 1.032 | 1.023 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5141 | .5310 | .5192 | .5364 |
| Stddev | .0004 | .0027 | .0014 | .0034 |
| %RSD | .0854 | .5065 | .2717 | .6298 |
| #1 | .5144 | .5291 | .5182 | .5340 |
| #2 | .5137 | .5329 | .5202 | .5388 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 177.8 | 161.9 | 55.15 | 286.8 |
| Stddev | .5 | .3 | 2.69 | .7 |
| %RSD | .2905 | .1718 | 4.873 | .2297 |
| #1 | 177.4 | 161.8 | 53.25 | 286.4 |
| #2 | 178.2 | 162.1 | 57.05 | 287.3 |

Sample Name: ICSAB Run Time: 03/28/08 10:19

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 481.1 | .5248 | 1.019 | 52.00 |
| Stddev | 5.4 | .0019 | .010 | 2.83 |
| %RSD | 1.127 | .3677 | 1.003 | 5.440 |
| #1 | 477.2 | .5234 | 1.012 | 50.00 |
| #2 | 484.9 | .5261 | 1.026 | 54.00 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.014 | 1.027 | 1.043 | 1.041 |
| Stddev | .007 | .007 | .011 | .003 |
| %RSD | .7164 | .7212 | 1.028 | .3097 |
| #1 | 1.009 | 1.022 | 1.050 | 1.044 |
| #2 | 1.020 | 1.032 | 1.035 | 1.039 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.027 | .9302 | .0631 | .0159 |
| Stddev | .018 | .0143 | .0010 | .0007 |
| %RSD | 1.788 | 1.543 | 1.569 | 4.078 |
| #1 | 1.014 | .9201 | .0624 | .0155 |
| #2 | 1.040 | .9404 | .0638 | .0164 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .9764 | 1.002 | .9961 | 4.781 |
| Stddev | .0174 | .058 | .0512 | .029 |
| %RSD | 1.783 | 5.735 | 5.138 | .6101 |
| #1 | .9641 | .9618 | .9600 | 4.761 |
| #2 | .9887 | 1.043 | 1.032 | 4.802 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.778 | .4051 | .9608 | .9332 |
| Stddev | .023 | .0299 | .0107 | .0064 |
| %RSD | .4831 | 7.391 | 1.109 | .6893 |
| #1 | 4.762 | .3839 | .9683 | .9286 |
| #2 | 4.795 | .4263 | .9532 | .9377 |

Sample Name: ICSAB Run Time: 03/28/08 10:19

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 61.964 | 116.30 |
| Stddev | .269 | 5.33 |
| %RSD | .43353 | 4.5840 |
| | | |
| #1 | 62.154 | 120.07 |
| #2 | 61.774 | 112.53 |

Method: NEWM06 Sample Name: CCV Operator:
Comment:
Run Time: 03/28/08 15:24 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.317 | 10.40 | 10.22 | 5.086 |
| Stddev | .094 | .77 | .74 | .024 |
| %RSD | 7.114 | 7.391 | 7.223 | .4727 |
| #1 | 1.251 | 9.859 | 9.700 | 5.103 |
| #2 | 1.383 | 10.95 | 10.74 | 5.069 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.024 | 5.026 | 10.20 | 10.39 |
| Stddev | .000 | .005 | .03 | .71 |
| %RSD | .0028 | .1011 | .2665 | 6.807 |
| #1 | 5.024 | 5.029 | 10.22 | 9.885 |
| #2 | 5.023 | 5.022 | 10.18 | 10.89 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2485 | 26.46 | 2.632 | 2.553 |
| Stddev | .0006 | .13 | .005 | .011 |
| %RSD | .2526 | .5078 | .2030 | .4122 |
| #1 | .2490 | 26.37 | 2.635 | 2.546 |
| #2 | .2481 | 26.56 | 2.628 | 2.561 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.521 | 1.028 | 1.271 | 1.231 |
| Stddev | .001 | .001 | .005 | .015 |
| %RSD | .0229 | .0975 | .4114 | 1.202 |
| #1 | 2.520 | 1.027 | 1.267 | 1.220 |
| #2 | 2.521 | 1.028 | 1.274 | 1.241 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.022 | 5.041 | 25.23 | 24.79 |
| Stddev | .009 | .015 | 1.79 | .28 |
| %RSD | .1868 | .3064 | 7.103 | 1.116 |
| #1 | 5.029 | 5.052 | 23.96 | 24.60 |
| #2 | 5.015 | 5.030 | 26.50 | 24.99 |

Sample Name: CCV Run Time: 03/28/08 15:24

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 24.99 | 2.480 | 5.136 | 25.60 |
| Stddev | .23 | .001 | .011 | 1.77 |
| %RSD | .9376 | .0182 | .2238 | 6.903 |
| #1 | 24.82 | 2.480 | 5.128 | 24.35 |
| #2 | 25.16 | 2.479 | 5.144 | 26.85 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.520 | 2.541 | 5.038 | 4.910 |
| Stddev | .008 | .008 | .015 | .009 |
| %RSD | .3033 | .3200 | .2996 | .1745 |
| #1 | 2.526 | 2.547 | 5.049 | 4.916 |
| #2 | 2.515 | 2.535 | 5.027 | 4.904 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.858 | 5.022 | 4.883 | 4.941 |
| Stddev | .015 | .006 | .010 | .010 |
| %RSD | .3066 | .1226 | .2087 | .2079 |
| #1 | 4.868 | 5.027 | 4.890 | 4.948 |
| #2 | 4.847 | 5.018 | 4.876 | 4.934 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.005 | 1.084 | 5.364 | 5.059 |
| Stddev | .022 | .076 | .377 | .003 |
| %RSD | .4354 | 7.002 | 7.028 | .0521 |
| #1 | 5.020 | 1.030 | 5.098 | 5.061 |
| #2 | 4.990 | 1.137 | 5.631 | 5.057 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.966 | 2.456 | 2.558 | 2.571 |
| Stddev | .034 | .198 | .005 | .005 |
| %RSD | .6877 | 8.070 | .2030 | .1821 |
| #1 | 4.942 | 2.315 | 2.554 | 2.567 |
| #2 | 4.990 | 2.596 | 2.561 | 2.574 |

Sample Name: CCV Run Time: 03/28/08 15:24

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.348 | 118.86 |
| Stddev | .070 | 7.20 |
| %RSD | .10081 | 6.0553 |
| | | |
| #1 | 69.299 | 123.95 |
| #2 | 69.398 | 113.77 |

Method: NEWM06 Sample Name: CCB Operator:
Comment:
Run Time: 03/28/08 15:29 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0004 | -.0256 | -.0090 | -.0016 |
| Stddev | .0016 | .0162 | .0100 | .0002 |
| %RSD | 374.0 | 63.33 | 111.1 | 11.15 |
| #1 | -.0007 | -.0141 | -.0160 | -.0015 |
| #2 | .0016 | -.0371 | -.0019 | -.0017 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0004 | .0005 | .0003 | .0006 |
| Stddev | .0022 | .0002 | .0004 | .0003 |
| %RSD | 544.8 | 46.92 | 127.6 | 45.32 |
| #1 | .0011 | .0003 | .0000 | .0008 |
| #2 | -.0019 | .0006 | .0006 | .0004 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0001 | -.0996 | -.0006 | -.0002 |
| Stddev | .0000 | .1863 | .0007 | .0007 |
| %RSD | 5.311 | 187.0 | 125.8 | 297.4 |
| #1 | .0001 | -.2313 | -.0010 | -.0007 |
| #2 | .0001 | .0321 | -.0001 | .0002 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0015 | -.0024 | .0002 |
| Stddev | .0004 | .0004 | .0019 | .0048 |
| %RSD | 1302. | 27.97 | 82.13 | 3020. |
| #1 | -.0003 | -.0012 | -.0037 | -.0032 |
| #2 | .0003 | -.0018 | -.0010 | .0035 |

| Elem | Fe2599 | K_7664 | Mg2802 | Mg2852 |
|---|---|---|---|---|
| Line | 259.940 {129} | 766.490 { 44} | 280.270 {119} | 285.213 {117} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0006 | -.0099 | -.0006 | -.0009 |
| Stddev | .0005 | .0434 | .0003 | .0119 |
| %RSD | 94.02 | 439.6 | 48.37 | 1253. |
| #1 | -.0010 | -.0406 | -.0008 | -.0094 |
| #2 | -.0002 | .0208 | -.0004 | .0075 |

Sample Name: CCB Run Time: 03/28/08 15:29

| Elem | Mn2576 | Mo2020 | Na5889 | Ni2216 |
|---|---|---|---|---|
| Line | 257.610 {131} | 202.030 {166} | 588.995 { 57} | 221.647 {152} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0001 | -.0034 | -.0287 | .0009 |
| Stddev | .0003 | .0038 | .0020 | .0019 |
| %RSD | 438.1 | 111.3 | 7.052 | 204.8 |
| #1 | -.0003 | -.0007 | -.0301 | .0022 |
| #2 | .0002 | -.0061 | -.0273 | -.0004 |

| Elem | Ni2316 | Pb2203 | Sb2068 | Sb2175 |
|---|---|---|---|---|
| Line | 231.604 {145} | 220.353 {152} | 206.833 {162} | 217.581 {154} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0010 | -.0055 | .0044 | .0014 |
| Stddev | .0000 | .0059 | .0026 | .0007 |
| %RSD | 4.730 | 108.2 | 59.32 | 51.31 |
| #1 | -.0009 | -.0096 | .0063 | .0009 |
| #2 | -.0010 | -.0013 | .0026 | .0019 |

| Elem | Se1960 | Si2124 | Si2516 | Sn1899 |
|---|---|---|---|---|
| Line | 196.090 {171} | 212.412 {158} | 251.612 {134} | 189.989 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0038 | -.0054 | -.0028 | .0083 |
| Stddev | .0095 | .0053 | .0027 | .0323 |
| %RSD | 250.2 | 99.04 | 95.70 | 389.4 |
| #1 | -.0105 | -.0091 | -.0047 | -.0145 |
| #2 | .0029 | -.0016 | -.0009 | .0311 |

| Elem | Sr4077 | Ti3349 | Tl1908 | Tl1908 |
|---|---|---|---|---|
| Line | 407.771 { 82} | 334.941 {100} | 190.864 {175} | 190.864 {176} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0001 | .0005 | .0029 | .0011 |
| Stddev | .0000 | .0003 | .0222 | .0079 |
| %RSD | 17.46 | 51.98 | 753.6 | 745.5 |
| #1 | .0001 | .0003 | -.0128 | .0067 |
| #2 | .0001 | .0007 | .0187 | -.0046 |

| Elem | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | .0046 | -.0004 | -.0020 |
| Stddev | .0030 | .0007 | .0016 |
| %RSD | 66.07 | 193.0 | 78.43 |
| #1 | .0024 | .0001 | -.0031 |
| #2 | .0067 | -.0009 | -.0009 |

Sample Name: CCB Run Time: 03/28/08 15:29

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 71.274 | 126.55 |
| Stddev | 1.909 | .31 |
| %RSD | 2.6781 | .24488 |
| | | |
| #1 | 72.623 | 126.77 |
| #2 | 69.924 | 126.33 |

Method: NEWM06 Sample Name: 0803A91-03B Operator:
Comment:
Run Time: 03/28/08 15:58 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0008 | .8630 | .9153 | .0037 |
| Stddev | .0029 | .0144 | .0038 | .0081 |
| %RSD | 377.2 | 1.664 | .4147 | 220.5 |
| #1 | -.0028 | .8732 | .9126 | -.0020 |
| #2 | .0013 | .8529 | .9180 | .0093 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0397 | .0416 | .1122 | .1139 |
| Stddev | .0040 | .0011 | .0003 | .0001 |
| %RSD | 10.05 | 2.728 | .2846 | .0587 |
| #1 | .0425 | .0424 | .1119 | .1139 |
| #2 | .0369 | .0408 | .1124 | .1140 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0001 | 189.6 | .0028 | -.0015 |
| Stddev | .0000 | .1 | .0011 | .0001 |
| %RSD | 23.55 | .0387 | 39.26 | 3.596 |
| #1 | -.0001 | 189.5 | .0036 | -.0015 |
| #2 | -.0001 | 189.7 | .0020 | -.0014 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0074 | -.0042 | .0123 | .0154 |
| Stddev | .0009 | .0007 | .0004 | .0006 |
| %RSD | 12.00 | 17.22 | 3.276 | 3.958 |
| #1 | .0080 | -.0047 | .0121 | .0149 |
| #2 | .0067 | -.0036 | .0126 | .0158 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 18.45 | 18.66 | .5297 | 79.02 |
| Stddev | .02 | .00 | .0220 | .06 |
| %RSD | .1070 | .0180 | 4.154 | .0714 |
| #1 | 18.46 | 18.66 | .5452 | 79.06 |
| #2 | 18.43 | 18.66 | .5141 | 78.98 |

Sample Name: 0803A91-03B Run Time: 03/28/08 15:58

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 85.16 | .5157 | -.0046 | 26.86 |
| Stddev | .25 | .0006 | .0033 | .19 |
| %RSD | .2990 | .1189 | 71.79 | .7213 |
| #1 | 85.34 | .5153 | -.0023 | 27.00 |
| #2 | 84.98 | .5162 | -.0070 | 26.72 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0164 | .0135 | -.0241 | .0035 |
| Stddev | .0030 | .0009 | .0010 | .0030 |
| %RSD | 18.43 | 6.485 | 4.000 | 83.55 |
| #1 | .0185 | .0129 | -.0234 | .0015 |
| #2 | .0142 | .0141 | -.0248 | .0056 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0262 | 7.610 | 7.654 |
| Stddev | .005 | .0137 | .008 | .015 |
| %RSD | 25000. | 52.51 | .1104 | .1906 |
| #1 | .0034 | -.0359 | 7.604 | 7.644 |
| #2 | -.0034 | -.0164 | 7.616 | 7.664 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0059 | .2177 | .0003 | .0626 |
| Stddev | .0015 | .0013 | .0002 | .0283 |
| %RSD | 25.42 | .6197 | 52.75 | 45.26 |
| #1 | .0048 | .2168 | .0005 | .0426 |
| #2 | .0069 | .2187 | .0002 | .0827 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0139 | .0115 | .0258 | .0122 |
| Stddev | .0043 | .0112 | .0004 | .0004 |
| %RSD | 31.27 | 96.89 | 1.687 | 3.457 |
| #1 | -.0169 | .0036 | .0261 | .0125 |
| #2 | -.0108 | .0194 | .0255 | .0119 |

Sample Name: 0803A91-03B Run Time: 03/28/08 15:58

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 66.334 | 120.50 |
| Stddev | .126 | .22 |
| %RSD | .19062 | .18246 |
| | | |
| #1 | 66.245 | 120.66 |
| #2 | 66.424 | 120.35 |

Method: NEWM06 Sample Name: 0803A91-04B Operator:
Comment:
Run Time: 03/28/08 16:03 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0009 | .9719 | .9463 | -.0181 |
| Stddev | .0023 | .0207 | .0064 | .0052 |
| %RSD | 250.2 | 2.130 | .6745 | 28.91 |
| #1 | -.0026 | .9573 | .9418 | -.0219 |
| #2 | .0007 | .9865 | .9508 | -.0144 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0368 | .0383 | .1095 | .1109 |
| Stddev | .0000 | .0011 | .0007 | .0002 |
| %RSD | .0814 | 2.910 | .6498 | .1597 |
| #1 | .0368 | .0391 | .1100 | .1110 |
| #2 | .0368 | .0375 | .1090 | .1108 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0001 | 185.8 | .0032 | -.0013 |
| Stddev | .0000 | .1 | .0007 | .0004 |
| %RSD | 24.90 | .0571 | 22.83 | 33.64 |
| #1 | -.0001 | 185.8 | .0027 | -.0010 |
| #2 | -.0001 | 185.9 | .0037 | -.0016 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0072 | -.0040 | .0163 | .0179 |
| Stddev | .0008 | .0003 | .0013 | .0031 |
| %RSD | 11.26 | 7.955 | 7.865 | 17.46 |
| #1 | .0066 | -.0038 | .0172 | .0201 |
| #2 | .0078 | -.0042 | .0154 | .0157 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 17.97 | 18.18 | .5165 | 76.69 |
| Stddev | .05 | .01 | .0265 | .29 |
| %RSD | .2762 | .0622 | 5.136 | .3799 |
| #1 | 18.01 | 18.18 | .5352 | 76.49 |
| #2 | 17.94 | 18.17 | .4977 | 76.90 |

Sample Name: 0803A91-04B Run Time: 03/28/08 16:03

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 83.76 | .5066 | -.0087 | 26.42 |
| Stddev | .05 | .0001 | .0008 | .23 |
| %RSD | .0584 | .0200 | 9.643 | .8708 |
| #1 | 83.73 | .5067 | -.0093 | 26.58 |
| #2 | 83.80 | .5065 | -.0081 | 26.25 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0193 | .0123 | -.0128 | .0037 |
| Stddev | .0010 | .0001 | .0009 | .0002 |
| %RSD | 5.066 | 1.006 | 7.414 | 4.239 |
| #1 | .0186 | .0122 | -.0121 | .0036 |
| #2 | .0200 | .0124 | -.0134 | .0038 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0044 | -.0285 | 7.467 | 7.514 |
| Stddev | .0014 | .0185 | .003 | .008 |
| %RSD | 32.27 | 65.19 | .0379 | .1031 |
| #1 | .0054 | -.0416 | 7.465 | 7.508 |
| #2 | .0034 | -.0153 | 7.469 | 7.519 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0026 | .2123 | -.0002 | .0625 |
| Stddev | .0106 | .0012 | .0005 | .0027 |
| %RSD | 408.5 | .5695 | 191.8 | 4.380 |
| #1 | .0049 | .2132 | .0001 | .0606 |
| #2 | -.0101 | .2115 | -.0006 | .0645 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0017 | .0260 | .0289 | .0143 |
| Stddev | .0000 | .0031 | .0035 | .0013 |
| %RSD | .0000 | 12.10 | 12.00 | 9.050 |
| #1 | -.0017 | .0283 | .0265 | .0134 |
| #2 | -.0017 | .0238 | .0314 | .0152 |

Sample Name: 0803A91-04B Run Time: 03/28/08 16:03

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 66.426 | 121.75 |
| Stddev | .128 | .03 |
| %RSD | .19317 | .02823 |
| | | |
| #1 | 66.517 | 121.78 |
| #2 | 66.336 | 121.73 |

Method: NEWM06 Sample Name: 0803A91-04BMS Operator:
Comment:
Run Time: 03/28/08 16:09 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .1934 | 2.953 | 3.064 | 2.044 |
| Stddev | .0005 | .020 | .017 | .001 |
| %RSD | .2520 | .6910 | .5580 | .0707 |
| #1 | .1938 | 2.939 | 3.052 | 2.043 |
| #2 | .1931 | 2.968 | 3.076 | 2.045 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.028 | 2.094 | 2.461 | 2.452 |
| Stddev | .008 | .004 | .005 | .006 |
| %RSD | .3973 | .2172 | .2065 | .2496 |
| #1 | 2.023 | 2.091 | 2.457 | 2.448 |
| #2 | 2.034 | 2.098 | 2.465 | 2.456 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .1990 | 200.6 | .2115 | .2009 |
| Stddev | .0003 | .2 | .0014 | .0000 |
| %RSD | .1711 | .0805 | .6693 | .0212 |
| #1 | .1992 | 200.4 | .2125 | .2010 |
| #2 | .1987 | 200.7 | .2105 | .2009 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2103 | 2.079 | .2171 | .2163 |
| Stddev | .0005 | .005 | .0028 | .0042 |
| %RSD | .2246 | .2409 | 1.287 | 1.939 |
| #1 | .2100 | 2.075 | .2151 | .2133 |
| #2 | .2106 | 2.082 | .2191 | .2193 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 19.92 | 20.25 | 21.19 | 93.44 |
| Stddev | .03 | .01 | .17 | .28 |
| %RSD | .1284 | .0341 | .7889 | .2992 |
| #1 | 19.93 | 20.25 | 21.07 | 93.63 |
| #2 | 19.90 | 20.24 | 21.31 | 93.24 |

Sample Name: 0803A91-04BMS Run Time: 03/28/08 16:09

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 104.5 | .7147 | 2.081 | 45.67 |
| Stddev | .0 | .0002 | .013 | .67 |
| %RSD | .0329 | .0225 | .6117 | 1.462 |
| #1 | 104.5 | .7145 | 2.072 | 45.20 |
| #2 | 104.5 | .7148 | 2.090 | 46.14 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.036 | 2.053 | 1.877 | 2.048 |
| Stddev | .005 | .000 | .007 | .007 |
| %RSD | .2314 | .0183 | .3861 | .3407 |
| #1 | 2.032 | 2.053 | 1.882 | 2.043 |
| #2 | 2.039 | 2.053 | 1.872 | 2.053 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.021 | 1.870 | 9.529 | 9.573 |
| Stddev | .004 | .015 | .017 | .055 |
| %RSD | .1848 | .8059 | .1736 | .5728 |
| #1 | 2.024 | 1.880 | 9.518 | 9.535 |
| #2 | 2.019 | 1.859 | 9.541 | 9.612 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.126 | .4166 | 2.065 | 1.965 |
| Stddev | .024 | .0020 | .006 | .005 |
| %RSD | 1.135 | .4710 | .2884 | .2532 |
| #1 | 2.109 | .4152 | 2.069 | 1.968 |
| #2 | 2.143 | .4179 | 2.061 | 1.961 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.931 | 1.850 | 1.962 | 1.954 |
| Stddev | .037 | .004 | .005 | .005 |
| %RSD | 1.930 | .2291 | .2442 | .2633 |
| #1 | 1.905 | 1.847 | 1.965 | 1.958 |
| #2 | 1.957 | 1.853 | 1.959 | 1.950 |

Sample Name: 0803A91-04BMS Run Time: 03/28/08 16:09

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 65.618 | 120.71 |
| Stddev | .009 | .07 |
| %RSD | .01324 | .05412 |
| | | |
| #1 | 65.624 | 120.76 |
| #2 | 65.612 | 120.66 |

Method: NEWM06 Sample Name: 0803A91-04BMSD Operator:
Comment:
Run Time: 03/28/08 16:14 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .1971 | 2.997 | 3.120 | 2.092 |
| Stddev | .0018 | .023 | .024 | .013 |
| %RSD | .9154 | .7731 | .7604 | .5953 |
| #1 | .1959 | 2.981 | 3.137 | 2.101 |
| #2 | .1984 | 3.013 | 3.103 | 2.084 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.071 | 2.125 | 2.506 | 2.500 |
| Stddev | .001 | .002 | .003 | .004 |
| %RSD | .0460 | .0993 | .1326 | .1643 |
| #1 | 2.072 | 2.127 | 2.509 | 2.497 |
| #2 | 2.070 | 2.124 | 2.504 | 2.503 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2028 | 207.0 | .2135 | .2047 |
| Stddev | .0010 | .1 | .0007 | .0002 |
| %RSD | .4706 | .0317 | .3489 | .0896 |
| #1 | .2034 | 207.0 | .2141 | .2048 |
| #2 | .2021 | 207.1 | .2130 | .2045 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2176 | 2.118 | .2227 | .2260 |
| Stddev | .0001 | .004 | .0006 | .0085 |
| %RSD | .0476 | .1724 | .2571 | 3.759 |
| #1 | .2176 | 2.121 | .2223 | .2320 |
| #2 | .2177 | 2.115 | .2232 | .2200 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 20.53 | 20.91 | 21.58 | 96.79 |
| Stddev | .01 | .01 | .19 | .29 |
| %RSD | .0612 | .0444 | .8957 | .3047 |
| #1 | 20.53 | 20.92 | 21.72 | 96.58 |
| #2 | 20.52 | 20.90 | 21.45 | 97.00 |

Sample Name: 0803A91-04BMSD Run Time: 03/28/08 16:14

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 108.6 | .7357 | 2.127 | 46.66 |
| Stddev | .3 | .0007 | .004 | .41 |
| %RSD | .2994 | .0891 | .1635 | .8794 |
| | | | | |
| #1 | 108.8 | .7362 | 2.124 | 46.96 |
| #2 | 108.3 | .7352 | 2.129 | 46.37 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.080 | 2.097 | 1.925 | 2.078 |
| Stddev | .008 | .004 | .013 | .000 |
| %RSD | .3636 | .1951 | .6537 | .0100 |
| | | | | |
| #1 | 2.086 | 2.100 | 1.916 | 2.078 |
| #2 | 2.075 | 2.095 | 1.934 | 2.078 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.063 | 1.914 | 9.837 | 9.846 |
| Stddev | .005 | .026 | .003 | .025 |
| %RSD | .2256 | 1.376 | .0292 | .2577 |
| | | | | |
| #1 | 2.060 | 1.895 | 9.839 | 9.864 |
| #2 | 2.067 | 1.932 | 9.835 | 9.828 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.152 | .4246 | 2.103 | 2.019 |
| Stddev | .016 | .0004 | .014 | .025 |
| %RSD | .7588 | .0929 | .6722 | 1.244 |
| | | | | |
| #1 | 2.141 | .4243 | 2.093 | 2.037 |
| #2 | 2.164 | .4248 | 2.113 | 2.001 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.992 | 1.927 | 1.997 | 1.988 |
| Stddev | .003 | .050 | .008 | .001 |
| %RSD | .1712 | 2.582 | .3937 | .0241 |
| | | | | |
| #1 | 1.994 | 1.892 | 2.003 | 1.988 |
| #2 | 1.990 | 1.962 | 1.992 | 1.988 |

Sample Name: 0803A91-04BMSD Run Time: 03/28/08 16:14

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 65.894 | 121.88 |
| Stddev | .031 | .46 |
| %RSD | .04645 | .37767 |
| | | |
| #1 | 65.915 | 122.20 |
| #2 | 65.872 | 121.55 |

Method: NEWM06 Sample Name: 0803A91-06B Operator:
Comment:
Run Time: 03/28/08 16:19 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0024 | .3298 | .2991 | .0320 |
| Stddev | .0021 | .0500 | .0143 | .0139 |
| %RSD | 85.86 | 15.15 | 4.777 | 43.45 |
| #1 | -.0039 | .2945 | .2890 | .0418 |
| #2 | -.0010 | .3652 | .3092 | .0221 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .6398 | .6738 | .7193 | .7237 |
| Stddev | .0069 | .0048 | .0087 | .0185 |
| %RSD | 1.081 | .7103 | 1.205 | 2.550 |
| #1 | .6349 | .6705 | .7131 | .7106 |
| #2 | .6447 | .6772 | .7254 | .7368 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0002 | 56.29 | .0012 | -.0002 |
| Stddev | .0001 | .94 | .0006 | .0004 |
| %RSD | 40.84 | 1.668 | 51.62 | 186.2 |
| #1 | .0001 | 55.62 | .0017 | -.0005 |
| #2 | .0003 | 56.95 | .0008 | .0001 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0013 | -.0023 | .0027 | .0041 |
| Stddev | .0008 | .0005 | .0010 | .0029 |
| %RSD | 58.62 | 22.30 | 36.35 | 70.27 |
| #1 | .0008 | -.0027 | .0020 | .0021 |
| #2 | .0018 | -.0020 | .0034 | .0061 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 6.059 | 6.099 | 51.36 | 44.41 |
| Stddev | .075 | .046 | 1.05 | .23 |
| %RSD | 1.232 | .7551 | 2.037 | .5145 |
| #1 | 6.006 | 6.067 | 50.62 | 44.25 |
| #2 | 6.111 | 6.132 | 52.10 | 44.57 |

Sample Name: 0803A91-06B Run Time: 03/28/08 16:19

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 46.49 | .3145 | -.0039 | 225.9 |
| Stddev | .22 | .0027 | .0027 | 1.1 |
| %RSD | .4755 | .8714 | 69.75 | .4869 |
| #1 | 46.33 | .3125 | -.0020 | 225.1 |
| #2 | 46.65 | .3164 | -.0059 | 226.7 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0160 | .0088 | -.0182 | .0036 |
| Stddev | .0011 | .0003 | .0086 | .0019 |
| %RSD | 7.068 | 3.951 | 46.97 | 51.81 |
| #1 | .0168 | .0091 | -.0122 | .0023 |
| #2 | .0152 | .0086 | -.0243 | .0050 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0038 | -.0143 | 7.585 | 7.792 |
| Stddev | .0028 | .0042 | .064 | .061 |
| %RSD | 73.58 | 29.56 | .8431 | .7811 |
| #1 | .0018 | -.0173 | 7.540 | 7.749 |
| #2 | .0058 | -.0113 | 7.631 | 7.835 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0055 | .4964 | .0022 | .0435 |
| Stddev | .0038 | .0207 | .0015 | .0124 |
| %RSD | 69.89 | 4.165 | 70.50 | 28.48 |
| #1 | .0028 | .4817 | .0011 | .0523 |
| #2 | .0082 | .5110 | .0033 | .0347 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0032 | .0064 | .0073 | -.0005 |
| Stddev | .0021 | .0094 | .0032 | .0002 |
| %RSD | 66.99 | 146.6 | 43.96 | 41.71 |
| #1 | -.0047 | -.0002 | .0095 | -.0006 |
| #2 | -.0017 | .0131 | .0050 | -.0003 |

Sample Name: 0803A91-06B Run Time: 03/28/08 16:19

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 67.206 | 120.34 |
| Stddev | .438 | 3.75 |
| %RSD | .65147 | 3.1198 |
| | | |
| #1 | 67.515 | 123.00 |
| #2 | 66.896 | 117.69 |

Method: NEWM06 Sample Name: 0803A91-11B Operator:
Comment:
Run Time: 03/28/08 16:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0030 | -.0215 | -.0116 | -.0252 |
| Stddev | .0022 | .0276 | .0225 | .0073 |
| %RSD | 74.54 | 128.3 | 194.9 | 29.12 |
| #1 | -.0014 | -.0020 | .0044 | -.0304 |
| #2 | -.0045 | -.0411 | -.0275 | -.0200 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0016 | -.0015 | -.0014 | -.0010 |
| Stddev | .0000 | .0014 | .0001 | .0000 |
| %RSD | 2.658 | 92.36 | 4.354 | 1.172 |
| #1 | -.0016 | -.0005 | -.0015 | -.0010 |
| #2 | -.0016 | -.0024 | -.0014 | -.0010 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0003 | .2005 | -.0007 | -.0009 |
| Stddev | .0000 | .0754 | .0001 | .0000 |
| %RSD | 6.093 | 37.59 | 20.66 | 4.006 |
| #1 | -.0003 | .1472 | -.0008 | -.0009 |
| #2 | -.0002 | .2538 | -.0006 | -.0010 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0008 | .0006 | .0012 | .0061 |
| Stddev | .0007 | .0008 | .0017 | .0040 |
| %RSD | 86.81 | 140.1 | 136.0 | 64.61 |
| #1 | .0003 | .0000 | .0000 | .0033 |
| #2 | .0013 | .0012 | .0024 | .0089 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0096 | .0108 | -.0374 | .0283 |
| Stddev | .0004 | .0002 | .0256 | .0022 |
| %RSD | 4.002 | 1.405 | 68.44 | 7.927 |
| #1 | .0099 | .0109 | -.0555 | .0267 |
| #2 | .0093 | .0107 | -.0193 | .0299 |

Sample Name: 0803A91-11B Run Time: 03/28/08 16:25

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0279 | .0004 | -.0101 | .1251 |
| Stddev | .0065 | .0000 | .0011 | .0097 |
| %RSD | 23.41 | 12.55 | 10.49 | 7.766 |
| #1 | .0233 | .0003 | -.0094 | .1320 |
| #2 | .0325 | .0004 | -.0109 | .1182 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0038 | -.0026 | -.0170 | .0049 |
| Stddev | .0032 | .0002 | .0026 | .0054 |
| %RSD | 83.70 | 8.258 | 15.11 | 110.0 |
| #1 | .0016 | -.0024 | -.0152 | .0011 |
| #2 | .0061 | -.0027 | -.0189 | .0087 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0038 | -.0118 | .0159 | .0123 |
| Stddev | .0011 | .0238 | .0038 | .0016 |
| %RSD | 29.22 | 201.7 | 23.81 | 12.67 |
| #1 | .0046 | -.0286 | .0185 | .0134 |
| #2 | .0030 | .0050 | .0132 | .0112 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0104 | .0003 | .0000 | .0037 |
| Stddev | .0142 | .0000 | .0006 | .0078 |
| %RSD | 137.1 | 1.783 | 5085. | 210.7 |
| #1 | -.0204 | .0003 | -.0004 | .0092 |
| #2 | -.0003 | .0003 | .0004 | -.0018 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0211 | .0217 | .0088 | .0035 |
| Stddev | .0107 | .0030 | .0030 | .0017 |
| %RSD | 50.68 | 13.93 | 33.91 | 47.26 |
| #1 | -.0287 | .0196 | .0109 | .0024 |
| #2 | -.0136 | .0238 | .0067 | .0047 |

Sample Name: 0803A91-11B Run Time: 03/28/08 16:25

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 67.638 | 127.15 |
| Stddev | .492 | .04 |
| %RSD | .72815 | .03465 |
| | | |
| #1 | 67.290 | 127.19 |
| #2 | 67.986 | 127.12 |

Method: NEWM06 Sample Name: CCV Operator:
Comment:
Run Time: 03/28/08 16:36 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.236 | 9.811 | 9.655 | 5.045 |
| Stddev | .007 | .032 | .022 | .008 |
| %RSD | .5745 | .3280 | .2325 | .1519 |
| #1 | 1.241 | 9.834 | 9.671 | 5.051 |
| #2 | 1.231 | 9.789 | 9.639 | 5.040 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.973 | 5.022 | 10.01 | 9.859 |
| Stddev | .029 | .025 | .08 | .015 |
| %RSD | .5804 | .5014 | .8072 | .1512 |
| #1 | 4.994 | 5.039 | 10.07 | 9.869 |
| #2 | 4.953 | 5.004 | 9.955 | 9.848 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2463 | 25.79 | 2.591 | 2.526 |
| Stddev | .0016 | .21 | .017 | .013 |
| %RSD | .6469 | .8118 | .6666 | .5313 |
| #1 | .2474 | 25.94 | 2.603 | 2.536 |
| #2 | .2452 | 25.64 | 2.578 | 2.517 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.492 | 1.013 | 1.263 | 1.223 |
| Stddev | .016 | .012 | .013 | .006 |
| %RSD | .6260 | 1.171 | 1.019 | .4627 |
| #1 | 2.503 | 1.022 | 1.272 | 1.227 |
| #2 | 2.481 | 1.005 | 1.254 | 1.219 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.975 | 5.028 | 24.04 | 24.59 |
| Stddev | .038 | .020 | .17 | .04 |
| %RSD | .7594 | .3932 | .7055 | .1693 |
| #1 | 5.001 | 5.042 | 24.16 | 24.61 |
| #2 | 4.948 | 5.014 | 23.92 | 24.56 |

Sample Name: CCV Run Time: 03/28/08 16:36

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 24.91 | 2.449 | 5.087 | 24.27 |
| Stddev | .16 | .016 | .026 | .10 |
| %RSD | .6398 | .6668 | .5058 | .4063 |
| | | | | |
| #1 | 25.02 | 2.460 | 5.105 | 24.34 |
| #2 | 24.80 | 2.437 | 5.069 | 24.20 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.477 | 2.506 | 4.681 | 4.903 |
| Stddev | .015 | .018 | .017 | .003 |
| %RSD | .6117 | .7388 | .3636 | .0575 |
| | | | | |
| #1 | 2.488 | 2.519 | 4.693 | 4.901 |
| #2 | 2.466 | 2.493 | 4.669 | 4.905 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.835 | 4.982 | 4.857 | 4.928 |
| Stddev | .061 | .043 | .031 | .017 |
| %RSD | 1.256 | .8614 | .6307 | .3414 |
| | | | | |
| #1 | 4.878 | 5.013 | 4.879 | 4.940 |
| #2 | 4.792 | 4.952 | 4.836 | 4.916 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.989 | .9978 | 5.038 | 5.022 |
| Stddev | .002 | .0023 | .010 | .047 |
| %RSD | .0339 | .2276 | .1932 | .9415 |
| | | | | |
| #1 | 4.988 | .9994 | 5.031 | 5.055 |
| #2 | 4.991 | .9962 | 5.045 | 4.989 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.916 | 2.295 | 2.527 | 2.520 |
| Stddev | .009 | .026 | .006 | .020 |
| %RSD | .1925 | 1.153 | .2557 | .7985 |
| | | | | |
| #1 | 4.923 | 2.276 | 2.532 | 2.534 |
| #2 | 4.910 | 2.313 | 2.523 | 2.506 |

Sample Name: CCV Run Time: 03/28/08 16:36

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.758 | 125.71 |
| Stddev | .280 | .15 |
| %RSD | .40070 | .11747 |
| | | |
| #1 | 69.560 | 125.82 |
| #2 | 69.955 | 125.61 |

Method: NEWM06 Sample Name: CCB Operator:
Comment:
Run Time: 03/28/08 16:47 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0041 | -.0182 | -.0183 | -.0155 |
| Stddev | .0006 | .0123 | .0079 | .0044 |
| %RSD | 14.28 | 67.44 | 43.41 | 28.58 |
| #1 | -.0045 | -.0269 | -.0239 | -.0187 |
| #2 | -.0037 | -.0095 | -.0127 | -.0124 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0025 | -.0019 | -.0017 | -.0013 |
| Stddev | .0008 | .0014 | .0002 | .0000 |
| %RSD | 32.59 | 72.16 | 13.17 | 2.067 |
| #1 | -.0030 | -.0009 | -.0019 | -.0013 |
| #2 | -.0019 | -.0029 | -.0016 | -.0013 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0185 | -.0009 | -.0005 |
| Stddev | .0000 | .1257 | .0011 | .0001 |
| %RSD | 660.7 | 678.6 | 122.1 | 22.49 |
| #1 | .0000 | -.1074 | -.0001 | -.0004 |
| #2 | .0000 | .0704 | -.0017 | -.0006 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0001 | -.0005 | .0004 | .0008 |
| Stddev | .0005 | .0004 | .0026 | .0021 |
| %RSD | 385.1 | 75.98 | 740.4 | 260.1 |
| #1 | -.0004 | -.0002 | -.0015 | .0023 |
| #2 | .0002 | -.0007 | .0022 | -.0007 |

| Elem | Fe2599 | K_7664 | Mg2802 | Mg2852 |
|---|---|---|---|---|
| Line | 259.940 {129} | 766.490 { 44} | 280.270 {119} | 285.213 {117} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0014 | -.0622 | -.0048 | .0002 |
| Stddev | .0003 | .0203 | .0004 | .0012 |
| %RSD | 19.74 | 32.67 | 7.363 | 505.9 |
| #1 | -.0012 | -.0766 | -.0046 | .0011 |
| #2 | -.0016 | -.0478 | -.0051 | -.0006 |

Sample Name: CCB Run Time: 03/28/08 16:47

| Elem | Mn2576 | Mo2020 | Na5889 | Ni2216 |
|---|---|---|---|---|
| Line | 257.610 {131} | 202.030 {166} | 588.995 { 57} | 221.647 {152} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0001 | -.0125 | -.0018 | .0025 |
| Stddev | .0001 | .0030 | .0006 | .0011 |
| %RSD | 96.70 | 23.56 | 35.53 | 42.79 |
| #1 | -.0002 | -.0105 | -.0023 | .0032 |
| #2 | .0000 | -.0146 | -.0014 | .0017 |

| Elem | Ni2316 | Pb2203 | Sb2068 | Sb2175 |
|---|---|---|---|---|
| Line | 231.604 {145} | 220.353 {152} | 206.833 {162} | 217.581 {154} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0012 | -.0168 | .0042 | .0038 |
| Stddev | .0008 | .0056 | .0026 | .0043 |
| %RSD | 65.18 | 33.11 | 62.11 | 114.4 |
| #1 | -.0006 | -.0207 | .0024 | .0007 |
| #2 | -.0017 | -.0129 | .0060 | .0069 |

| Elem | Se1960 | Si2124 | Si2516 | Sn1899 |
|---|---|---|---|---|
| Line | 196.090 {171} | 212.412 {158} | 251.612 {134} | 189.989 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0131 | -.0047 | -.0026 | -.0030 |
| Stddev | .0133 | .0036 | .0003 | .0255 |
| %RSD | 101.0 | 76.96 | 11.46 | 842.6 |
| #1 | -.0038 | -.0072 | -.0024 | -.0211 |
| #2 | -.0225 | -.0021 | -.0028 | .0150 |

| Elem | Sr4077 | Ti3349 | Tl1908 | Tl1908 |
|---|---|---|---|---|
| Line | 407.771 { 82} | 334.941 {100} | 190.864 {175} | 190.864 {176} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0001 | -.0010 | .0102 | -.0060 |
| Stddev | .0000 | .0015 | .0025 | .0021 |
| %RSD | 59.29 | 152.1 | 24.41 | 34.13 |
| #1 | .0000 | .0001 | .0120 | -.0046 |
| #2 | .0001 | -.0020 | .0085 | -.0075 |

| Elem | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | .0153 | -.0013 | -.0018 |
| Stddev | .0030 | .0012 | .0020 |
| %RSD | 19.72 | 89.48 | 112.8 |
| #1 | .0131 | -.0005 | -.0032 |
| #2 | .0174 | -.0022 | -.0004 |

Sample Name: CCB Run Time: 03/28/08 16:47

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.207 | 127.34 |
| Stddev | .040 | .17 |
| %RSD | .05838 | .13200 |
| | | |
| #1 | 69.178 | 127.22 |
| #2 | 69.236 | 127.46 |

Method: NEWM06 Sample Name: CCV Operator:
Comment:
Run Time: 03/28/08 17:47 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.227 | 9.702 | 9.553 | 4.965 |
| Stddev | .001 | .059 | .028 | .007 |
| %RSD | .0932 | .6049 | .2898 | .1508 |
| #1 | 1.228 | 9.744 | 9.573 | 4.960 |
| #2 | 1.226 | 9.661 | 9.534 | 4.970 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.942 | 4.959 | 10.02 | 9.707 |
| Stddev | .013 | .031 | .03 | .021 |
| %RSD | .2693 | .6180 | .2612 | .2192 |
| #1 | 4.951 | 4.981 | 10.04 | 9.722 |
| #2 | 4.933 | 4.937 | 10.00 | 9.692 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2435 | 25.68 | 2.575 | 2.497 |
| Stddev | .0011 | .07 | .010 | .011 |
| %RSD | .4566 | .2657 | .3992 | .4269 |
| #1 | .2443 | 25.63 | 2.582 | 2.504 |
| #2 | .2427 | 25.72 | 2.567 | 2.489 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.461 | 1.006 | 1.251 | 1.207 |
| Stddev | .006 | .005 | .008 | .011 |
| %RSD | .2476 | .4873 | .6587 | .9436 |
| #1 | 2.465 | 1.010 | 1.257 | 1.199 |
| #2 | 2.456 | 1.003 | 1.245 | 1.215 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.907 | 4.982 | 23.83 | 24.55 |
| Stddev | .030 | .016 | .04 | .10 |
| %RSD | .6200 | .3129 | .1643 | .4041 |
| #1 | 4.929 | 4.993 | 23.86 | 24.62 |
| #2 | 4.886 | 4.971 | 23.80 | 24.48 |

Sample Name: CCV Run Time: 03/28/08 17:47

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 24.90 | 2.428 | 5.074 | 24.19 |
| Stddev | .01 | .006 | .002 | .02 |
| %RSD | .0403 | .2513 | .0339 | .0858 |
| | | | | |
| #1 | 24.90 | 2.432 | 5.073 | 24.17 |
| #2 | 24.89 | 2.424 | 5.075 | 24.20 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.455 | 2.487 | 4.607 | 4.873 |
| Stddev | .006 | .009 | .036 | .005 |
| %RSD | .2654 | .3577 | .7745 | .1058 |
| | | | | |
| #1 | 2.460 | 2.493 | 4.632 | 4.876 |
| #2 | 2.450 | 2.480 | 4.582 | 4.869 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.781 | 4.906 | 4.798 | 4.893 |
| Stddev | .010 | .036 | .013 | .016 |
| %RSD | .2065 | .7341 | .2656 | .3189 |
| | | | | |
| #1 | 4.788 | 4.931 | 4.807 | 4.904 |
| #2 | 4.774 | 4.880 | 4.789 | 4.882 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.973 | 1.002 | 4.995 | 4.924 |
| Stddev | .025 | .000 | .003 | .010 |
| %RSD | .5041 | .0165 | .0661 | .2042 |
| | | | | |
| #1 | 4.955 | 1.001 | 4.993 | 4.932 |
| #2 | 4.991 | 1.002 | 4.998 | 4.917 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.869 | 2.259 | 2.493 | 2.498 |
| Stddev | .013 | .032 | .021 | .012 |
| %RSD | .2565 | 1.399 | .8534 | .4713 |
| | | | | |
| #1 | 4.877 | 2.237 | 2.508 | 2.507 |
| #2 | 4.860 | 2.282 | 2.478 | 2.490 |

Sample Name: CCV Run Time: 03/28/08 17:47

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.881 | 125.60 |
| Stddev | .003 | .05 |
| %RSD | .00452 | .04197 |
| | | |
| #1 | 69.879 | 125.63 |
| #2 | 69.883 | 125.56 |

Method: NEWM06 Sample Name: CCB Operator:
Comment:
Run Time: 03/28/08 17:58 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0017 | -.0457 | -.0017 | -.0130 |
| Stddev | .0011 | .0161 | .0030 | .0049 |
| %RSD | 66.47 | 35.23 | 171.5 | 38.17 |
| #1 | .0009 | -.0343 | .0004 | -.0165 |
| #2 | .0025 | -.0571 | -.0038 | -.0095 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0028 | -.0030 | -.0016 | -.0012 |
| Stddev | .0007 | .0002 | .0002 | .0001 |
| %RSD | 26.22 | 8.040 | 10.93 | 9.952 |
| #1 | -.0023 | -.0032 | -.0018 | -.0012 |
| #2 | -.0033 | -.0029 | -.0015 | -.0011 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.1546 | -.0012 | -.0004 |
| Stddev | .0000 | .1018 | .0002 | .0003 |
| %RSD | 209.2 | 65.87 | 16.00 | 70.96 |
| #1 | .0000 | -.2265 | -.0011 | -.0006 |
| #2 | .0000 | -.0826 | -.0013 | -.0002 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0011 | -.0046 | -.0020 | -.0018 |
| Stddev | .0013 | .0004 | .0015 | .0027 |
| %RSD | 126.0 | 7.818 | 74.11 | 147.1 |
| #1 | -.0020 | -.0048 | -.0010 | -.0037 |
| #2 | -.0001 | -.0043 | -.0031 | .0001 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0011 | -.0011 | -.0208 | -.0048 |
| Stddev | .0002 | .0003 | .0369 | .0009 |
| %RSD | 19.73 | 25.18 | 178.0 | 17.86 |
| #1 | .0010 | -.0009 | .0054 | -.0042 |
| #2 | .0013 | -.0013 | -.0469 | -.0054 |

Sample Name: CCB Run Time: 03/28/08 17:58

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0029 | .0000 | -.0080 | .0033 |
| Stddev | .0001 | .000 | .0012 | .0023 |
| %RSD | 2.792 | 880.7 | 14.73 | 70.91 |
| #1 | -.0028 | .0001 | -.0072 | .0016 |
| #2 | -.0029 | -.0001 | -.0089 | .0050 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0012 | -.0005 | -.0106 | .0059 |
| Stddev | .0026 | .0009 | .0063 | .0010 |
| %RSD | 212.8 | 171.7 | 59.82 | 16.47 |
| #1 | -.0006 | -.0012 | -.0151 | .0052 |
| #2 | .0031 | .0001 | -.0061 | .0066 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0058 | -.0133 | -.0092 | -.0031 |
| Stddev | .0055 | .0114 | .0012 | .0021 |
| %RSD | 95.31 | 85.51 | 13.33 | 69.42 |
| #1 | .0019 | -.0214 | -.0083 | -.0016 |
| #2 | .0097 | -.0053 | -.0100 | -.0046 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0008 | .0000 | -.0010 | .0130 |
| Stddev | .0134 | .000 | .0003 | .0018 |
| %RSD | 1765. | 44.75 | 26.92 | 13.65 |
| #1 | -.0087 | .0000 | -.0012 | .0118 |
| #2 | .0102 | .0000 | -.0008 | .0143 |

| Elem | Tl1908 | V_2924 | Zn2062 | Zn2062 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0116 | -.0008 | .0012 | -.0022 |
| Stddev | .0058 | .0076 | .0001 | .0010 |
| %RSD | 50.35 | 1006. | 10.21 | 44.20 |
| #1 | -.0075 | .0046 | .0011 | -.0029 |
| #2 | -.0157 | -.0061 | .0012 | -.0015 |

Sample Name: CCB Run Time: 03/28/08 17:58

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 70.796 | 127.04 |
| Stddev | 1.568 | .11 |
| %RSD | 2.2148 | .09044 |
| | | |
| #1 | 69.687 | 126.96 |
| #2 | 71.904 | 127.12 |

# DIGESTION LOG(S)

# Microbac Laboratories, Inc.

# PREP BATCH REPORT



Prep Batch **60649** Prep Code: **3010** Technician: **Troy M. Goehl**

Prep Start Date: **3/27/2008 6:00:00 PM**
Prep End Date: **3/27/2008 9:00:00 PM**

| Sample ID | Matrix | pH | wt (g) | Ini vol (mL) | Sol Added | Sol Recov | Fin Vol (mL) | factor | PrepStart | PrepEnd |
|---|---|---|---|---|---|---|---|---|---|---|
| LCS080327-1 | | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| MB080327-1 | | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A22-07A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A22-12A | Aqueous | | | 1 | 0 | 0 | 50 | 50 | 3/27/2008 | 3/27/2008 |
| ME0803A22-13A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A31-01A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A33-01A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A43-01B | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A49-01A | Ice | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A69-01B | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A69-02B | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A70-09B | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A70-09BM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A70-09BM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A73-01C | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A76-09A | Aqueous | | | 1 | 0 | 0 | 50 | 50 | 3/27/2008 | 3/27/2008 |
| ME0803A91-03B | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A91-04B | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A91-04BM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A91-04BM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A91-06B | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A91-11B | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |

# Microbac Laboratories, Inc.

# PREP BATCH REPORT



Prep Batch **60649** Prep Code: **3010** Technician: **Troy M. Goehl**

Prep Start Date: **3/27/2008 6:00:00 PM**
Prep End Date: **3/27/2008 9:00:00 PM**

| Sample ID | Matrix | pH | wt (g) | Ini vol (mL) | Sol Added | Sol Recov | Fin Vol (mL) | factor | PrepStart | PrepEnd |
|---|---|---|---|---|---|---|---|---|---|---|
| ME0803A95-01A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A95-02A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A95-03A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |
| ME0803A98-01A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 3/27/2008 | 3/27/2008 |

# SVOA GC/MS
# RAW DATA

# METHOD BLANK RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040204.D
Acq On : 2 Apr 2008 5:30 pm
Sample : ,mblk,bk-1-040208,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008

Vial: 26
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 118091 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 353494 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 151733 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 223731 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 194492 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 151890 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 143493 | 39.19 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 121806 | 25.16 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 197516 | 46.49 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 265658 | 55.87 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 104206 | 82.92 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 273133 | 64.22 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 10) 1,3-Dichlorobenzene | 4.29 | 146 | 5395 | 1.31 | ug/ml# | 92 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 5395 | 1.31 | ug/ml# | 91 |
| 12) 1,2-Dichlorobenzene | 4.29 | 146 | 5395 | 1.39 | ug/ml | 91 |

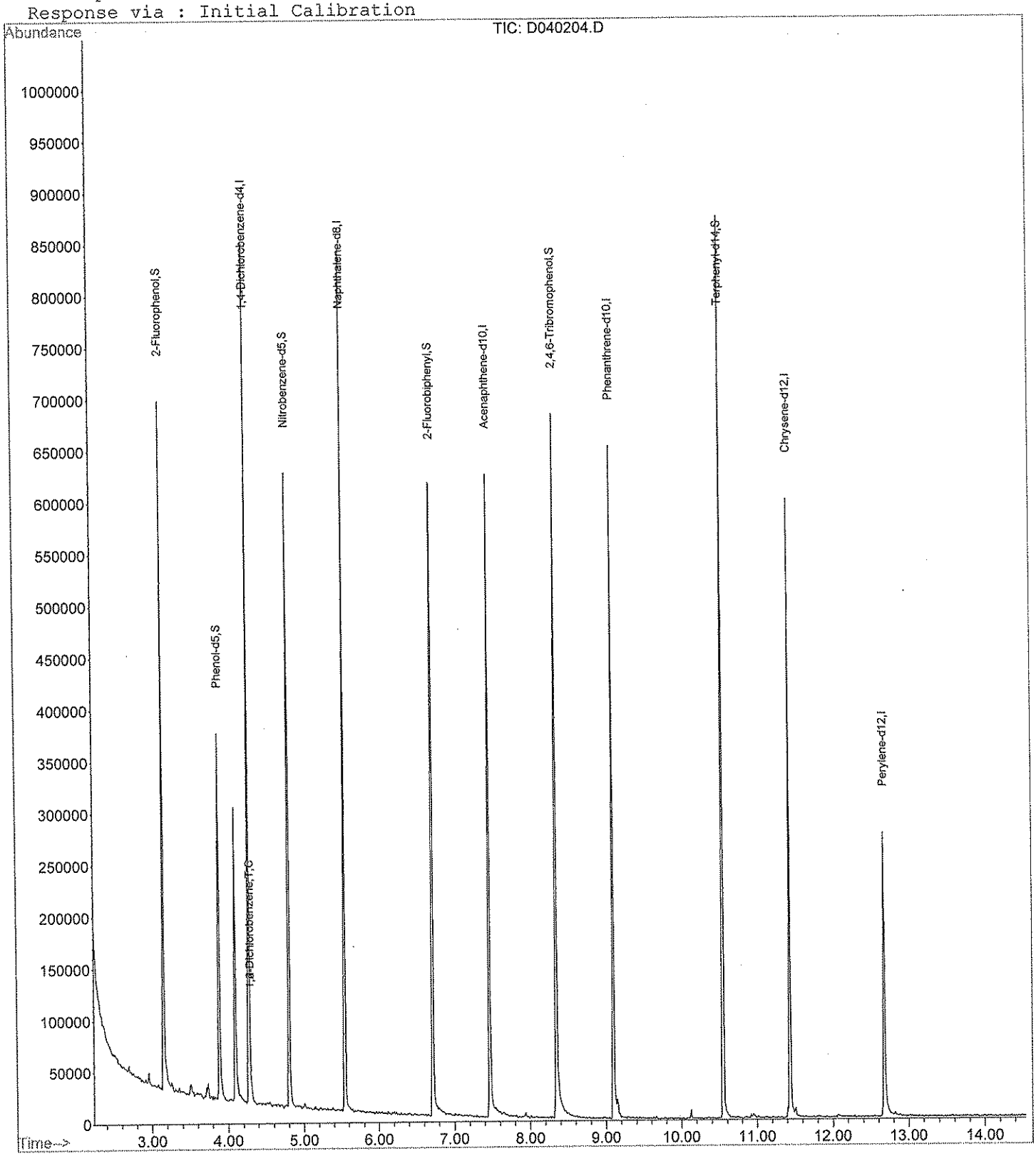
(#) = qualifier out of range (m) = manual integration
D040204.D SVOA0328.M Wed Apr 02 21:05:50 2008 SVOA 4

Data File : C:\HPCHEM\1\DATA\D040208\D040204.D
Acq On : 2 Apr 2008 5:30 pm
Sample : ,mblk,bk-1-040208,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008

Vial: 26
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# LABORATORY CONTROL SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040206.D Vial: 28
Acq On : 2 Apr 2008 6:23 pm Operator: mills
Sample : ,lcs,lcs-1-040208,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 104343 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 320001 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 150619 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 208187 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 172264 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 162068 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 141228 | 43.65 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 125970 | 29.44 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 214570 | 55.79 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 310083 | 65.69 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 122565 | 104.81 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 281364 | 74.69 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 6) Phenol | 3.90 | 94 | 83118 | 20.48 | ug/ml | 92 |
| 7) Aniline | 4.07 | 93 | 3492 | 0.78 | ug/ml# | 1 |
| 8) bis(2-Chloroethyl)ether | 4.07 | 93 | 3492 | 1.03 | ug/ml# | 1 |
| 9) 2-Chlorophenol | 4.07 | 128 | 170141 | 52.39 | ug/ml | 98 |
| 10) 1,3-Dichlorobenzene | 4.29 | 146 | 192016 | 52.60 | ug/ml | 96 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 192016 | 52.69 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.29 | 146 | 192016 | 55.85 | ug/ml | 98 |
| 13) Benzyl alcohol | 4.29 | 108 | 1888 | 0.96 | ug/ml# | 16 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 341909 | 52.53 | ug/ml | 97 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 146657 | 61.86 | ug/ml | 97 |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 154107 | 54.20 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.13 | 107 | 174321 | 65.38 | ug/ml | 89 |
| 35) 2-Methylnaphthalene | 6.13 | 142 | 140516 | 29.31 | ug/ml# | 19 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 270581 | 47.29 | ug/ml | 97 |
| 44) Dimethyl phthalate | 7.17 | 163 | 411727 | 72.31 | ug/ml | 100 |
| 47) Acenaphthene | 7.51 | 153 | 269988 | 69.20 | ug/ml | 99 |
| 50) 4-Nitrophenol | 7.60 | 109 | 28159 | 26.90 | ug/ml | 95 |
| 51) 2,4-Dinitrotoluene | 7.69 | 165 | 136433 | 83.76 | ug/ml | 84 |
| 53) 4-Chlorophenyl phenylether | 8.09 | 204 | 158756 | 88.91 | ug/ml | 98 |
| 54) Diethyl phthalate | 7.96 | 149 | 456841 | 78.56 | ug/ml | 98 |
| 58) n-Nitrosodiphenylamine | 8.08 | 169 | 16379 | 3.01 | ug/ml# | 63 |
| 63) Pentachlorophenol | 8.90 | 266 | 78030 | 80.17 | ug/ml | 99 |
| 68) Fluoranthene | 10.42 | 202 | 442078 | 76.15 | ug/ml# | 81 |
| 71) Pyrene | 10.42 | 202 | 456554 | 73.17 | ug/ml | 96 |
| 75) 3,3'-Dichlorobenzidine | 11.41 | 252 | 139844 | 79.04 | ug/ml | 93 |
| 77) bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 407710 | 78.29 | ug/ml | 96 |
| 80) Benzo[b]fluoranthene | 12.36 | 252 | 339552 | 50.42 | ug/ml# | 94 |
| 81) Benzo[k]fluoranthene | 12.36 | 252 | 339552 | 74.83 | ug/ml | 98 |
| 83) Indeno[1,2,3cd]pyrene | 13.88 | 276 | 246535 | 64.50 | ug/ml | 89 |
| 84) Dibenz[a,h]anthracene | 13.89 | 278 | 196889 | 92.88 | ug/ml | 93 |
| 85) Benzo[g,h,i]perylene | 14.23 | 276 | 194335 | 61.27 | ug/ml | 99 |

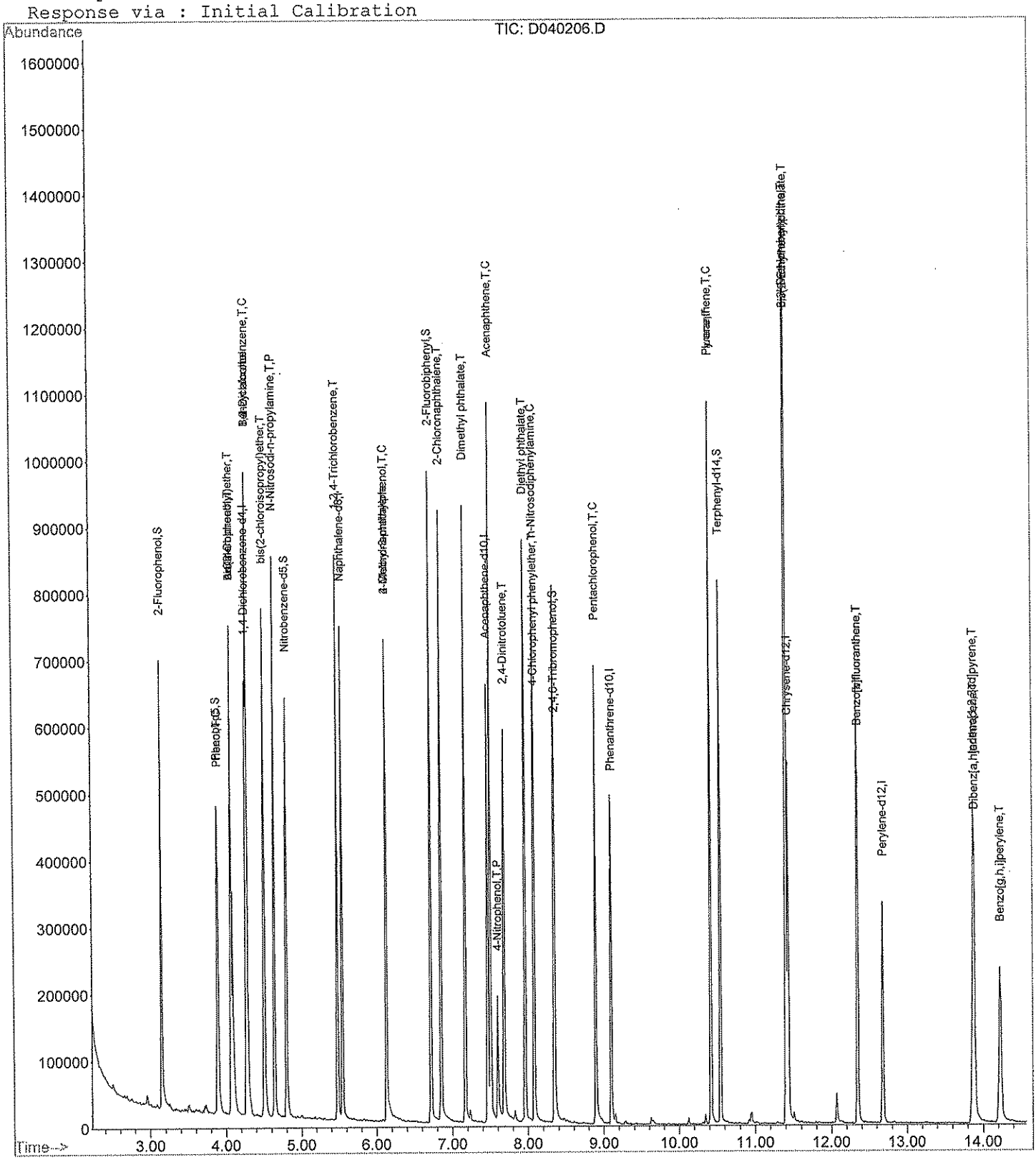
4/2/08

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D040208\D040206.D Vial: 28
Acq On : 2 Apr 2008 6:23 pm Operator: mills
Sample : ,lcs,lcs-1-040208,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# MATRIX SPIKE/MATRIX SPIKE DUPLICATE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040340.D Vial: 16
Acq On : 4 Apr 2008 4:12 am Operator: mills
Sample : ,samp,me0803c07-02b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

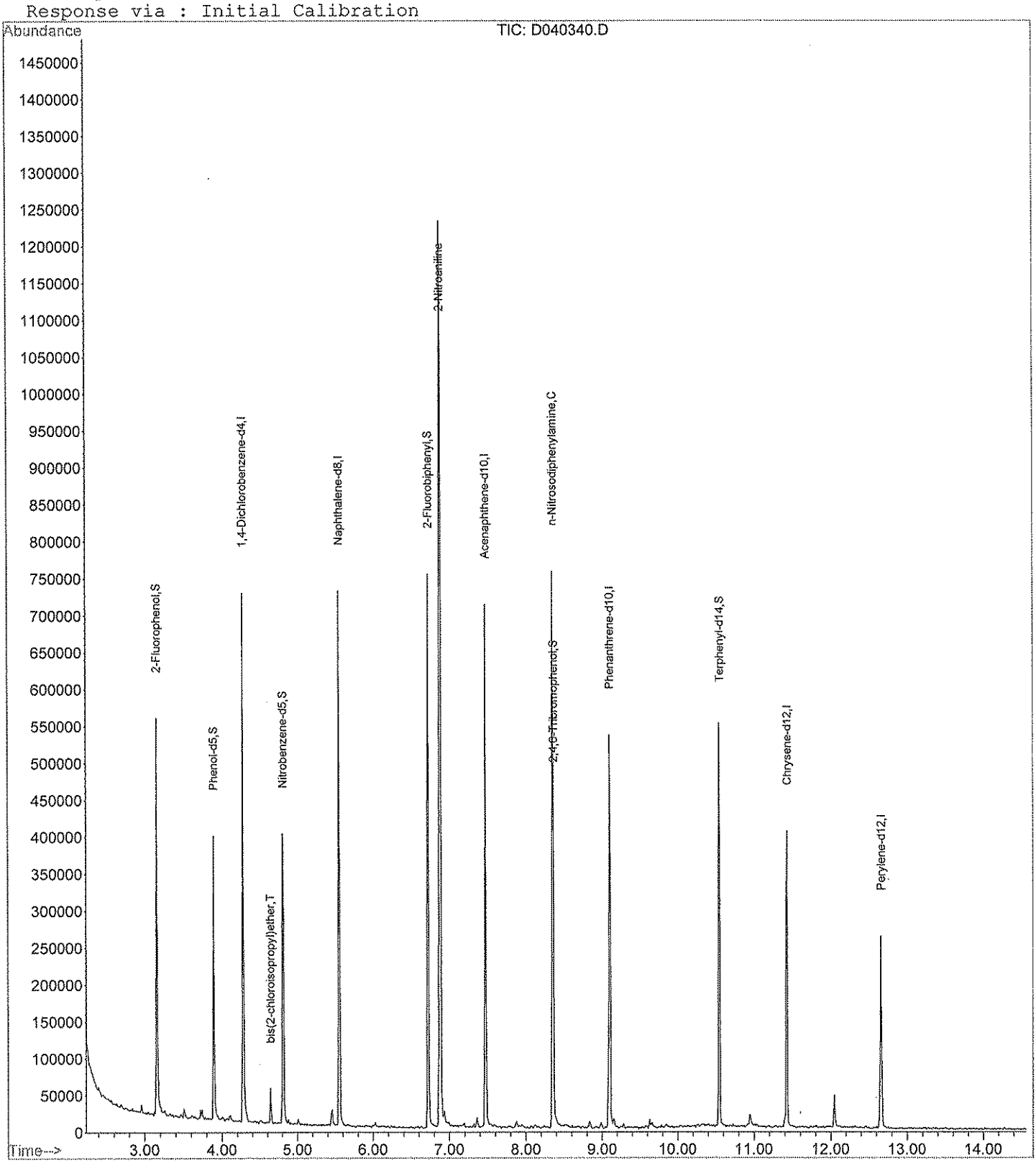
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 101707 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 303173 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 146540 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 186252 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.43 | 240 | 149848 | 40.00 | ug/ml | -0.01 |
| 78) Perylene-d12 | 12.66 | 264 | 119085 | 40.00 | ug/ml | -0.02 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 102824 | 32.61 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 94773 | 22.73 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 147824 | 40.57 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 238215 | 51.87 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 105256 | 100.60 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 203035 | 61.96 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| ~~14)~~ bis(2-chloroisopropyl)ethe | 4.64 | 45 | 18070 | 2.85 | ug/ml# | 74 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 22857 | 12.38 | ug/ml# | 16 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.35 | 169 | 3532 | 0.72 | ug/ml# | 29 |

Jm 4-4-08

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

Data File : C:\HPCHEM\1\DATA\D040308\D040340.D Vial: 16
Acq On : 4 Apr 2008 4:12 am Operator: mills
Sample : ,samp,me0803c07-02b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040341.D Vial: 17
Acq On : 4 Apr 2008 4:38 am Operator: mills
Sample : ,ms,me0803c07-02bms,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

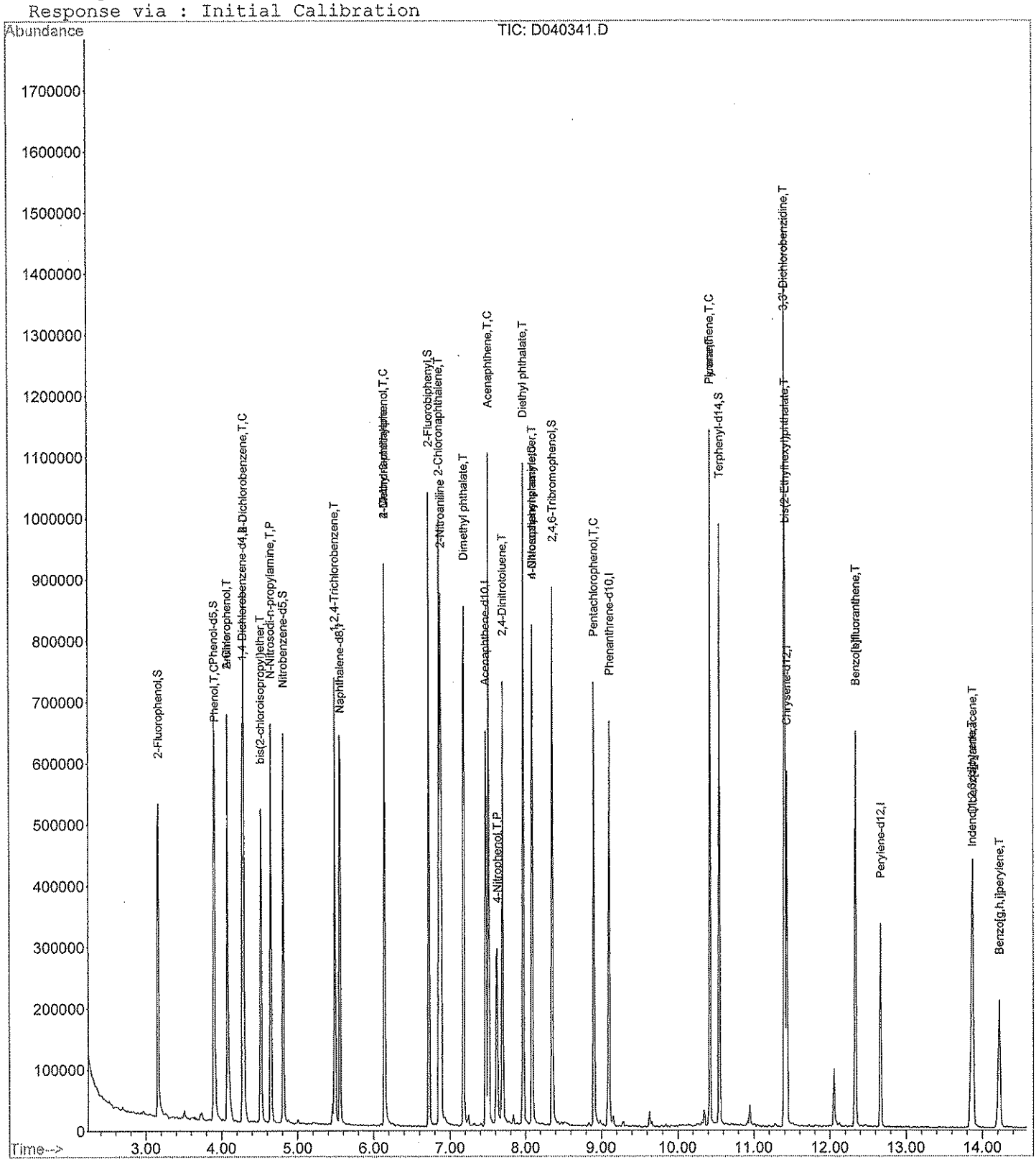
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 113309 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 350856 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 171925 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 228824 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.43 | 240 | 180385 | 40.00 | ug/ml | -0.02 |
| 78) Perylene-d12 | 12.67 | 264 | 142848 | 40.00 | ug/ml | -0.02 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 150805 | 42.93 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 174681 | 37.60 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 173860 | 41.23 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 295609 | 54.86 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 126646 | 98.53 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 258758 | 65.60 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 6) Phenol | 3.91 | 94 | 110027 | 24.96 | ug/ml | 88 |
| ~~7)~~ Aniline | 4.08 | 93 | 2820 | 0.58 | ug/ml# | 1 |
| 9) 2-Chlorophenol | 4.08 | 128 | 133860 | 37.96 | ug/ml | 94 |
| ~~10)~~ 1,3-Dichlorobenzene | 4.29 | 146 | 153079 | 38.62 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 153079 | 38.68 | ug/ml | 100 |
| ~~12)~~ 1,2-Dichlorobenzene | 4.29 | 146 | 153079 | 41.00 | ug/ml | 99 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 245628 | 34.75 | ug/ml | 98 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 116545 | 45.27 | ug/ml | 92 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 125287 | 40.19 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.14 | 107 | 174502 | 59.69 | ug/ml | 89 |
| ~~35)~~ 2-Methylnaphthalene | 6.14 | 142 | 143392 | 27.28 | ug/ml# | 20 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 257923 | 39.49 | ug/ml | 97 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 14093 | 6.51 | ug/ml# | 11 |
| 44) Dimethyl phthalate | 7.19 | 163 | 438782 | 67.51 | ug/ml | 98 |
| 47) Acenaphthene | 7.51 | 153 | 261275 | 58.67 | ug/ml | 99 |
| 50) 4-Nitrophenol | 7.63 | 109 | 56279 | 47.09 | ug/ml# | 73 |
| 51) 2,4-Dinitrotoluene | 7.70 | 165 | 123942 | 66.66 | ug/ml | 97 |
| 53) 4-Chlorophenyl phenylether | 8.10 | 204 | 160436 | 78.72 | ug/ml | 95 |
| 54) Diethyl phthalate | 7.97 | 149 | 480734 | 72.43 | ug/ml | 100 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.10 | 169 | 16174 | 2.70 | ug/ml# | 59 |
| 63) Pentachlorophenol | 8.90 | 266 | 78416 | 73.30 | ug/ml | 98 |
| ~~68)~~ Fluoranthene | 10.43 | 202 | 439772 | 68.92 | ug/ml# | 86 |
| 71) Pyrene | 10.43 | 202 | 446901 | 68.40 | ug/ml | 100 |
| 75) 3,3'-Dichlorobenzidine | 11.40 | 252 | 101764 | 54.93 | ug/ml# | 93 |
| 77) bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 407623 | 74.75 | ug/ml | 95 |
| ~~80)~~ Benzo[b]fluoranthene | 12.34 | 252 | 285509 | 48.10 | ug/ml | 97 |
| 81) Benzo[k]fluoranthene | 12.34 | 252 | 285509 | 71.38 | ug/ml | 97 |
| 83) Indeno[1,2,3cd]pyrene | 13.87 | 276 | 201244 | 59.73 | ug/ml | 95 |
| 84) Dibenz[a,h]anthracene | 13.88 | 278 | 162739 | 87.10 | ug/ml | 98 |
| 85) Benzo[g,h,i]perylene | 14.22 | 276 | 165605 | 59.24 | ug/ml | 91 |

4/4/08

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

Data File : C:\HPCHEM\1\DATA\D040308\D040341.D Vial: 17
Acq On : 4 Apr 2008 4:38 am Operator: mills
Sample : ,ms,me0803c07-02bms,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040342.D Vial: 18
Acq On : 4 Apr 2008 5:03 am Operator: mills
Sample : ,msd,me0803c07-02bmsd,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120613 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 358599 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 175228 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 220294 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 171757 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 147870 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 165399 | 44.23 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 199804 | 40.40 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 194503 | 45.13 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 338971 | 61.73 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.37 | 330 | 134947 | 109.05 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.56 | 244 | 263889 | 70.26 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 6) Phenol | 3.92 | 94 | 127717 | 27.22 | ug/ml | 95 |
| ~~7)~~ Aniline | 4.08 | 93 | 3011 | 0.58 | ug/ml# | 1 |
| 9) 2-Chlorophenol | 4.08 | 128 | 162089 | 43.18 | ug/ml | 96 |
| ~~10)~~ 1,3-Dichlorobenzene | 4.30 | 146 | 180462 | 42.77 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.30 | 146 | 180462 | 42.84 | ug/ml | 99 |
| ~~12)~~ 1,2-Dichlorobenzene | 4.30 | 146 | 180462 | 45.41 | ug/ml | 99 |
| ~~13)~~ Benzyl alcohol | 4.30 | 108 | 2270 | 0.99 | ug/ml# | 12 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 282493 | 37.55 | ug/ml | 99 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 138013 | 50.36 | ug/ml | 94 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 152610 | 47.89 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.15 | 107 | 202486 | 67.76 | ug/ml | 94 |
| ~~35)~~ 2-Methylnaphthalene | 6.15 | 142 | 157393 | 29.29 | ug/ml# | 18 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 294388 | 44.22 | ug/ml | 96 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 14208 | 6.44 | ug/ml# | 16 |
| 44) Dimethyl phthalate | 7.18 | 163 | 426633 | 64.41 | ug/ml | 99 |
| 47) Acenaphthene | 7.52 | 153 | 297674 | 65.58 | ug/ml | 99 |
| 50) 4-Nitrophenol | 7.62 | 109 | 53986 | 44.32 | ug/ml | 87 |
| 51) 2,4-Dinitrotoluene | 7.70 | 165 | 133901 | 70.66 | ug/ml | 86 |
| 53) 4-Chlorophenyl phenylether | 8.09 | 204 | 158494 | 76.30 | ug/ml | 87 |
| 54) Diethyl phthalate | 7.97 | 149 | 484853 | 71.67 | ug/ml | 99 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.09 | 169 | 15855 | 2.75 | ug/ml# | 60 |
| 63) Pentachlorophenol | 8.91 | 266 | 78504 | 76.22 | ug/ml | 97 |
| 71) Pyrene | 10.43 | 202 | 473632 | 76.13 | ug/ml | 89 |
| 75) 3,3'-Dichlorobenzidine | 11.41 | 252 | 94216 | 53.41 | ug/ml | 95 |
| 77) bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 377229 | 72.65 | ug/ml | 96 |
| ~~80)~~ Benzo[b]fluoranthene | 12.35 | 252 | 274001 | 44.60 | ug/ml | 96 |
| 81) Benzo[k]fluoranthene | 12.35 | 252 | 274615 | 66.33 | ug/ml# | 94 |
| 83) Indeno[1,2,3cd]pyrene | 13.88 | 276 | 223966 | 64.22 | ug/ml | 92 |
| 84) Dibenz[a,h]anthracene | 13.89 | 278 | 178219 | 92.15 | ug/ml | 99 |
| 85) Benzo[g,h,i]perylene | 14.24 | 276 | 191078 | 66.03 | ug/ml | 92 |

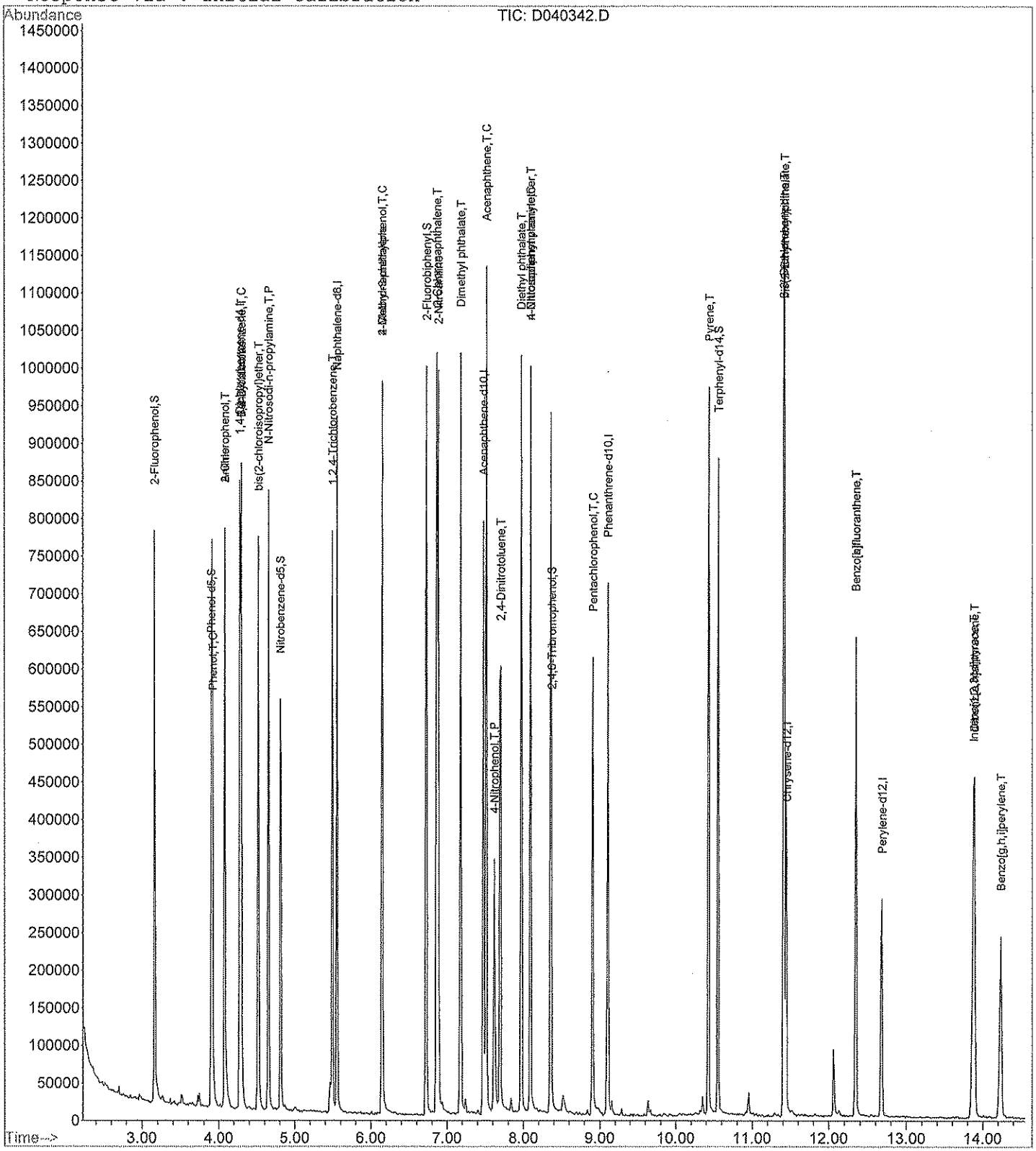
4-4-08

(#) = qualifier out of range (m) = manual integration
D040342.D SVOA0328.M Fri Apr 04 14:59:10 2008 SVOA 4

4/4/08

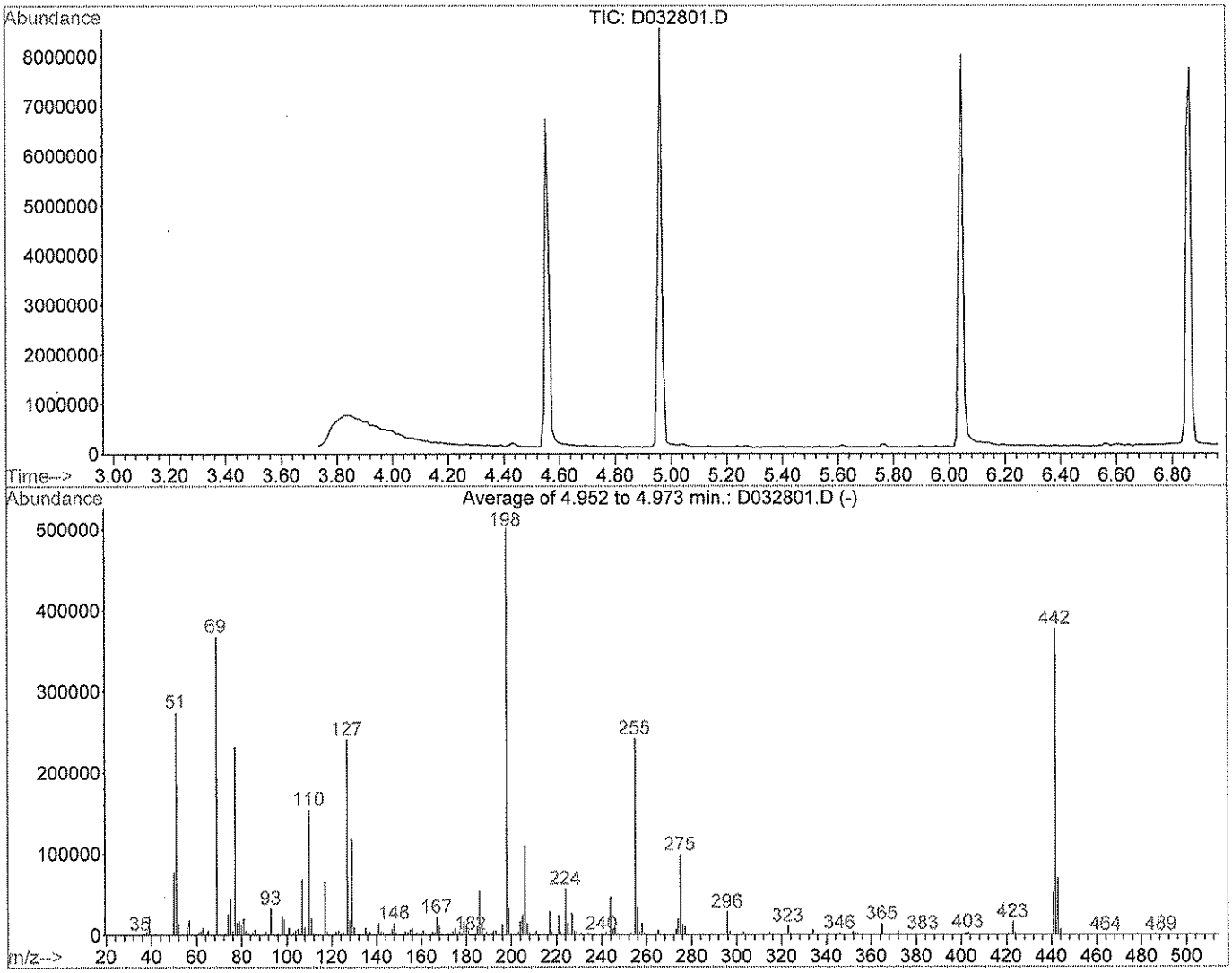
Data File : C:\HPCHEM\1\DATA\D040308\D040342.D Vial: 18
Acq On : 4 Apr 2008 5:03 am Operator: mills
Sample : ,msd,me0803c07-02bmsd,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# TUNING RAW DATA

Data File : C:\HPCHEM\1\DATA\D032708\D032801.D Vial: 1
Acq On : 28 Mar 2008 4:26 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP




AutoFind: Scans 120, 121, 122; Background Corrected with Scan 116

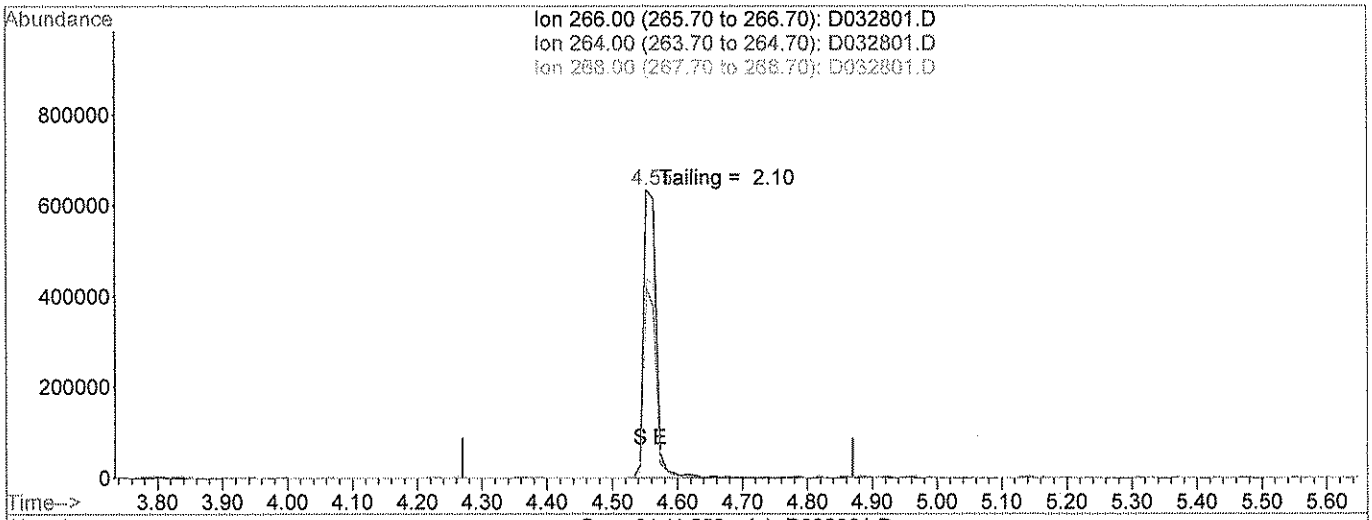
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 30 | 60 | 54.8 | 274221 | PASS |
| 68 | 69 | 0.00 | 2 | 0.0 | 0 | PASS |
| 70 | 69 | 0.00 | 2 | 0.3 | 1166 | PASS |
| 127 | 198 | 40 | 60 | 48.1 | 240719 | PASS |
| 197 | 198 | 0.00 | 1 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 500629 | PASS |
| 199 | 198 | 5 | 9 | 6.7 | 33653 | PASS |
| 275 | 198 | 10 | 30 | 19.6 | 98369 | PASS |
| 365 | 198 | 1 | 100 | 2.6 | 13217 | PASS |
| 441 | 443 | 0.01 | 100 | 73.5 | 51334 | PASS |
| 442 | 198 | 40 | 250 | 75.4 | 377253 | PASS |
| 443 | 442 | 17 | 23 | 18.5 | 69817 | PASS |

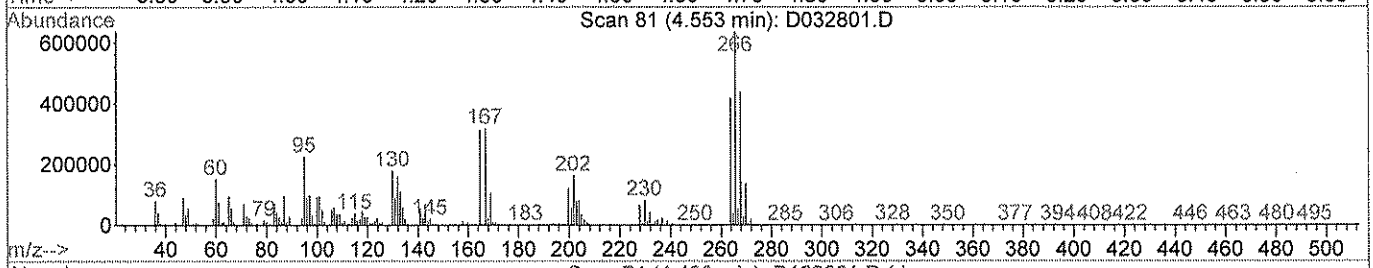
D032801.D DFTPP.M Fri Mar 28 21:14:11 2008 SVOA 4

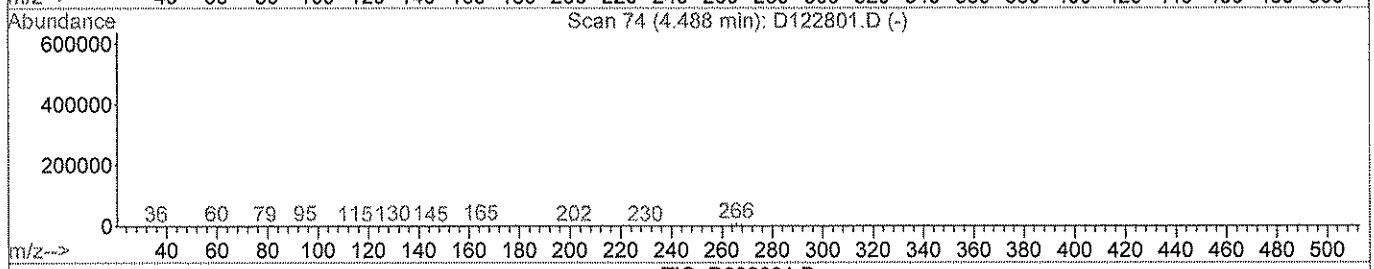
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D032708\D032801.D Vial: 1
Acq On : 28 Mar 2008 4:26 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 28 21:14 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Mar 28 21:14:17 2008
Response via : Single Level Calibration




TIC: D032801.D

(1) PENTACHLOROPHENOL

4.55min 63.86

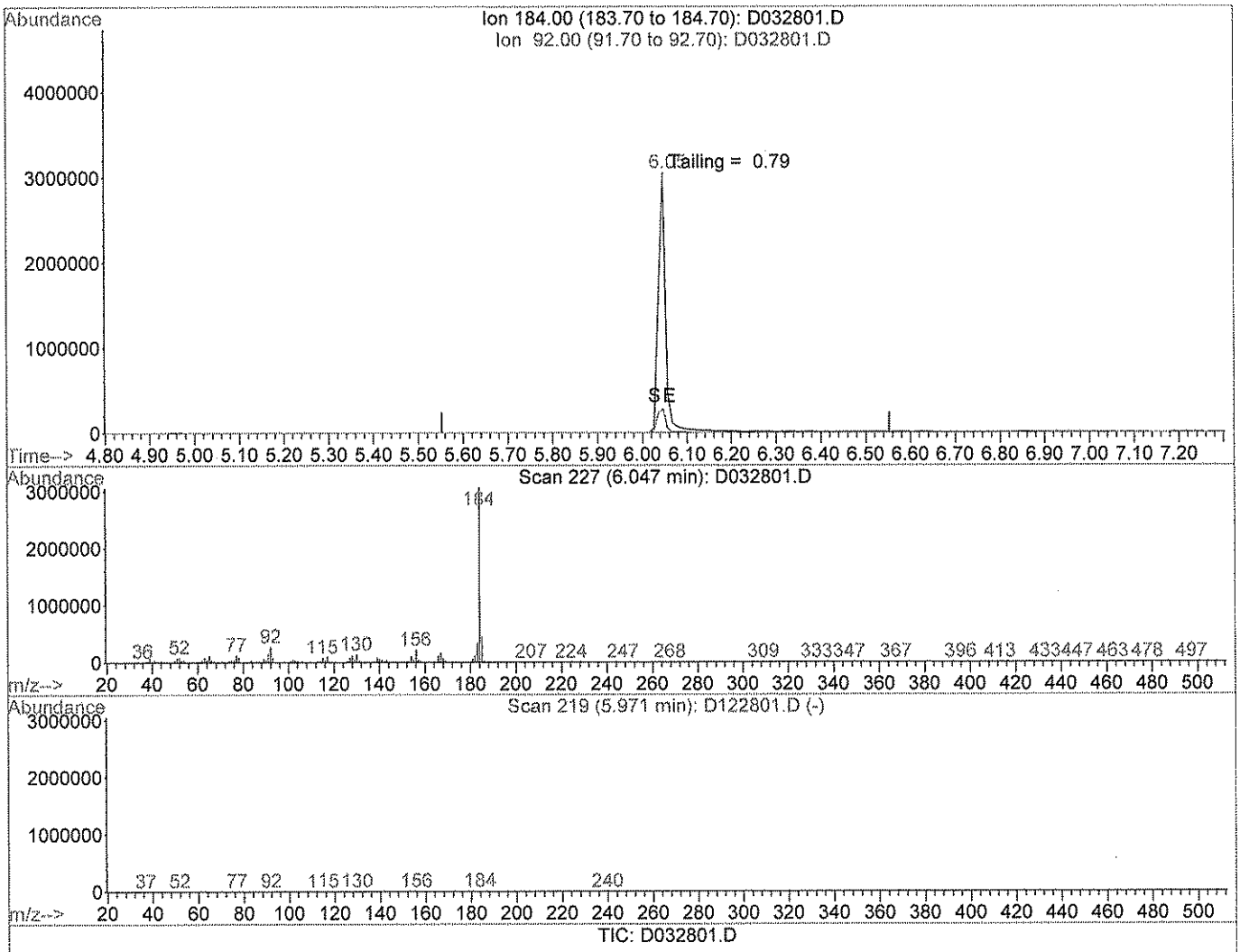
response 848211

| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 63.53 |
| 268.00 | 64.60 | 69.59 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D032708\D032801.D Vial: 1
Acq On : 28 Mar 2008 4:26 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 28 21:14 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Mar 28 21:14:17 2008
Response via : Single Level Calibration




TIC: D032801.D

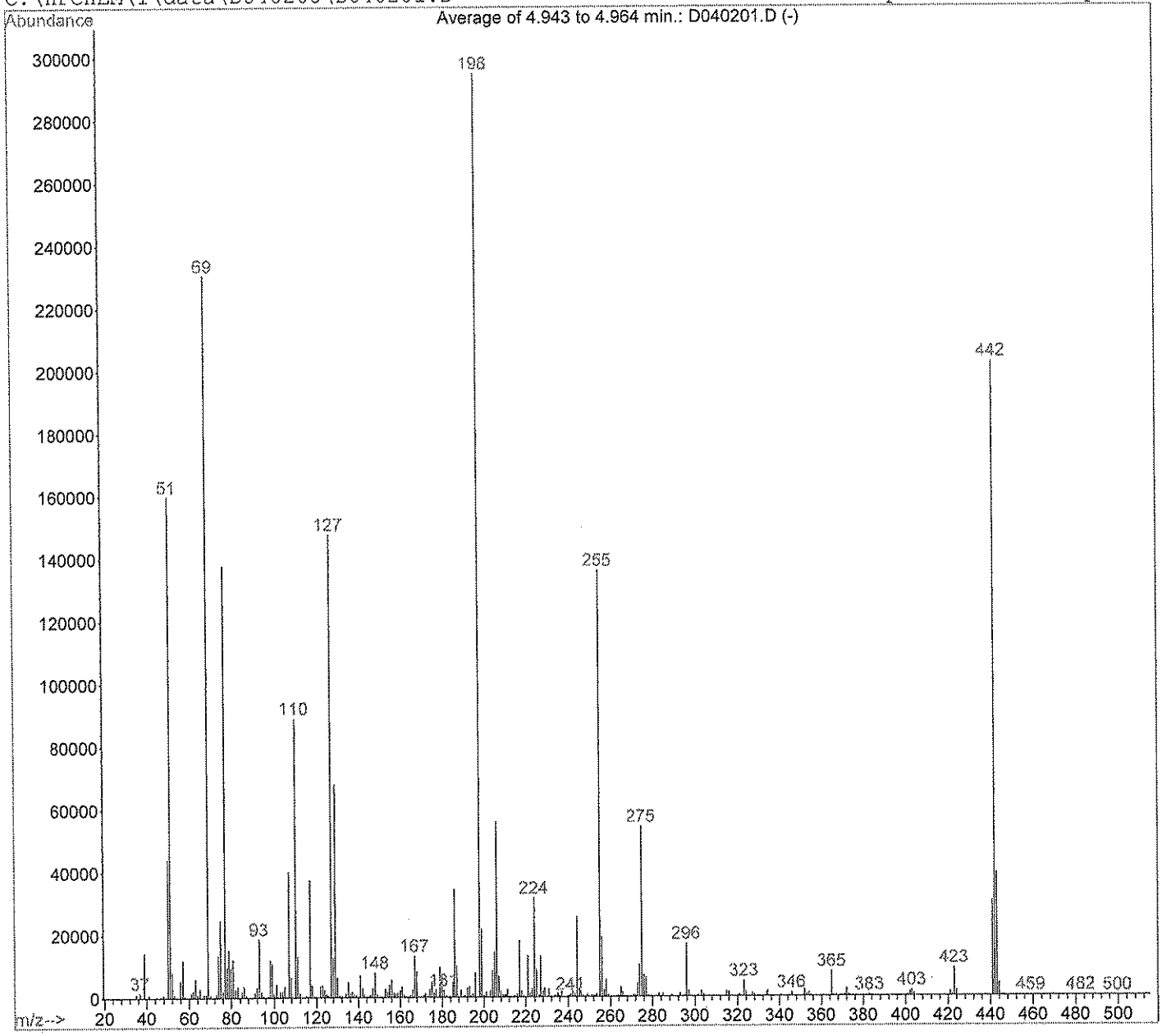
(3) BENZIDINE

6.05min 62.82

response 3500067

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100 | 100 |
| 92.00 | 12.20 | 10.74 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

C:\HPCHEM\1\data\D040208\D040201.D 2 Apr 2008 3:55 pm



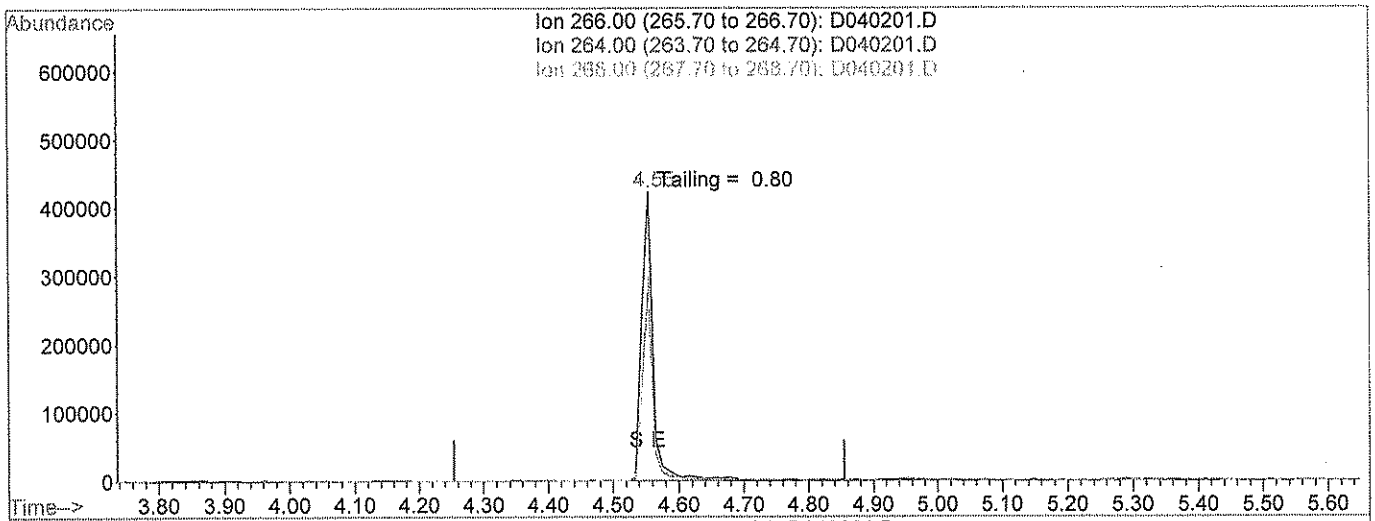

Peak Apex is scan: 120
Average of 3 scans: 119,120,121 minus background scan 115

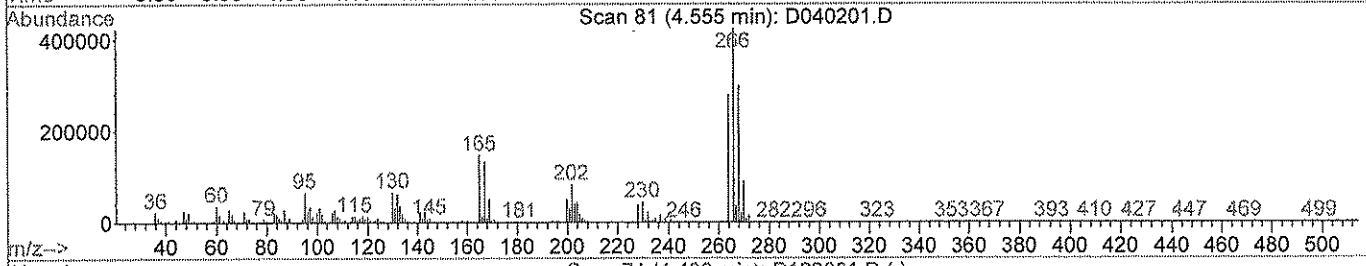
| Target Mass | Comparison Mass | Lower Limit,% | Upper Limit,% | Relative Abundance,% | Result Pass/Fail |
|---|---|---|---|---|---|
| 51 | 198 | 30 | 60 | 54.2 | PASS |
| 68 | 69 | 0 | 2 | 0.5 | PASS |
| 69 | 198 | 0 | 100 | 78.2 | PASS |
| 70 | 69 | 0 | 2 | 0.3 | PASS |
| 127 | 198 | 40 | 60 | 50.1 | PASS |
| 197 | 198 | 0 | 1 | 0.1 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | PASS |
| 199 | 198 | 5 | 9 | 7.4 | PASS |
| 275 | 198 | 10 | 30 | 18.4 | PASS |
| 365 | 198 | 1 | 100 | 2.7 | PASS |
| 441 | 443 | >0 | 100 | 77.4 | PASS |
| 442 | 198 | 40 | 100 | 68.7 | PASS |
| 443 | 442 | 17 | 23 | 19.4 | PASS |

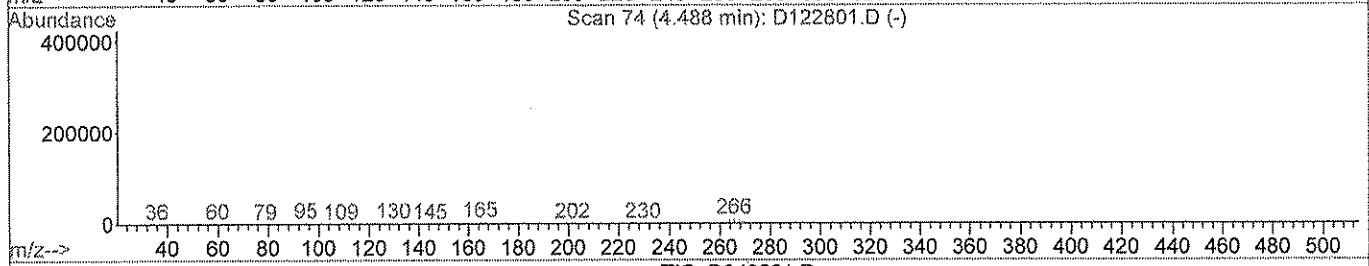
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040208\D040201.D Vial: 1
Acq On : 2 Apr 2008 3:55 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 17:03 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 02 16:03:03 2008
Response via : Single Level Calibration




TIC: D040201.D

(1) PENTACHLOROPHENOL

4.55min 50.00

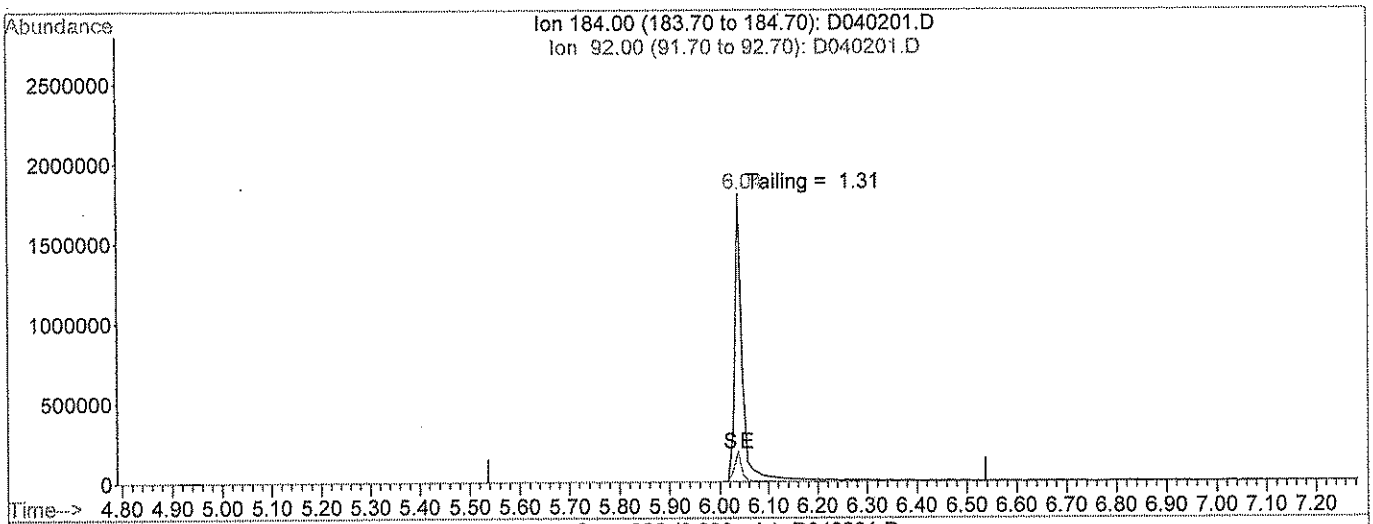
response 493439

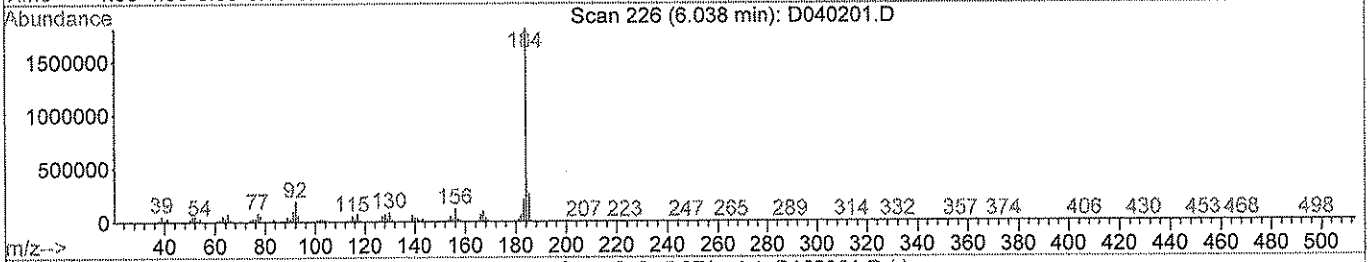
| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 62.81 |
| 268.00 | 64.60 | 67.75 |
| 0.00 | 0.00 | 0.00 |

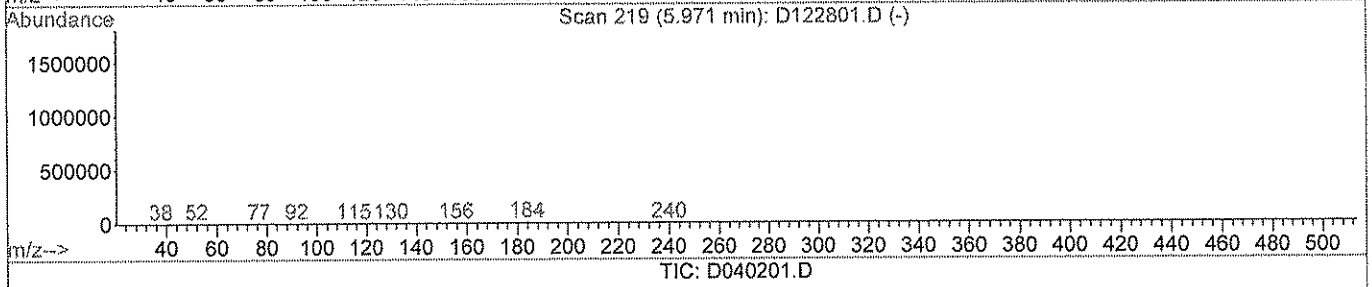
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040208\D040201.D Vial: 1
Acq On : 2 Apr 2008 3:55 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 17:03 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 02 16:03:03 2008
Response via : Single Level Calibration



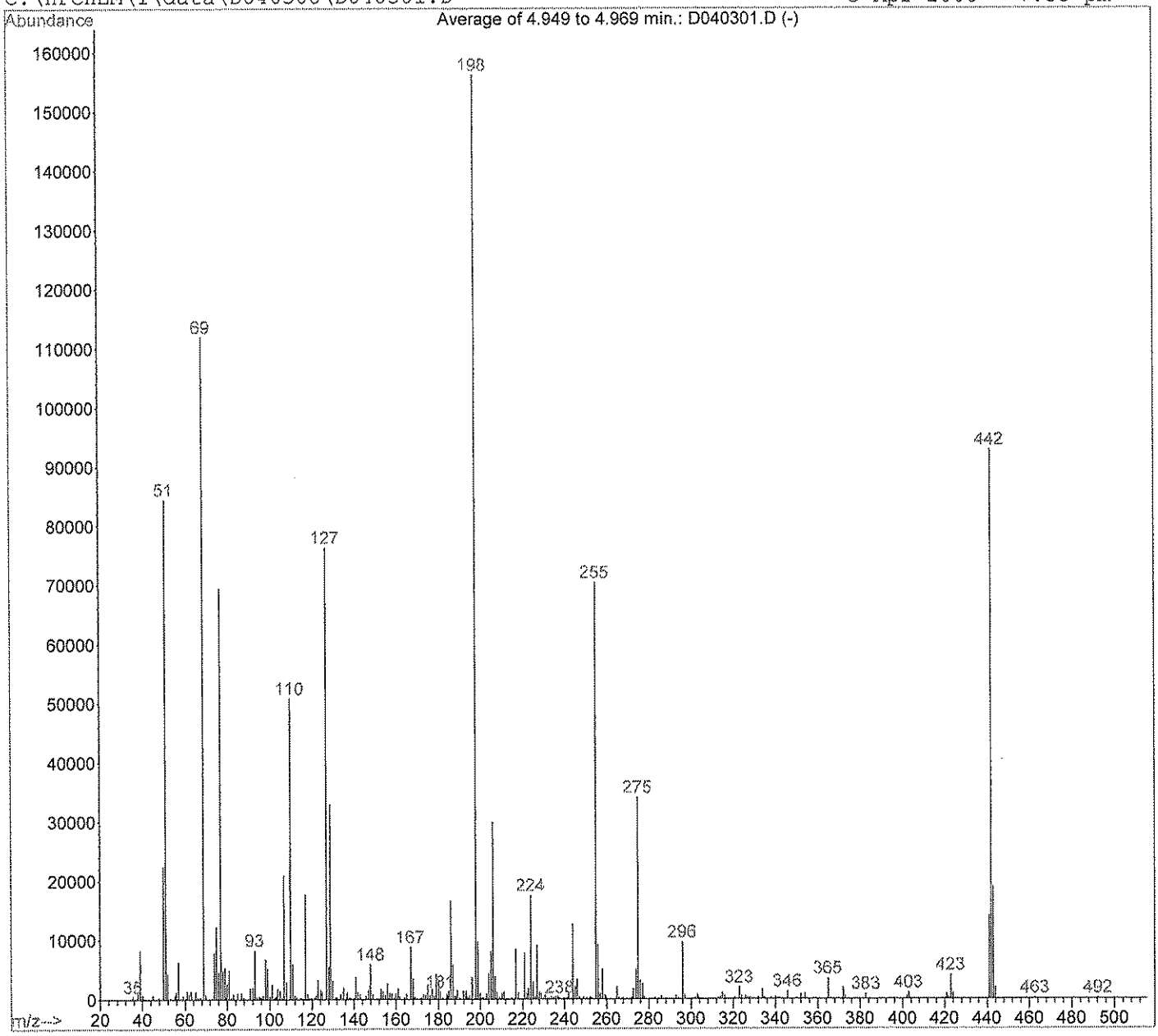

(3) BENZIDINE

6.04min 50.00

response 2030670

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100 | 100 |
| 92.00 | 12.20 | 10.50 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

C:\HPCHEM\1\data\D040308\D040301.D 3 Apr 2008 7:35 pm



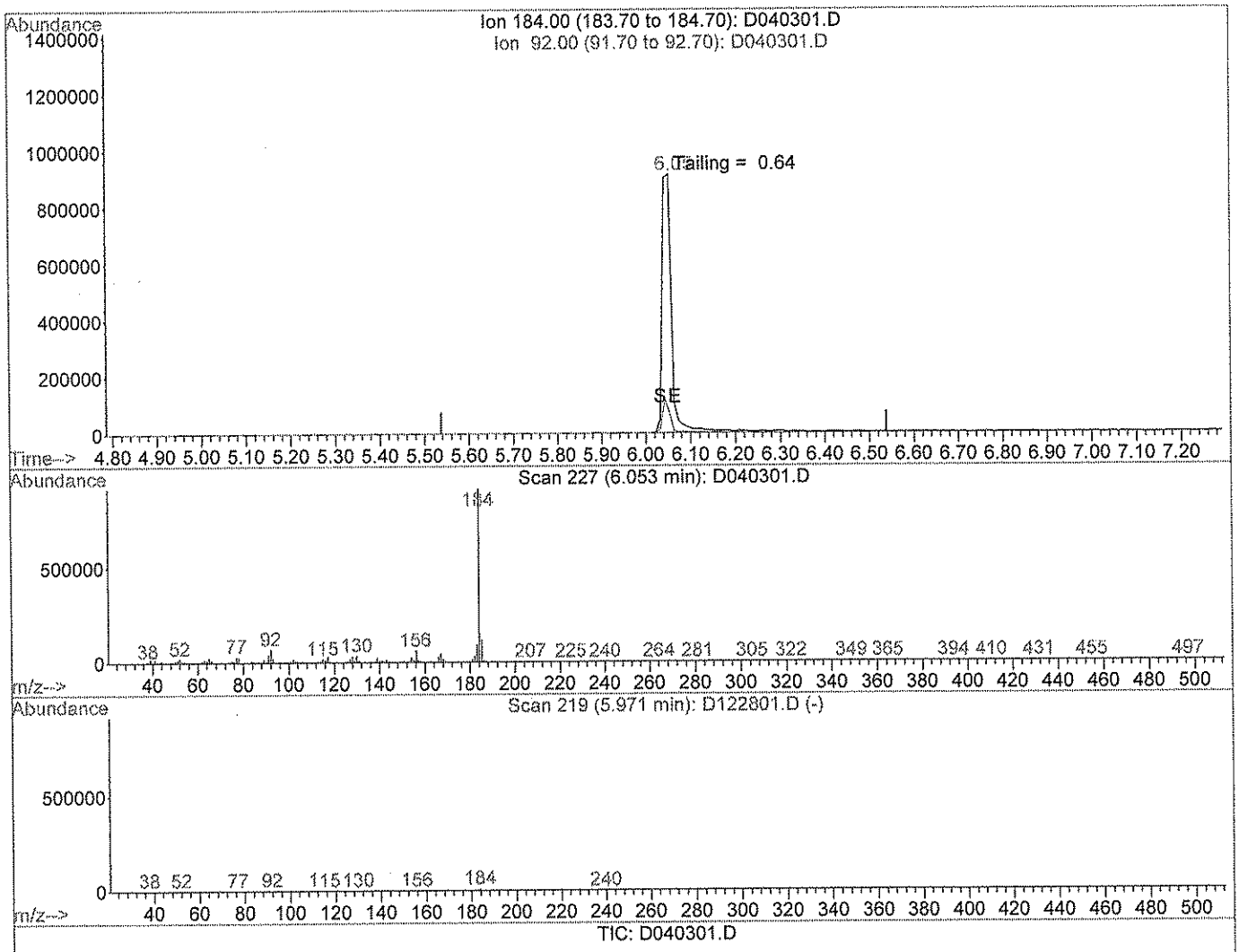

Peak Apex is scan: 120
Average of 3 scans: 119,120,121 minus background scan 113

| Target Mass | Comparison Mass | Lower Limit,% | Upper Limit,% | Relative Abundance,% | Result Pass/Fail |
|---|---|---|---|---|---|
| 51 | 198 | 30 | 60 | 54.1 | PASS |
| 68 | 69 | 0 | 2 | 0.1 | PASS |
| 69 | 198 | 0 | 100 | 71.7 | PASS |
| 70 | 69 | 0 | 2 | 0.7 | PASS |
| 127 | 198 | 40 | 60 | 48.9 | PASS |
| 197 | 198 | 0 | 1 | 0.0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | PASS |
| 199 | 198 | 5 | 9 | 6.3 | PASS |
| 275 | 198 | 10 | 30 | 21.8 | PASS |
| 365 | 198 | 1 | 100 | 2.2 | PASS |
| 441 | 443 | >0 | 100 | 74.0 | PASS |
| 442 | 198 | 40 | 100 | 59.5 | PASS |
| 443 | 442 | 17 | 23 | 20.4 | PASS |

Data File : C:\HPCHEM\1\DATA\D040308\D040301.D
Acq On : 3 Apr 2008 7:35 pm
Sample : ,tune,dftpp tune,1,
Misc : dftpp
MS Integration Params: rteint.p
Quant Time: Apr 3 19:51 2008

Vial: 1
Operator: mills
Inst : SVOA 4
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Thu Apr 03 19:51:44 2008
Response via : Single Level Calibration




(3) BENZIDINE

6.05min 32.60

response 1323935

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100 | 100 |
| 92.00 | 12.20 | 10.63 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

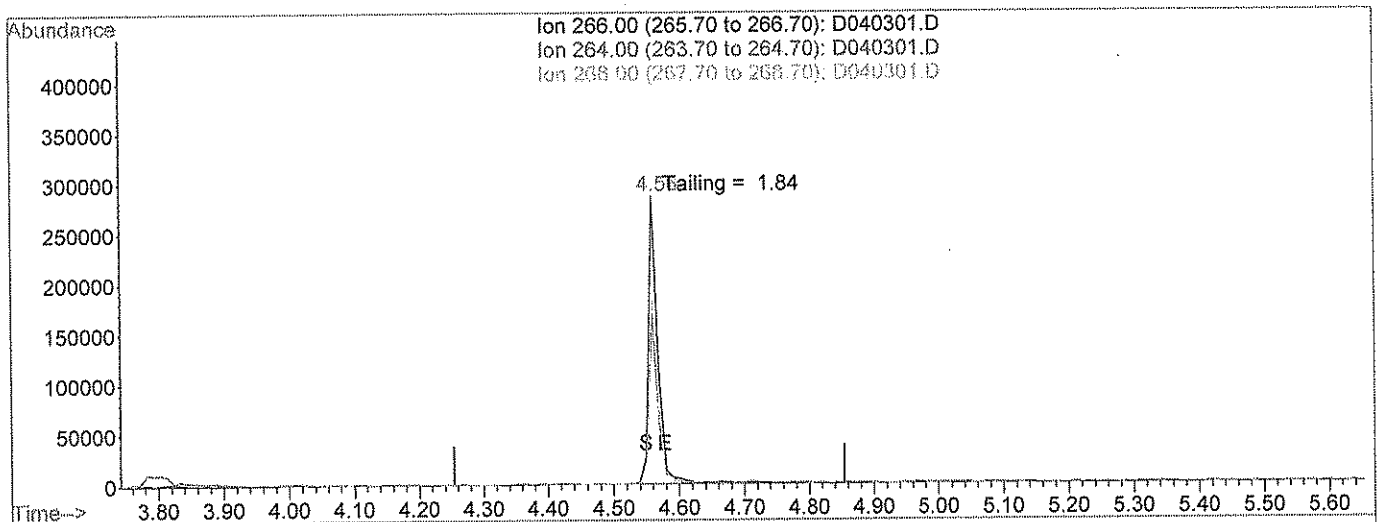
Quantitation Report (Qedit)

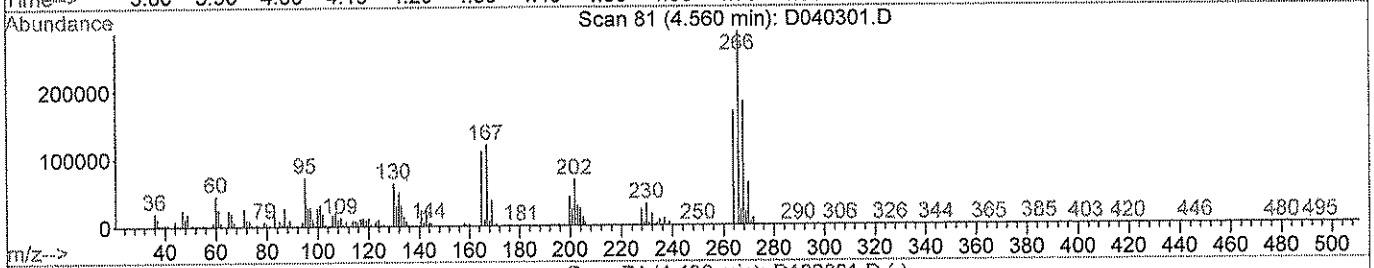
Data File : C:\HPCHEM\1\DATA\D040308\D040301.D
Acq On : 3 Apr 2008 7:35 pm
Sample : ,tune,dftpp tune,1,
Misc : dftpp
MS Integration Params: rteint.p
Quant Time: Apr 3 19:51 2008

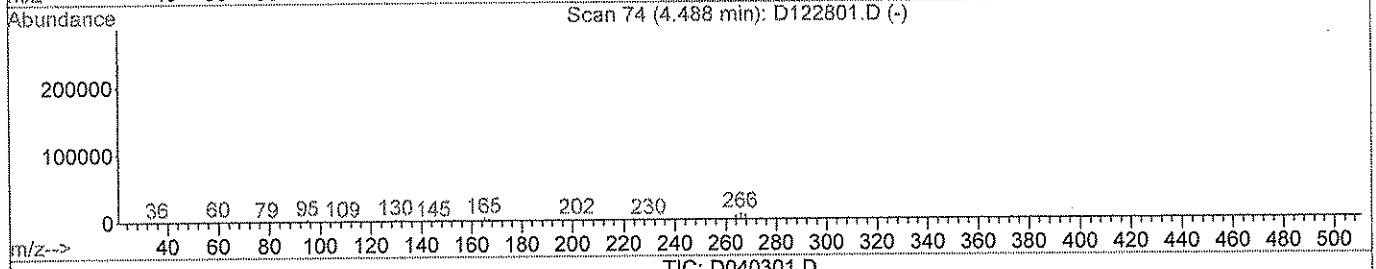
Vial: 1
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Thu Apr 03 19:51:44 2008
Response via : Single Level Calibration




TIC: D040301.D

(1) PENTACHLOROPHENOL

4.56min 27.98

response 276148

| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 59.04 |
| 268.00 | 64.60 | 64.13 |
| 0.00 | 0.00 | 0.00 |

# INITIAL CALIBRATION RAW DATA

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration

Avg =10%

Calibration Files
1.0 =D032802.D 5.0 =D032803.D 10 =D032804.D
20 =D032805.D 50 =D032806.D 80 =D032807.D

100 = D032808 120 = D032808

| | | Compound | 1.0 | 5.0 | 10 | 20 | 50 | 80 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | 1,4-Dichlorobenzene-d | ISTD | | | | | | | |
| 2) | | Pyridine | | | 1.426 | 1.521 | 1.450 | 1.318 | 1.414 | 4.90 |
| 3) | | n-Nitrosodimethylam | | | 0.941 | 0.810 | 0.936 | 0.889 | 0.894 | 5.28 |
| 4) | S | 2-Fluorophenol | | | 1.246 | 1.207 | 1.295 | 1.223 | 1.240 | 2.68 |
| 5) | S | Phenol-d5 | | | 1.566 | 1.550 | 1.684 | 1.663 | 1.640 | 3.92 |
| 6) | T,C | Phenol | | | 1.434 | 1.463 | 1.581 | 1.549 | 1.556 | 6.04 |
| 7) | | Aniline | | | 1.727 | 1.679 | 1.744 | 1.785 | 1.707 | 4.32 |
| 8) | T | bis(2-Chloroethyl)e | | | 1.239 | 1.158 | 1.341 | 1.157 | 1.298 | 11.53 |
| 9) | T | 2-Chlorophenol | | | 1.325 | 1.275 | 1.343 | 1.209 | 1.245 | 6.58 |
| 10) | T | 1,3-Dichlorobenzene | | | 1.533 | 1.510 | 1.467 | 1.325 | 1.399 | 8.56 |
| 11) | T,C | 1,4-Dichlorobenzene | | | 1.547 | 1.500 | 1.502 | 1.317 | 1.397 | 9.57 |
| 12) | T | 1,2-Dichlorobenzene | | | 1.479 | 1.455 | 1.431 | 1.251 | 1.318 | 11.89 |
| 13) | | Benzyl alcohol | | | 0.720 | 0.747 | 0.807 | 0.770 | 0.757 | 3.84 |
| 14) | T | bis(2-chloroisoprop | | | 2.567 | 2.451 | 2.564 | 2.436 | 2.495 | 2.36 |
| 15) | | 2-Methylphenol | | | 1.065 | 1.049 | 1.134 | 1.078 | 1.092 | 3.00 |
| 16) | T | Hexachloroethane | | | 0.775 | 0.735 | 0.767 | 0.702 | 0.723 | 5.93 |
| 17) | T,P | N-Nitrosodi-n-propy | | | 0.986 | 0.914 | 0.954 | 0.876 | 0.909 | 5.77 |
| 18) | | 3/4-Methylphenol | | | 1.067 | 1.060 | 1.144 | 1.116 | 1.102 | 2.97 |
| 19) | I | Naphthalene-d8 | ISTD | | | | | | | |
| 20) | S | Nitrobenzene-d5 | 0.429 | 0.532 | 0.513 | 0.496 | 0.498 | 0.470 | 0.481 | 7.21 |
| 21) | T | Nitrobenzene | | | 0.492 | 0.452 | 0.458 | 0.422 | 0.440 | 7.62 |
| 22) | | Acetophenone | | | 0.599 | 0.586 | 0.597 | 0.555 | 0.568 | 5.56 |
| 23) | T | Isophorone | | | 0.876 | 0.814 | 0.833 | 0.816 | 0.827 | 3.05 |
| 24) | T,C | 2-Nitrophenol | | | 0.237 | 0.238 | 0.244 | 0.239 | 0.242 | 1.78 |
| 25) | T | 2,4-Dimethylphenol | | | 0.401 | 0.391 | 0.427 | 0.417 | 0.408 | 3.04 |
| 26) | T | bis(2-Chloroethoxy) | | | 0.491 | 0.482 | 0.515 | 0.501 | 0.492 | 3.28 |
| 27) | T,C | 2,4-Dichlorophenol | | | 0.355 | 0.332 | 0.363 | 0.344 | 0.345 | 3.39 |
| 28) | | Benzoic acid | | | 0.139 | 0.178 | 0.224 | 0.233 | 0.203 | 18.41 |
| 29) | T | 1,2,4-Trichlorobenz | | | 0.384 | 0.372 | 0.374 | 0.345 | 0.355 | 7.16 |
| 30) | T | Naphthalene | 0.942 | 1.019 | 1.032 | 0.953 | 0.965 | 0.892 | 0.937 | 7.59 |
| 31) | | 2,6-Dichlorophenol | | | 0.336 | 0.333 | 0.340 | 0.293 | 0.313 | 8.32 |
| 32) | | 4-Chloroaniline | | | 0.437 | 0.422 | 0.419 | 0.383 | 0.404 | 6.87 |
| 33) | T,C | Hexachlorobutadiene | | | 0.256 | 0.237 | 0.229 | 0.204 | 0.217 | 13.18 |
| 34) | T,C | 4-Chloro-3-methylph | | | 0.336 | 0.322 | 0.339 | 0.342 | 0.333 | 2.67 |
| 35) | | 2-Methylnaphthalene | | | 0.688 | 0.619 | 0.625 | 0.580 | 0.599 | 9.47 |
| 36) | I | Acenaphthene-d10 | ISTD | | | | | | | |
| 37) | P | Hexachlorocyclopent | | | 0.392 | 0.387 | 0.291 | 0.261 | 0.316 | 18.50 |
| 38) | | 2,4,5-Trichlorophen | | | 0.417 | 0.485 | 0.510 | 0.469 | 0.457 | 8.00 |
| 39) | T,C | 2,4,6-Trichlorophen | | | 0.456 | 0.431 | 0.461 | 0.444 | 0.455 | 3.65 |
| 40) | S | 2-Fluorobiphenyl | 1.175 | 1.392 | 1.406 | 1.348 | 1.328 | 1.162 | 1.254 | 10.18 |
| 41) | T | 2-Chloronaphthalene | | | 1.548 | 1.634 | 1.643 | 1.566 | 1.520 | 9.21 |
| 42) | | 2-Nitroaniline | | | 0.483 | 0.502 | 0.532 | 0.501 | 0.504 | 3.55 |
| 43) | T | Acenaphthylene | 1.658 | 2.042 | 1.940 | 1.889 | 1.893 | 1.650 | 1.791 | 9.33 |
| 44) | T | Dimethyl phthalate | | | 1.556 | 1.546 | 1.550 | 1.480 | 1.512 | 2.80 |
| 45) | T | 2,6-Dinitrotoluene | | | 0.324 | 0.357 | 0.391 | 0.358 | 0.359 | 6.52 |
| 46) | | 3-Nitroaniline | | | 0.401 | 0.378 | 0.401 | 0.389 | 0.392 | 2.19 |
| 47) | T,C | Acenaphthene | 0.998 | 1.173 | 1.160 | 1.103 | 1.088 | 0.939 | 1.036 | 10.50 |
| 48) | T,P | 2,4-Dinitrophenol | | | 0.156 | 0.174 | 0.230 | 0.238 | 0.219 | 20.05 |
| 49) | | Dibenzofuran | | | 1.680 | 1.606 | 1.497 | 1.319 | 1.457 | 11.04 |
| 50) | T,P | 4-Nitrophenol | | | 0.237 | 0.293 | 0.324 | 0.295 | 0.278 | 11.43 |

A/B/H/V

3/28/08

(#) = Out of Range ### Number of calibration levels exceeded format ###

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration

Calibration Files
1.0 =D032802.D 5.0 =D032803.D 10 =D032804.D
20 =D032805.D 50 =D032806.D 80 =D032807.D

| | | Compound | 1.0 | 5.0 | 10 | 20 | 50 | 80 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 51) | T | 2,4-Dinitrotoluene | | | 0.439 | 0.459 | 0.436 | 0.416 | 0.433 | 4.02 |
| 52) | T | Fluorene | 1.121 | 1.152 | 1.241 | 1.151 | 1.047 | 0.845 | 1.014 | 18.38 |
| 53) | T | 4-Chlorophenyl phen | | | 0.571 | 0.560 | 0.530 | 0.435 | 0.474 | 19.17 |
| 54) | T | Diethyl phthalate | | | 1.772 | 1.645 | 1.559 | 1.474 | 1.544 | 9.41 |
| 55) | | 4-Nitroaniline | | | 0.397 | 0.381 | 0.375 | 0.383 | 0.380 | 2.67 |
| 56) | I | Phenanthrene-d10 | ---------- | | ISTD | ---------- | | | | |
| 57) | T | 4,6-Dinitro-2-methy | | | 0.176 | 0.183 | 0.210 | 0.217 | 0.202 | 8.99 |
| 58) | C | n-Nitrosodiphenylam | | | 1.105 | 1.175 | 1.173 | 1.015 | 1.047 | 11.83 |
| 59) | | 1,2-diphenyl-Hydraz | | | 1.155 | 1.145 | 1.172 | 1.018 | 1.065 | 9.82 |
| 60) | S | 2,4,6-Tribromopheno | | | 0.228 | 0.249 | 0.248 | 0.219 | 0.225 | 9.50 |
| 61) | T | 4-Bromophenyl pheny | | | 0.269 | 0.280 | 0.269 | 0.237 | 0.246 | 12.79 |
| 62) | T | Hexachlorobenzene | | | 0.364 | 0.372 | 0.365 | 0.309 | 0.328 | 13.54 |
| 63) | T,C | Pentachlorophenol | | | 0.207 | 0.214 | 0.211 | 0.180 | 0.187 | 14.77 |
| 64) | T | Phenanthrene | 1.113 | 1.227 | 1.223 | 1.202 | 1.295 | 1.130 | 1.147 | 9.74 |
| 65) | T | Anthracene | 1.140 | 1.286 | 1.239 | 1.209 | 1.331 | 1.194 | 1.177 | 10.18 |
| 66) | | Carbazole | | | 1.131 | 1.248 | 1.867 | 1.705 | 1.339 | 26.79 |
| 67) | T | Di-n-butyl phthalat | | | 2.104 | 2.107 | 2.035 | 1.785 | 1.851 | 14.68 |
| 68) | T,C | Fluoranthene | 0.919 | 1.243 | 1.215 | 1.243 | 1.246 | 1.143 | 1.115 | 13.04 |
| 69) | I | Chrysene-d12 | ---------- | | ISTD | ---------- | | | | |
| 70) | | Benzidine | | | 0.485 | 0.471 | 0.314 | 0.357 | 0.420 | 16.74 |
| 71) | T | Pyrene | 1.196 | 1.551 | 1.577 | 1.441 | 1.566 | 1.454 | 1.449 | 9.04 |
| 72) | S | Terphenyl-d14 | 0.788 | 0.950 | 0.999 | 0.944 | 0.911 | 0.835 | 0.875 | 10.28 |
| 73) | T | Butyl benzyl phthal | | | 1.173 | 1.087 | 1.137 | 1.017 | 1.048 | 9.74 |
| 74) | T | Benzo[a]anthracene | 0.998 | 1.173 | 1.180 | 1.163 | 1.128 | 1.157 | 1.113 | 6.62 |
| 75) | T | 3,3'-Dichlorobenzid | | | 0.449 | 0.476 | 0.482 | 0.409 | 0.411 | 17.97 |
| 76) | T | Chrysene | 1.135 | 1.165 | 1.228 | 1.066 | 1.067 | 1.050 | 1.076 | 9.20 |
| 77) | T | bis(2-Ethylhexyl)ph | | | 1.566 | 1.465 | 1.397 | 1.069 | 1.209 | 25.27 |
| 78) | I | Perylene-d12 | ---------- | | ISTD | ---------- | | | | |
| 79) | T,C | Di-n-octyl phthalat | | | 2.972 | 3.012 | 2.906 | 2.985 | 3.107 | 7.58 |
| 80) | T | Benzo[b]fluoranthen | 1.535 | 1.889 | 1.556 | 1.924 | 1.752 | 1.353 | 1.662 | 11.62 |
| 81) | T | Benzo[k]fluoranthen | 1.413 | 1.844 | 1.251 | 0.825 | 0.716 | 1.082 | 1.120 | 33.48 |
| 82) | T,C | Benzo[a]pyrene | 1.227 | 1.815 | 1.426 | 1.318 | 1.211 | 1.129 | 1.305 | 17.51 |
| 83) | T | Indeno[1,2,3cd]pyre | 0.954 | 1.264 | 1.061 | 1.032 | 0.954 | 0.782 | 0.943 | 19.05 |
| 84) | T | Dibenz[a,h]anthrace | 0.640 | 0.910 | 0.454 | 0.492 | 0.479 | 0.402 | 0.523 | 33.40 |
| 85) | T | Benzo[g,h,i]perylen | 0.867 | 1.074 | 0.856 | 0.879 | 0.799 | 0.621 | 0.783 | 22.28 |

3/28/08

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032808\D032802.D Vial: 2
Acq On : 28 Mar 2008 4:44 pm Operator: mills
Sample : ,ical,pna ical 1.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:05 2008 Quant Results File: SVOA0328.RES

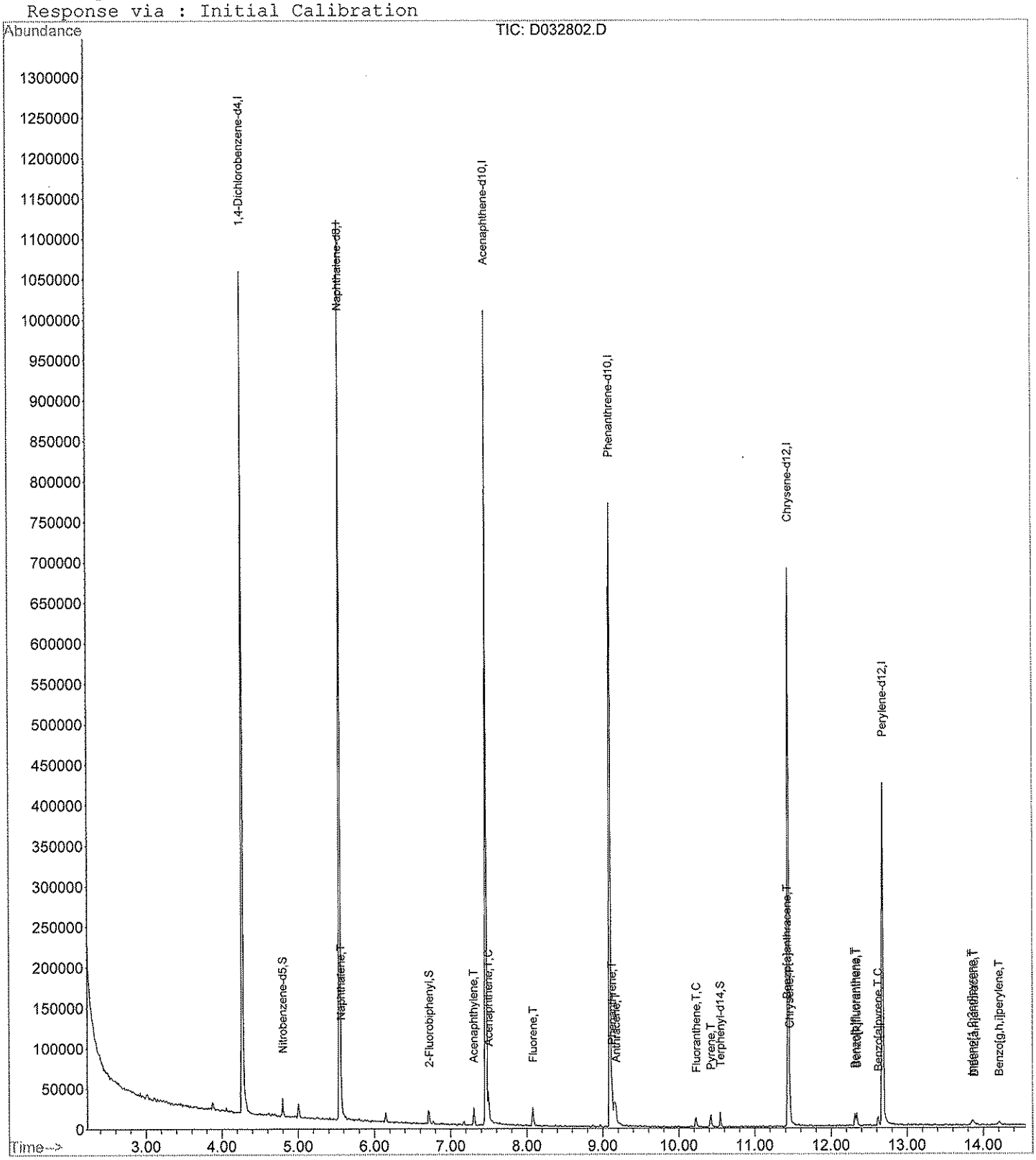
Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:03:39 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 175134 | 40.00 | ug/ml | -0.01 |
| 19) Naphthalene-d8 | 5.54 | 136 | 524133 | 40.00 | ug/ml | -0.01 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 252469 | 40.00 | ug/ml | -0.01 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 328748 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 291217 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 191401 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 0.00 | 112 | 0 | 0.00 | ug/ml | |
| 5) Phenol-d5 | 0.00 | 99 | 0 | 0.00 | ug/ml | |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 5623 | 0.89 | ug/ml | -0.01 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 7414 | 0.94 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 0.00 | 330 | 0 | 0.00 | ug/ml | |
| 72) Terphenyl-d14 | 10.55 | 244 | 5737 | 0.90 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 30) Naphthalene | 5.57 | 128 | 12338 | 1.02 | ug/ml | 99 |
| 43) Acenaphthylene | 7.30 | 152 | 10465 | 0.94 | ug/ml | 97 |
| 47) Acenaphthene | 7.50 | 153 | 6301 | 0.98 | ug/ml | 97 |
| 52) Fluorene | 8.08 | 166 | 7073 | 1.15 | ug/ml | 86 |
| 64) Phenanthrene | 9.12 | 178 | 9150 | 0.98 | ug/ml | 90 |
| 65) Anthracene | 9.18 | 178 | 9373 | 0.98 | ug/ml | 97 |
| 68) Fluoranthene | 10.23 | 202 | 7555 | 0.82 | ug/ml# | 86 |
| 71) Pyrene | 10.42 | 202 | 8705 | 0.81 | ug/ml# | 77 |
| 74) Benzo[a]anthracene | 11.43 | 228 | 7269 | 0.89 | ug/ml | 96 |
| 76) Chrysene | 11.46 | 228 | 8266 | 1.08 | ug/ml | 93 |
| 80) Benzo[b]fluoranthene | 12.32 | 252 | 7344 | 0.93 | ug/ml | 94 |
| 81) Benzo[k]fluoranthene | 12.34 | 252 | 6759m | 1.49 | ug/ml | |
| 82) Benzo[a]pyrene | 12.62 | 252 | 5872 | 1.00 | ug/ml# | 91 |
| 83) Indeno[1,2,3cd]pyrene | 13.85 | 276 | 4567 | 1.04 | ug/ml# | 84 |
| 84) Dibenz[a,h]anthracene | 13.88 | 278 | 3061 | 1.43 | ug/ml | 86 |
| 85) Benzo[g,h,i]perylene | 14.21 | 276 | 4151 | 1.16 | ug/ml# | 80 |

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

Data File : C:\HPCHEM\1\DATA\D032808\D032802.D Vial: 2
Acq On : 28 Mar 2008 4:44 pm Operator: mills
Sample : ,ical,pna ical 1.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:05 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032803.D Vial: 3
Acq On : 28 Mar 2008 5:10 pm Operator: mills
Sample : ,ical,pna ical 5.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:10 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:06:04 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

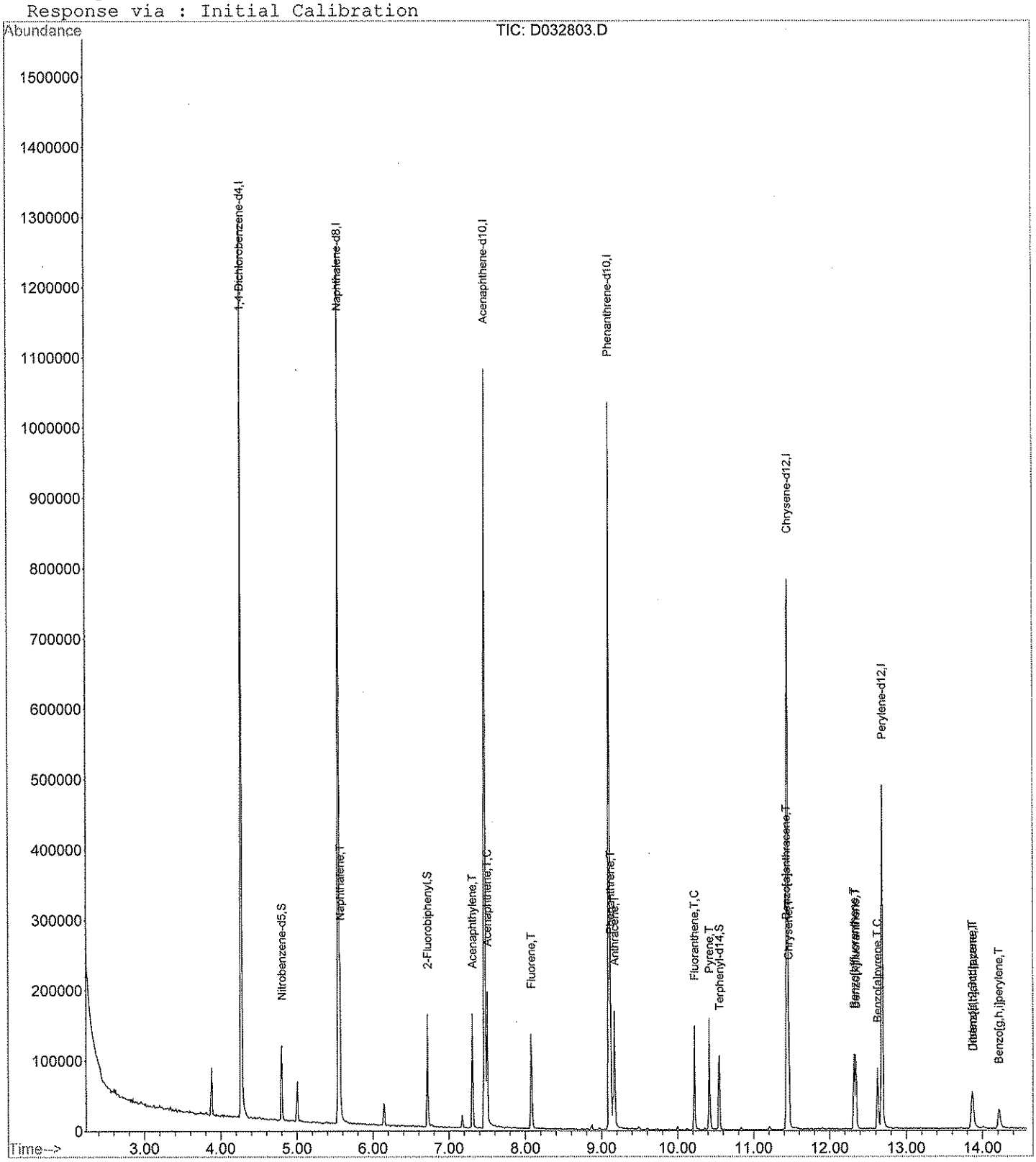
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 185657 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 573855 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 275992 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 382222 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 326457 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.69 | 264 | 203454 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 0.00 | 112 | 0 | 0.00 | ug/ml | |
| 5) Phenol-d5 | 0.00 | 99 | 0 | 0.00 | ug/ml | |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 38138 | 5.61 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 48025 | 5.64 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 0.00 | 330 | 0 | 0.00 | ug/ml | |
| 72) Terphenyl-d14 | 10.55 | 244 | 38773 | 5.50 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 30) Naphthalene | 5.57 | 128 | 73061 | 5.50 | ug/ml | 98 |
| 43) Acenaphthylene | 7.31 | 152 | 70434 | 5.82 | ug/ml | 99 |
| 47) Acenaphthene | 7.50 | 153 | 40466 | 5.77 | ug/ml | 96 |
| 52) Fluorene | 8.08 | 166 | 39736 | 5.79 | ug/ml | 93 |
| 64) Phenanthrene | 9.12 | 178 | 58610 | 5.40 | ug/ml | 98 |
| 65) Anthracene | 9.17 | 178 | 61434 | 5.54 | ug/ml | 98 |
| 68) Fluoranthene | 10.22 | 202 | 59370 | 5.66 | ug/ml | 91 |
| 71) Pyrene | 10.42 | 202 | 63297 | 5.41 | ug/ml | 89 |
| 74) Benzo[a]anthracene | 11.43 | 228 | 47874 | 5.31 | ug/ml | 99 |
| 76) Chrysene | 11.46 | 228 | 47530 | 5.48 | ug/ml | 96 |
| 80) Benzo[b]fluoranthene | 12.32 | 252 | 48036 | 5.80 | ug/ml | 95 |
| 81) Benzo[k]fluoranthene | 12.34 | 252 | 46904 | 9.07 | ug/ml | 96 |
| 82) Benzo[a]pyrene | 12.63 | 252 | 46163 | 7.37 | ug/ml | 97 |
| 83) Indeno[1,2,3cd]pyrene | 13.87 | 276 | 32152 | 6.85 | ug/ml | 91 |
| 84) Dibenz[a,h]anthracene | 13.88 | 278 | 23136m3 | 9.49 | ug/ml | |
| 85) Benzo[g,h,i]perylene | 14.21 | 276 | 27301 | 7.01 | ug/ml | 98 |

(#) = qualifier out of range (m) = manual integration
D032803.D SVOA0328.M Fri Mar 28 21:13:21 2008 SVOA 4 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D032708\D032803.D Vial: 3
Acq On : 28 Mar 2008 5:10 pm Operator: mills
Sample : ,ical,pna ical 5.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:10 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032804.D Vial: 4
Acq On : 28 Mar 2008 5:35 pm Operator: mills
Sample : ,ical,svoa ical 10ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:57 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:56:11 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 126914 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 379233 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 192057 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 260746 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 220183 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.70 | 264 | 187656 | 40.00 | ug/ml | 0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 39526 | 9.62 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 49698 | 9.30 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 48623 | 10.31 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 67523 | 10.59 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 14895 | 9.22 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 55011 | 10.97 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.39 | 79 | 45247 | 9.84 | ug/ml | 94 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 29871 | 10.06 | ug/ml | 95 |
| 6) Phenol | 3.90 | 94 | 45486 | 9.07 | ug/ml | 81 |
| 7) Aniline | 3.97 | 93 | 54788 | 9.90 | ug/ml | 98 |
| 8) bis(2-Chloroethyl)ether | 4.01 | 93 | 39321 | 9.24 | ug/ml | 99 |
| 9) 2-Chlorophenol | 4.07 | 128 | 42054 | 9.87 | ug/ml | 89 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 48645 | 10.45 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 49081 | 10.30 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 46919 | 10.34 | ug/ml | 97 |
| 13) Benzyl alcohol | 4.38 | 108 | 22841 | 8.93 | ug/ml | 86 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 81459 | 10.01 | ug/ml | 97 |
| 15) 2-Methylphenol | 4.47 | 108 | 33800 | 9.39 | ug/ml | 98 |
| 16) Hexachloroethane | 4.76 | 117 | 24583 | 10.10 | ug/ml | 82 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 31291 | 10.33 | ug/ml | 94 |
| 18) 3/4-Methylphenol | 4.62 | 108 | 33846 | 9.32 | ug/ml | 95 |
| 21) Nitrobenzene | 4.82 | 77 | 46629 | 10.75 | ug/ml | 90 |
| 22) Acetophenone | 4.65 | 105 | 56819 | 10.04 | ug/ml | 88 |
| 23) Isophorone | 5.07 | 82 | 83015 | 10.52 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.15 | 139 | 22481 | 9.73 | ug/ml | 97 |
| 25) 2,4-Dimethylphenol | 5.17 | 107 | 38009 | 9.40 | ug/ml | 97 |
| 26) bis(2-Chloroethoxy)methane | 5.28 | 93 | 46585 | 9.53 | ug/ml | 96 |
| 27) 2,4-Dichlorophenol | 5.38 | 162 | 33655 | 9.79 | ug/ml | 96 |
| 28) Benzoic acid | 5.23 | 122 | 13148m2 | 6.18 | ug/ml | |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 36452 | 10.28 | ug/ml | 95 |
| 30) Naphthalene | 5.57 | 128 | 97813 | 10.69 | ug/ml | 98 |
| 31) 2,6-Dichlorophenol | 5.63 | 162 | 31859 | 9.87 | ug/ml | 80 |
| 32) 4-Chloroaniline | 5.62 | 127 | 41410 | 10.42 | ug/ml | 98 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 24276 | 11.16 | ug/ml | 93 |
| 34) 4-Chloro-3-methylphenol | 6.13 | 107 | 31855 | 9.91 | ug/ml | 98 |
| 35) 2-Methylnaphthalene | 6.31 | 142 | 65239 | 11.01 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 18831 | 13.50 | ug/ml | 98 |
| 38) 2,4,5-Trichlorophenol | 6.65 | 196 | 20026 | 8.18 | ug/ml | 95 |
| 39) 2,4,6-Trichlorophenol | 6.62 | 196 | 21871 | 9.88 | ug/ml | 99 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 74341 | 9.43 | ug/ml | 99 |
| 42) 2-Nitroaniline | 6.96 | 65 | 23204 | 9.08 | ug/ml | 96 |

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

D032804.D SVOA0328.M Fri Mar 28 21:13:22 2008 SVOA 4 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032804.D Vial: 4
Acq On : 28 Mar 2008 5:35 pm Operator: mills
Sample : ,ical,svoa ical 10ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:57 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:56:11 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

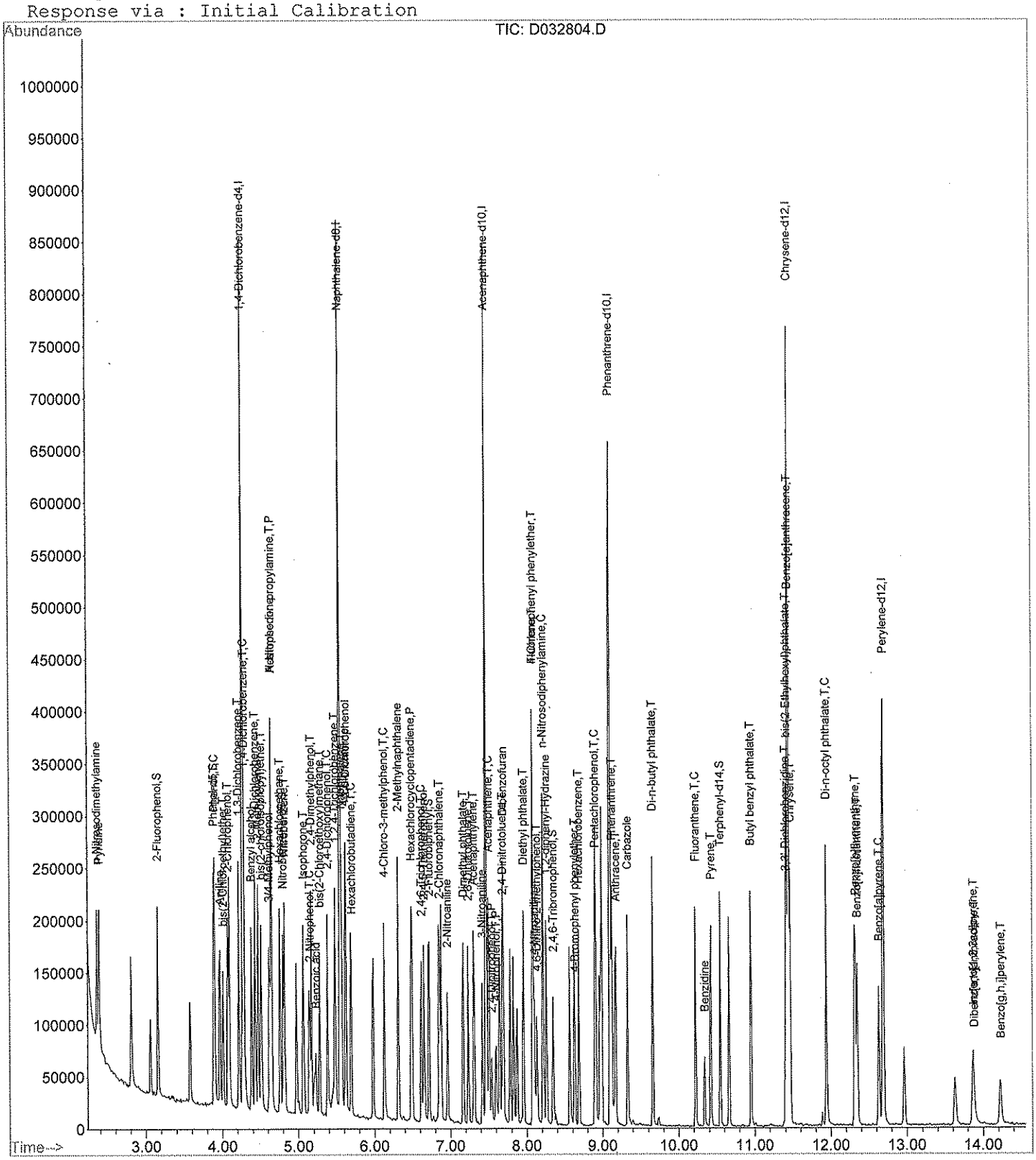
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.31 | 152 | 93152 | 10.25 | ug/ml | 98 |
| 44) | Dimethyl phthalate | 7.17 | 163 | 74688 | 10.04 | ug/ml | 98 |
| 45) | 2,6-Dinitrotoluene | 7.23 | 165 | 15560 | 8.28 | ug/ml# | 57 |
| 46) | 3-Nitroaniline | 7.42 | 138 | 19257 | 10.01 | ug/ml | 95 |
| 47) | Acenaphthene | 7.50 | 153 | 55688 | 10.66 | ug/ml | 97 |
| 48) | 2,4-Dinitrophenol | 7.54 | 184 | 7495 | 6.78 | ug/ml | 93 |
| 49) | Dibenzofuran | 7.69 | 168 | 80640 | 11.22 | ug/ml | 83 |
| 50) | 4-Nitrophenol | 7.60 | 109 | 11396 | 7.33 | ug/ml# | 77 |
| 51) | 2,4-Dinitrotoluene | 7.68 | 165 | 21075 | 10.07 | ug/ml | 81 |
| 52) | Fluorene | 8.08 | 166 | 59569 | 11.85 | ug/ml | 99 |
| 53) | 4-Chlorophenyl phenylether | 8.08 | 204 | 27395 | 10.76 | ug/ml | 88 |
| 54) | Diethyl phthalate | 7.96 | 149 | 85070 | 11.37 | ug/ml | 95 |
| 55) | 4-Nitroaniline | 8.10 | 138 | 19077 | 10.61 | ug/ml | 92 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.13 | 198 | 11445 | 8.36 | ug/ml | 95 |
| 58) | n-Nitrosodiphenylamine | 8.22 | 169 | 72054 | 9.42 | ug/ml | 94 |
| 59) | 1,2-diphenyl-Hydrazine | 8.26 | 77 | 75280 | 9.85 | ug/ml# | 87 |
| 61) | 4-Bromophenyl phenylether | 8.63 | 248 | 17520 | 9.99 | ug/ml | 99 |
| 62) | Hexachlorobenzene | 8.69 | 284 | 23729 | 9.99 | ug/ml# | 81 |
| 63) | Pentachlorophenol | 8.90 | 266 | 13499 | 9.83 | ug/ml | 99 |
| 64) | Phenanthrene | 9.13 | 178 | 79729 | 9.45 | ug/ml | 97 |
| 65) | Anthracene | 9.18 | 178 | 80736 | 9.30 | ug/ml | 100 |
| 66) | Carbazole | 9.33 | 167 | 73738 | 6.06 | ug/ml | 97 |
| 67) | Di-n-butyl phthalate | 9.66 | 149 | 137153 | 10.34 | ug/ml | 99 |
| 68) | Fluoranthene | 10.22 | 202 | 79183 | 9.75 | ug/ml | 93 |
| 70) | Benzidine | 10.34 | 184 | 26699 | 15.43 | ug/ml# | 96 |
| 71) | Pyrene | 10.42 | 202 | 86790m2 | 10.07 | ug/ml | |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 64548 | 10.31 | ug/ml# | 79 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 64976 | 10.46 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.41 | 252 | 24727 | 9.32 | ug/ml | 91 |
| 76) | Chrysene | 11.47 | 228 | 67595 | 11.51 | ug/ml | 97 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 86201 | 11.21 | ug/ml | 98 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 139416 | 10.23 | ug/ml | 100 |
| 80) | Benzo[b]fluoranthene | 12.33 | 252 | 72995 | 8.88 | ug/ml | 95 |
| 81) | Benzo[k]fluoranthene | 12.35 | 252 | 58668 | 17.47 | ug/ml | 97 |
| 82) | Benzo[a]pyrene | 12.63 | 252 | 66916 | 11.77 | ug/ml | 95 |
| 83) | Indeno[1,2,3cd]pyrene | 13.87 | 276 | 49791 | 11.12 | ug/ml | 91 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 21317 | 9.48 | ug/ml | 98 |
| 85) | Benzo[g,h,i]perylene | 14.23 | 276 | 40178 | 10.72 | ug/ml | 92 |

3-28-08

(#) = qualifier out of range (m) = manual integration
D032804.D SVOA0328.M Fri Mar 28 21:13:23 2008 SVOA 4 Page 2

Data File : C:\HPCHEM\1\DATA\D032708\D032804.D Vial: 4
Acq On : 28 Mar 2008 5:35 pm Operator: mills
Sample : ,ical,svoa ical 10ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:57 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032805.D Vial: 5
Acq On : 28 Mar 2008 6:02 pm Operator: mills
Sample : ,ical,svoa ical 20ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:58 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:57:31 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 126599 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 389056 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 187609 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 239823 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 205821 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.69 | 264 | 165565 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 76421 | 19.01 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 98122 | 19.08 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 96434 | 19.63 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 126492 | 19.72 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 29909 | 20.94 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 97172 | 19.77 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.38 | 79 | 96263 | 21.15 | ug/ml | 99 |
| 3) n-Nitrosodimethylamine | 2.36 | 74 | 51277 | 17.26 | ug/ml | 91 |
| 6) Phenol | 3.90 | 94 | 92613 | 19.41 | ug/ml | 88 |
| 7) Aniline | 3.96 | 93 | 106258 | 19.35 | ug/ml | 90 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 73313 | 17.96 | ug/ml | 97 |
| 9) 2-Chlorophenol | 4.08 | 128 | 80724 | 19.12 | ug/ml | 88 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 95585 | 20.13 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 94951 | 19.68 | ug/ml | 97 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 92119 | 20.01 | ug/ml | 97 |
| 13) Benzyl alcohol | 4.38 | 108 | 47282 | 19.57 | ug/ml | 84 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 155158 | 19.11 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.48 | 108 | 66391 | 19.08 | ug/ml | 96 |
| 16) Hexachloroethane | 4.76 | 117 | 46519 | 19.06 | ug/ml | 96 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 57880 | 18.85 | ug/ml | 94 |
| 18) 3/4-Methylphenol | 4.63 | 108 | 67089 | 19.17 | ug/ml | 98 |
| 21) Nitrobenzene | 4.82 | 77 | 87882 | 19.03 | ug/ml | 94 |
| 22) Acetophenone | 4.65 | 105 | 113948 | 19.58 | ug/ml | 94 |
| 23) Isophorone | 5.07 | 82 | 158400 | 19.07 | ug/ml | 99 |
| 24) 2-Nitrophenol | 5.14 | 139 | 46362 | 19.83 | ug/ml | 84 |
| 25) 2,4-Dimethylphenol | 5.17 | 107 | 76130 | 18.92 | ug/ml | 99 |
| 26) bis(2-Chloroethoxy)methane | 5.28 | 93 | 93780 | 19.16 | ug/ml | 98 |
| 27) 2,4-Dichlorophenol | 5.39 | 162 | 64644 | 18.52 | ug/ml | 94 |
| 28) Benzoic acid | 5.25 | 122 | 34536 | 19.56 | ug/ml | 92 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 72413 | 19.63 | ug/ml | 99 |
| 30) Naphthalene | 5.57 | 128 | 185369 | 19.09 | ug/ml | 100 |
| 31) 2,6-Dichlorophenol | 5.63 | 162 | 64794 | 19.70 | ug/ml | 90 |
| 32) 4-Chloroaniline | 5.62 | 127 | 82163 | 19.74 | ug/ml | 100 |
| 33) Hexachlorobutadiene | 5.69 | 225 | 46072 | 19.51 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.13 | 107 | 62708 | 19.10 | ug/ml | 97 |
| 35) 2-Methylnaphthalene | 6.32 | 142 | 120346 | 18.84 | ug/ml | 100 |
| 37) Hexachlorocyclopentadiene | 6.48 | 237 | 36335 | 22.69 | ug/ml | 95 |
| 38) 2,4,5-Trichlorophenol | 6.65 | 196 | 45469 | 20.92 | ug/ml | 95 |
| 39) 2,4,6-Trichlorophenol | 6.62 | 196 | 40439 | 18.82 | ug/ml | 95 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 153232 | 20.48 | ug/ml | 96 |
| 42) 2-Nitroaniline | 6.96 | 65 | 47115 | 19.79 | ug/ml | 93 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032805.D Vial: 5
Acq On : 28 Mar 2008 6:02 pm Operator: mills
Sample : ,ical,svoa ical 20ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:58 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:57:31 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

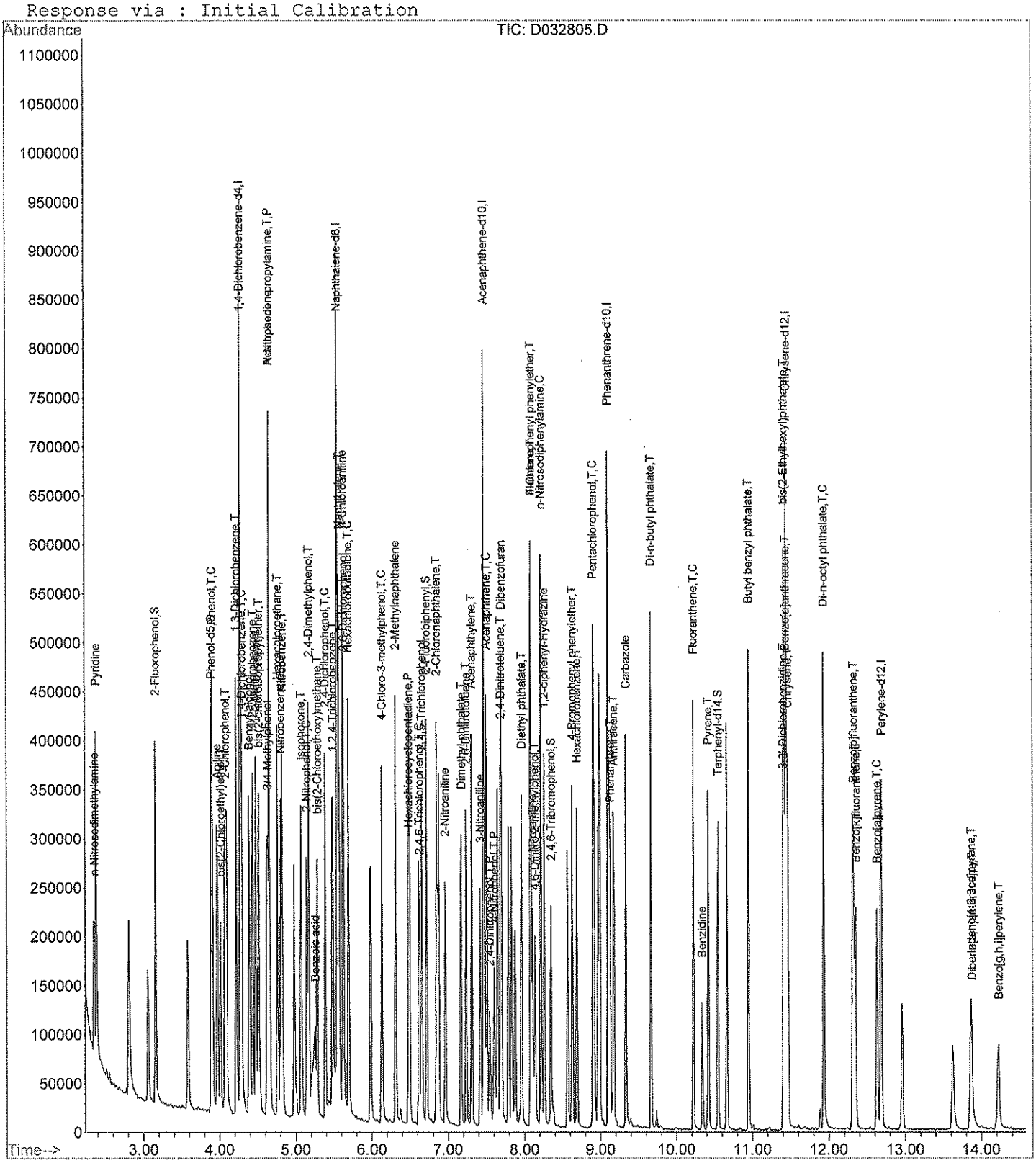
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.31 | 152 | 177182 | 19.71 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.18 | 163 | 144998 | 19.91 | ug/ml | 98 |
| 45) | 2,6-Dinitrotoluene | 7.24 | 165 | 33451 | 19.94 | ug/ml# | 68 |
| 46) | 3-Nitroaniline | 7.42 | 138 | 35458 | 18.86 | ug/ml | 95 |
| 47) | Acenaphthene | 7.50 | 153 | 103498 | 19.63 | ug/ml | 97 |
| 48) | 2,4-Dinitrophenol | 7.54 | 184 | 16344 | 18.04 | ug/ml | 86 |
| 49) | Dibenzofuran | 7.70 | 168 | 150685 | 20.23 | ug/ml | 87 |
| 50) | 4-Nitrophenol | 7.61 | 109 | 27469 | 20.87 | ug/ml | 84 |
| 51) | 2,4-Dinitrotoluene | 7.69 | 165 | 43069 | 21.00 | ug/ml | 89 |
| 52) | Fluorene | 8.09 | 166 | 108006 | 20.13 | ug/ml | 94 |
| 53) | 4-Chlorophenyl phenylether | 8.09 | 204 | 52523 | 20.34 | ug/ml | 95 |
| 54) | Diethyl phthalate | 7.96 | 149 | 154267 | 19.75 | ug/ml | 97 |
| 55) | 4-Nitroaniline | 8.11 | 138 | 35780 | 19.77 | ug/ml | 91 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.14 | 198 | 21918 | 18.96 | ug/ml | 84 |
| 58) | n-Nitrosodiphenylamine | 8.22 | 169 | 140912 | 20.63 | ug/ml | 98 |
| 59) | 1,2-diphenyl-Hydrazine | 8.26 | 77 | 137350 | 19.69 | ug/ml | 92 |
| 61) | 4-Bromophenyl phenylether | 8.63 | 248 | 33619 | 20.85 | ug/ml# | 78 |
| 62) | Hexachlorobenzene | 8.69 | 284 | 44647 | 20.44 | ug/ml# | 83 |
| 63) | Pentachlorophenol | 8.90 | 266 | 25674 | 20.50 | ug/ml | 95 |
| 64) | Phenanthrene | 9.13 | 178 | 144185 | 19.10 | ug/ml | 98 |
| 65) | Anthracene | 9.17 | 178 | 144993 | 18.82 | ug/ml | 98 |
| 66) | Carbazole | 9.33 | 167 | 149693 | 16.65 | ug/ml | 99 |
| 67) | Di-n-butyl phthalate | 9.66 | 149 | 252703 | 20.36 | ug/ml | 99 |
| 68) | Fluoranthene | 10.22 | 202 | 149033 | 20.21 | ug/ml | 88 |
| 70) | Benzidine | 10.34 | 184 | 48518 | 23.59 | ug/ml | 99 |
| 71) | Pyrene | 10.42 | 202 | 148335 | 18.34 | ug/ml | 97 |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 111862 | 18.83 | ug/ml | 89 |
| 74) | Benzo[a]anthracene | 11.43 | 228 | 119692 | 20.15 | ug/ml | 98 |
| 75) | 3,3'-Dichlorobenzidine | 11.40 | 252 | 48974 | 20.45 | ug/ml | 97 |
| 76) | Chrysene | 11.46 | 228 | 109753 | 18.59 | ug/ml | 96 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 150803 | 19.78 | ug/ml | 97 |
| 79) | Di-n-octyl phthalate | 11.93 | 149 | 249371 | 20.50 | ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.32 | 252 | 159283 | 23.27 | ug/ml | 97 |
| 81) | Benzo[k]fluoranthene | 12.35 | 252 | 68304m2 | 16.79 | ug/ml | |
| 82) | Benzo[a]pyrene | 12.63 | 252 | 109126 | 19.99 | ug/ml | 97 |
| 83) | Indeno[1,2,3cd]pyrene | 13.87 | 276 | 85406 | 20.47 | ug/ml | 96 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 40745 | 21.09 | ug/ml | 93 |
| 85) | Benzo[g,h,i]perylene | 14.22 | 276 | 72770 | 21.24 | ug/ml | 96 |

4/3-2008

(#) = qualifier out of range (m) = manual integration
D032805.D SVOA0328.M Fri Mar 28 21:13:25 2008 SVOA 4 Page 2

Data File : C:\HPCHEM\1\DATA\D032708\D032805.D Vial: 5
Acq On : 28 Mar 2008 6:02 pm Operator: mills
Sample : ,ical,svoa ical 20ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:58 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032806.D Vial: 6
Acq On : 28 Mar 2008 6:27 pm Operator: mills
Sample : ,ical,svoa ical 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:55 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:55:01 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 116985 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 367424 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 184189 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 228920 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 181640 | 40.00 | ug/ml | -0.03 |
| 78) Perylene-d12 | 12.68 | 264 | 158702 | 40.00 | ug/ml | -0.03 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 189346 | 48.52 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 246214 | 49.63 | ug/ml | -0.02 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 228496 | 46.85 | ug/ml | -0.02 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 305829 | 52.04 | ug/ml | -0.02 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 70938 | 52.16 | ug/ml | -0.02 |
| 72) Terphenyl-d14 | 10.55 | 244 | 206795 | 40.66 | ug/ml | -0.02 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.37 | 79 | 211984 | 44.02 | ug/ml | 94 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 136901 | 45.94 | ug/ml | 94 |
| 6) Phenol | 3.91 | 94 | 231175 | 48.27 | ug/ml | 90 |
| 7) Aniline | 3.97 | 93 | 255023 | 46.29 | ug/ml | 96 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 196073 | 49.27 | ug/ml | 95 |
| 9) 2-Chlorophenol | 4.08 | 128 | 196361 | 50.57 | ug/ml | 89 |
| 10) 1,3-Dichlorobenzene | 4.23 | 146 | 214571 | 50.87 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 219700 | 52.71 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 209206 | 51.47 | ug/ml | 96 |
| 13) Benzyl alcohol | 4.40 | 108 | 117940 | 49.36 | ug/ml | 98 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 374889 | 44.59 | ug/ml | 100 |
| 15) 2-Methylphenol | 4.48 | 108 | 165817 | 49.80 | ug/ml | 99 |
| 16) Hexachloroethane | 4.77 | 117 | 112199 | 51.42 | ug/ml | 88 |
| 17) N-Nitrosodi-n-propylamine | 4.67 | 70 | 139543 | 50.28 | ug/ml | 97 |
| 18) 3/4-Methylphenol | 4.63 | 108 | 167358 | 49.40 | ug/ml | 99 |
| 21) Nitrobenzene | 4.83 | 77 | 210223 | 49.16 | ug/ml | 92 |
| 22) Acetophenone | 4.66 | 105 | 274287 | 53.20 | ug/ml | 97 |
| 23) Isophorone | 5.07 | 82 | 382380 | 46.32 | ug/ml | 95 |
| 24) 2-Nitrophenol | 5.15 | 139 | 111944 | 50.11 | ug/ml | 81 |
| 25) 2,4-Dimethylphenol | 5.18 | 107 | 195945 | 51.59 | ug/ml | 96 |
| 26) bis(2-Chloroethoxy)methane | 5.29 | 93 | 236688 | 51.80 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.39 | 162 | 166556 | 53.27 | ug/ml | 98 |
| 28) Benzoic acid | 5.31 | 122 | 103018 | 49.56 | ug/ml | 93 |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 171765 | 54.00 | ug/ml | 98 |
| 30) Naphthalene | 5.58 | 128 | 443415 | 49.24 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 156352 | 54.25 | ug/ml | 77 |
| 32) 4-Chloroaniline | 5.63 | 127 | 192526 | 52.06 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 105362 | 54.39 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.14 | 107 | 155777 | 49.86 | ug/ml | 95 |
| 35) 2-Methylnaphthalene | 6.32 | 142 | 287081 | 51.61 | ug/ml | 98 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 66899 | 47.58 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.66 | 196 | 117371 | 54.71 | ug/ml | 98 |
| 39) 2,4,6-Trichlorophenol | 6.63 | 196 | 106134 | 52.10 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 378211 | 58.15 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.98 | 65 | 122514 | 47.98 | ug/ml | 81 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032806.D Vial: 6
Acq On : 28 Mar 2008 6:27 pm Operator: mills
Sample : ,ical,svoa ical 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:55 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:55:01 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

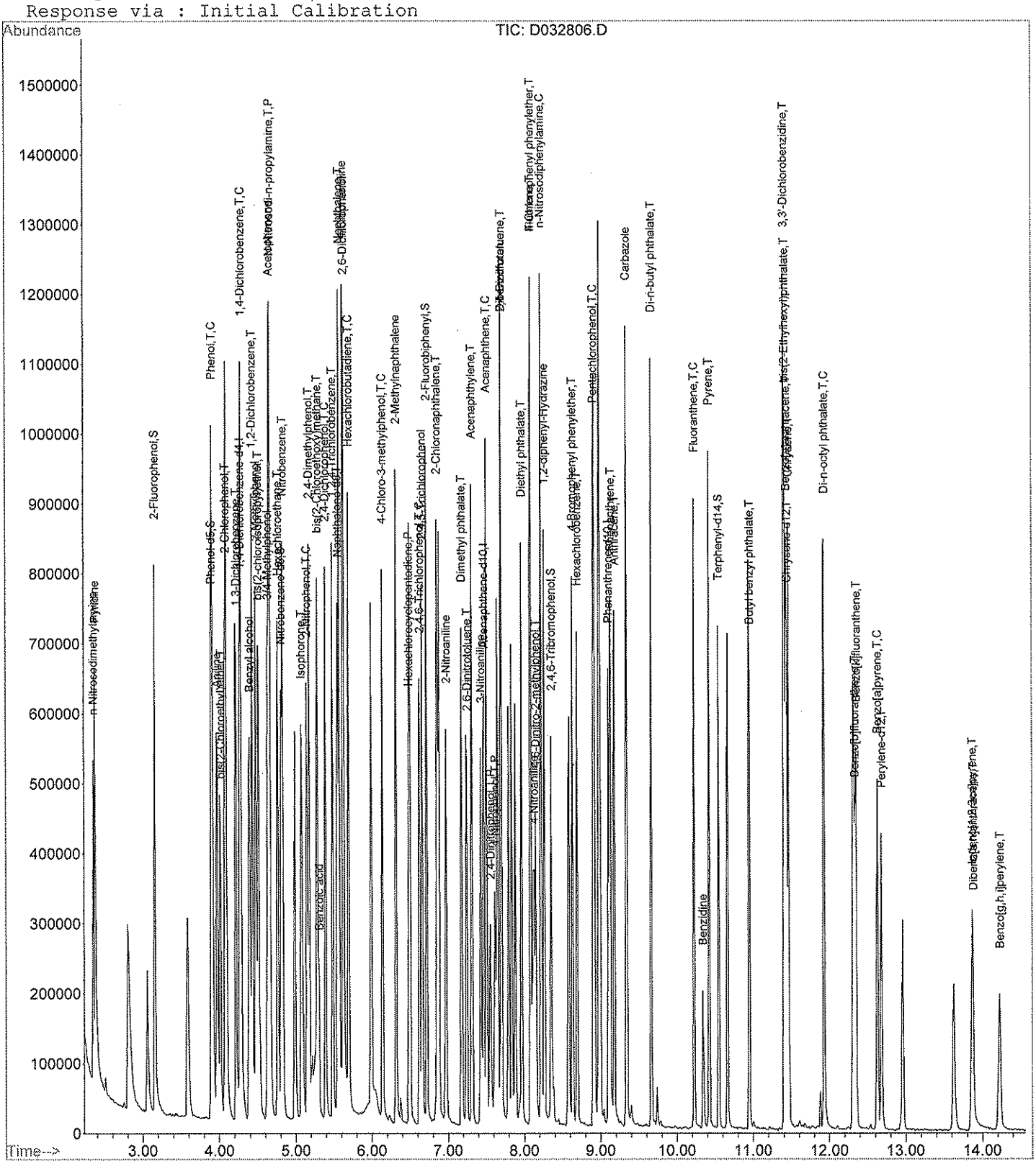
| | Compound | R.T. | QIon | Response | Conc Unit | Qvalue |
|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.31 | 152 | 435904 | 50.46 ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.18 | 163 | 356832 | 50.71 ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.25 | 165 | 90125 | 51.98 ug/ml | 93 |
| 46) | 3-Nitroaniline | 7.44 | 138 | 92258 | 47.69 ug/ml | 97 |
| 47) | Acenaphthene | 7.51 | 153 | 250503 | 50.25 ug/ml | 95 |
| 48) | 2,4-Dinitrophenol | 7.56 | 184 | 53028 | 56.86 ug/ml | 96 |
| 49) | Dibenzofuran | 7.70 | 168 | 344669 | 49.90 ug/ml | 96 |
| 50) | 4-Nitrophenol | 7.62 | 109 | 74578 | 63.61 ug/ml | 86 |
| 51) | 2,4-Dinitrotoluene | 7.70 | 165 | 100317 | 51.77 ug/ml | 96 |
| 52) | Fluorene | 8.09 | 166 | 241001 | 50.50 ug/ml | 98 |
| 53) | 4-Chlorophenyl phenylether | 8.09 | 204 | 122107 | 53.19 ug/ml | 94 |
| 54) | Diethyl phthalate | 7.97 | 149 | 358890 | 49.65 ug/ml | 97 |
| 55) | 4-Nitroaniline | 8.13 | 138 | 86238 | 46.22 ug/ml | 94 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.15 | 198 | 60097 | 55.70 ug/ml | 94 |
| 58) | n-Nitrosodiphenylamine | 8.22 | 169 | 335626 | 53.32 ug/ml | 99 |
| 59) | 1,2-diphenyl-Hydrazine | 8.27 | 77 | 335368 | 49.21 ug/ml | 93 |
| 61) | 4-Bromophenyl phenylether | 8.63 | 248 | 77002 | 49.57 ug/ml | 87 |
| 62) | Hexachlorobenzene | 8.70 | 284 | 104308 | 50.63 ug/ml# | 80 |
| 63) | Pentachlorophenol | 8.91 | 266 | 60303 | 53.14 ug/ml | 97 |
| 64) | Phenanthrene | 9.13 | 178 | 370535 | 55.58 ug/ml | 99 |
| 65) | Anthracene | 9.19 | 178 | 380958 | 54.56 ug/ml | 98 |
| 66) | Carbazole | 9.34 | 167 | 534331 | 70.05 ug/ml | 95 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 582408 | 53.17 ug/ml | 100 |
| 68) | Fluoranthene | 10.23 | 202 | 356449 | 58.81 ug/ml | 94 |
| 70) | Benzidine | 10.34 | 184 | 71377 | 33.03 ug/ml | 98 |
| 71) | Pyrene | 10.42 | 202 | 355665 | 43.86 ug/ml | 91 |
| 73) | Butyl benzyl phthalate | 10.96 | 149 | 258133 | 43.54 ug/ml | 95 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 256150 | 52.67 ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.41 | 252 | 109380 | 51.16 ug/ml | 95 |
| 76) | Chrysene | 11.47 | 228 | 242332 | 53.34 ug/ml | 96 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 317262 | 50.49 ug/ml | 99 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 576393 | 37.16 ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.34 | 252 | 347587 | 42.51 ug/ml | 97 |
| 81) | Benzo[k]fluoranthene | 12.36 | 252 | 141976 | 24.03 ug/ml | 96 |
| 82) | Benzo[a]pyrene | 12.63 | 252 | 240332 | 38.90 ug/ml | 99 |
| 83) | Indeno[1,2,3cd]pyrene | 13.87 | 276 | 189344 | 38.23 ug/ml | 96 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 95083 | 36.40 ug/ml | 96 |
| 85) | Benzo[g,h,i]perylene | 14.23 | 276 | 158536 | 41.18 ug/ml | 96 |

3/28/08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032806.D Vial: 6
Acq On : 28 Mar 2008 6:27 pm Operator: mills
Sample : ,ical,svoa ical 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:55 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032807.D Vial: 7
Acq On : 28 Mar 2008 6:53 pm Operator: mills
Sample : ,ical,svoa ical 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:58:37 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 127517 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 396088 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 205312 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 261355 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 190697 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 148032 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 311886 | 78.31 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.91 | 99 | 424068 | 83.14 | ug/ml | 0.02 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 372683 | 74.97 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 477064 | 68.29 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 114708 | 72.56 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 318417 | 70.20 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.38 | 79 | 336216 | 71.97 | ug/ml | 96 |
| 3) n-Nitrosodimethylamine | 2.36 | 74 | 226819 | 79.42 | ug/ml | 97 |
| 6) Phenol | 3.93 | 94 | 394999m3 | 83.02 | ug/ml | |
| 7) Aniline | 3.98 | 93 | 455349 | 83.21 | ug/ml | 98 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 295194 | 74.31 | ug/ml | 98 |
| 9) 2-Chlorophenol | 4.09 | 128 | 308219 | 73.55 | ug/ml | 96 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 337809 | 70.48 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 335972 | 69.50 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 318982 | 68.77 | ug/ml | 97 |
| 13) Benzyl alcohol | 4.42 | 108 | 196456 | 81.32 | ug/ml | 98 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 621346 | 77.12 | ug/ml | 99 |
| 15) 2-Methylphenol | 4.49 | 108 | 274969 | 79.67 | ug/ml | 97 |
| 16) Hexachloroethane | 4.76 | 117 | 179040 | 74.00 | ug/ml | 90 |
| 17) N-Nitrosodi-n-propylamine | 4.68 | 70 | 223361 | 73.63 | ug/ml | 97 |
| 18) 3/4-Methylphenol | 4.65 | 108 | 284702 | 81.91 | ug/ml | 96 |
| 21) Nitrobenzene | 4.84 | 77 | 334669 | 72.35 | ug/ml | 96 |
| 22) Acetophenone | 4.67 | 105 | 439432 | 74.70 | ug/ml | 99 |
| 23) Isophorone | 5.10 | 82 | 646412 | 77.64 | ug/ml | 100 |
| 24) 2-Nitrophenol | 5.15 | 139 | 189652 | 79.89 | ug/ml | 88 |
| 25) 2,4-Dimethylphenol | 5.19 | 107 | 330055 | 82.04 | ug/ml | 99 |
| 26) bis(2-Chloroethoxy)methane | 5.30 | 93 | 396655 | 80.72 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.41 | 162 | 272264 | 78.56 | ug/ml | 97 |
| 28) Benzoic acid | 5.35 | 122 | 184654 | 103.50 | ug/ml | 93 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 273597 | 73.31 | ug/ml | 99 |
| 30) Naphthalene | 5.58 | 128 | 706369 | 72.54 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 232452 | 69.76 | ug/ml# | 64 |
| 32) 4-Chloroaniline | 5.64 | 127 | 303191 | 71.86 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 161984 | 67.94 | ug/ml | 97 |
| 34) 4-Chloro-3-methylphenol | 6.15 | 107 | 270993 | 82.30 | ug/ml | 94 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 459327 | 72.03 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 107247 | 58.58 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.67 | 196 | 192504 | 79.71 | ug/ml | 98 |
| 39) 2,4,6-Trichlorophenol | 6.64 | 196 | 182340 | 79.08 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 643189 | 77.92 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.98 | 65 | 205621 | 79.19 | ug/ml | 92 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032807.D Vial: 7
Acq On : 28 Mar 2008 6:53 pm Operator: mills
Sample : ,ical,svoa ical 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:58:37 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

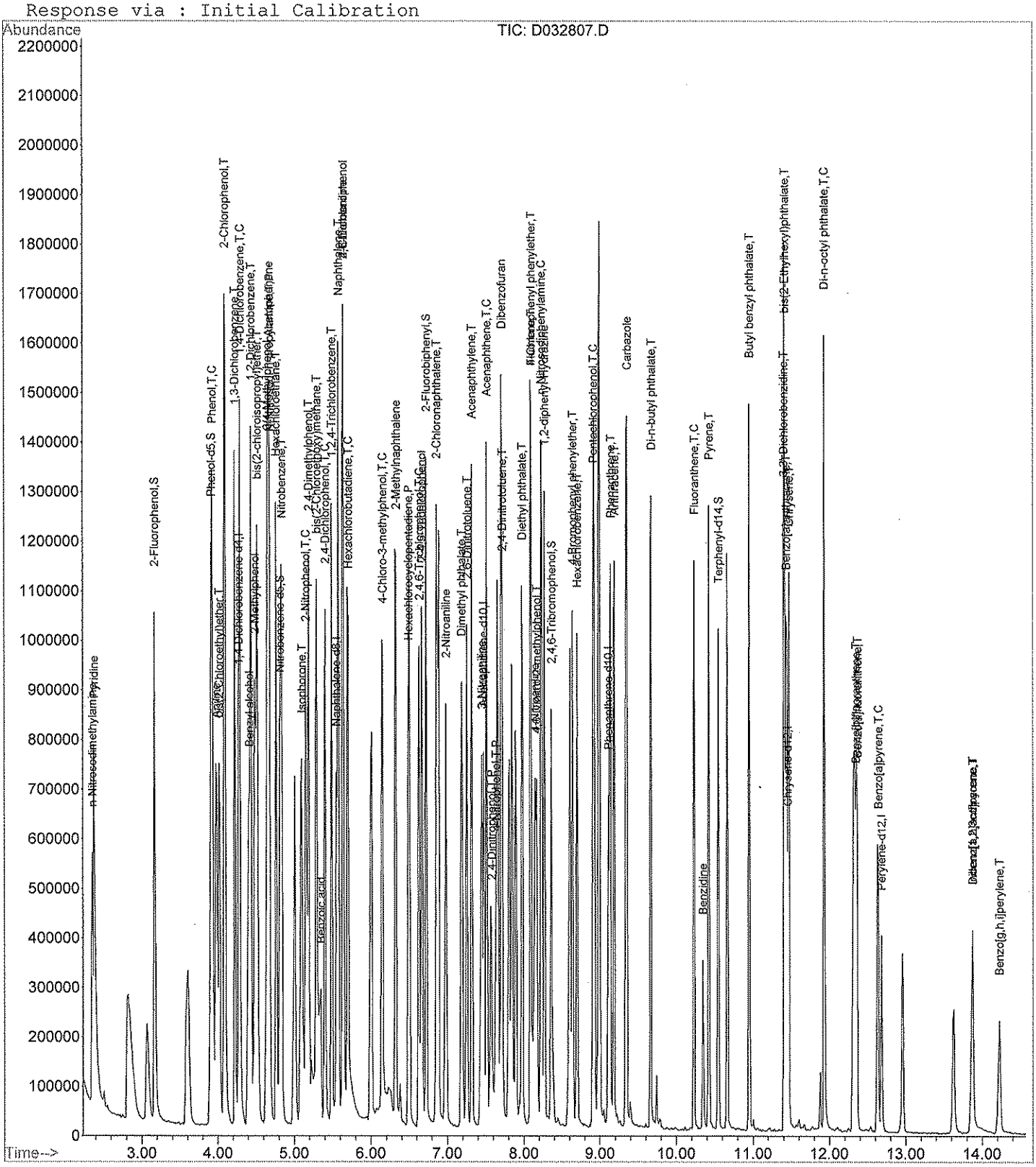
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.32 | 152 | 677338 | 69.18 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.19 | 163 | 607877 | 76.39 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.26 | 165 | 147009 | 80.14 | ug/ml | 81 |
| 46) | 3-Nitroaniline | 7.45 | 138 | 159763 | 79.15 | ug/ml | 98 |
| 47) | Acenaphthene | 7.52 | 153 | 385611 | 67.25 | ug/ml | 98 |
| 48) | 2,4-Dinitrophenol | 7.58 | 184 | 97531 | 101.68 | ug/ml | 99 |
| 49) | Dibenzofuran | 7.71 | 168 | 541747 | 66.20 | ug/ml | 95 |
| 50) | 4-Nitrophenol | 7.64 | 109 | 121113 | 82.88 | ug/ml | 87 |
| 51) | 2,4-Dinitrotoluene | 7.72 | 165 | 170877 | 74.88 | ug/ml | 74 |
| 52) | Fluorene | 8.10 | 166 | 346798 | 58.94 | ug/ml | 97 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 178821 | 62.93 | ug/ml | 93 |
| 54) | Diethyl phthalate | 7.98 | 149 | 605453 | 71.13 | ug/ml | 98 |
| 55) | 4-Nitroaniline | 8.15 | 138 | 157450 | 79.79 | ug/ml | 93 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.17 | 198 | 113400 | 91.61 | ug/ml | 89 |
| 58) | n-Nitrosodiphenylamine | 8.23 | 169 | 530491 | 70.53 | ug/ml | 99 |
| 59) | 1,2-diphenyl-Hydrazine | 8.27 | 77 | 532206 | 70.37 | ug/ml | 96 |
| 61) | 4-Bromophenyl phenylether | 8.64 | 248 | 123626 | 69.37 | ug/ml | 95 |
| 62) | Hexachlorobenzene | 8.70 | 284 | 161310 | 67.28 | ug/ml# | 80 |
| 63) | Pentachlorophenol | 8.92 | 266 | 94303 | 68.52 | ug/ml | 97 |
| 64) | Phenanthrene | 9.14 | 178 | 590797 | 72.91 | ug/ml | 99 |
| 65) | Anthracene | 9.19 | 178 | 624118 | 75.83 | ug/ml | 99 |
| 66) | Carbazole | 9.36 | 167 | 891237 | 96.36 | ug/ml | 98 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 932889 | 68.57 | ug/ml | 99 |
| 68) | Fluoranthene | 10.24 | 202 | 597410 | 74.07 | ug/ml | 91 |
| 70) | Benzidine | 10.35 | 184 | 136272 | 67.48 | ug/ml | 98 |
| 71) | Pyrene | 10.43 | 202 | 554512 | 76.11 | ug/ml | 95 |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 387935 | 71.87 | ug/ml | 95 |
| 74) | Benzo[a]anthracene | 11.43 | 228 | 441110 | 79.96 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.40 | 252 | 156042 | 69.80 | ug/ml | 99 |
| 76) | Chrysene | 11.47 | 228 | 400316 | 74.93 | ug/ml | 98 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 407695 | 57.93 | ug/ml | 96 |
| 79) | Di-n-octyl phthalate | 11.93 | 149 | 883777 | 80.59 | ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.34 | 252 | 400657m2 | 62.07 | ug/ml | |
| 81) | Benzo[k]fluoranthene | 12.36 | 252 | 320296 | 93.02 | ug/ml | 96 |
| 82) | Benzo[a]pyrene | 12.64 | 252 | 334133 | 68.47 | ug/ml | 96 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 231378 | 61.55 | ug/ml | 93 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 118967 | 67.63 | ug/ml | 92 |
| 85) | Benzo[g,h,i]perylene | 14.22 | 276 | 183730 | 58.76 | ug/ml | 98 |

3/28/08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032807.D Vial: 7
Acq On : 28 Mar 2008 6:53 pm Operator: mills
Sample : ,ical,svoa ical 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032808.D Vial: 8
Acq On : 28 Mar 2008 7:18 pm Operator: mills
Sample : ,ical,svoa ical 100ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:01 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:59:59 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 123662 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 388869 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 207240 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.12 | 188 | 284987 | 40.00 | ug/ml | 0.01 |
| 69) Chrysene-d12 | 11.46 | 240 | 201044 | 40.00 | ug/ml | 0.01 |
| 78) Perylene-d12 | 12.69 | 264 | 131752 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.18 | 112 | 374716 | 97.53 | ug/ml | 0.01 |
| 5) Phenol-d5 | 3.92 | 99 | 521395 | 104.38 | ug/ml | 0.02 |
| 20) Nitrobenzene-d5 | 4.82 | 82 | 449436 | 93.56 | ug/ml | 0.01 |
| 40) 2-Fluorobiphenyl | 6.74 | 172 | 577496 | 85.01 | ug/ml | 0.01 |
| 60) 2,4,6-Tribromophenol | 8.37 | 330 | 142536 | 84.66 | ug/ml | 0.01 |
| 72) Terphenyl-d14 | 10.56 | 244 | 417262 | 90.01 | ug/ml | 0.01 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.39 | 79 | 424440 | 96.09 | ug/ml | 98 |
| 3) n-Nitrosodimethylamine | 2.36 | 74 | 274490 | 99.28 | ug/ml | 92 |
| 6) Phenol | 3.93 | 94 | 516447m | 110.88 | ug/ml | |
| 7) Aniline | 3.98 | 93 | 536165 | 100.03 | ug/ml | 100 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 414532m | 109.55 | ug/ml | |
| 9) 2-Chlorophenol | 4.09 | 128 | 362867 | 91.13 | ug/ml | 94 |
| 10) 1,3-Dichlorobenzene | 4.23 | 146 | 407746 | 90.41 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 390355 | 86.09 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 364237 | 83.92 | ug/ml | 98 |
| 13) Benzyl alcohol | 4.42 | 108 | 233309 | 99.18 | ug/ml | 86 |
| 14) bis(2-chloroisopropyl)ethe | 4.53 | 45 | 757663 | 97.85 | ug/ml | 99 |
| 15) 2-Methylphenol | 4.50 | 108 | 343750 | 102.81 | ug/ml | 98 |
| 16) Hexachloroethane | 4.76 | 117 | 208783 | 90.68 | ug/ml | 97 |
| 17) N-Nitrosodi-n-propylamine | 4.69 | 70 | 266785 | 92.52 | ug/ml | 98 |
| 18) 3/4-Methylphenol | 4.66 | 108 | 346236 | 102.11 | ug/ml | 98 |
| 21) Nitrobenzene | 4.84 | 77 | 393373 | 88.75 | ug/ml | 97 |
| 22) Acetophenone | 4.68 | 105 | 532703 | 93.79 | ug/ml | 99 |
| 23) Isophorone | 5.11 | 82 | 795755 | 98.07 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.16 | 139 | 240916 | 103.41 | ug/ml | 92 |
| 25) 2,4-Dimethylphenol | 5.20 | 107 | 394960 | 99.36 | ug/ml | 99 |
| 26) bis(2-Chloroethoxy)methane | 5.29 | 93 | 482085 | 99.70 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.42 | 162 | 329141 | 97.17 | ug/ml | 99 |
| 28) Benzoic acid | 5.36 | 122 | 220475 | 117.26 | ug/ml | 93 |
| 29) 1,2,4-Trichlorobenzene | 5.50 | 180 | 328628 | 91.60 | ug/ml | 97 |
| 30) Naphthalene | 5.58 | 128 | 843940 | 90.39 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 280051 | 88.43 | ug/ml | 99 |
| 32) 4-Chloroaniline | 5.65 | 127 | 386992 | 95.86 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 183766 | 81.58 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.15 | 107 | 328997 | 101.05 | ug/ml | 92 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 538622 | 88.23 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 149991 | 86.98 | ug/ml | 100 |
| 38) 2,4,5-Trichlorophenol | 6.67 | 196 | 226350 | 92.93 | ug/ml | 97 |
| 39) 2,4,6-Trichlorophenol | 6.63 | 196 | 237604 | 102.39 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.87 | 162 | 657260 | 79.40 | ug/ml | 99 |
| 42) 2-Nitroaniline | 6.99 | 65 | 253329 | 96.90 | ug/ml | 97 |

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

Mar 31 08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032808.D Vial: 8
Acq On : 28 Mar 2008 7:18 pm Operator: mills
Sample : ,ical,svoa ical 100ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:01 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:59:59 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

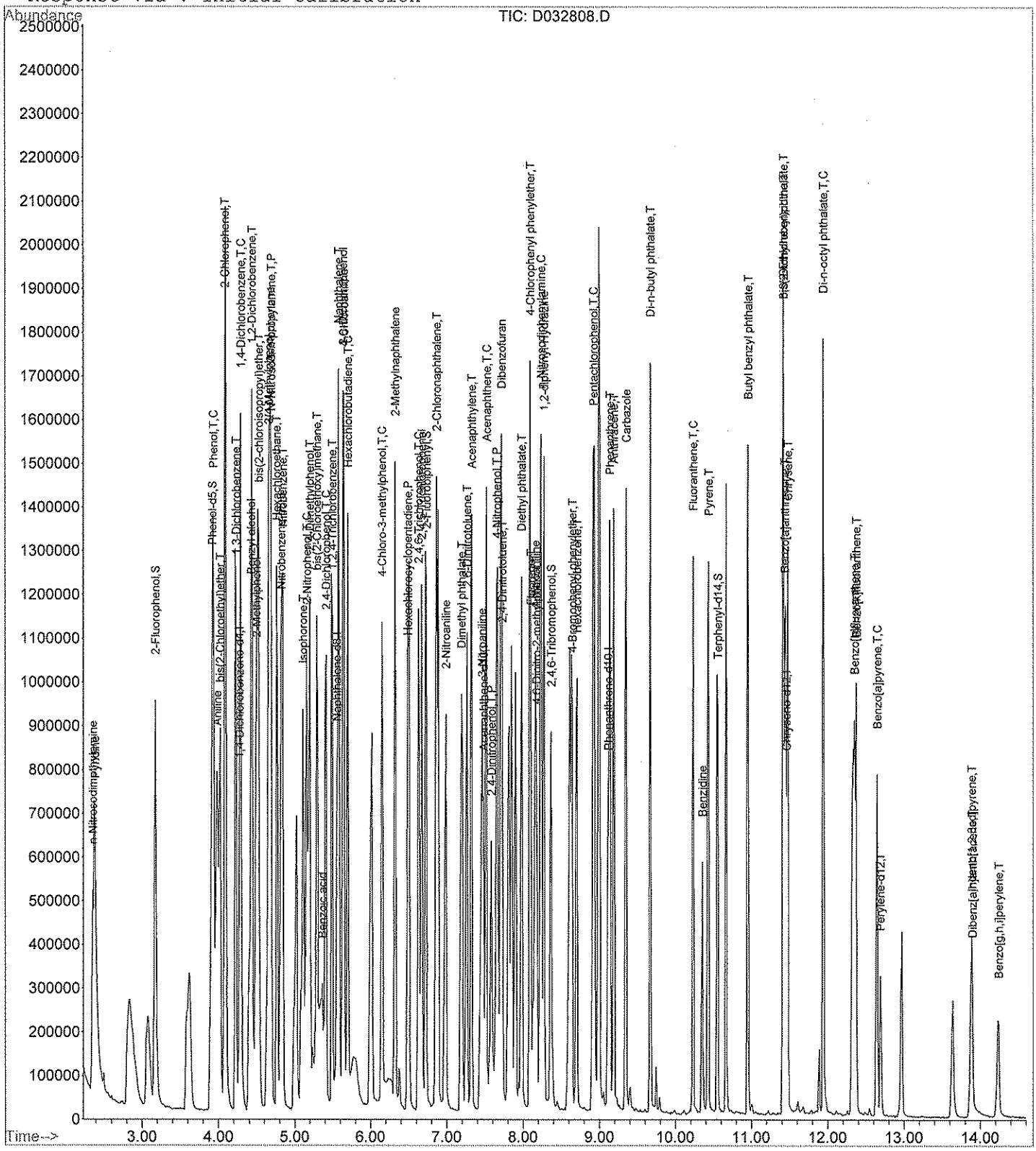
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.33 | 152 | 847015 | 88.71 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.20 | 163 | 759242 | 95.60 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.27 | 165 | 180286 | 97.33 | ug/ml | 96 |
| 46) | 3-Nitroaniline | 7.46 | 138 | 203445 | 100.12 | ug/ml | 98 |
| 47) | Acenaphthene | 7.52 | 153 | 462659 | 83.26 | ug/ml | 100 |
| 48) | 2,4-Dinitrophenol | 7.58 | 184 | 131718 | 127.41 | ug/ml | 92 |
| 49) | Dibenzofuran | 7.72 | 168 | 683989 | 86.54 | ug/ml | 97 |
| 50) | 4-Nitrophenol | 7.66 | 109 | 138182 | 92.85 | ug/ml | 92 |
| 51) | 2,4-Dinitrotoluene | 7.73 | 165 | 212793 | 93.88 | ug/ml | 98 |
| 52) | Fluorene | 8.11 | 166 | 421861 | 76.04 | ug/ml | 97 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 197861 | 72.87 | ug/ml | 89 |
| 54) | Diethyl phthalate | 7.98 | 149 | 744637 | 89.14 | ug/ml | 99 |
| 55) | 4-Nitroaniline | 8.17 | 138 | 191585 | 96.25 | ug/ml | 94 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.18 | 198 | 151337 | 108.19 | ug/ml | 94 |
| 58) | n-Nitrosodiphenylamine | 8.24 | 169 | 652326 | 81.96 | ug/ml | 99 |
| 59) | 1,2-diphenyl-Hydrazine | 8.28 | 77 | 667238 | 83.42 | ug/ml | 95 |
| 61) | 4-Bromophenyl phenylether | 8.65 | 248 | 151213 | 80.49 | ug/ml | 92 |
| 62) | Hexachlorobenzene | 8.71 | 284 | 193245 | 76.97 | ug/ml | 91 |
| 63) | Pentachlorophenol | 8.92 | 266 | 111811 | 77.28 | ug/ml | 99 |
| 64) | Phenanthrene | 9.14 | 178 | 728133 | 84.28 | ug/ml | 99 |
| 65) | Anthracene | 9.19 | 178 | 733887 | 82.85 | ug/ml | 99 |
| 66) | Carbazole | 9.35 | 167 | 729780 | 68.84 | ug/ml | 99 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 1063297 | 74.33 | ug/ml | 99 |
| 68) | Fluoranthene | 10.23 | 202 | 684788 | 79.33 | ug/ml | 93 |
| 70) | Benzidine | 10.36 | 184 | 237709 | 116.19 | ug/ml | 97 |
| 71) | Pyrene | 10.44 | 202 | 742002 | 97.79 | ug/ml | 94 |
| 73) | Butyl benzyl phthalate | 10.96 | 149 | 488902 | 88.16 | ug/ml | 95 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 551993 | 94.92 | ug/ml | 98 |
| 75) | 3,3'-Dichlorobenzidine | 11.42 | 252 | 177484 | 77.78 | ug/ml | 94 |
| 76) | Chrysene | 11.48 | 228 | 472679 | 85.27 | ug/ml | 99 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 452318 | 65.48 | ug/ml | 98 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 1067094 | 109.13 | ug/ml | 100 |
| 80) | Benzo[b]fluoranthene | 12.35 | 252 | 563935m | 103.99 | ug/ml | |
| 81) | Benzo[k]fluoranthene | 12.37 | 252 | 267924m | 84.01 | ug/ml | |
| 82) | Benzo[a]pyrene | 12.65 | 252 | 379624 | 90.67 | ug/ml | 94 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 245840 | 77.97 | ug/ml | 96 |
| 84) | Dibenz[a,h]anthracene | 13.89 | 278 | 131976 | 87.69 | ug/ml | 89 |
| 85) | Benzo[g,h,i]perylene | 14.24 | 276 | 194818 | 74.98 | ug/ml | 87 |

3/28/08

(#) = qualifier out of range (m) = manual integration
D032808.D SVOA0328.M Fri Mar 28 21:13:32 2008 SVOA 4 Page 2

Data File : C:\HPCHEM\1\DATA\D032708\D032808.D Vial: 8
Acq On : 28 Mar 2008 7:18 pm Operator: mills
Sample : ,ical,svoa ical 100ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:01 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032809.D Vial: 9
Acq On : 28 Mar 2008 7:44 pm Operator: mills
Sample : ,ical,svoa ical 120ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:03 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:01:32 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120417 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 384868 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 195601 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 265326 | 40.00 | ug/ml | 0.01 |
| 69) Chrysene-d12 | 11.46 | 240 | 192043 | 40.00 | ug/ml | 0.01 |
| 78) Perylene-d12 | 12.69 | 264 | 110503 | 40.00 | ug/ml | 0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 454577 | 122.11 | ug/ml | 0.01 |
| 5) Phenol-d5 | 3.93 | 99 | 610846 | 124.49 | ug/ml | 0.03 |
| 20) Nitrobenzene-d5 | 4.83 | 82 | 515661 | 109.87 | ug/ml | 0.02 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 646772 | 103.99 | ug/ml | 0.01 |
| 60) 2,4,6-Tribromophenol | 8.38 | 330 | 161439 | 106.25 | ug/ml | 0.02 |
| 72) Terphenyl-d14 | 10.56 | 244 | 426396 | 98.26 | ug/ml | 0.01 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.38 | 79 | 504023 | 118.11 | ug/ml | 96 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 324668 | 120.77 | ug/ml | 89 |
| 6) Phenol | 3.94 | 94 | 591811m? | 127.71 | ug/ml | |
| 7) Aniline | 3.99 | 93 | 568550 | 108.93 | ug/ml | 99 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 561466m? | 149.53 | ug/ml | |
| 9) 2-Chlorophenol | 4.09 | 128 | 413274 | 108.51 | ug/ml | 95 |
| 10) 1,3-Dichlorobenzene | 4.23 | 146 | 448582 | 104.14 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 4.30 | 146 | 452526 | 105.42 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 402646 | 98.44 | ug/ml | 99 |
| 13) Benzyl alcohol | 4.43 | 108 | 269642 | 117.91 | ug/ml | 75 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 903429 | 120.34 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.50 | 108 | 402085 | 122.80 | ug/ml | 98 |
| 16) Hexachloroethane | 4.77 | 117 | 246295 | 111.94 | ug/ml | 87 |
| 17) N-Nitrosodi-n-propylamine | 4.70 | 70 | 310393 | 112.23 | ug/ml | 98 |
| 18) 3/4-Methylphenol | 4.67 | 108 | 399503 | 120.48 | ug/ml | 96 |
| 21) Nitrobenzene | 4.85 | 77 | 473189 | 110.35 | ug/ml | 93 |
| 22) Acetophenone | 4.69 | 105 | 600906 | 108.24 | ug/ml | 95 |
| 23) Isophorone | 5.12 | 82 | 930688 | 116.34 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.17 | 139 | 283484 | 122.11 | ug/ml | 91 |
| 25) 2,4-Dimethylphenol | 5.21 | 107 | 466209 | 118.65 | ug/ml | 100 |
| 26) bis(2-Chloroethoxy)methane | 5.30 | 93 | 540506 | 113.01 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.41 | 162 | 388925 | 116.68 | ug/ml | 96 |
| 28) Benzoic acid | 5.38 | 122 | 254605 | 132.25 | ug/ml | 98 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 367751 | 105.34 | ug/ml | 97 |
| 30) Naphthalene | 5.59 | 128 | 955560 | 105.43 | ug/ml | 100 |
| 31) 2,6-Dichlorophenol | 5.65 | 162 | 330916 | 108.08 | ug/ml | 97 |
| 32) 4-Chloroaniline | 5.65 | 127 | 418649 | 105.65 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 212798 | 99.11 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.16 | 107 | 371543 | 115.06 | ug/ml | 93 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 612453 | 103.82 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 160519 | 101.26 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.68 | 196 | 249652m? | 110.16 | ug/ml | |
| 39) 2,4,6-Trichlorophenol | 6.64 | 196 | 281796 | 128.05 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.87 | 162 | 855429 | 114.19 | ug/ml | 98 |
| 42) 2-Nitroaniline | 7.00 | 65 | 302692 | 123.44 | ug/ml | 96 |

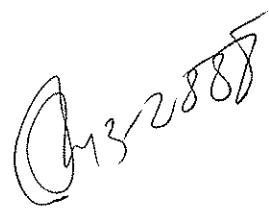
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032809.D Vial: 9
Acq On : 28 Mar 2008 7:44 pm Operator: mills
Sample : ,ical,svoa ical 120ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:03 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:01:32 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

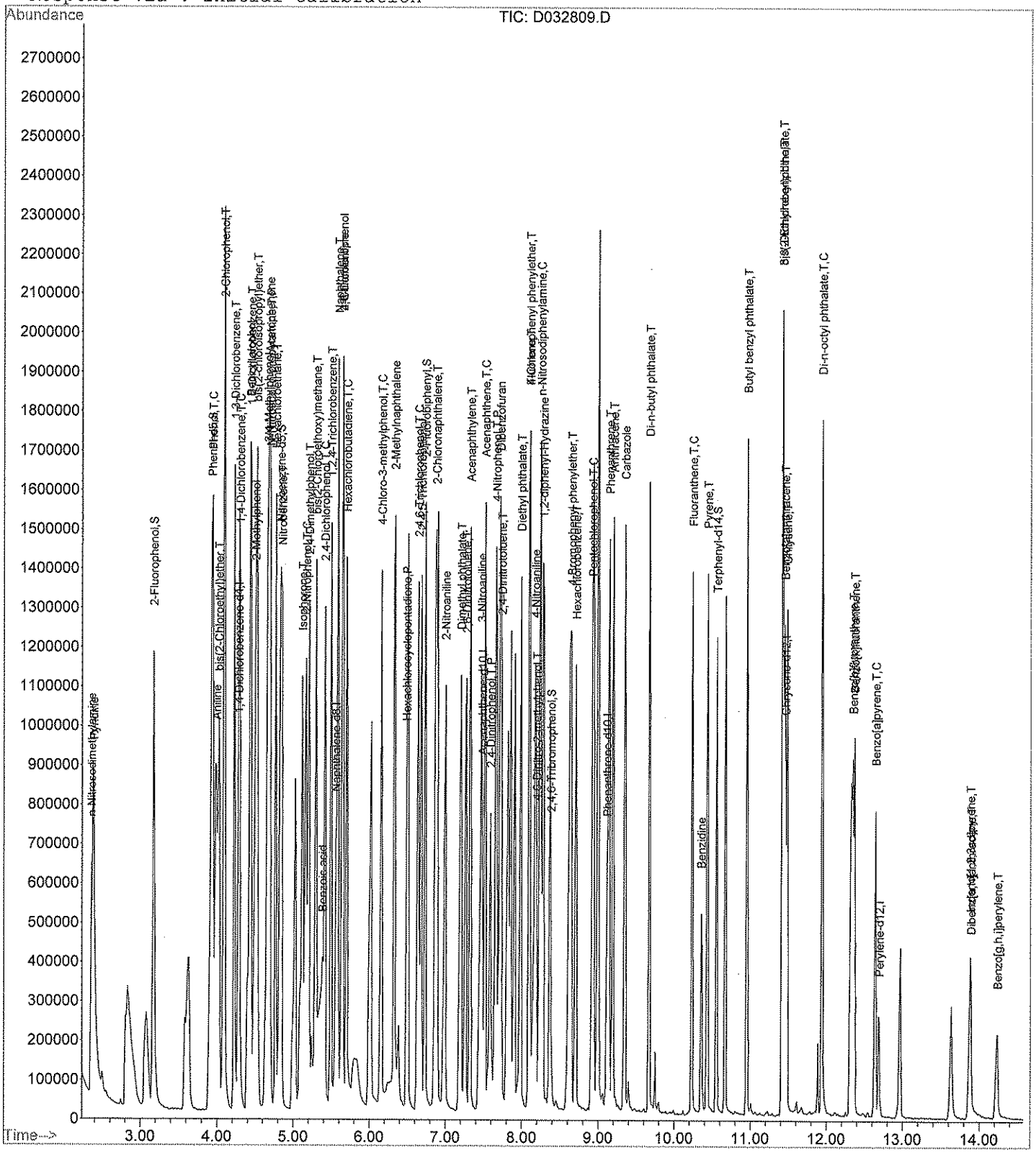
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.32 | 152 | 951888 | 108.06 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.20 | 163 | 865784 | 116.53 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.27 | 165 | 221575 | 127.42 | ug/ml | 88 |
| 46) | 3-Nitroaniline | 7.47 | 138 | 228521 | 119.12 | ug/ml | 100 |
| 47) | Acenaphthene | 7.52 | 153 | 548428 | 108.19 | ug/ml | 100 |
| 48) | 2,4-Dinitrophenol | 7.59 | 184 | 154768 | 150.37 | ug/ml | 97 |
| 49) | Dibenzofuran | 7.71 | 168 | 775307 | 106.80 | ug/ml | 100 |
| 50) | 4-Nitrophenol | 7.66 | 109 | 148133 | 106.98 | ug/ml | 94 |
| 51) | 2,4-Dinitrotoluene | 7.73 | 165 | 255136 | 120.74 | ug/ml | 96 |
| 52) | Fluorene | 8.10 | 166 | 436569 | 87.57 | ug/ml | 100 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 215355 | 88.85 | ug/ml | 95 |
| 54) | Diethyl phthalate | 7.99 | 149 | 809253 | 104.92 | ug/ml | 99 |
| 55) | 4-Nitroaniline | 8.17 | 138 | 218235 | 117.04 | ug/ml | 94 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.19 | 198 | 171781 | 129.78 | ug/ml# | 72 |
| 58) | n-Nitrosodiphenylamine | 8.25 | 169 | 713628 | 99.91 | ug/ml | 100 |
| 59) | 1,2-diphenyl-Hydrazine | 8.28 | 77 | 767940 | 106.66 | ug/ml | 99 |
| 61) | 4-Bromophenyl phenylether | 8.64 | 248 | 165229 | 98.30 | ug/ml | 99 |
| 62) | Hexachlorobenzene | 8.71 | 284 | 228551 | 102.50 | ug/ml | 98 |
| 63) | Pentachlorophenol | 8.92 | 266 | 121649 | 94.60 | ug/ml | 98 |
| 64) | Phenanthrene | 9.15 | 178 | 767705 | 98.54 | ug/ml | 99 |
| 65) | Anthracene | 9.20 | 178 | 784394 | 98.49 | ug/ml | 99 |
| 66) | Carbazole | 9.35 | 167 | 841163 | 90.89 | ug/ml# | 96 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 1259106 | 99.65 | ug/ml | 99 |
| 68) | Fluoranthene | 10.24 | 202 | 759800 | 98.62 | ug/ml | 98 |
| 70) | Benzidine | 10.35 | 184 | 242984 | 120.44 | ug/ml | 95 |
| 71) | Pyrene | 10.43 | 202 | 765584 | 106.10 | ug/ml | 98 |
| 73) | Butyl benzyl phthalate | 10.96 | 149 | 521119 | 100.76 | ug/ml | 100 |
| 74) | Benzo[a]anthracene | 11.45 | 228 | 578674 | 105.24 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.42 | 252 | 170517 | 81.87 | ug/ml | 95 |
| 76) | Chrysene | 11.48 | 228 | 549893 | 107.01 | ug/ml | 100 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 494266 | 80.46 | ug/ml | 99 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 1169329 | 140.02 | ug/ml | 100 |
| 80) | Benzo[b]fluoranthene | 12.35 | 252 | 522136m | 113.89 | ug/ml | |
| 81) | Benzo[k]fluoranthene | 12.37 | 252 | 336875m | 130.10 | ug/ml | |
| 82) | Benzo[a]pyrene | 12.64 | 252 | 384492 | 111.57 | ug/ml# | 92 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 249651 | 94.40 | ug/ml | 98 |
| 84) | Dibenz[a,h]anthracene | 13.89 | 278 | 135113 | 107.04 | ug/ml | 95 |
| 85) | Benzo[g,h,i]perylene | 14.24 | 276 | 190463 | 87.40 | ug/ml | 94 |



(#) = qualifier out of range (m) = manual integration
D032809.D SVOA0328.M Fri Mar 28 21:13:35 2008 SVOA 4 Page 2

Data File : C:\HPCHEM\1\DATA\D032708\D032809.D Vial: 9
Acq On : 28 Mar 2008 7:44 pm Operator: mills
Sample : ,ical,svoa ical 120ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:03 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# CONTINUING CALIBRATION RAW DATA

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D  Vial: 2
Acq On : 2 Apr 2008 4:14 pm  Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1,  Inst : SVOA 4
Misc : 8270_w  Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 103 | -0.01 |
| 2 | | Pyridine | 1.414 | 1.474 | -4.2 | 105 | 0.00 |
| 3 | | n-Nitrosodimethylamine | 0.894 | 0.940 | -5.1 | 103 | -0.01 |
| 4 | S | 2-Fluorophenol | 1.240 | 1.276 | -2.9 | 101 | -0.01 |
| 5 | S | Phenol-d5 | 1.640 | 1.704 | -3.9 | 104 | 0.00 |
| 6 | T,C | Phenol | 1.556 | 1.628 | -4.6 | 106 | 0.00 |
| 7 | | Aniline | 1.707 | 1.705 | 0.1 | 101 | 0.00 |
| 8 | T | bis(2-Chloroethyl)ether | 1.298 | 1.432 | -10.3 | 110 | -0.01 |
| 9 | T | 2-Chlorophenol | 1.245 | 1.338 | -7.5 | 102 | -0.01 |
| 10 | T | 1,3-Dichlorobenzene | 1.399 | 1.480 | -5.8 | 104 | -0.01 |
| 11 | T,C | 1,4-Dichlorobenzene | 1.397 | 1.522 | -8.9 | 104 | 0.00 |
| 12 | T | 1,2-Dichlorobenzene | 1.318 | 1.443 | -9.5 | 104 | 0.00 |
| 13 | | Benzyl alcohol | 0.757 | 0.796 | -5.2 | 102 | -0.01 |
| 14 | T | bis(2-chloroisopropyl)ether | 2.495 | 2.605 | -4.4 | 105 | 0.00 |
| 15 | | 2-Methylphenol | 1.092 | 1.100 | -0.7 | 100 | 0.00 |
| 16 | T | Hexachloroethane | 0.723 | 0.781 | -8.0 | 105 | -0.01 |
| 17 | T,P | N-Nitrosodi-n-propylamine | 0.909 | 0.907 | 0.2 | 98 | -0.01 |
| 18 | | 3/4-Methylphenol | 1.102 | 1.133 | -2.8 | 102 | 0.00 |
| 19 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 101 | -0.01 |
| 20 | S | Nitrobenzene-d5 | 0.481 | 0.504 | -4.8 | 103 | 0.00 |
| 21 | T | Nitrobenzene | 0.440 | 0.456 | -3.6 | 101 | 0.00 |
| 22 | | Acetophenone | 0.568 | 0.595 | -4.8 | 101 | 0.00 |
| 23 | T | Isophorone | 0.827 | 0.870 | -5.2 | 106 | 0.00 |
| 24 | T,C | 2-Nitrophenol | 0.242 | 0.248 | -2.5 | 103 | 0.00 |
| 25 | T | 2,4-Dimethylphenol | 0.408 | 0.434 | -6.4 | 103 | 0.00 |
| 26 | T | bis(2-Chloroethoxy)methane | 0.492 | 0.505 | -2.6 | 99 | -0.01 |
| 27 | T,C | 2,4-Dichlorophenol | 0.345 | 0.350 | -1.4 | 98 | 0.00 |
| 28 | | Benzoic acid | 0.203 | 0.210 | -3.4 | 95 | -0.01 |
| 29 | T | 1,2,4-Trichlorobenzene | 0.355 | 0.377 | -6.2 | 102 | 0.00 |
| 30 | T | Naphthalene | 0.937 | 0.982 | -4.8 | 103 | 0.00 |
| 31 | | 2,6-Dichlorophenol | 0.313 | 0.335 | -7.0 | 100 | 0.00 |
| 32 | | 4-Chloroaniline | 0.404 | 0.396 | 2.0 | 96 | 0.00 |
| 33 | T,C | Hexachlorobutadiene | 0.217 | 0.228 | -5.1 | 101 | 0.00 |
| 34 | T,C | 4-Chloro-3-methylphenol | 0.333 | 0.342 | -2.7 | 102 | 0.00 |
| 35 | | 2-Methylnaphthalene | 0.599 | 0.619 | -3.3 | 100 | -0.01 |
| 36 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 97 | -0.01 |
| 37 | P | Hexachlorocyclopentadiene | 0.316 | 0.290 | 8.2 | 97 | 0.00 |
| 38 | | 2,4,5-Trichlorophenol | 0.457 | 0.522 | -14.2 | 100 | 0.00 |
| 39 | T,C | 2,4,6-Trichlorophenol | 0.455 | 0.466 | -2.4 | 99 | -0.01 |
| 40 | S | 2-Fluorobiphenyl | 1.254 | 1.355 | -8.1 | 99 | 0.00 |
| 41 | T | 2-Chloronaphthalene | 1.520 | 1.361 | 10.5 | 81 | 0.00 |
| 42 | | 2-Nitroaniline | 0.504 | 0.517 | -2.6 | 95 | -0.01 |
| 43 | T | Acenaphthylene | 1.791 | 1.910 | -6.6 | 98 | 0.00 |
| 44 | T | Dimethyl phthalate | 1.512 | 1.598 | -5.7 | 100 | 0.00 |
| 45 | T | 2,6-Dinitrotoluene | 0.359 | 0.388 | -8.1 | 97 | -0.01 |
| 46 | | 3-Nitroaniline | 0.392 | 0.417 | -6.4 | 101 | 0.00 |
| 47 | T,C | Acenaphthene | 1.036 | 1.114 | -7.5 | 100 | 0.00 |
| 48 | T,P | 2,4-Dinitrophenol | 0.219 | 0.241 | -10.0 | 102 | -0.01 |

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D  Vial: 2
Acq On : 2 Apr 2008 4:14 pm  Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1,  Inst : SVOA 4
Misc : 8270_w  Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | | Dibenzofuran | 1.457 | 1.591 | -9.2 | 104 | 0.00 |
| 50 | T,P | 4-Nitrophenol | 0.278 | 0.315 | -13.3 | 95 | 0.00 |
| 51 | T | 2,4-Dinitrotoluene | 0.433 | 0.451 | -4.2 | 101 | 0.00 |
| 52 | T | Fluorene | 1.014 | 1.048 | -3.4 | 98 | -0.01 |
| 53 | T | 4-Chlorophenyl phenylether | 0.474 | 0.554 | -16.9 | 102 | -0.01 |
| 54 | T | Diethyl phthalate | 1.544 | 1.663 | -7.7 | 104 | 0.00 |
| 55 | | 4-Nitroaniline | 0.380 | 0.373 | 1.8 | 97 | -0.01 |
| 56 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 57 | T | 4,6-Dinitro-2-methylphenol | 0.202 | 0.227 | -12.4 | 105 | 0.00 |
| 58 | C | n-Nitrosodiphenylamine | 1.047 | 1.171 | -11.8 | 97 | 0.00 |
| 59 | | 1,2-diphenyl-Hydrazine | 1.065 | 1.194 | -12.1 | 99 | 0.00 |
| 60 | S | 2,4,6-Tribromophenol | 0.225 | 0.254 | -12.9 | 100 | 0.00 |
| 61 | T | 4-Bromophenyl phenylether | 0.246 | 0.280 | -13.8 | 101 | 0.00 |
| 62 | T | Hexachlorobenzene | 0.328 | 0.362 | -10.4 | 97 | 0.00 |
| 63 | T,C | Pentachlorophenol | 0.187 | 0.224 | -19.8 | 104 | 0.00 |
| 64 | T | Phenanthrene | 1.147 | 1.266 | -10.4 | 95 | -0.01 |
| 65 | T | Anthracene | 1.177 | 1.305 | -10.9 | 95 | -0.01 |
| 66 | | Carbazole | 1.339 | 1.734 | -29.5# | 90 | 0.00 |
| 67 | T | Di-n-butyl phthalate | 1.851 | 2.133 | -15.2 | 102 | 0.00 |
| 68 | T,C | Fluoranthene | 1.115 | 1.298 | -16.4 | 101 | 0.00 |
| 69 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 98 | -0.01 |
| 70 | | Benzidine | 0.420 | 0.319 | 24.0# | 99 | 0.00 |
| 71 | T | Pyrene | 1.449 | 1.574 | -8.6 | 98 | 0.00 |
| 72 | S | Terphenyl-d14 | 0.875 | 0.926 | -5.8 | 99 | 0.00 |
| 73 | T | Butyl benzyl phthalate | 1.048 | 1.144 | -9.2 | 98 | -0.01 |
| 74 | T | Benzo[a]anthracene | 1.113 | 1.227 | -10.2 | 106 | -0.01 |
| 75 | T | 3,3'-Dichlorobenzidine | 0.411 | 0.454 | -10.5 | 92 | -0.01 |
| 76 | T | Chrysene | 1.076 | 1.070 | 0.6 | 98 | -0.01 |
| 77 | T | bis(2-Ethylhexyl)phthalate | 1.209 | 1.404 | -16.1 | 98 | -0.01 |
| 78 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 94 | -0.01 |
| 79 | T,C | Di-n-octyl phthalate | 3.107 | 3.149 | -1.4 | 102 | -0.01 |
| 80 | T | Benzo[b]fluoranthene | 1.662 | 1.788 | -7.6 | 96 | -0.01 |
| 81 | T | Benzo[k]fluoranthene | 1.120 | 0.744 | 33.6# | 98 | -0.01 |
| 82 | T,C | Benzo[a]pyrene | 1.305 | 1.204 | 7.7 | 94 | -0.01 |
| 83 | T | Indeno[1,2,3cd]pyrene | 0.943 | 0.811 | 14.0 | 80 | -0.02 |
| 84 | T | Dibenz[a,h]anthracene | 0.523 | 0.375 | 28.3# | 74 | -0.02 |
| 85 | T | Benzo[g,h,i]perylene | 0.783 | 0.627 | 19.9 | 74 | -0.02 |

4-2-08

(#) = Out of Range  SPCC's out = 0  CCC's out = 0
D040202.D SVOA0328.M  Wed Apr 02 17:02:43 2008  SVOA 4  Page 2

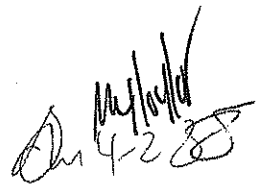
Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D Vial: 2
Acq On : 2 Apr 2008 4:14 pm Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 16:31 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 120354 | 40.00 | ug/ml | -0.01 |
| 19) Naphthalene-d8 | 5.54 | 136 | 372704 | 40.00 | ug/ml | -0.01 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 179485 | 40.00 | ug/ml | -0.01 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 222834 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 177706 | 40.00 | ug/ml | -0.01 |
| 78) Perylene-d12 | 12.67 | 264 | 149943 | 40.00 | ug/ml | -0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 192035 | 51.46 | ug/ml | -0.01 |
| 5) Phenol-d5 | 3.90 | 99 | 256331 | 51.94 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 234713 | 52.39 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 303926 | 54.03 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 70811 | 56.57 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 205616 | 52.91 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.37 | 79 | 221745 | 52.13 | ug/ml | 95 |
| 3) n-Nitrosodimethylamine | 2.34 | 74 | 141367 | 52.56 | ug/ml | 92 |
| 6) Phenol | 3.91 | 94 | 244944 | 52.32 | ug/ml | 99 |
| 7) Aniline | 3.97 | 93 | 256479 | 49.93 | ug/ml | 98 |
| 8) bis(2-Chloroethyl)ether | 4.01 | 93 | 215427 | 55.14 | ug/ml | 99 |
| 9) 2-Chlorophenol | 4.07 | 128 | 201254 | 53.73 | ug/ml | 95 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 222674 | 52.89 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 228935 | 54.46 | ug/ml | 97 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 217149 | 54.76 | ug/ml | 99 |
| 13) Benzyl alcohol | 4.39 | 108 | 119736 | 52.54 | ug/ml | 99 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 391967 | 52.21 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.48 | 108 | 165520 | 50.38 | ug/ml | 96 |
| 16) Hexachloroethane | 4.76 | 117 | 117530 | 54.05 | ug/ml | 94 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 136450 | 49.90 | ug/ml | 91 |
| 18) 3/4-Methylphenol | 4.63 | 108 | 170502 | 51.41 | ug/ml | 97 |
| 21) Nitrobenzene | 4.83 | 77 | 212237 | 51.80 | ug/ml | 96 |
| 22) Acetophenone | 4.65 | 105 | 277342 | 52.44 | ug/ml | 96 |
| 23) Isophorone | 5.07 | 82 | 405335 | 52.59 | ug/ml | 97 |
| 24) 2-Nitrophenol | 5.15 | 139 | 115698 | 51.31 | ug/ml | 94 |
| 25) 2,4-Dimethylphenol | 5.18 | 107 | 202308 | 53.27 | ug/ml | 96 |
| 26) bis(2-Chloroethoxy)methane | 5.28 | 93 | 235039 | 51.24 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.39 | 162 | 163268 | 50.81 | ug/ml | 98 |
| 28) Benzoic acid | 5.30 | 122 | 97844 | 51.61 | ug/ml | 97 |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 175682 | 53.05 | ug/ml | 98 |
| 30) Naphthalene | 5.58 | 128 | 457526 | 52.39 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 156084 | 53.53 | ug/ml | 70 |
| 32) 4-Chloroaniline | 5.63 | 127 | 184308 | 49.01 | ug/ml | 97 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 106120 | 52.56 | ug/ml | 99 |
| 34) 4-Chloro-3-methylphenol | 6.14 | 107 | 159290 | 51.29 | ug/ml | 95 |
| 35) 2-Methylnaphthalene | 6.31 | 142 | 288193 | 51.61 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 65128 | 45.97 | ug/ml | 96 |
| 38) 2,4,5-Trichlorophenol | 6.66 | 196 | 117018 | 57.05 | ug/ml | 99 |
| 39) 2,4,6-Trichlorophenol | 6.62 | 196 | 104565 | 51.21 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 305353 | 44.78 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.97 | 65 | 116030 | 51.32 | ug/ml | 97 |

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



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D Vial: 2
Acq On : 2 Apr 2008 4:14 pm Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 16:31 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

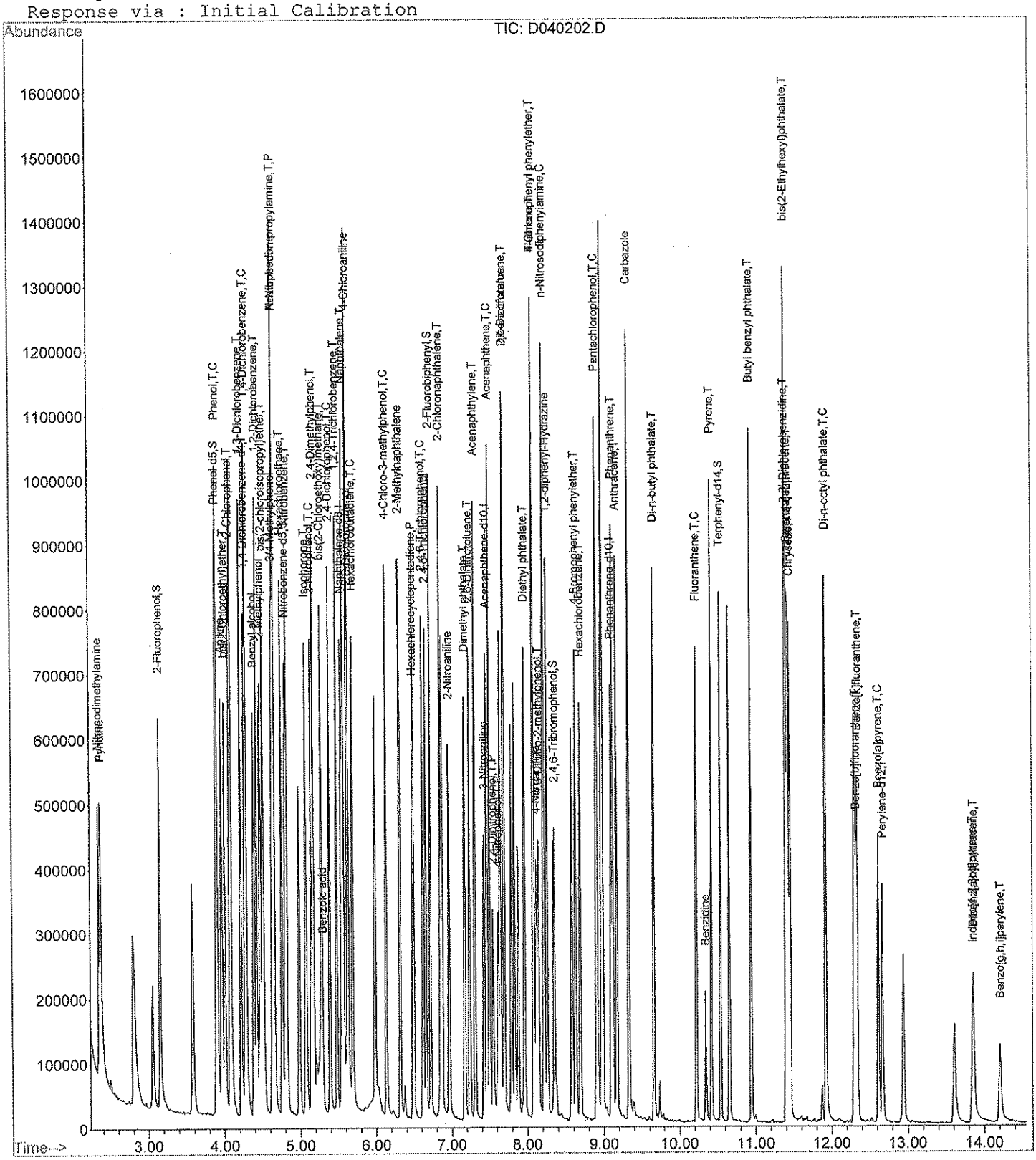
| Compound | R.T. | QIon | Response | Conc Unit | Qvalue |
|---|---|---|---|---|---|
| 43) Acenaphthylene | 7.31 | 152 | 428428 | 53.31 ug/ml | 99 |
| 44) Dimethyl phthalate | 7.18 | 163 | 358422 | 52.83 ug/ml | 99 |
| 45) 2,6-Dinitrotoluene | 7.24 | 165 | 87025 | 53.98 ug/ml | 94 |
| 46) 3-Nitroaniline | 7.44 | 138 | 93478 | 53.17 ug/ml | 91 |
| 47) Acenaphthene | 7.51 | 153 | 250003 | 53.77 ug/ml | 99 |
| 48) 2,4-Dinitrophenol | 7.55 | 184 | 54172 | 55.04 ug/ml | 86 |
| 49) Dibenzofuran | 7.70 | 168 | 356935 | 54.59 ug/ml | 97 |
| 50) 4-Nitrophenol | 7.62 | 109 | 70740 | 56.70 ug/ml | 93 |
| 51) 2,4-Dinitrotoluene | 7.70 | 165 | 101084 | 52.08 ug/ml | 83 |
| 52) Fluorene | 8.08 | 166 | 235184 | 51.68 ug/ml | 99 |
| 53) 4-Chlorophenyl phenylether | 8.08 | 204 | 124246 | 58.39 ug/ml | 91 |
| 54) Diethyl phthalate | 7.97 | 149 | 373158 | 53.85 ug/ml | 99 |
| 55) 4-Nitroaniline | 8.12 | 138 | 83697 | 49.12 ug/ml | 100 |
| 57) 4,6-Dinitro-2-methylphenol | 8.15 | 198 | 63094 | 56.00 ug/ml | 88 |
| 58) n-Nitrosodiphenylamine | 8.22 | 169 | 326175 | 55.94 ug/ml | 99 |
| 59) 1,2-diphenyl-Hydrazine | 8.27 | 77 | 332547 | 56.04 ug/ml | 98 |
| 61) 4-Bromophenyl phenylether | 8.63 | 248 | 78045 | 57.01 ug/ml | 97 |
| 62) Hexachlorobenzene | 8.69 | 284 | 100845 | 55.19 ug/ml | 93 |
| 63) Pentachlorophenol | 8.91 | 266 | 62424 | 59.92 ug/ml | 93 |
| 64) Phenanthrene | 9.12 | 178 | 352507 | 55.16 ug/ml | 99 |
| 65) Anthracene | 9.18 | 178 | 363448 | 55.44 ug/ml | 99 |
| 66) Carbazole | 9.34 | 167 | 482941 | 64.75 ug/ml | 97 |
| 67) Di-n-butyl phthalate | 9.67 | 149 | 594162 | 57.62 ug/ml | 100 |
| 68) Fluoranthene | 10.23 | 202 | 361601 | 58.19 ug/ml | 92 |
| 70) Benzidine | 10.34 | 184 | 70871 | 37.94 ug/ml | 99 |
| 71) Pyrene | 10.42 | 202 | 349717 | 54.33 ug/ml | 100 |
| 73) Butyl benzyl phthalate | 10.95 | 149 | 254188 | 54.57 ug/ml | 90 |
| 74) Benzo[a]anthracene | 11.43 | 228 | 272487 | 55.12 ug/ml | 99 |
| 75) 3,3'-Dichlorobenzidine | 11.40 | 252 | 100877 | 55.27 ug/ml | 98 |
| 76) Chrysene | 11.46 | 228 | 237735 | 49.74 ug/ml | 100 |
| 77) bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 311797 | 58.04 ug/ml | 94 |
| 79) Di-n-octyl phthalate | 11.93 | 149 | 590129 | 50.67 ug/ml | 99 |
| 80) Benzo[b]fluoranthene | 12.33 | 252 | 335100 | 53.79 ug/ml | 96 |
| 81) Benzo[k]fluoranthene | 12.35 | 252 | 139469 | 33.22 ug/ml | 98 |
| 82) Benzo[a]pyrene | 12.62 | 252 | 225631 | 46.13 ug/ml | 99 |
| 83) Indeno[1,2,3cd]pyrene | 13.85 | 276 | 152056 | 43.00 ug/ml | 95 |
| 84) Dibenz[a,h]anthracene | 13.86 | 278 | 70362 | 35.88 ug/ml | 94 |
| 85) Benzo[g,h,i]perylene | 14.21 | 276 | 117573 | 40.07 ug/ml | 93 |

4/2/08

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

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D Vial: 2
Acq On : 2 Apr 2008 4:14 pm Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 16:31 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D  Vial: 2
Acq On : 3 Apr 2008 7:53 pm  Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1,  Inst : SVOA 4
Misc : 8270_w  Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 95 | 0.00 |
| 2 | | Pyridine | 1.414 | 1.297 | 8.3 | 93 | 0.00 |
| 3 | | n-Nitrosodimethylamine | 0.894 | 0.838 | 6.3 | 89 | 0.00 |
| 4 | S | 2-Fluorophenol | 1.240 | 1.199 | 3.3 | 93 | 0.00 |
| 5 | S | Phenol-d5 | 1.640 | 1.644 | -0.2 | 94 | 0.02 |
| 6 | T,C | Phenol | 1.556 | 1.559 | -0.2 | 95 | 0.02 |
| 7 | | Aniline | 1.707 | 1.643 | 3.7 | 87 | 0.02 |
| 8 | T | bis(2-Chloroethyl)ether | 1.298 | 1.167 | 10.1 | 96 | 0.00 |
| 9 | T | 2-Chlorophenol | 1.245 | 1.262 | -1.4 | 99 | 0.00 |
| 10 | T | 1,3-Dichlorobenzene | 1.399 | 1.400 | -0.1 | 100 | 0.00 |
| 11 | T,C | 1,4-Dichlorobenzene | 1.397 | 1.365 | 2.3 | 98 | 0.00 |
| 12 | T | 1,2-Dichlorobenzene | 1.318 | 1.304 | 1.1 | 99 | 0.00 |
| 13 | | Benzyl alcohol | 0.757 | 0.766 | -1.2 | 94 | 0.02 |
| 14 | T | bis(2-chloroisopropyl)ether | 2.495 | 2.373 | 4.9 | 92 | 0.00 |
| 15 | | 2-Methylphenol | 1.092 | 1.097 | -0.5 | 96 | 0.02 |
| 16 | T | Hexachloroethane | 0.723 | 0.723 | 0.0 | 98 | 0.00 |
| 17 | T,P | N-Nitrosodi-n-propylamine | 0.909 | 0.879 | 3.3 | 95 | 0.02 |
| 18 | | 3/4-Methylphenol | 1.102 | 1.146 | -4.0 | 97 | 0.03 |
| 19 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 20 | S | Nitrobenzene-d5 | 0.481 | 0.466 | 3.1 | 96 | 0.02 |
| 21 | T | Nitrobenzene | 0.440 | 0.432 | 1.8 | 99 | 0.02 |
| 22 | | Acetophenone | 0.568 | 0.578 | -1.8 | 101 | 0.02 |
| 23 | T | Isophorone | 0.827 | 0.793 | 4.1 | 94 | 0.03 |
| 24 | T,C | 2-Nitrophenol | 0.242 | 0.234 | 3.3 | 94 | 0.02 |
| 25 | T | 2,4-Dimethylphenol | 0.408 | 0.420 | -2.9 | 98 | 0.02 |
| 26 | T | bis(2-Chloroethoxy)methane | 0.492 | 0.479 | 2.6 | 93 | 0.00 |
| 27 | T,C | 2,4-Dichlorophenol | 0.345 | 0.344 | 0.3 | 97 | 0.02 |
| 28 | | Benzoic acid | 0.203 | 0.200 | 1.5 | 83 | 0.04 |
| 29 | T | 1,2,4-Trichlorobenzene | 0.355 | 0.363 | -2.3 | 102 | 0.00 |
| 30 | T | Naphthalene | 0.937 | 0.900 | 3.9 | 98 | 0.00 |
| 31 | | 2,6-Dichlorophenol | 0.313 | 0.324 | -3.5 | 107 | 0.00 |
| 32 | | 4-Chloroaniline | 0.404 | 0.394 | 2.5 | 100 | 0.02 |
| 33 | T,C | Hexachlorobutadiene | 0.217 | 0.210 | 3.2 | 99 | 0.00 |
| 34 | T,C | 4-Chloro-3-methylphenol | 0.333 | 0.340 | -2.1 | 96 | 0.02 |
| 35 | | 2-Methylnaphthalene | 0.599 | 0.563 | 6.0 | 94 | 0.00 |
| 36 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 37 | P | Hexachlorocyclopentadiene | 0.316 | 0.262 | 17.1 | 99 | 0.00 |
| 38 | | 2,4,5-Trichlorophenol | 0.457 | 0.476 | -4.2 | 100 | 0.02 |
| 39 | T,C | 2,4,6-Trichlorophenol | 0.455 | 0.467 | 2.6 | 104 | 0.00 |
| 40 | S | 2-Fluorobiphenyl | 1.254 | 1.227 | 2.2 | 104 | 0.00 |
| 41 | T | 2-Chloronaphthalene | 1.520 | 1.476 | 2.9 | 93 | 0.02 |
| 42 | | 2-Nitroaniline | 0.504 | 0.497 | 1.4 | 98 | 0.00 |
| 43 | T | Acenaphthylene | 1.791 | 1.777 | 0.8 | 106 | 0.00 |
| 44 | T | Dimethyl phthalate | 1.512 | 1.479 | 2.2 | 98 | 0.02 |
| 45 | T | 2,6-Dinitrotoluene | 0.359 | 0.370 | -3.1 | 102 | 0.00 |
| 46 | | 3-Nitroaniline | 0.392 | 0.376 | 4.1 | 95 | 0.02 |
| 47 | T,C | Acenaphthene | 1.036 | 1.019 | 1.6 | 107 | 0.00 |
| 48 | T,P | 2,4-Dinitrophenol | 0.219 | 0.235 | -7.3 | 98 | 0.02 |

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,ccv, svoa ccv 80ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | | Dibenzofuran | 1.457 | 1.436 | 1.4 | 107 | 0.00 |
| 50 | T,P | 4-Nitrophenol | 0.278 | 0.292 | -5.0 | 98 | 0.03 |
| 51 | T | 2,4-Dinitrotoluene | 0.433 | 0.410 | 5.3 | 97 | 0.02 |
| 52 | T | Fluorene | 1.014 | 0.847 | 16.5 | 99 | 0.00 |
| 53 | T | 4-Chlorophenyl phenylether | 0.474 | 0.460 | 3.0 | 104 | 0.00 |
| 54 | T | Diethyl phthalate | 1.544 | 1.523 | 1.4 | 102 | 0.02 |
| 55 | | 4-Nitroaniline | 0.380 | 0.360 | 5.3 | 92 | 0.03 |
| 56 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 57 | T | 4,6-Dinitro-2-methylphenol | 0.202 | 0.213 | -5.4 | 98 | 0.03 |
| 58 | C | n-Nitrosodiphenylamine | 1.047 | 0.997 | 4.8 | 98 | 0.02 |
| 59 | | 1,2-diphenyl-Hydrazine | 1.065 | 1.035 | 2.8 | 102 | 0.00 |
| 60 | S | 2,4,6-Tribromophenol | 0.225 | 0.230 | -2.2 | 105 | 0.02 |
| 61 | T | 4-Bromophenyl phenylether | 0.246 | 0.248 | -0.8 | 105 | 0.00 |
| 62 | T | Hexachlorobenzene | 0.328 | 0.326 | 0.6 | 106 | 0.00 |
| 63 | T,C | Pentachlorophenol | 0.187 | 0.183 | 2.1 | 101 | 0.00 |
| 64 | T | Phenanthrene | 1.147 | 1.108 | 3.4 | 98 | 0.00 |
| 65 | T | Anthracene | 1.177 | 1.163 | 1.2 | 98 | 0.00 |
| 66 | | Carbazole | 1.339 | 1.662 | -24.1# | 98 | 0.02 |
| 67 | T | Di-n-butyl phthalate | 1.851 | 1.763 | 4.8 | 99 | 0.00 |
| 68 | T,C | Fluoranthene | 1.115 | 1.109 | 0.5 | 97 | 0.00 |
| 69 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 70 | | Benzidine | 0.420 | 0.285 | 32.1# | 78 | 0.00 |
| 71 | T | Pyrene | 1.449 | 1.435 | 1.0 | 97 | 0.00 |
| 72 | S | Terphenyl-d14 | 0.875 | 0.828 | 5.4 | 97 | 0.00 |
| 73 | T | Butyl benzyl phthalate | 1.048 | 0.998 | 4.8 | 96 | 0.00 |
| 74 | T | Benzo[a]anthracene | 1.113 | 1.155 | -3.8 | 98 | 0.00 |
| 75 | T | 3,3'-Dichlorobenzidine | 0.411 | 0.398 | 3.2 | 95 | 0.00 |
| 76 | T | Chrysene | 1.076 | 1.054 | 2.0 | 98 | 0.00 |
| 77 | T | bis(2-Ethylhexyl)phthalate | 1.209 | 1.105 | 8.6 | 101 | 0.00 |
| 78 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 79 | T,C | Di-n-octyl phthalate | 3.107 | 3.004 | 3.3 | 94 | 0.00 |
| 80 | T | Benzo[b]fluoranthene | 1.662 | 1.399 | 15.8 | 96 | 0.00 |
| 81 | T | Benzo[k]fluoranthene | 1.120 | 1.075 | 4.0 | 93 | 0.00 |
| 82 | T,C | Benzo[a]pyrene | 1.305 | 1.133 | 13.2 | 94 | 0.00 |
| 83 | T | Indeno[1,2,3cd]pyrene | 0.943 | 0.758 | 19.6 | 90 | 0.00 |
| 84 | T | Dibenz[a,h]anthracene | 0.523 | 0.383 | 26.8# | 89 | 0.00 |
| 85 | T | Benzo[g,h,i]perylene | 0.783 | 0.628 | 19.8 | 94 | 0.00 |

4-3-08

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D Vial: 2
Acq On : 3 Apr 2008 7:53 pm Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120953 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 383369 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.49 | 164 | 202281 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 261771 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.46 | 240 | 186913 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 137911 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 289942 | 77.31 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.92 | 99 | 397778 | 80.21 | ug/ml | 0.02 |
| 20) Nitrobenzene-d5 | 4.83 | 82 | 357124 | 77.50 | ug/ml | 0.02 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 496268 | 78.28 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.38 | 330 | 120361 | 81.85 | ug/ml | 0.02 |
| 72) Terphenyl-d14 | 10.56 | 244 | 309466 | 75.71 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.37 | 79 | 313766 | 73.39 | ug/ml | 100 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 202760 | 75.01 | ug/ml | 88 |
| 6) Phenol | 3.93 | 94 | 377202m | 80.18 | ug/ml | |
| 7) Aniline | 3.99 | 93 | 397375 | 76.98 | ug/ml | 100 |
| 8) bis(2-Chloroethyl)ether | 4.03 | 93 | 282340 | 71.91 | ug/ml | 91 |
| 9) 2-Chlorophenol | 4.09 | 128 | 305263 | 81.09 | ug/ml | 99 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 338665 | 80.04 | ug/ml | 100 |
| 11) 1,4-Dichlorobenzene | 4.30 | 146 | 330232 | 78.17 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 315528 | 79.17 | ug/ml | 99 |
| 13) Benzyl alcohol | 4.42 | 108 | 185399 | 80.95 | ug/ml | 98 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 574073 | 76.09 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.50 | 108 | 265315 | 80.36 | ug/ml | 98 |
| 16) Hexachloroethane | 4.77 | 117 | 174924 | 80.05 | ug/ml | 95 |
| 17) N-Nitrosodi-n-propylamine | 4.68 | 70 | 212663 | 77.39 | ug/ml | 97 |
| 18) 3/4-Methylphenol | 4.66 | 108 | 277303 | 83.20 | ug/ml | 95 |
| 21) Nitrobenzene | 4.85 | 77 | 331475 | 78.66 | ug/ml | 92 |
| 22) Acetophenone | 4.67 | 105 | 443490 | 81.53 | ug/ml | 100 |
| 23) Isophorone | 5.10 | 82 | 608028 | 76.70 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.17 | 139 | 179177 | 77.26 | ug/ml | 89 |
| 25) 2,4-Dimethylphenol | 5.20 | 107 | 321963 | 82.42 | ug/ml | 96 |
| 26) bis(2-Chloroethoxy)methane | 5.30 | 93 | 367615 | 77.92 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.41 | 162 | 264069 | 79.90 | ug/ml | 99 |
| 28) Benzoic acid | 5.35 | 122 | 153720 | 78.82 | ug/ml | 98 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 278134 | 81.65 | ug/ml | 99 |
| 30) Naphthalene | 5.59 | 128 | 690138 | 76.83 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.65 | 162 | 248612 | 82.89 | ug/ml | 98 |
| 32) 4-Chloroaniline | 5.65 | 127 | 302069 | 78.09 | ug/ml | 98 |
| 33) Hexachlorobutadiene | 5.71 | 225 | 160741 | 77.40 | ug/ml | 97 |
| 34) 4-Chloro-3-methylphenol | 6.16 | 107 | 260374 | 81.51 | ug/ml | 92 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 431999 | 75.20 | ug/ml | 100 |
| 37) Hexachlorocyclopentadiene | 6.50 | 237 | 105901 | 66.33 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.68 | 196 | 192681 | 83.35 | ug/ml | 99 |
| 39) 2,4,6-Trichlorophenol | 6.64 | 196 | 188785 | 82.03 | ug/ml | 99 |
| 41) 2-Chloronaphthalene | 6.87 | 162 | 596967 | 77.69 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.99 | 65 | 200954 | 78.87 | ug/ml | 95 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D Vial: 2
Acq On : 3 Apr 2008 7:53 pm Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

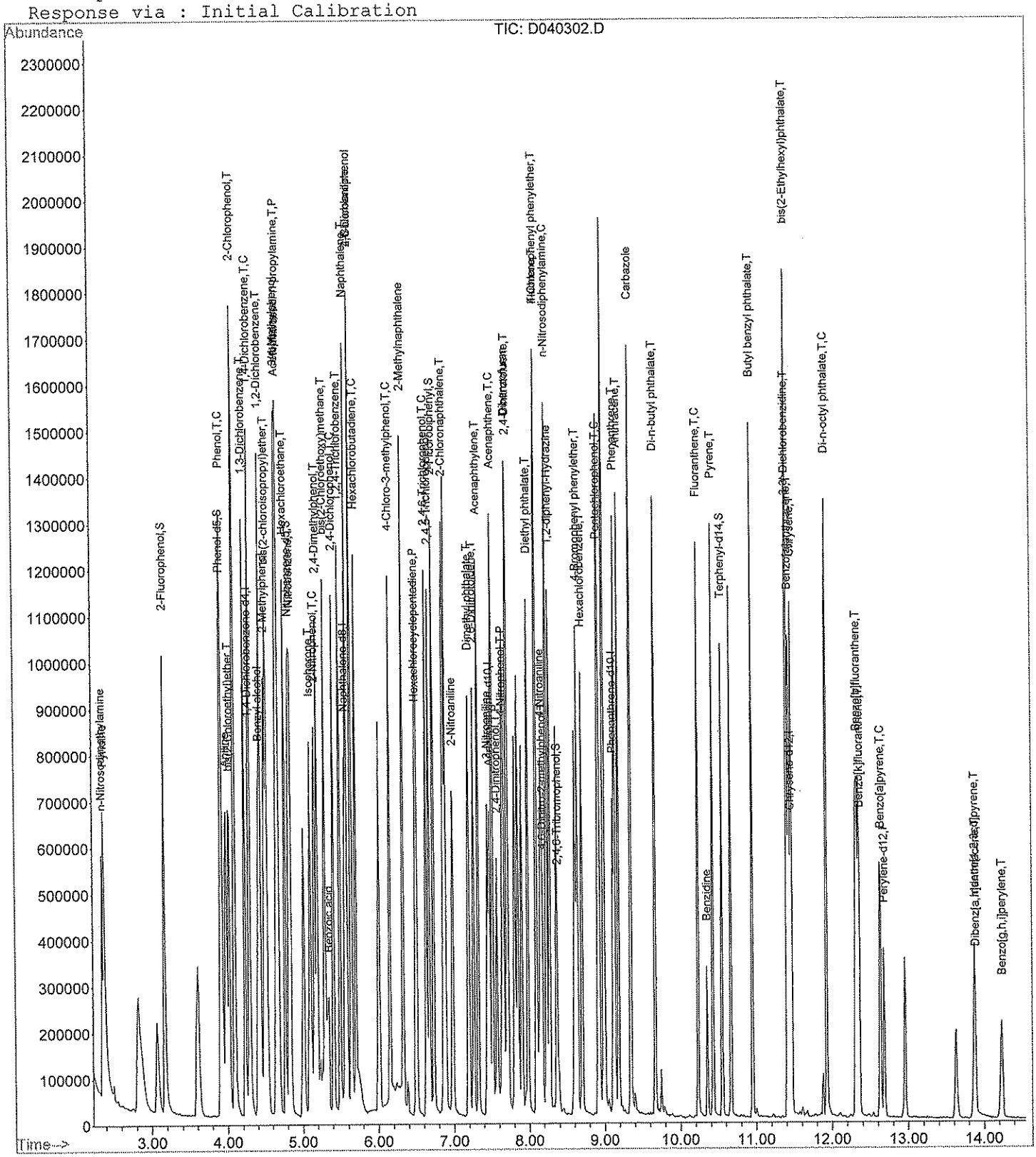
| Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|
| 43) Acenaphthylene | 7.32 | 152 | 718809 | 79.36 | ug/ml | 99 |
| 44) Dimethyl phthalate | 7.20 | 163 | 598409 | 78.26 | ug/ml | 99 |
| 45) 2,6-Dinitrotoluene | 7.26 | 165 | 149604 | 82.34 | ug/ml | 94 |
| 46) 3-Nitroaniline | 7.46 | 138 | 152219 | 76.82 | ug/ml | 98 |
| 47) Acenaphthene | 7.52 | 153 | 412120 | 78.65 | ug/ml | 98 |
| 48) 2,4-Dinitrophenol | 7.58 | 184 | 95214 | 85.83 | ug/ml | 93 |
| 49) Dibenzofuran | 7.71 | 168 | 580795 | 78.81 | ug/ml | 97 |
| 50) 4-Nitrophenol | 7.65 | 109 | 118253 | 84.10 | ug/ml | 90 |
| 51) 2,4-Dinitrotoluene | 7.72 | 165 | 165949 | 75.86 | ug/ml | 77 |
| 52) Fluorene | 8.10 | 166 | 342487 | 66.77 | ug/ml | 98 |
| 53) 4-Chlorophenyl phenylether | 8.10 | 204 | 186036 | 77.58 | ug/ml | 99 |
| 54) Diethyl phthalate | 7.99 | 149 | 616219 | 78.90 | ug/ml | 98 |
| 55) 4-Nitroaniline | 8.16 | 138 | 145463 | 75.75 | ug/ml | 99 |
| 57) 4,6-Dinitro-2-methylphenol | 8.18 | 198 | 111413 | 84.17 | ug/ml# | 75 |
| 58) n-Nitrosodiphenylamine | 8.24 | 169 | 521835 | 76.18 | ug/ml | 98 |
| 59) 1,2-diphenyl-Hydrazine | 8.27 | 77 | 541938 | 77.74 | ug/ml | 98 |
| 61) 4-Bromophenyl phenylether | 8.64 | 248 | 129949 | 80.80 | ug/ml | 94 |
| 62) Hexachlorobenzene | 8.70 | 284 | 170426 | 79.40 | ug/ml | 94 |
| 63) Pentachlorophenol | 8.92 | 266 | 95645 | 78.15 | ug/ml | 97 |
| 64) Phenanthrene | 9.14 | 178 | 580202 | 77.29 | ug/ml | 100 |
| 65) Anthracene | 9.20 | 178 | 608748 | 79.04 | ug/ml | 99 |
| 66) Carbazole | 9.36 | 167 | 869866 | 99.28 | ug/ml | 99 |
| 67) Di-n-butyl phthalate | 9.68 | 149 | 922902 | 76.19 | ug/ml | 100 |
| 68) Fluoranthene | 10.24 | 202 | 580483 | 79.52 | ug/ml | 97 |
| 70) Benzidine | 10.35 | 184 | 106470 | 54.19 | ug/ml | 96 |
| 71) Pyrene | 10.43 | 202 | 536492 | 79.25 | ug/ml | 100 |
| 73) Butyl benzyl phthalate | 10.95 | 149 | 373001 | 76.13 | ug/ml | 99 |
| 74) Benzo[a]anthracene | 11.44 | 228 | 431660 | 83.01 | ug/ml | 100 |
| 75) 3,3'-Dichlorobenzidine | 11.40 | 252 | 148622 | 77.42 | ug/ml | 100 |
| 76) Chrysene | 11.48 | 228 | 393856 | 78.35 | ug/ml | 100 |
| 77) bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 413078 | 73.10 | ug/ml | 98 |
| 79) Di-n-octyl phthalate | 11.94 | 149 | 828601 | 77.35 | ug/ml | 99 |
| 80) Benzo[b]fluoranthene | 12.34 | 252 | 385814 | 67.33 | ug/ml | 97 |
| 81) Benzo[k]fluoranthene | 12.37 | 252 | 296452 | 76.77 | ug/ml | 97 |
| 82) Benzo[a]pyrene | 12.64 | 252 | 312522 | 69.46 | ug/ml | 98 |
| 83) Indeno[1,2,3cd]pyrene | 13.88 | 276 | 209057 | 64.27 | ug/ml | 99 |
| 84) Dibenz[a,h]anthracene | 13.89 | 278 | 105747 | 58.63 | ug/ml | 89 |
| 85) Benzo[g,h,i]perylene | 14.24 | 276 | 173114 | 64.14 | ug/ml | 90 |

4/3/08

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

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D  Vial: 2
Acq On : 3 Apr 2008 7:53 pm  Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1,  Inst : SVOA 4
Misc : 8270_w  Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008  Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040214.D Vial: 34
Acq On : 2 Apr 2008 9:52 pm Operator: mills
Sample : ,samp,me0803a91-07b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 12:56 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

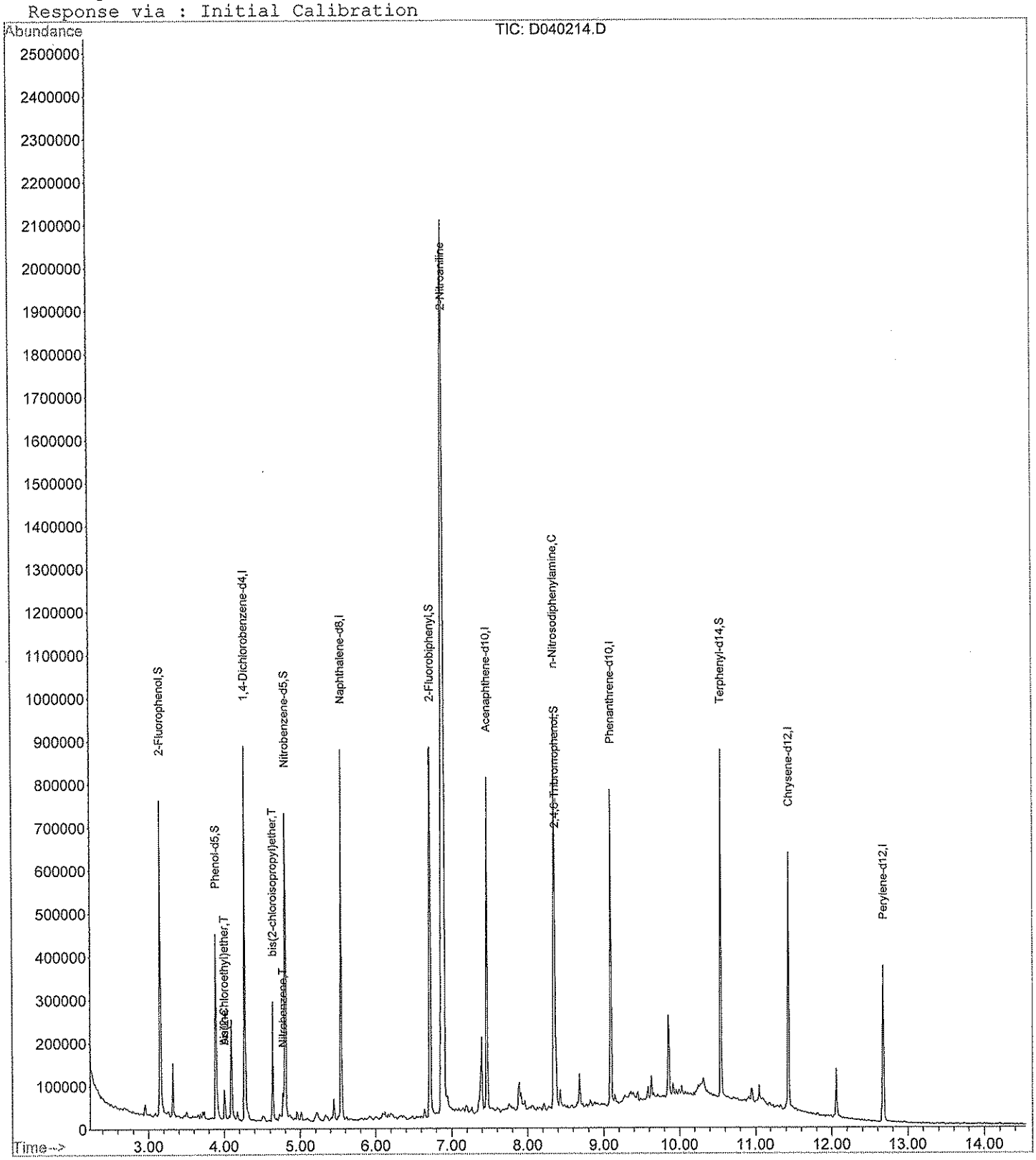
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 117343 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 356681 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 169999 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 241256 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 200491 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 166329 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 165106 | 45.38 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 147197 | 30.59 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 243516 | 56.80 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 355323 | 66.69 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 143285 | 105.73 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 224371 | 51.18 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 7) Aniline | 4.00 | 93 | 22334 | 4.46 | ug/ml# | 35 |
| 8) bis(2-Chloroethyl)ether | 4.00 | 93 | 22334 | 5.86 | ug/ml | 92 |
| 14) bis(2-chloroisopropyl)ethe | 4.64 | 45 | 99667 | 13.62 | ug/ml# | 74 |
| 21) Nitrobenzene | 4.77 | 77 | 4810 | 1.23 | ug/ml# | 49 |
| 42) 2-Nitroaniline | 6.90 | 65 | 62898 | 29.37 | ug/ml# | 11 |
| 58) n-Nitrosodiphenylamine | 8.35 | 169 | 4695 | 0.74 | ug/ml# | 34 |

4-3-08

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

Data File : C:\HPCHEM\1\DATA\D040208\D040214.D Vial: 34
Acq On : 2 Apr 2008 9:52 pm Operator: mills
Sample : ,samp,me0803a91-07b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 12:56 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040215.D Vial: 35
Acq On : 2 Apr 2008 10:18 pm Operator: mills
Sample : ,samp,me0803a91-11c,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 12:56 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 122603 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 369526 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 171001 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 238062 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.43 | 240 | 189084 | 40.00 | ug/ml | -0.01 |
| 78) Perylene-d12 | 12.67 | 264 | 174671 | 40.00 | ug/ml | -0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 153614 | 40.41 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 126723 | 25.21 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 218789 | 49.26 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 322041 | 60.09 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 138314 | 103.43 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 277771 | 67.18 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 58) n-Nitrosodiphenylamine | 8.35 | 169 | 4436 | 0.71 | ug/ml# | 28 |

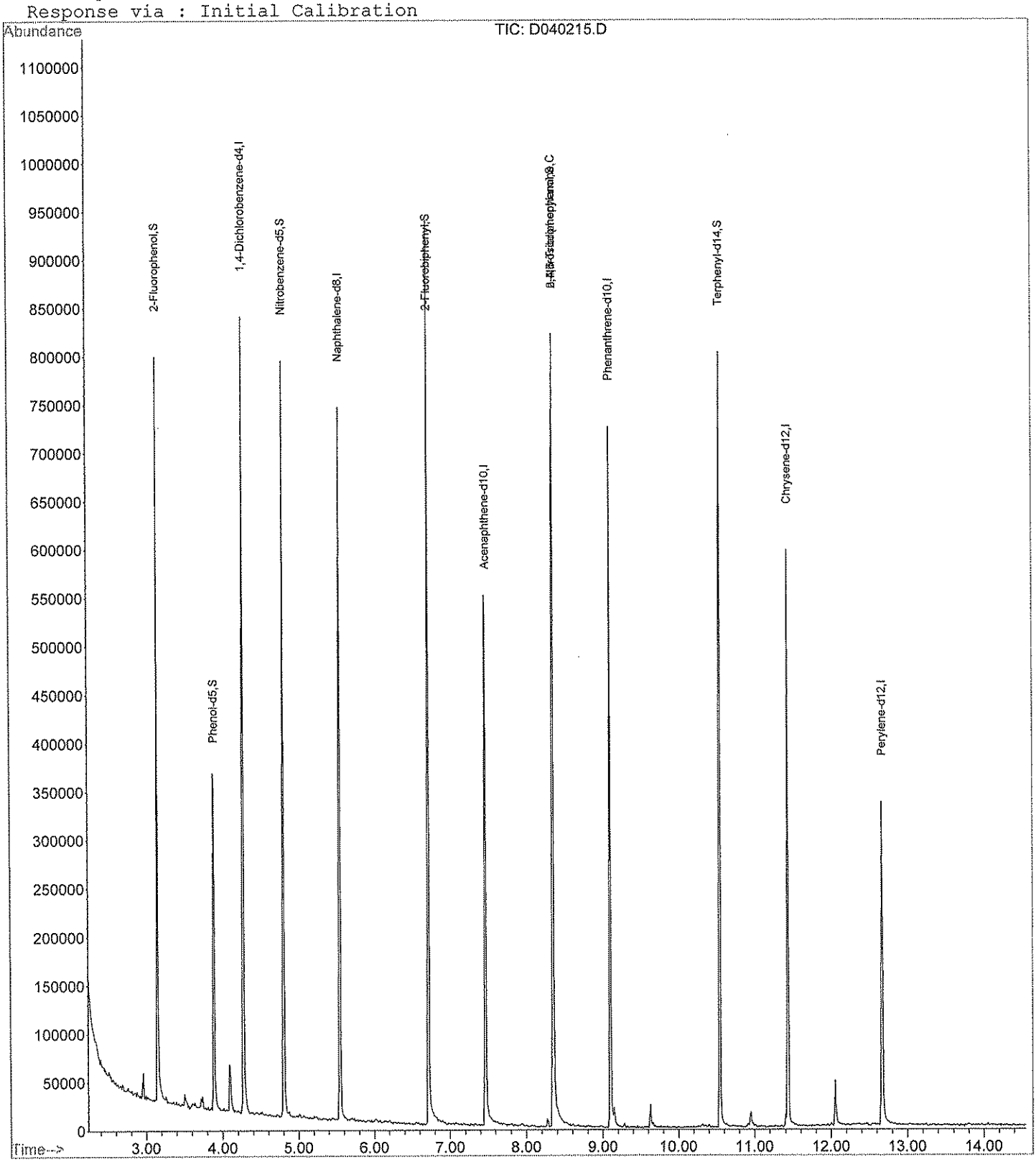
VT

4328

(#) = qualifier out of range (m) = manual integration
D040215.D SVOA0328.M Thu Apr 03 12:56:07 2008 SVOA 4 Page 1

Data File : C:\HPCHEM\1\DATA\D040208\D040215.D Vial: 35
Acq On : 2 Apr 2008 10:18 pm Operator: mills
Sample : ,samp,me0803a91-11c,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 12:56 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# EXTRACTION LOG(S)

# Microbac Laboratories, Inc.

# PREP BATCH REPORT



Prep Batch **60802** Prep Code: **3510_B** Technician: **James Manley**

Prep Start Date: **4/2/2008 6:22:00 AM**
Prep End Date: **4/2/2008 1:44:00 PM**

| Sample ID | Matrix | pH | wt (g) | Ini vol (mL) | Sol Added | Sol Recov | Fin Vol (mL) | factor | PrepStart | PrepEnd |
|---|---|---|---|---|---|---|---|---|---|---|
| BK-1-040208 | | | | 1000 | 0 | 0 | 1 | 0.001 | 4/2/2008 | 4/2/2008 |
| LCS-1-040208 | | | | 1000 | 0 | 0 | 1 | 0.001 | 4/2/2008 | 4/2/2008 |
| ME0803A91-07B | Aqueous | | | 980 | 0 | 0 | 1 | 0.0010204 | 4/2/2008 | 4/2/2008 |
| ME0803A91-11C | Aqueous | | | 990 | 0 | 0 | 1 | 0.0010101 | 4/2/2008 | 4/2/2008 |
| ME0803B85-14B | Aqueous | | | 970 | 0 | 0 | 1 | 0.0010309 | 4/2/2008 | 4/2/2008 |
| ME0803B85-17B | Aqueous | | | 980 | 0 | 0 | 1 | 0.0010204 | 4/2/2008 | 4/2/2008 |
| ME0803C07-02B | Aqueous | | | 970 | 0 | 0 | 1 | 0.0010309 | 4/2/2008 | 4/2/2008 |
| ME0803C07-02BM | Aqueous | | | 470 | 0 | 0 | 1 | 0.0021277 | 4/2/2008 | 4/2/2008 |
| ME0803C07-02BM | Aqueous | | | 480 | 0 | 0 | 1 | 0.0020833 | 4/2/2008 | 4/2/2008 |
| ME0803C18-01B | Aqueous | | | 1010 | 0 | 0 | 1 | 0.0009901 | 4/2/2008 | 4/2/2008 |
| ME0804043-01B | Aqueous | | | 970 | 0 | 0 | 1 | 0.0010309 | 4/2/2008 | 4/2/2008 |
| ME0804043-02B | Aqueous | | | 990 | 0 | 0 | 1 | 0.0010101 | 4/2/2008 | 4/2/2008 |

| Spk ID | Spike Name | SampType | AmtAdd |
|---|---|---|---|
| 1MLSPAB62-12 | | | 0 |
| 1MLSRAB62-07 | | | 0 |

# Injection Log

Directory: C:\HPCHEM\1\DATA\D040208

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | D040201.D | 1. | ,tune,dftpp tune,1, | dftpp | 2 Apr 2008 15:55 |
| 2 | 2 | D040202.D | 1. | ,ccv, svoa ccv 50ug/ml,1, | 8270_w | 2 Apr 2008 16:14 |
| 3 | 100 | D040203.D | 1. | rinse | 8270_w | 2 Apr 2008 17:08 |
| 4 | 26 | D040204.D | 1. | ,mblk,bk-1-040208,1, | 8270_w | 2 Apr 2008 17:30 |
| 5 | 27 | D040205.D | 1. | ,mblk,bk-1-032708,1, | 8270_w | 2 Apr 2008 17:57 |
| 6 | 28 | D040206.D | 1. | ,lcs,lcs-1-040208,1, | 8270_w | 2 Apr 2008 18:23 |
| 7 | 29 | D040207.D | 1. | ,lcs,lcs-1-032708,1, | 8270_w | 2 Apr 2008 18:48 |
| 8 | 30 | D040208.D | 1. | ,samp,me0803c18-01b,1, | 8270_w | 2 Apr 2008 19:15 |
| 9 | 31 | D040209.D | 1. | ,samp,me0803968-01a,1, | 625_w | 2 Apr 2008 19:41 |
| 10 | 36 | D040210.D | 1. | ,lcs,lcs-9a-032108,1, | 8270_o | 2 Apr 2008 20:07 |
| 11 | 37 | D040211.D | 1. | ,lcs,lcs-9b-032108,1, | 8270_o | 2 Apr 2008 20:34 |
| 12 | 32 | D040212.D | 1. | ,ms,me0803866-02ems,1, | 8270_w | 2 Apr 2008 21:00 |
| 13 | 33 | D040213.D | 1. | ,msd,me0803866-02emsd,1, | 8270_w | 2 Apr 2008 21:26 |
| 14 | 34 | D040214.D | 1. | ,samp,me0803a91-07b,1, | 8270_w | 2 Apr 2008 21:52 |
| 15 | 35 | D040215.D | 1. | ,samp,me0803a91-11c,1, | 8270_w | 2 Apr 2008 22:18 |
| 16 | 38 | D040216.D | 1. | ,samp,me0803a81-01a,1, | 1311_b | 2 Apr 2008 22:41 |
| 17 | 39 | D040217.D | 1. | ,samp,me0803a19-01a,1, | 8270_s_pah | 2 Apr 2008 23:07 |
| 18 | 40 | D040218.D | 1. | ,samp,me0803a19-02a,1, | 8270_s_pah | 2 Apr 2008 23:32 |
| 19 | 41 | D040219.D | 1. | ,samp,me0803a19-03a,1, | 8270_s_pah | 2 Apr 2008 23:57 |
| 20 | 42 | D040220.D | 1. | ,samp,me0803880-01a,1, | 8270_s_pah | 3 Apr 2008 00:23 |
| 21 | 43 | D040221.D | 1. | ,ms,me0803880-01ams,1, | 8270_s_pah | 3 Apr 2008 00:48 |
| 22 | 44 | D040222.D | 1. | ,msd,me0803880-01amsd,1, | 8270_s_pah | 3 Apr 2008 01:13 |
| 23 | 45 | D040223.D | 1. | ,samp,me0803880-03a,1, | 8270_s_pah | 3 Apr 2008 01:38 |

1762699

SVOA Standards

Acquisition Method 8270-AQ
Initial Linearity Date 3-28-08
Tune Std. # T7720
ICV Std. # AB1912
CCV Std. # AB6122
I.S. # AB6702

4-3-08

# Injection Log

Directory: C:\HPCHEM\1\DATA\D040308

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | D040301.D | 1. | ,tune,dftpp tune,1, | dftpp | 3 Apr 2008 19:35 |
| 2 | 2 | D040302.D | 1. | ,ccv, svoa ccv 80ug/ml,1, | 8270_w | 3 Apr 2008 19:53 |
| 3 | 100 | D040303.D | 1. | rinse | 8270_w | 3 Apr 2008 21:16 |
| 4 | 3 | D040304.D | 1. | ,samp,me0803b68-01c,1,#37 only | 625+_w | 3 Apr 2008 21:41 |
| 5 | 100 | D040325.D | 1. | rinse | 8270_w | 3 Apr 2008 21:57 |
| 6 | 100 | D040327.D | 1. | rinse | 8270_w | 3 Apr 2008 22:23 |
| 7 | 4 | D040328.D | 1. | ,mblk,bk-8-040308,1,short 625 list | 8270_w | 3 Apr 2008 22:59 |
| 8 | 5 | D040329.D | 1. | ,lcs,lcs-8a-040308,1,short 625 list | 8270_w | 3 Apr 2008 23:27 |
| 9 | 6 | D040330.D | 1. | ,lcs,lcs-8b-040308,1,short 625 list | 8270_w | 3 Apr 2008 23:54 |
| 10 | 7 | D040331.D | 1. | ,samp,me0804101-01a,1, | 8270_w | 4 Apr 2008 00:22 |
| 11 | 8 | D040332.D | 1. | ,samp,me0804119-03b,1, | 8270_w | 4 Apr 2008 00:49 |
| 12 | 9 | D040333.D | 1. | ,samp,me0804119-04b,1, | 8270_w | 4 Apr 2008 01:13 |
| 13 | 10 | D040334.D | 1. | ,samp,me0804043-03b,1, | 8270_w | 4 Apr 2008 01:39 |
| 14 | 11 | D040335.D | 1. | ,samp,me0804043-04b,1, | 8270_w | 4 Apr 2008 02:04 |
| 15 | 12 | D040336.D | 1. | ,samp,me0804107-01a,1, | 625_w | 4 Apr 2008 02:30 |
| 16 | 13 | D040337.D | 1. | ,samp,me0804126-02a,1, | 625+_w | 4 Apr 2008 02:56 |
| 17 | 14 | D040338.D | 1. | ,samp,me0803b85-14b,1, | 8270_w | 4 Apr 2008 03:21 |
| 18 | 15 | D040339.D | 1. | ,samp,me0803b85-17b,1, | 8270_w | 4 Apr 2008 03:47 |
| 19 | 16 | D040340.D | 1. | ,samp,me0803c07-02b,1, | 8270_w | 4 Apr 2008 04:12 |
| 20 | 17 | D040341.D | 1. | ,ms,me0803c07-02bms,1, | 8270_w | 4 Apr 2008 04:38 |
| 21 | 18 | D040342.D | 1. | ,msd,me0803c07-02bmsd,1, | 8270_w | 4 Apr 2008 05:03 |
| 22 | 19 | D040343.D | 1. | ,samp,me0804043-01b,1, | 8270_w | 4 Apr 2008 05:29 |
| 23 | 20 | D040344.D | 1. | ,samp,me0804043-02b,1, | 8270_w | 4 Apr 2008 05:54 |
| 24 | 21 | D040345.D | 1. | ,samp,me0804053-01a,1, | 625_w | 4 Apr 2008 06:20 |
| 25 | 22 | D040346.D | 1. | ,samp,me0804005-01a,1, | 625_w | 4 Apr 2008 06:45 |
| 26 | 23 | D040347.D | 1. | ,lcs,lcs-2-033108,1, not used | 8270_s_pah | 4 Apr 2008 07:11 |
| 27 | 100 | D040350.D | 1. | rinse | 625_w | 4 Apr 2008 07:27 |

SVOA Standards

Acquisition Method 8270-AE
Initial Linearity Date 3-28-08
Tune Std. # FF724
ICV Std. # AB1472
CCV Std. # AB1403
I.S. # AB1402

4-4-08

# VOA GC/MS
# RAW DATA

# METHOD BLANK RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040205.D
Acq On : 2 Apr 2008 10:07 am
Sample : ,mblk,bk_w25 040208,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 02 10:58:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.011 | 96 | 346370 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.524 | 117 | 274245 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.385 | 152 | 142931 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.166 | 113 | 85840 | 10.75 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.50% | | | |
| 30) 1,2-dichloroethane-d4 | 6.598 | 65 | 80987 | 11.62 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 116.20% | | | |
| 44) toluene-d8 | 9.249 | 98 | 341016 | 9.92 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.20% | | | |
| 63) 4-bromofluorobenzene | 13.518 | 95 | 130747 | 10.35 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.50% | | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.976 | 39 | 427 | 0.06 | ug/L # | 14 |
| 6) bromomethane | 2.335 | 94 | 1410 | 0.69 | ug/L # | 77 |
| 11) acetone | 3.466 | 43 | 1878 | 2.46 | ug/L | 57 |
| 84) 1,2,3-trichlorobenzene | 18.511 | 180 | 2832 | 0.34 | ug/L | 93 |
| 85) 2-methyl naphthalene | 19.320 | 142 | 6622 | 1.11 | ug/L | 99 |

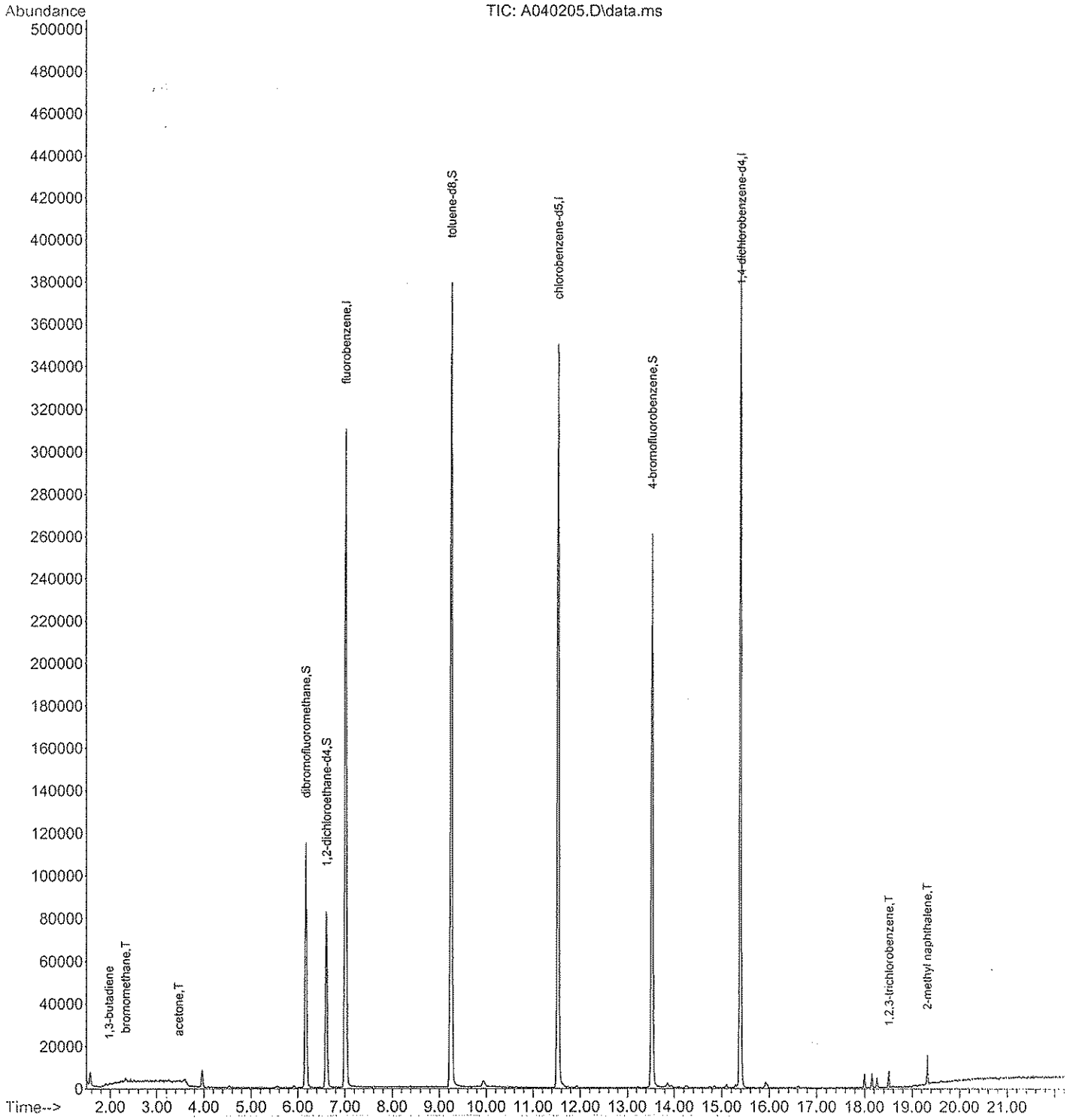
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/04/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040205.D
Acq On : 2 Apr 2008 10:07 am
Sample : ,mblk,bk_w25 040208,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 02 10:58:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040314.D
Acq On : 3 Apr 2008 4:51 pm
Sample : ,mblk,bk_w25-40308,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 03 17:14:35 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 629718 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 550804 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 289395 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 162821 | 9.93 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.30% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 153904 | 9.79 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.90% | | | |
| 44) toluene-d8 | 9.254 | 98 | 647744 | 9.68 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.80% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 269348 | 9.56 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.60% | | | |
| Target Compounds | | | | | | Qvalue |
| 3) chloromethane | 1.810 | 50 | 12629 | 0.61 | ug/L | 94 |
| 5) 1,3-butadiene | 1.962 | 39 | 495 | 0.02 | ug/L # | 44 |
| 85) 2-methyl naphthalene | 19.324 | 142 | 5758 | 0.57 | ug/L | 84 |

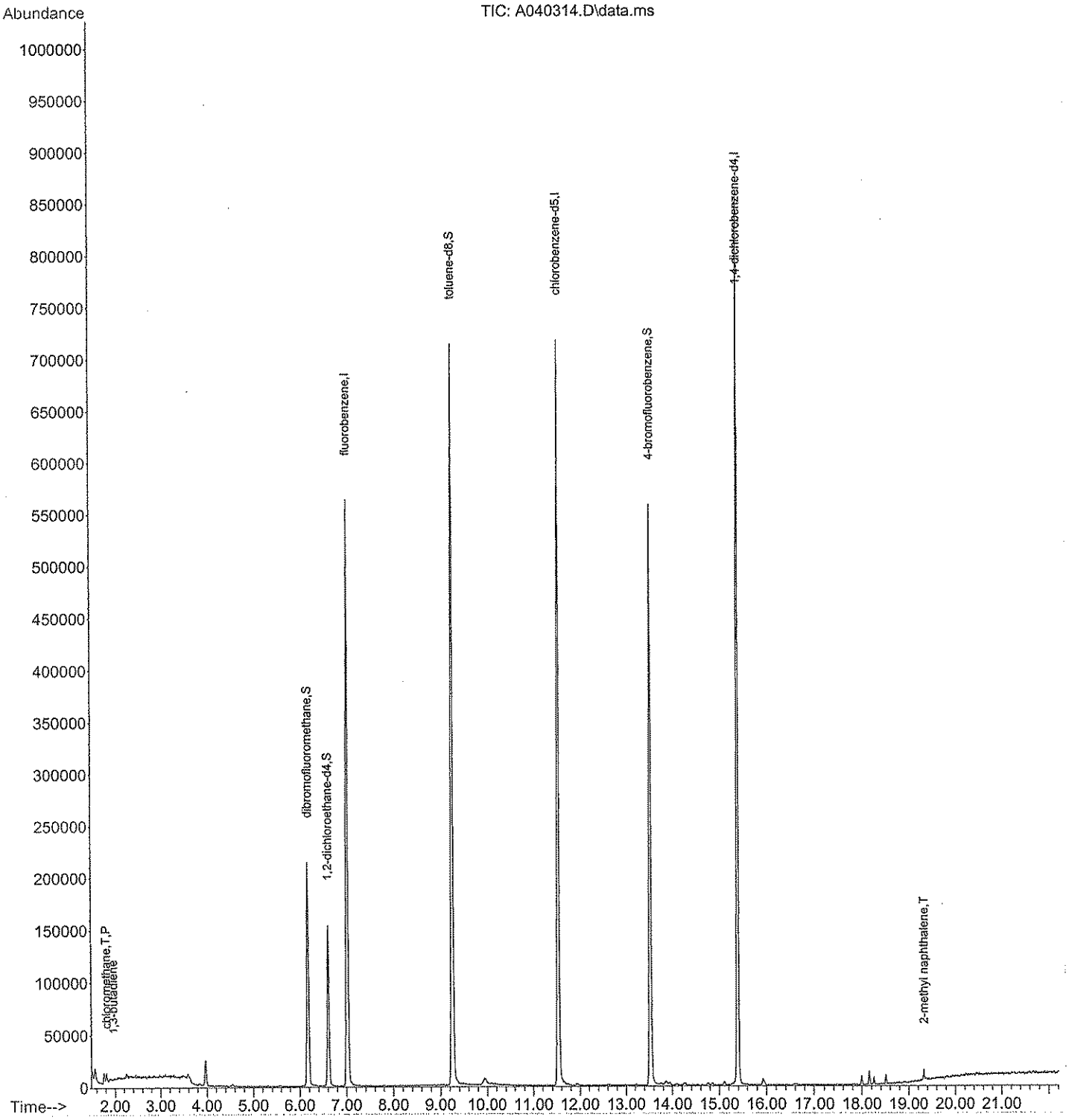
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/5/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040314.D
Acq On : 3 Apr 2008 4:51 pm
Sample : ,mblk,bk_w25-40308,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 03 17:14:35 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# LABORATORY CONTROL SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040206.D
Acq On : 2 Apr 2008 10:42 am
Sample : ,lcs,lcs_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 02 11:07:36 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 350258 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 280960 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 162436 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 88196 | 10.92 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 85446 | 12.12 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 121.20% | | | | |
| 44) toluene-d8 | 9.247 | 98 | 347507 | 9.87 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.70% | | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 144107 | 11.13 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.30% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 96022 | 30.44 | ug/L | | 99 |
| 3) chloromethane | 1.822 | 50 | 130601 | 18.81 | ug/L | | 94 |
| 4) vinyl chloride | 1.937 | 62 | 104583 | 13.81 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.986 | 39 | 440 | 0.06 | ug/L | # | 14 |
| 6) bromomethane | 2.320 | 94 | 46234 | 22.45 | ug/L | | 96 |
| 7) chloroethane | 2.442 | 64 | 64684 | 14.36 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.728 | 101 | 190159 | 16.31 | ug/L | | 93 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 65558 | 10.25 | ug/L | # | 86 |
| 11) acetone | 3.470 | 43 | 9319 | 12.08 | ug/L | | 85 |
| 12) carbon disulfide | 3.585 | 76 | 264080 | 12.62 | ug/L | | 98 |
| 13) methylene chloride | 3.962 | 84 | 100097 | 10.70 | ug/L | | 90 |
| 14) acrylonitrile | 4.309 | 53 | 11862 | 12.27 | ug/L | | 95 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 81013 | 9.43 | ug/L | | 90 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 138273 | 9.87 | ug/L | | 96 |
| 17) acetonitrile | 3.828 | 41 | 4345 | 11.53 | ug/L | | 95 |
| 19) 1,1-dichloroethane | 4.795 | 63 | 164225 | 9.76 | ug/L | | 96 |
| 20) vinyl acetate | 4.868 | 43 | 92972 | 18.79 | ug/L | | 96 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 80486 | 8.58 | ug/L | | 93 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 161069 | 10.59 | ug/L | | 94 |
| 23) 2-butanone | 5.586 | 72 | 2459 | 10.17 | ug/L | # | 68 |
| 25) chloroform | 5.957 | 83 | 166847 | 9.92 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 169176 | 10.43 | ug/L | | 90 |
| 29) carbon tetrachloride | 6.334 | 117 | 146981 | 11.07 | ug/L | | 94 |
| 31) benzene | 6.626 | 78 | 305191 | 9.01 | ug/L | | 94 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 116863 | 9.69 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.699 | 62 | 91158 | 10.00 | ug/L | | 92 |
| 34) trichloroethene | 7.508 | 95 | 87022 | 8.84 | ug/L | | 92 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 67189 | 8.30 | ug/L | | 97 |
| 37) methyl methacrylate | 7.836 | 41 | 54517 | 16.82 | ug/L | # | 41 |
| 38) dibromomethane | 8.031 | 93 | 29069 | 8.86 | ug/L | # | 82 |
| 39) bromodichloromethane | 8.262 | 83 | 104663 | 9.29 | ug/L | | 96 |
| 40) 2-chloroethyl vinyl ether | 8.694 | 63 | 5977 | 11.43 | ug/L | | 96 |
| 42) cis-1,3-dichloropropene | 8.894 | 75 | 95594 | 8.12 | ug/L | | 95 |
| 43) 4-methyl-2-pentanone | 9.125 | 43 | 30947 | 9.17 | ug/L | | 98 |
| 45) toluene | 9.350 | 92 | 202011 | 8.43 | ug/L | | 86 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040206.D
Acq On : 2 Apr 2008 10:42 am
Sample : ,lcs,lcs_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 02 11:07:36 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

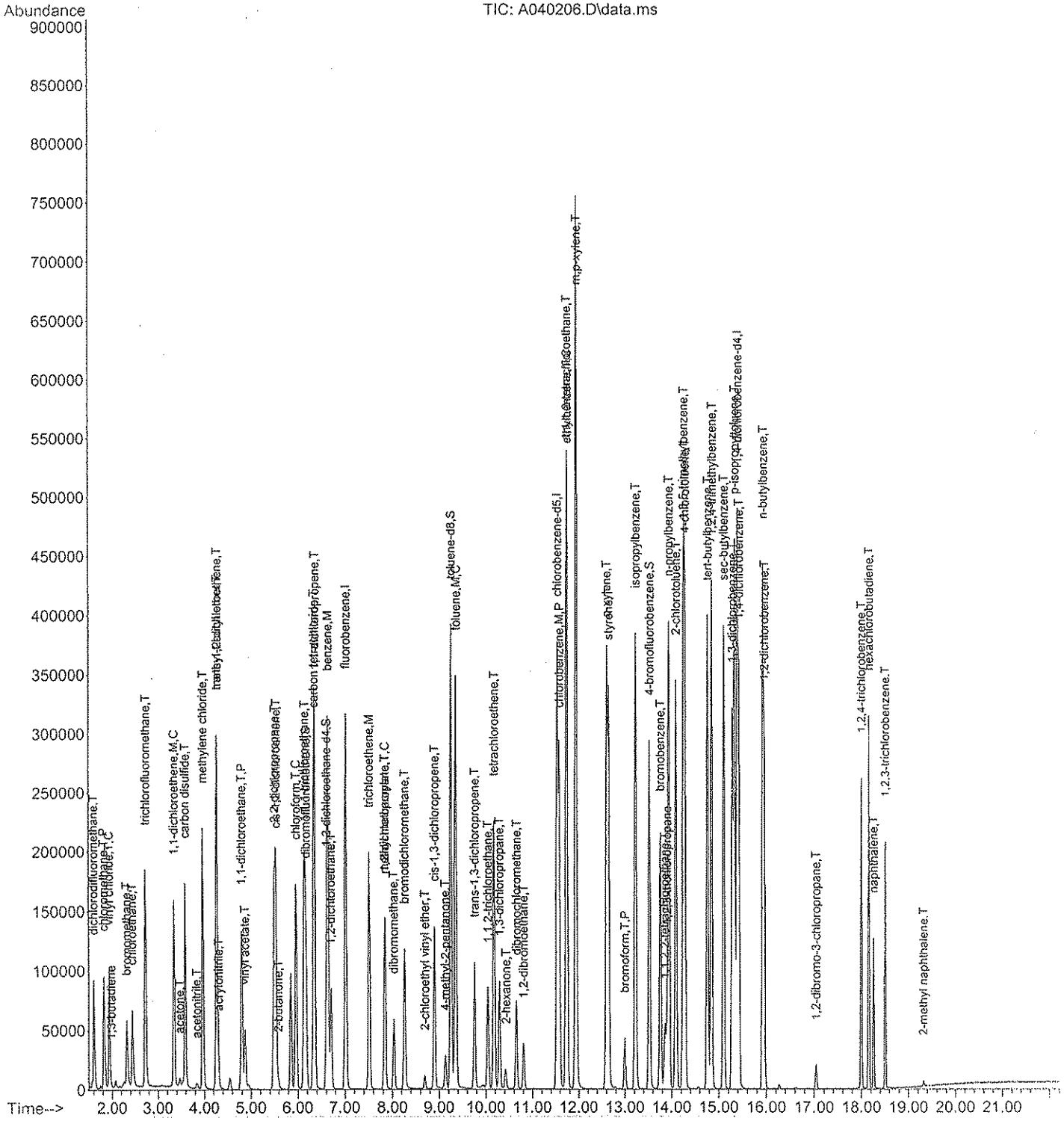
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 46) 1,1,2-trichloroethane | 10.044 | 83 | 30607 | 7.89 ug/L | 89 |
| 47) 1,3-dichloropropane | 10.287 | 76 | 66495 | 7.99 ug/L | 94 |
| 48) tetrachloroethene | 10.171 | 164 | 73689 | 8.61 ug/L | 92 |
| 49) trans-1,3-dichloropropene | 9.758 | 75 | 76806 | 8.80 ug/L | 93 |
| 50) 2-hexanone | 10.427 | 43 | 18812 | 8.51 ug/L # | 59 |
| 51) dibromochloromethane | 10.652 | 129 | 55790 | 8.66 ug/L | 99 |
| 52) 1,2-dibromoethane | 10.804 | 107 | 38104 | 8.08 ug/L | 99 |
| 53) chlorobenzene | 11.576 | 112 | 207654 | 8.27 ug/L | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 74796 | 8.59 ug/L | 92 |
| 55) ethylbenzene | 11.740 | 91 | 417640 | 8.81 ug/L | 95 |
| 56) m,p-xylene | 11.935 | 106 | 304746 | 17.13 ug/L # | 71 |
| 58) o-xylene | 12.598 | 106 | 141905 | 8.32 ug/L # | 86 |
| 59) styrene | 12.640 | 104 | 222366 | 8.14 ug/L | 90 |
| 60) isopropylbenzene | 13.224 | 105 | 392755 | 9.82 ug/L | 94 |
| 61) bromobenzene | 13.759 | 156 | 90173 | 8.28 ug/L | 91 |
| 62) bromoform | 12.999 | 173 | 31167 | 8.59 ug/L | 97 |
| 64) 1,2,3-trichloropropane | 13.905 | 75 | 33889 | 8.72 ug/L | 95 |
| 65) n-propylbenzene | 13.936 | 91 | 472142 | 9.06 ug/L | 95 |
| 66) 2-chlorotoluene | 14.088 | 91 | 290245 | 8.86 ug/L | 89 |
| 67) 4-chlorotoluene | 14.276 | 91 | 340803 | 9.13 ug/L | 92 |
| 68) 1,3,5-trimethylbenzene | 14.246 | 105 | 341444 | 9.03 ug/L | 83 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 36776 | 7.22 ug/L | 92 |
| 71) tert-butylbenzene | 14.763 | 119 | 268723 | 7.74 ug/L | 93 |
| 72) sec-butylbenzene | 15.097 | 105 | 373938 | 7.52 ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 340415 | 7.68 ug/L | 86 |
| 74) 1,3-dichlorobenzene | 15.280 | 146 | 176784 | 7.66 ug/L | 88 |
| 75) p-isopropyltoluene | 15.328 | 119 | 346093 | 8.31 ug/L | 94 |
| 77) 1,4-dichlorobenzene | 15.419 | 146 | 174909 | 7.71 ug/L | 91 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 143689 | 7.66 ug/L | 93 |
| 79) n-butylbenzene | 15.924 | 91 | 308367 | 7.95 ug/L | 93 |
| 80) 1,2-dibromo-3-chloropr... | 17.037 | 75 | 7188 | 8.48 ug/L # | 63 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 88376 | 6.93 ug/L | 94 |
| 82) hexachlorobutadiene | 18.156 | 225 | 69839 | 7.62 ug/L | 93 |
| 83) naphthalene | 18.259 | 128 | 94606 | 6.01 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 65779 | 6.91 ug/L | 91 |
| 85) 2-methyl naphthalene | 19.318 | 142 | 2510 | 0.37 ug/L # | 71 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040206.D
Acq On : 2 Apr 2008 10:42 am
Sample : ,lcs,lcs_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 02 11:07:36 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040329.D
Acq On : 4 Apr 2008 2:02 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 04 06:42:42 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.011 | 96 | 455550 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 429888 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.392 | 152 | 276010 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 126548 | 10.67 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.70% | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 124323 | 10.93 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.30% | | | |
| 44) toluene-d8 | 9.249 | 98 | 498512 | 9.55 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.50% | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 239789 | 10.90 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.00% | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 128781 | 13.70 | ug/L | | 96 |
| 3) chloromethane | 1.818 | 50 | 245052 | 16.33 | ug/L | | 98 |
| 4) vinyl chloride | 1.934 | 62 | 157911 | 9.85 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.958 | 39 | 90 | 0.01 | ug/L | # | 10 |
| 6) bromomethane | 2.317 | 94 | 17045 | 3.01 | ug/L | | 93 |
| 7) chloroethane | 2.444 | 64 | 111262 | 11.75 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.724 | 101 | 351900 | 12.43 | ug/L | | 99 |
| 10) 1,1-dichloroethene | 3.344 | 96 | 110095 | 8.85 | ug/L | | 94 |
| 11) acetone | 3.472 | 43 | 18405 | 11.28 | ug/L | | 93 |
| 12) carbon disulfide | 3.588 | 76 | 440247 | 10.87 | ug/L | | 99 |
| 13) methylene chloride | 3.965 | 84 | 150720 | 10.26 | ug/L | | 91 |
| 14) acrylonitrile | 4.305 | 53 | 18527 | 11.41 | ug/L | | 98 |
| 15) trans-1,2-dichloroethene | 4.269 | 96 | 130519 | 9.57 | ug/L | | 97 |
| 16) methyl-t-butyl ether | 4.269 | 73 | 217503 | 10.34 | ug/L | | 97 |
| 17) acetonitrile | 3.837 | 41 | 8304 | 11.81 | ug/L | | 95 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 271286 | 9.99 | ug/L | | 98 |
| 20) vinyl acetate | 4.877 | 43 | 89942 | 11.93 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.534 | 96 | 127643 | 9.18 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.503 | 77 | 211765 | 7.88 | ug/L | | 97 |
| 23) 2-butanone | 5.595 | 72 | 3570 | 10.38 | ug/L | # | 75 |
| 25) chloroform | 5.959 | 83 | 287124 | 10.51 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.142 | 97 | 290033 | 10.06 | ug/L | | 96 |
| 29) carbon tetrachloride | 6.343 | 117 | 251833 | 10.14 | ug/L | | 97 |
| 31) benzene | 6.628 | 78 | 490133 | 9.61 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 186959 | 9.47 | ug/L | | 95 |
| 33) 1,2-dichloroethane | 6.701 | 62 | 163145 | 10.34 | ug/L | | 99 |
| 34) trichloroethene | 7.510 | 95 | 148658 | 9.71 | ug/L | | 98 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 110439 | 9.50 | ug/L | | 91 |
| 37) methyl methacrylate | 7.845 | 41 | 99000 | 20.15 | ug/L | # | 55 |
| 38) dibromomethane | 8.033 | 93 | 50782 | 10.04 | ug/L | | 94 |
| 39) bromodichloromethane | 8.264 | 83 | 179759 | 9.97 | ug/L | | 96 |
| 42) cis-1,3-dichloropropene | 8.903 | 75 | 146924 | 8.32 | ug/L | | 95 |
| 43) 4-methyl-2-pentanone | 9.134 | 43 | 47292 | 8.94 | ug/L | | 96 |
| 45) toluene | 9.353 | 92 | 335579 | 8.96 | ug/L | | 97 |
| 46) 1,1,2-trichloroethane | 10.046 | 83 | 53375 | 9.12 | ug/L | | 95 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040329.D
Acq On : 4 Apr 2008 2:02 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 04 06:42:42 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

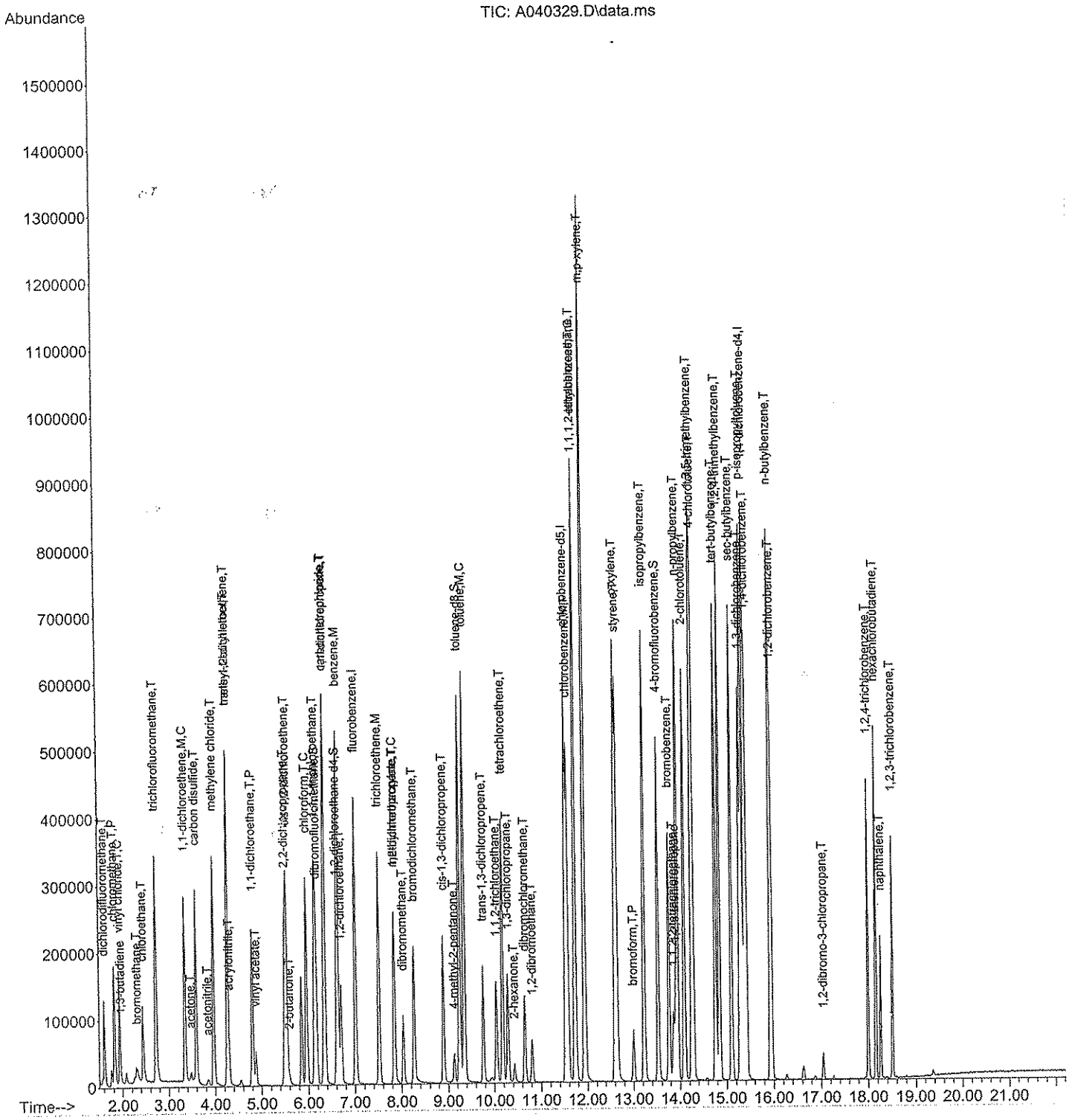
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 47) 1,3-dichloropropane | 10.289 | 76 | 112970 | 9.00 | ug/L | 100 |
| 48) tetrachloroethene | 10.174 | 164 | 122047 | 8.92 | ug/L | 94 |
| 49) trans-1,3-dichloropropene | 9.754 | 75 | 124107 | 9.27 | ug/L | 98 |
| 50) 2-hexanone | 10.423 | 43 | 30531 | 9.57 | ug/L | 94 |
| 51) dibromochloromethane | 10.654 | 129 | 95854 | 9.29 | ug/L | 92 |
| 52) 1,2-dibromoethane | 10.812 | 107 | 62813 | 9.03 | ug/L | 95 |
| 53) chlorobenzene | 11.572 | 112 | 347520 | 9.14 | ug/L | 96 |
| 54) 1,1,1,2-tetrachloroethane | 11.731 | 131 | 130454 | 9.24 | ug/L | 98 |
| 55) ethylbenzene | 11.737 | 91 | 701837 | 9.25 | ug/L | 97 |
| 56) m,p-xylene | 11.937 | 106 | 510169 | 18.43 | ug/L | 99 |
| 58) o-xylene | 12.606 | 106 | 237933 | 9.18 | ug/L | 99 |
| 59) styrene | 12.643 | 104 | 380047 | 9.14 | ug/L | 98 |
| 60) isopropylbenzene | 13.227 | 105 | 671954 | 10.47 | ug/L | 98 |
| 61) bromobenzene | 13.762 | 156 | 154892 | 9.43 | ug/L | 97 |
| 62) bromoform | 12.995 | 173 | 54242 | 9.44 | ug/L | 97 |
| 64) 1,2,3-trichloropropane | 13.902 | 75 | 59892 | 9.44 | ug/L | 90 |
| 65) n-propylbenzene | 13.944 | 91 | 820699 | 9.45 | ug/L | 99 |
| 66) 2-chlorotoluene | 14.090 | 91 | 509613 | 9.50 | ug/L | 99 |
| 67) 4-chlorotoluene | 14.279 | 91 | 607029 | 9.64 | ug/L | 98 |
| 68) 1,3,5-trimethylbenzene | 14.248 | 105 | 593288 | 9.60 | ug/L | 98 |
| 70) 1,1,2,2-tetrachloroethane | 13.859 | 83 | 62092 | 8.08 | ug/L | 99 |
| 71) tert-butylbenzene | 14.765 | 119 | 474011 | 8.44 | ug/L | 100 |
| 72) sec-butylbenzene | 15.100 | 105 | 648478 | 7.89 | ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.850 | 105 | 602327 | 8.37 | ug/L | 98 |
| 74) 1,3-dichlorobenzene | 15.288 | 146 | 310469 | 8.48 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.331 | 119 | 607634 | 8.85 | ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.422 | 146 | 302298 | 8.30 | ug/L | 98 |
| 78) 1,2-dichlorobenzene | 15.957 | 146 | 258989 | 8.68 | ug/L | 98 |
| 79) n-butylbenzene | 15.927 | 91 | 539846 | 8.26 | ug/L | 98 |
| 80) 1,2-dibromo-3-chloropr... | 17.040 | 75 | 12693 | 8.60 | ug/L | 91 |
| 81) 1,2,4-trichlorobenzene | 18.000 | 180 | 146319 | 7.93 | ug/L | 94 |
| 82) hexachlorobutadiene | 18.159 | 225 | 112829 | 7.03 | ug/L | 98 |
| 83) naphthalene | 18.262 | 128 | 158149 | 8.08 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.511 | 180 | 109196 | 7.70 | ug/L | 98 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040329.D
Acq On : 4 Apr 2008 2:02 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 04 06:42:42 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# MATRIX SPIKE/MATRIX SPIKE DUPLICATE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040213.D
Acq On : 2 Apr 2008 3:09 pm
Sample : ,samp,me0803a63-03a,1, Inst : VOA1
Misc : 8260_w25
Operator : BR
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 02 15:37:53 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 281735 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 228021 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 115699 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 72747 | 11.20 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.00% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 70539 | 12.44 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 124.40% | | |
| 44) toluene-d8 | 9.248 | 98 | 279773 | 9.79 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.90% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 107174 | 10.20 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 102.00% | | |
| Target Compounds | | | | | | Qvalue |
| 4) vinyl chloride | 1.932 | 62 | 2917 | 0.48 | ug/L | 92 |
| 5) 1,3-butadiene | 1.975 | 39 | 56 | 0.01 | ug/L # | 14 |
| 11) acetone | 3.477 | 43 | 1452 | 2.34 | ug/L | 57 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FIT (1)

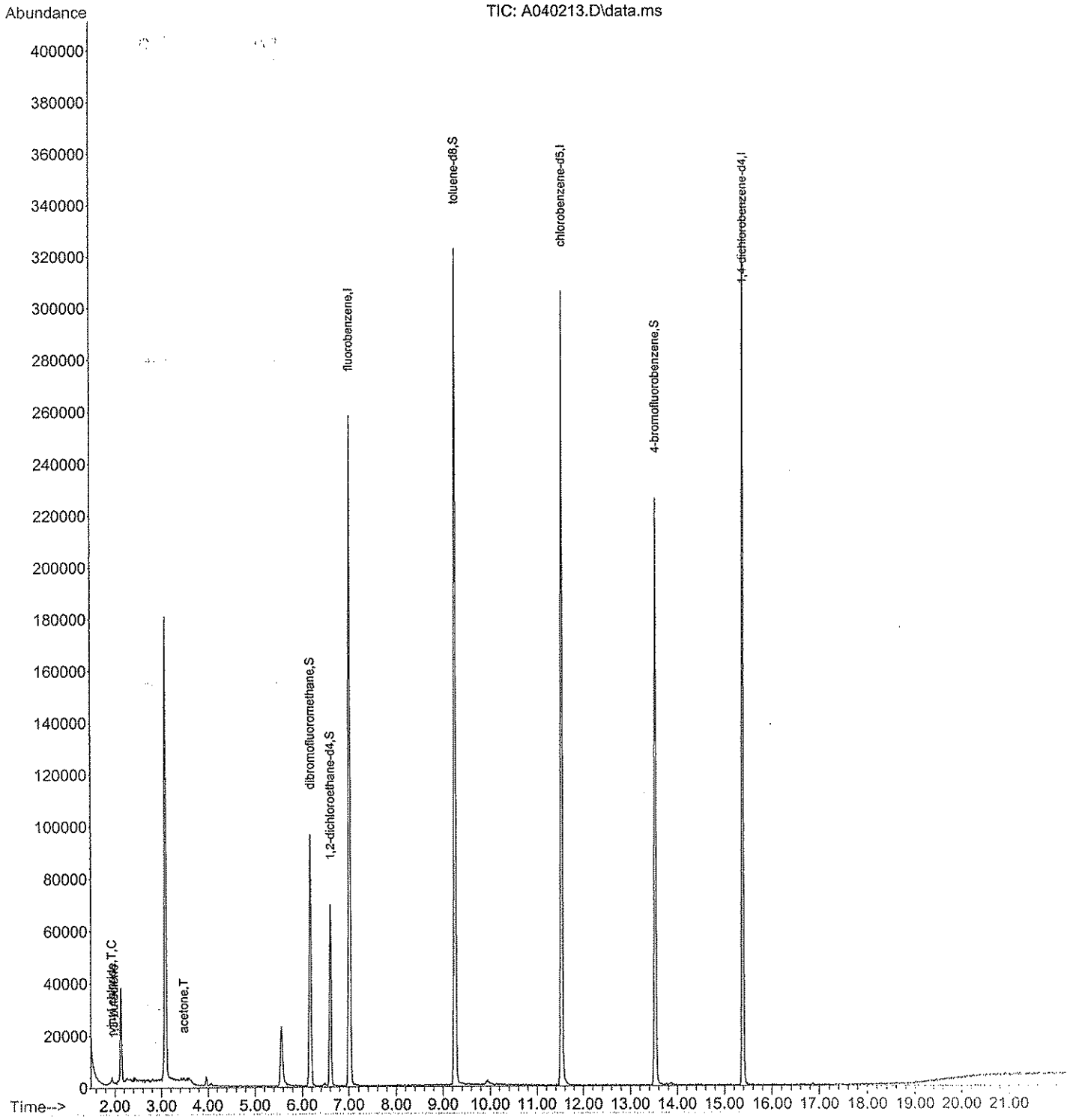
4/2/8

4/2/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040213.D
Acq On : 2 Apr 2008 3:09 pm
Sample : ,samp,me0803a63-03a,1, Inst : VOA1
Misc : 8260_w25
Operator : BR
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 02 15:37:53 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040214.D
Acq On : 2 Apr 2008 4:08 pm
Sample : ,MS,me0803a63-03aMS,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 02 16:57:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 308671 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 247242 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 145547 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 79518 | 11.18 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.80% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 76601 | 12.33 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 123.30% | | | | |
| 44) toluene-d8 | 9.244 | 98 | 311256 | 10.04 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.40% | | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 127496 | 11.19 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.90% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 101307 | 36.45 | ug/L | | 96 |
| 3) chloromethane | 1.819 | 50 | 135019 | 22.06 | ug/L | | 96 |
| 4) vinyl chloride | 1.935 | 62 | 114662 | 17.18 | ug/L | | 97 |
| 5) 1,3-butadiene | 2.014 | 39 | 263 | 0.04 | ug/L | # | 14 |
| 6) bromomethane | 2.318 | 94 | 48682 | 26.82 | ug/L | | 93 |
| 7) chloroethane | 2.445 | 64 | 69871 | 17.60 | ug/L | | 94 |
| 8) trichlorofluoromethane | 2.725 | 101 | 220610 | 21.47 | ug/L | | 91 |
| 10) 1,1-dichloroethene | 3.339 | 96 | 71832 | 12.75 | ug/L | # | 84 |
| 11) acetone | 3.473 | 43 | 8413 | 12.38 | ug/L | | 87 |
| 12) carbon disulfide | 3.589 | 76 | 279665 | 15.16 | ug/L | | 99 |
| 13) methylene chloride | 3.960 | 84 | 77250 | 9.37 | ug/L | # | 85 |
| 14) acrylonitrile | 4.300 | 53 | 10386 | 12.19 | ug/L | | 86 |
| 15) trans-1,2-dichloroethene | 4.264 | 96 | 83316 | 11.01 | ug/L | | 89 |
| 16) methyl-t-butyl ether | 4.258 | 73 | 121658 | 9.85 | ug/L | | 93 |
| 17) acetonitrile | 3.826 | 41 | 4173 | 12.57 | ug/L | | 88 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 167335 | 11.28 | ug/L | | 95 |
| 20) vinyl acetate | 4.866 | 43 | 80186 | 18.38 | ug/L | | 95 |
| 21) cis-1,2-dichloroethene | 5.535 | 96 | 80007 | 9.67 | ug/L | # | 88 |
| 22) 2,2-dichloropropane | 5.492 | 77 | 178307 | 13.30 | ug/L | | 96 |
| 23) 2-butanone | 5.583 | 72 | 1957 | 9.18 | ug/L | # | 69 |
| 25) chloroform | 5.954 | 83 | 173865 | 11.73 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.131 | 97 | 184057 | 12.87 | ug/L | | 89 |
| 29) carbon tetrachloride | 6.337 | 117 | 159187 | 13.61 | ug/L | | 94 |
| 31) benzene | 6.629 | 78 | 307682 | 10.31 | ug/L | | 94 |
| 32) 1,1-dichloropropene | 6.350 | 75 | 121456 | 11.43 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.696 | 62 | 94466 | 11.76 | ug/L | | 93 |
| 34) trichloroethene | 7.505 | 95 | 89431 | 10.31 | ug/L | | 92 |
| 36) 1,2-dichloropropane | 7.833 | 63 | 65642 | 9.21 | ug/L | | 96 |
| 37) methyl methacrylate | 7.839 | 41 | 56372 | 19.73 | ug/L | # | 43 |
| 38) dibromomethane | 8.028 | 93 | 29122 | 10.08 | ug/L | # | 86 |
| 39) bromodichloromethane | 8.259 | 83 | 104078 | 10.48 | ug/L | | 94 |
| 40) 2-chloroethyl vinyl ether | 8.898 | 63 | 311 | 0.67 | ug/L | # | 47 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 88952 | 8.59 | ug/L | | 93 |
| 43) 4-methyl-2-pentanone | 9.129 | 43 | 25879 | 8.71 | ug/L | | 90 |
| 45) toluene | 9.348 | 92 | 204283 | 9.68 | ug/L | | 88 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040214.D
Acq On : 2 Apr 2008 4:08 pm
Sample : MS;me0803a63-03aMS,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 02 16:57:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

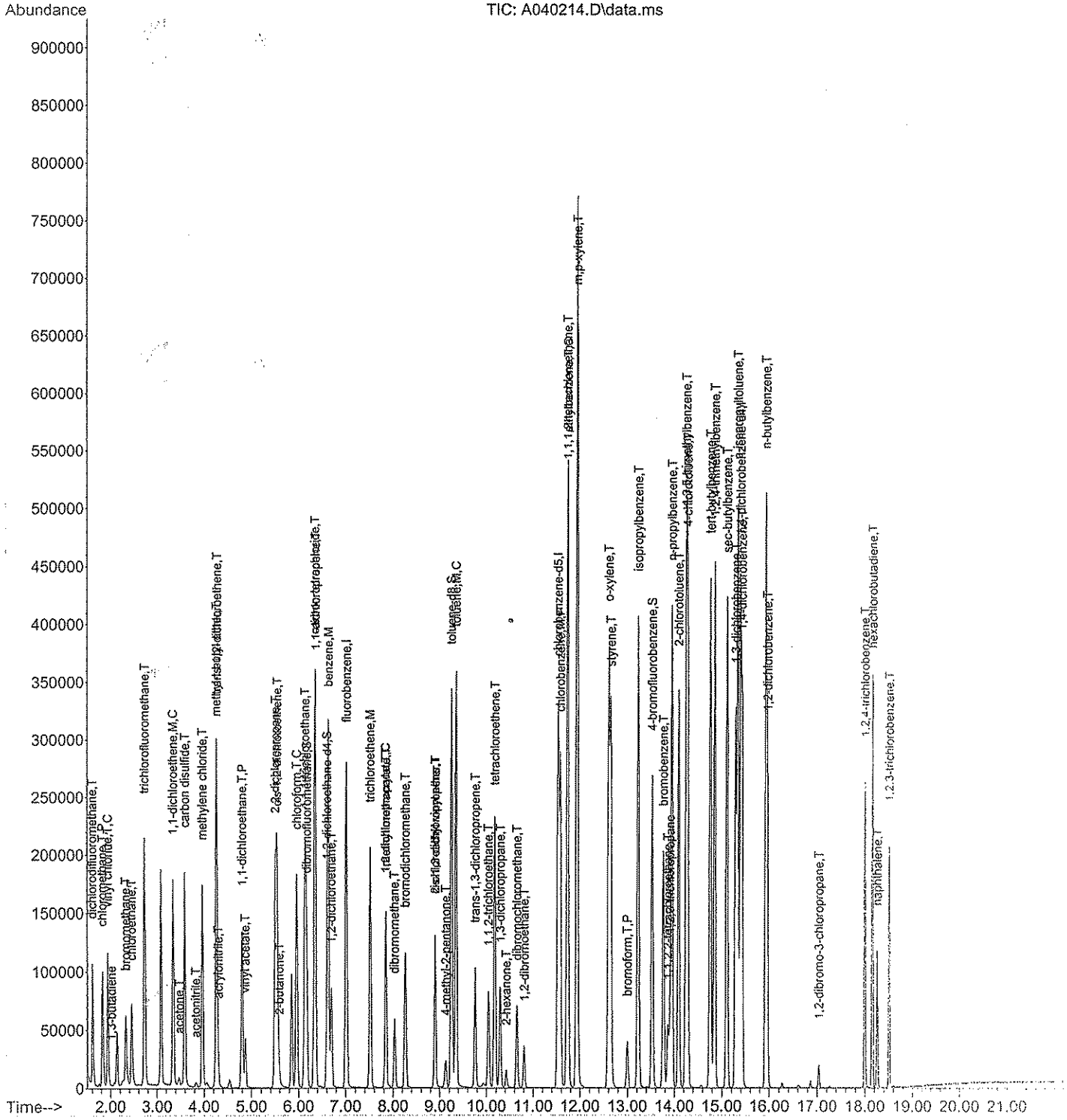
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 46) 1,1,2-trichloroethane | 10.035 | 83 | 28719 | 8.42 | ug/L | | 93 |
| 47) 1,3-dichloropropane | 10.290 | 76 | 62608 | 8.54 | ug/L | | 100 |
| 48) tetrachloroethene | 10.175 | 164 | 74622 | 9.91 | ug/L | | 92 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 72282 | 9.41 | ug/L | | 94 |
| 50) 2-hexanone | 10.418 | 43 | 16409 | 8.43 | ug/L | | 75 |
| 51) dibromochloromethane | 10.649 | 129 | 53152 | 9.37 | ug/L | | 97 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 35628 | 8.59 | ug/L | | 96 |
| 53) chlorobenzene | 11.573 | 112 | 201241 | 9.10 | ug/L | | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.725 | 131 | 73416 | 9.58 | ug/L | | 92 |
| 55) ethylbenzene | 11.738 | 91 | 425324 | 10.20 | ug/L | | 95 |
| 56) m,p-xylene | 11.932 | 106 | 307701 | 19.66 | ug/L | # | 71 |
| 58) o-xylene | 12.601 | 106 | 142545 | 9.49 | ug/L | # | 86 |
| 59) styrene | 12.644 | 104 | 218636 | 9.10 | ug/L | | 92 |
| 60) isopropylbenzene | 13.221 | 105 | 409220 | 11.63 | ug/L | | 91 |
| 61) bromobenzene | 13.757 | 156 | 87207 | 9.10 | ug/L | | 90 |
| 62) bromoform | 12.996 | 173 | 28684 | 8.99 | ug/L | | 96 |
| 64) 1,2,3-trichloropropane | 13.903 | 75 | 31267 | 9.14 | ug/L | | 89 |
| 65) n-propylbenzene | 13.939 | 91 | 497937 | 10.86 | ug/L | | 96 |
| 66) 2-chlorotoluene | 14.085 | 91 | 295454 | 10.25 | ug/L | | 89 |
| 67) 4-chlorotoluene | 14.274 | 91 | 343874 | 10.46 | ug/L | | 89 |
| 68) 1,3,5-trimethylbenzene | 14.243 | 105 | 357215 | 10.74 | ug/L | | 82 |
| 70) 1,1,2,2-tetrachloroethane | 13.854 | 83 | 35269 | 7.73 | ug/L | | 95 |
| 71) tert-butylbenzene | 14.760 | 119 | 291874 | 9.38 | ug/L | | 90 |
| 72) sec-butylbenzene | 15.101 | 105 | 409652 | 9.19 | ug/L | | 96 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 351960 | 8.87 | ug/L | | 83 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 174416 | 8.43 | ug/L | | 91 |
| 75) p-isopropyltoluene | 15.326 | 119 | 379133 | 10.16 | ug/L | | 91 |
| 77) 1,4-dichlorobenzene | 15.417 | 146 | 168831 | 8.31 | ug/L | | 90 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 140576 | 8.36 | ug/L | | 93 |
| 79) n-butylbenzene | 15.922 | 91 | 349848 | 10.06 | ug/L | | 90 |
| 80) 1,2-dibromo-3-chloropr... | 17.041 | 75 | 6444 | 8.49 | ug/L | # | 69 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 86029 | 7.53 | ug/L | | 90 |
| 82) hexachlorobutadiene | 18.160 | 225 | 80452 | 9.80 | ug/L | | 94 |
| 83) naphthalene | 18.257 | 128 | 87276 | 6.18 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 63895 | 7.49 | ug/L | | 91 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040214.D
Acq On : 2 Apr 2008 4:08 pm
Sample : ,MS,me0803a63-03aMS,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 02 16:57:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040215.D
Acq On : 2 Apr 2008 4:43 pm
Sample : ,MSD,me0803a63-03aMSD,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 02 17:07:09 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 317062 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 261692 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 155867 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 84054 | 11.50 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.00% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 81524 | 12.78 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 127.80% | | | | |
| 44) toluene-d8 | 9.254 | 98 | 321243 | 9.79 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.90% | | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 134894 | 11.19 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.90% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 107025 | 37.48 | ug/L | | 96 |
| 3) chloromethane | 1.823 | 50 | 145199 | 23.10 | ug/L | | 95 |
| 4) vinyl chloride | 1.938 | 62 | 124465 | 18.16 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.968 | 39 | 293 | 0.04 | ug/L | # | 14 |
| 6) bromomethane | 2.321 | 94 | 52616 | 28.22 | ug/L | | 97 |
| 7) chloroethane | 2.443 | 64 | 74226 | 18.20 | ug/L | | 94 |
| 8) trichlorofluoromethane | 2.729 | 101 | 217297 | 20.59 | ug/L | | 96 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 71204 | 12.30 | ug/L | # | 87 |
| 11) acetone | 3.471 | 43 | 9531 | 13.65 | ug/L | | 80 |
| 12) carbon disulfide | 3.592 | 76 | 277570 | 14.65 | ug/L | | 98 |
| 13) methylene chloride | 3.963 | 84 | 84341 | 9.96 | ug/L | | 88 |
| 14) acrylonitrile | 4.304 | 53 | 11948 | 13.65 | ug/L | | 86 |
| 15) trans-1,2-dichloroethene | 4.273 | 96 | 85247 | 10.97 | ug/L | | 91 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 141238 | 11.13 | ug/L | | 96 |
| 17) acetonitrile | 3.829 | 41 | 4842 | 14.20 | ug/L | | 83 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 175864 | 11.54 | ug/L | | 93 |
| 20) vinyl acetate | 4.875 | 43 | 88700 | 19.80 | ug/L | | 94 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 84290 | 9.92 | ug/L | # | 87 |
| 22) 2,2-dichloropropane | 5.502 | 77 | 177378 | 12.88 | ug/L | | 100 |
| 23) 2-butanone | 5.593 | 72 | 2496 | 11.40 | ug/L | # | 72 |
| 25) chloroform | 5.958 | 83 | 179511 | 11.79 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 188082 | 12.81 | ug/L | | 86 |
| 29) carbon tetrachloride | 6.341 | 117 | 160710 | 13.38 | ug/L | | 92 |
| 31) benzene | 6.633 | 78 | 316844 | 10.34 | ug/L | | 95 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 123234 | 11.29 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.706 | 62 | 100559 | 12.19 | ug/L | | 94 |
| 34) trichloroethene | 7.509 | 95 | 90529 | 10.16 | ug/L | | 92 |
| 36) 1,2-dichloropropane | 7.843 | 63 | 70653 | 9.65 | ug/L | | 93 |
| 37) methyl methacrylate | 7.837 | 41 | 58734 | 20.01 | ug/L | # | 44 |
| 38) dibromomethane | 8.038 | 93 | 31806 | 10.72 | ug/L | # | 82 |
| 39) bromodichloromethane | 8.263 | 83 | 109450 | 10.73 | ug/L | | 96 |
| 40) 2-chloroethyl vinyl ether | 8.889 | 63 | 406 | 0.86 | ug/L | # | 47 |
| 42) cis-1,3-dichloropropene | 8.901 | 75 | 96611 | 8.82 | ug/L | | 94 |
| 43) 4-methyl-2-pentanone | 9.126 | 43 | 30339 | 9.65 | ug/L | | 91 |
| 45) toluene | 9.345 | 92 | 212647 | 9.52 | ug/L | | 87 |

FIX (5) FIX (37) 4/2/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040215.D
Acq On : 2 Apr 2008 4:43 pm
Sample : ,MSD,me0803a63-03aMSD,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 02 17:07:09 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

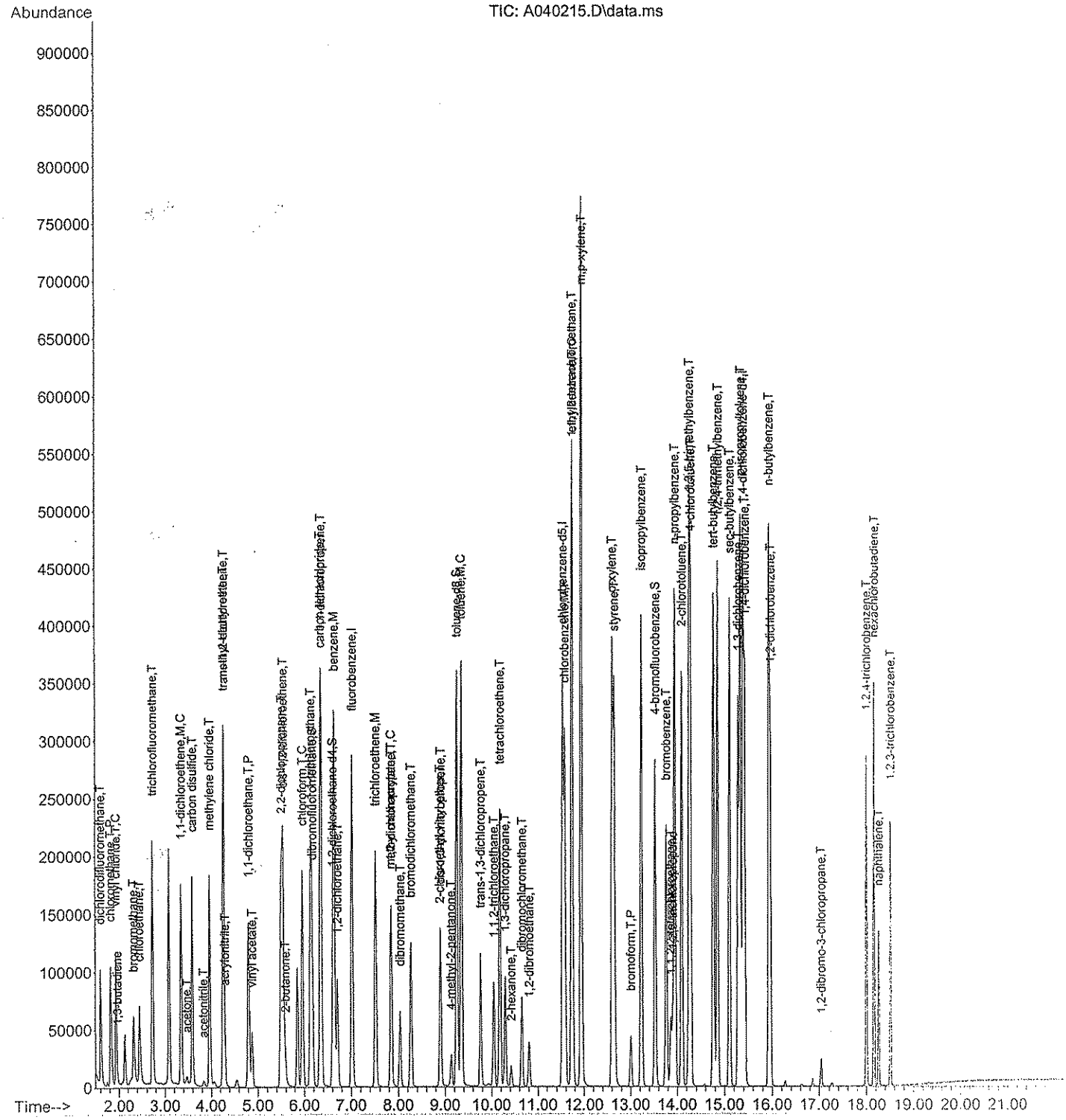
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 46) 1,1,2-trichloroethane | 10.044 | 83 | 32590 | 9.02 ug/L | 93 |
| 47) 1,3-dichloropropane | 10.288 | 76 | 69737 | 8.99 ug/L | 98 |
| 48) tetrachloroethene | 10.172 | 164 | 76775 | 9.64 ug/L # | 89 |
| 49) trans-1,3-dichloropropene | 9.759 | 75 | 79968 | 9.83 ug/L | 92 |
| 50) 2-hexanone | 10.422 | 43 | 19614 | 9.52 ug/L # | 61 |
| 51) dibromochloromethane | 10.653 | 129 | 58421 | 9.74 ug/L | 96 |
| 52) 1,2-dibromoethane | 10.811 | 107 | 38902 | 8.86 ug/L | 99 |
| 53) chlorobenzene | 11.571 | 112 | 213773 | 9.14 ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.729 | 131 | 78560 | 9.68 ug/L | 89 |
| 55) ethylbenzene | 11.741 | 91 | 437000 | 9.90 ug/L | 95 |
| 56) m,p-xylene | 11.936 | 106 | 316553 | 19.11 ug/L # | 73 |
| 58) o-xylene | 12.599 | 106 | 146471 | 9.22 ug/L # | 81 |
| 59) styrene | 12.641 | 104 | 232675 | 9.15 ug/L | 92 |
| 60) isopropylbenzene | 13.225 | 105 | 413754 | 11.11 ug/L | 92 |
| 61) bromobenzene | 13.760 | 156 | 93969 | 9.26 ug/L | 90 |
| 62) bromoform | 13.000 | 173 | 32448 | 9.60 ug/L | 97 |
| 64) 1,2,3-trichloropropane | 13.900 | 75 | 36355 | 10.04 ug/L | 84 |
| 65) n-propylbenzene | 13.937 | 91 | 497386 | 10.25 ug/L | 96 |
| 66) 2-chlorotoluene | 14.089 | 91 | 303683 | 9.95 ug/L | 90 |
| 67) 4-chlorotoluene | 14.277 | 91 | 360497 | 10.36 ug/L | 90 |
| 68) 1,3,5-trimethylbenzene | 14.247 | 105 | 356592 | 10.13 ug/L | 83 |
| 70) 1,1,2,2-tetrachloroethane | 13.858 | 83 | 39233 | 8.03 ug/L | 97 |
| 71) tert-butylbenzene | 14.758 | 119 | 290207 | 8.71 ug/L | 90 |
| 72) sec-butylbenzene | 15.098 | 105 | 403594 | 8.46 ug/L | 97 |
| 73) 1,2,4-trimethylbenzene | 14.849 | 105 | 355713 | 8.37 ug/L | 83 |
| 74) 1,3-dichlorobenzene | 15.281 | 146 | 183509 | 8.29 ug/L | 90 |
| 75) p-isopropyltoluene | 15.329 | 119 | 371135 | 9.29 ug/L | 94 |
| 77) 1,4-dichlorobenzene | 15.420 | 146 | 182101 | 8.37 ug/L | 91 |
| 78) 1,2-dichlorobenzene | 15.956 | 146 | 152794 | 8.49 ug/L | 91 |
| 79) n-butylbenzene | 15.919 | 91 | 339895 | 9.13 ug/L | 91 |
| 80) 1,2-dibromo-3-chloropr... | 17.038 | 75 | 7934 | 9.76 ug/L # | 69 |
| 81) 1,2,4-trichlorobenzene | 17.993 | 180 | 95643 | 7.81 ug/L | 92 |
| 82) hexachlorobutadiene | 18.157 | 225 | 79467 | 9.04 ug/L | 95 |
| 83) naphthalene | 18.260 | 128 | 105547 | 6.98 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.510 | 180 | 73414 | 8.03 ug/L | 90 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040215.D
Acq On : 2 Apr 2008 4:43 pm
Sample : ,MSD,me0803a63-03aMSD,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 02 17:07:09 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

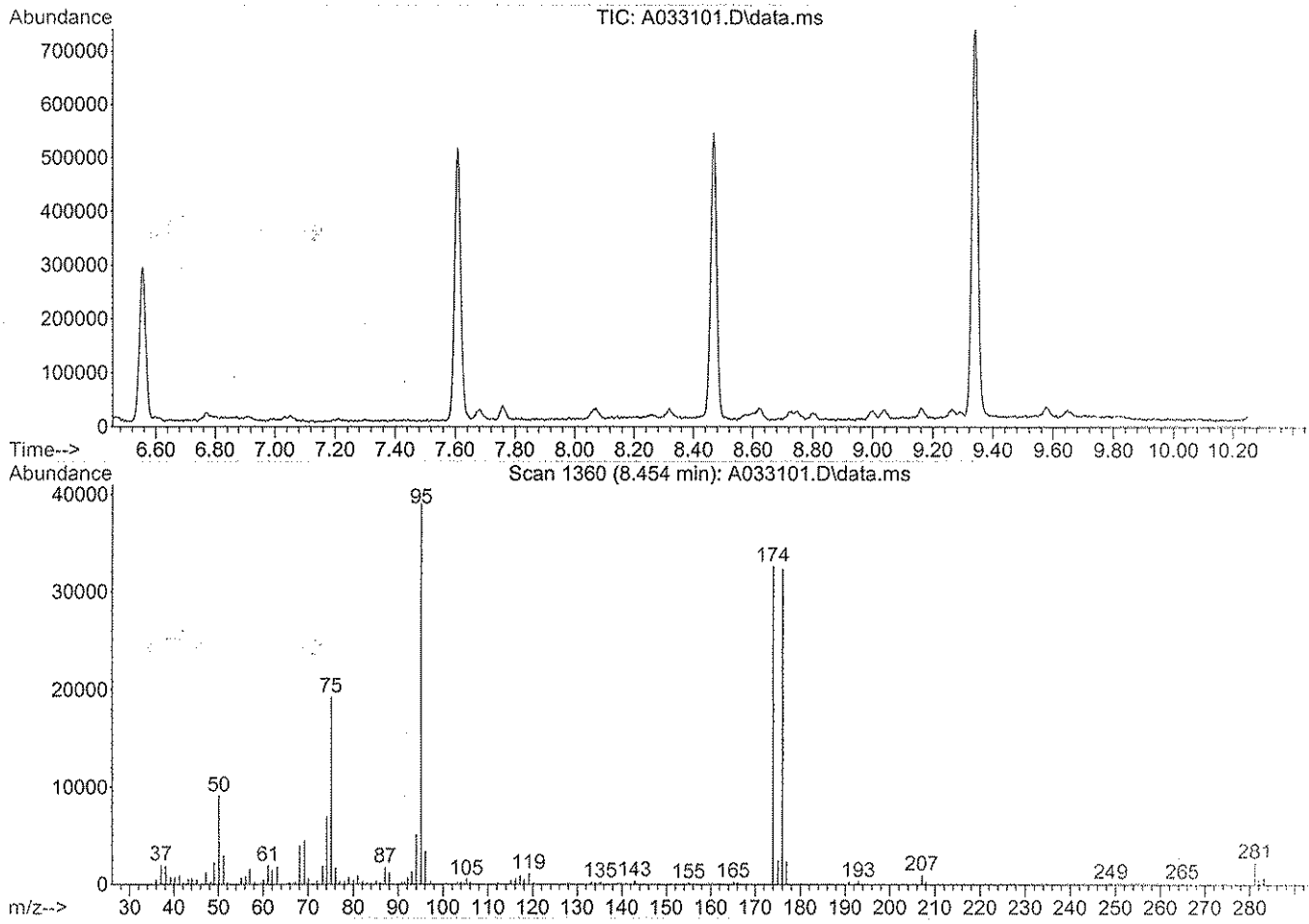


# TUNING RAW DATA

Data File: C:\msdchem\1\DATA\A033108\A033101.D
Acq On : 31 Mar 2008 6:29 am
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : JDB
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\SOIL0321.M
Title : Soil ICAL 3/21/08-Misc Included
Last Update : Sat Mar 22 10:06:01 2008




Spectrum Information: Scan 1360

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 23.4 | 9106 | PASS |
| 75 | 95 | 30 | 60 | 49.4 | 19256 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 38992 | PASS |
| 96 | 95 | 5 | 9 | 8.7 | 3408 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 83.7 | 32624 | PASS |
| 175 | 174 | 5 | 9 | 7.5 | 2436 | PASS |
| 176 | 174 | 95 | 101 | 99.3 | 32392 | PASS |
| 177 | 176 | 5 | 9 | 7.4 | 2399 | PASS |

3/31/08

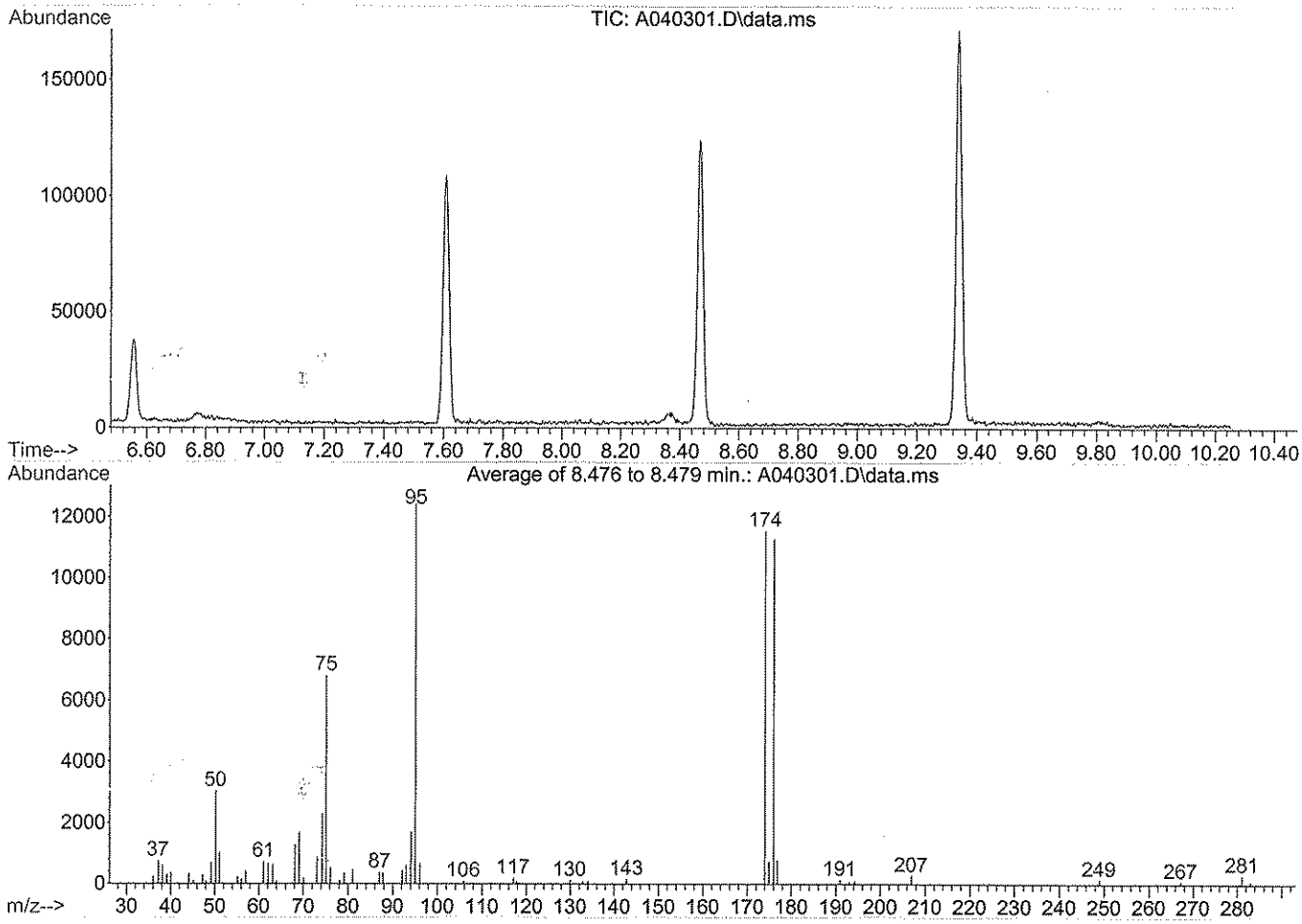


11/03/31/08

Data File: C:\msdchem\1\DATA\A040308\A040301.D
Acq On : 3 Apr 2008 7:03 am
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds
Last Update : Mon Mar 31 16:38:00 2008




Spectrum Information: Average of 8.476 to 8.479 min.

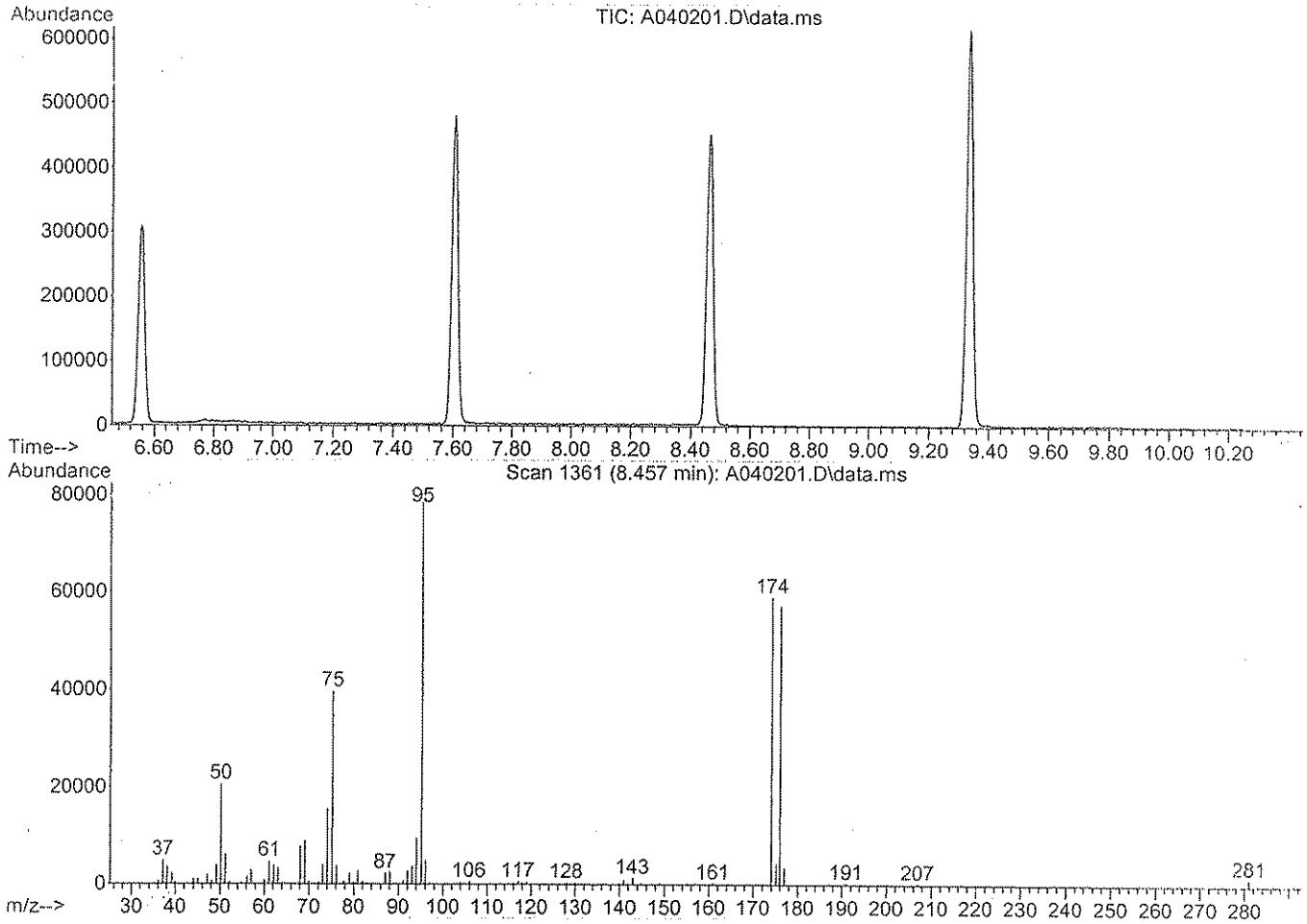
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 24.5 | 3039 | PASS |
| 75 | 95 | 30 | 60 | 54.9 | 6816 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 12410 | PASS |
| 96 | 95 | 5 | 9 | 5.3 | 657 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 93.1 | 11558 | PASS |
| 175 | 174 | 5 | 9 | 6.4 | 741 | PASS |
| 176 | 174 | 95 | 101 | 97.6 | 11286 | PASS |
| 177 | 176 | 5 | 9 | 6.9 | 774 | PASS |

4/8/08
4/03/08

Data File: C:\msdchem\1\DATA\A040208\A040201.D
Acq On : 2 Apr 2008 6:36 am
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds
Last Update : Mon Mar 31 16:38:00 2008



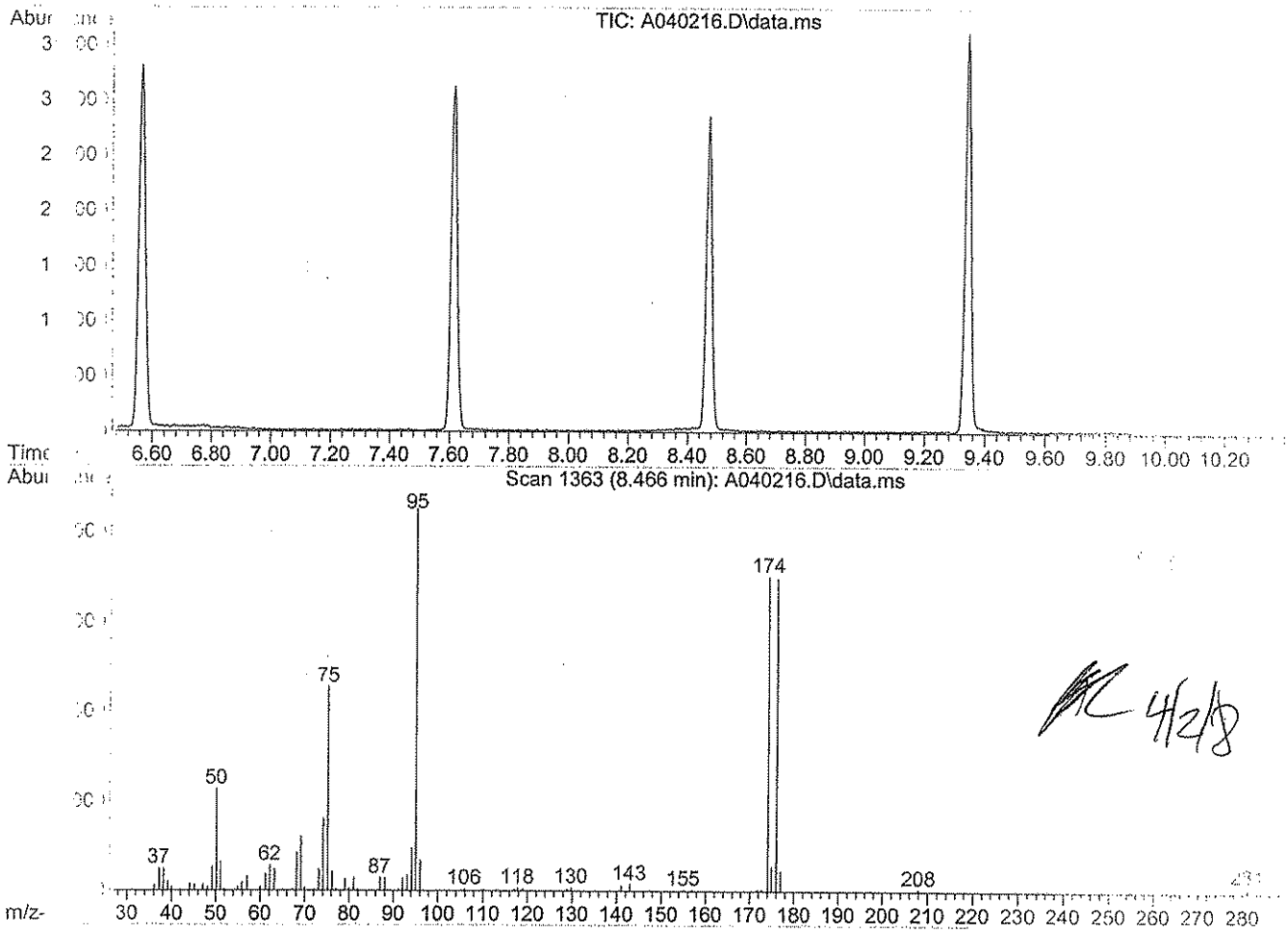

Spectrum Information: Scan 1361

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 26.3 | 20640 | PASS |
| 75 | 95 | 30 | 60 | 50.5 | 39640 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 78440 | PASS |
| 96 | 95 | 5 | 9 | 6.1 | 4785 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 75.2 | 58968 | PASS |
| 175 | 174 | 5 | 9 | 7.3 | 4278 | PASS |
| 176 | 174 | 95 | 101 | 96.9 | 57136 | PASS |
| 177 | 176 | 5 | 9 | 6.1 | 3500 | PASS |

Data File: C:\msdchem\1\DATA\A040208\Snapshot\A040216.D
Acq C : 2 Apr 2008 5:17 pm
Sampl : ,tune,bfb tune,1, Inst : VOA1
Opera or : BR
Misc : BFB
ALS V l : 16 Sample Multiplier: 1

Integ t ion File: rteint.p

Methc : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds
Last pdate : Mon Mar 31 16:38:00 2008




4/2/8

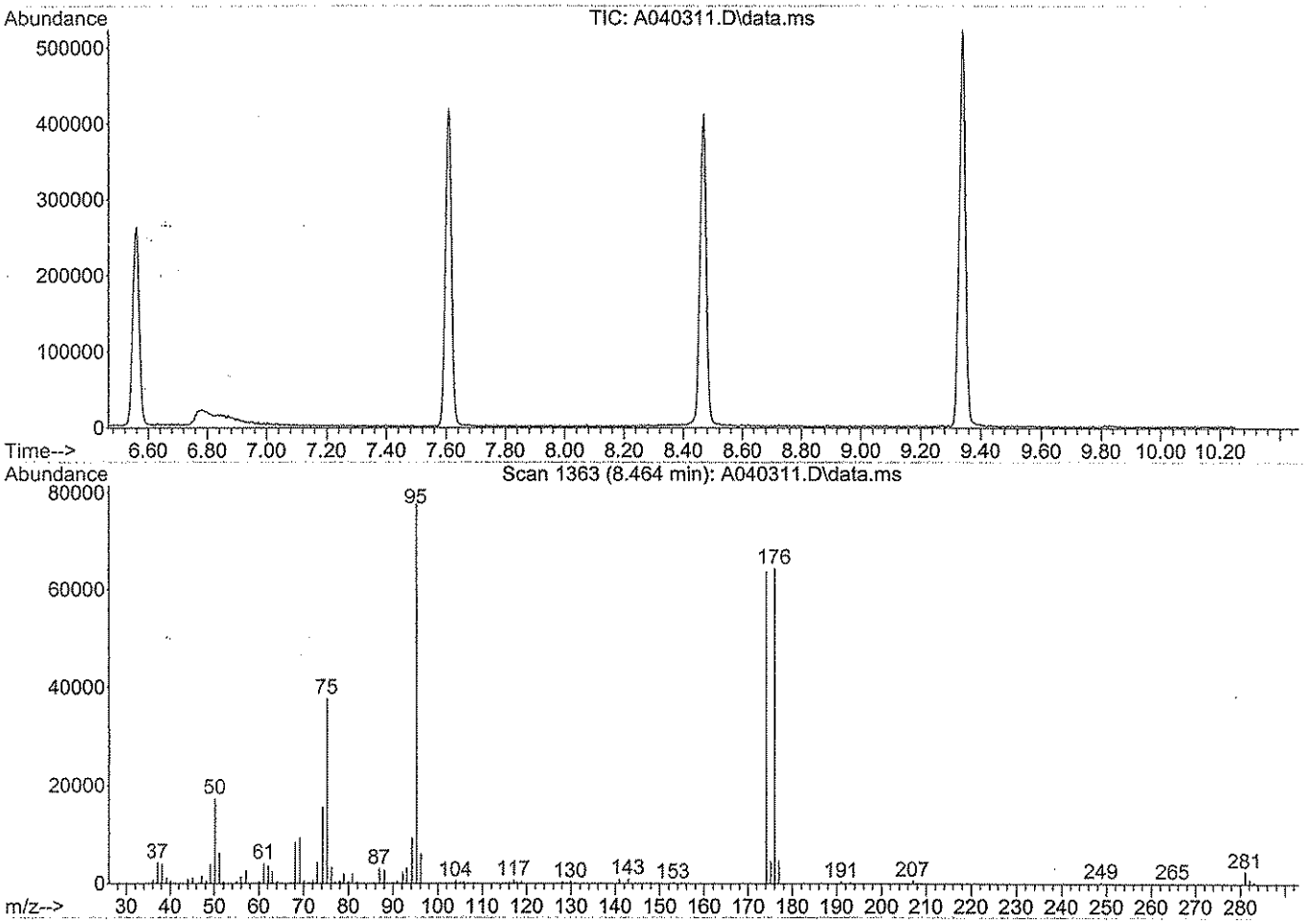
Spe m Information: Scan 1363

| T gt s | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| C | 95 | 15 | 40 | 26.7 | 11354 | PASS |
| E | 95 | 30 | 60 | 53.5 | 22744 | PASS |
| E | 95 | 100 | 100 | 100.0 | 42528 | PASS |
| E | 95 | 5 | 9 | 8.1 | 3436 | PASS |
| | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| | 95 | 50 | 250 | 82.6 | 35136 | PASS |
| | 174 | 5 | 9 | 7.9 | 2771 | PASS |
| | 174 | 95 | 101 | 99.4 | 34912 | PASS |
| | 176 | 5 | 9 | 6.6 | 2301 | PASS |

Data File: C:\msdchem\1\DATA\A040308\A040311.D
Acq On : 3 Apr 2008 2:28 pm
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\SOIL0321.M
Title : Soil ICAL 3/21/08-Misc Included
Last Update : Sat Mar 22 10:06:01 2008




Spectrum Information: Scan 1363

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 22.4 | 17336 | PASS |
| 75 | 95 | 30 | 60 | 48.7 | 37728 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 77528 | PASS |
| 96 | 95 | 5 | 9 | 7.7 | 5964 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 82.1 | 63672 | PASS |
| 175 | 174 | 5 | 9 | 7.1 | 4537 | PASS |
| 176 | 174 | 95 | 101 | 100.9 | 64264 | PASS |
| 177 | 176 | 5 | 9 | 7.2 | 4612 | PASS |

# INITIAL CALIBRATION RAW DATA

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds
Last Update : Mon Mar 31 15:35:18 2008
Response Via : Initial Calibration

Avg < 15%

Calibration Files
1 =A033111.D 2 =A033110.D 4 =A033109.D 8 =A033108.D 10 =A033107.D 20 =A033113.D 40 =A033114.D
15 =A033112.D

| | | Compound | 1 | 2 | 4 | 8 | 10 | 20 | 40 | 15 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 4 | ISTD | 10 | 20 | 40 | 15 | Avg | |
| 1) | I | fluorobenzene | | | | | | | | | | |
| 2) | T | dichlorodifluo... | 0.096 | 0.088 | 0.086 | 0.063 | 0.095 | 0.097 | 0.098 | 0.098 | 0.090 | 12.95 |
| 3) | T,P | chloromethane | 0.266 | 0.215 | 0.201 | 0.163 | 0.181 | 0.189 | 0.187 | 0.184 | 0.198# | 15.74 |
| 4) | T,C | vinyl chloride | 0.263 | 0.222 | 0.212 | 0.163 | 0.211 | 0.219 | 0.221 | 0.217 | 0.216 | 12.52 |
| 5) | | 1,3-butadiene | 0.259 | 0.204 | 0.196 | 0.121 | 0.209 | 0.221 | 0.231 | 0.228 | 0.209 | 19.35 |
| 6) | T | bromomethane | 0.059 | 0.057 | 0.052 | 0.055 | 0.066 | 0.073 | 0.043 | 0.066 | 0.059 | 16.10 |
| 7) | T | chloroethane | 0.168 | 0.139 | 0.128 | 0.104 | 0.119 | 0.125 | 0.119 | 0.127 | 0.129 | 14.47 |
| 8) | T | trichlorofluor... | 0.373 | 0.324 | 0.318 | 0.235 | 0.326 | 0.363 | 0.367 | 0.357 | 0.333 | 13.54 |
| 9) | T | acrolein | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 | 0.003 | 0.003 | 0.003 | 0.002 | 43.88 |
| 10) | M,C | 1,1-dichloroet... | 0.216 | 0.183 | 0.170 | 0.135 | 0.184 | 0.193 | 0.188 | 0.192 | 0.183 | 12.71 |
| 11) | T | acetone | PQL=5 | | 0.025 | 0.025 | 0.018 | 0.021 | 0.022 | 0.021 | 0.022 | 11.88 |
| 12) | T | carbon disulfide | 0.714 | 0.608 | 0.558 | 0.449 | 0.607 | 0.616 | 0.617 | 0.612 | 0.598 | 12.35 |
| 13) | T | methylene chlo... | PQL=2 | 0.369 | 0.294 | 0.270 | 0.245 | 0.233 | 0.217 | 0.241 | 0.267 | 19.31 |
| 14) | T | acrylonitrile | 0.032 | 0.026 | 0.026 | 0.027 | 0.025 | 0.028 | 0.028 | 0.029 | 0.028 | 7.73 |
| 15) | T | trans-1,2-dich... | 0.293 | 0.244 | 0.237 | 0.208 | 0.248 | 0.247 | 0.242 | 0.243 | 0.245 | 9.42 |
| 16) | T | methyl-t-butyl... | 0.485 | 0.408 | 0.396 | 0.408 | 0.358 | 0.388 | 0.376 | 0.382 | 0.400 | 9.50 |
| 17) | T | acetonitrile | 0.015 | 0.011 | 0.010 | 0.010 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 | 15.37 |
| 18) | T | hexane | 0.329 | 0.270 | 0.288 | 0.166 | 0.337 | 0.320 | 0.330 | 0.332 | 0.297 | 19.56 |
| 19) | T,P | 1,1-dichloroet... | 0.568 | 0.484 | 0.457 | 0.425 | 0.471 | 0.484 | 0.479 | 0.477 | 0.480 | 8.40 |
| 20) | T | vinyl acetate | 0.163 | 0.137 | 0.136 | 0.146 | 0.130 | 0.139 | 0.141 | 0.138 | 0.141 | 7.01 |
| 21) | T | cis-1,2-dichlo... | 0.315 | 0.270 | 0.256 | 0.248 | 0.261 | 0.269 | 0.262 | 0.264 | 0.268 | 7.52 |
| 22) | T | 2,2-dichloropr... | 0.497 | 0.428 | 0.412 | 0.353 | 0.456 | 0.445 | 0.438 | 0.445 | 0.434 | 9.45 |
| 23) | T | 2-butanone | 0.004 | 0.007 | 0.006 | 0.008 | 0.007 | 0.008 | 0.008 | 0.008 | 0.007 | 20.75 |
| 24) | T | methyl acrylate | 0.098 | 0.080 | 0.081 | 0.084 | 0.069 | 0.081 | 0.085 | 0.080 | 0.082 | 9.97 |
| 25) | T,C | chloroform | 0.588 | 0.480 | 0.455 | 0.439 | 0.456 | 0.476 | 0.474 | 0.475 | 0.480 | 9.50 |
| 26) | S | dibromofluorom... | 0.235 | 0.231 | 0.230 | 0.233 | 0.225 | 0.230 | 0.228 | 0.232 | 0.230 | 1.24 |
| 27) | T | 1,1,1-trichlor... | 0.533 | 0.461 | 0.435 | 0.355 | 0.462 | 0.485 | 0.487 | 0.487 | 0.463 | 11.25 |
| 28) | T | cyclohexane | 0.425 | 0.361 | 0.365 | 0.229 | 0.409 | 0.424 | 0.437 | 0.430 | 0.385 | 18.02 |
| 29) | T | carbon tetrach... | 0.422 | 0.371 | 0.346 | 0.269 | 0.392 | 0.413 | 0.411 | 0.406 | 0.379 | 13.46 |
| 30) | S | 1,2-dichloroet... | 0.206 | 0.201 | 0.198 | 0.200 | 0.193 | 0.204 | 0.204 | 0.204 | 0.201 | 2.18 |
| 31) | M | benzene | 1.158 | 0.992 | 0.936 | 0.856 | 0.935 | 0.955 | 0.951 | 0.953 | 0.967 | 8.91 |
| 32) | T | 1,1-dichloropr... | 0.390 | 0.346 | 0.317 | 0.257 | 0.355 | 0.365 | 0.364 | 0.361 | 0.344 | 11.81 |
| 33) | T | 1,2-dichloroet... | 0.325 | 0.263 | 0.239 | 0.247 | 0.231 | 0.257 | 0.264 | 0.256 | 0.260 | 10.94 |
| 34) | M | trichloroethene | 0.323 | 0.280 | 0.269 | 0.239 | 0.279 | 0.288 | 0.286 | 0.284 | 0.281 | 8.31 |
| 35) | T | ethyl acrylate | PQL=2 | 0.124 | 0.125 | 0.131 | 0.109 | 0.128 | 0.138 | 0.127 | 0.126 | 7.06 |
| 36) | T,C | 1,2-dichloropr... | 0.279 | 0.230 | 0.220 | 0.219 | 0.217 | 0.228 | 0.227 | 0.227 | 0.231 | 8.70 |
| 37) | T | methyl methacr... | PQL=2 | 0.094 | 0.092 | 0.098 | 0.078 | 0.095 | 0.099 | 0.092 | 0.093 | 7.58 |



4/03/08W

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38) | T | dibromomethane | 0.112 | 0.092 | 0.092 | 0.094 | 0.084 | 0.092 | 0.092 | 0.091 | 0.094 | 8.79 |
| 39) | T | bromodichlorom... | 0.373 | 0.317 | 0.307 | 0.306 | 0.297 | 0.324 | 0.328 | 0.320 | 0.322 | 7.22 |
| 40) | T | 2-chloroethyl ... | 0.015 | 0.017 | 0.016 | 0.017 | 0.015 | 0.015 | 0.009 | 0.016 | 0.015 | 18.39 |
| | | | 1 | 2 | 4 | 8 | | 10 | 20 | 40 | 15 | avg |
| 41) | I | chlorobenzene-d5 | ---------- | | | ISTD | | | | | | |
| 42) | T | cis-1,3-dichlo... | 0.466 | 0.401 | 0.393 | 0.408 | 0.400 | 0.428 | 0.434 | 0.421 | 0.419 | 5.73 |
| 43) | T | 4-methyl-2-pen... | 0.139 | 0.121 | 0.114 | 0.120 | 0.103 | 0.121 | 0.125 | 0.119 | 0.120 | 8.52 |
| 44) | S | toluene-d8 | 1.249 | 1.249 | 1.250 | 1.249 | 1.255 | 1.267 | 1.253 | 1.257 | 1.254 | 0.50 |
| 45) | M,C | toluene | 1.028 | 0.866 | 0.811 | 0.754 | 0.838 | 0.850 | 0.840 | 0.838 | 0.853 | 9.19 |
| 46) | T | 1,1,2-trichlor... | 0.162 | 0.137 | 0.133 | 0.136 | 0.126 | 0.136 | 0.139 | 0.134 | 0.138 | 7.47 |
| 47) | T | 1,3-dichloropr... | 0.337 | 0.290 | 0.284 | 0.297 | 0.271 | 0.299 | 0.301 | 0.292 | 0.296 | 6.42 |
| 48) | T | tetrachloroethene | 0.356 | 0.304 | 0.287 | 0.236 | 0.314 | 0.316 | 0.311 | 0.312 | 0.304 | 11.03 |
| 49) | T | trans-1,3-dich... | 0.345 | 0.296 | 0.293 | 0.306 | 0.290 | 0.316 | 0.327 | 0.312 | 0.311 | 6.04 |
| 50) | T | 2-hexanone | 0.086 | 0.074 | 0.077 | 0.079 | 0.068 | 0.081 | 0.085 | 0.079 | 0.079 | 7.45 |
| 51) | T | dibromochlorom... | 0.250 | 0.215 | 0.214 | 0.229 | 0.212 | 0.238 | 0.246 | 0.231 | 0.229 | 6.38 |
| 52) | T | 1,2-dibromoethane | 0.189 | 0.165 | 0.162 | 0.168 | 0.153 | 0.169 | 0.171 | 0.167 | 0.168 | 6.04 |
| 53) | M,P | chlorobenzene | 1.083 | 0.900 | 0.865 | 0.826 | 0.857 | 0.886 | 0.872 | 0.864 | 0.894 | 8.86 |
| 54) | T | 1,1,1,2-tetrac... | 0.348 | 0.303 | 0.297 | 0.294 | 0.297 | 0.313 | 0.317 | 0.311 | 0.310 | 5.71 |
| 55) | T,C | ethylbenzene | 1.987 | 1.690 | 1.629 | 1.477 | 1.680 | 1.692 | 1.658 | 1.684 | 1.687 | 8.33 |
| 56) | T | m,p-xylene | 0.755 | 0.638 | 0.618 | 0.561 | 0.632 | 0.631 | 0.605 | 0.623 | 0.633 | 8.68 |
| 57) | T | butyl acrylate | 80=2 | 0.341 | 0.348 | 0.353 | 0.296 | 0.358 | 0.368 | 0.351 | 0.345 | 6.72 |
| 58) | T | o-xylene | 0.728 | 0.607 | 0.593 | 0.560 | 0.593 | 0.602 | 0.585 | 0.590 | 0.607 | 8.38 |
| 59) | T | styrene | 1.133 | 0.967 | 0.941 | 0.923 | 0.927 | 0.970 | 0.951 | 0.963 | 0.972 | 6.93 |
| 60) | T | isopropylbenzene | 1.627 | 1.428 | 1.365 | 1.186 | 1.447 | 1.463 | 1.437 | 1.429 | 1.423 | 8.56 |
| 61) | T | bromobenzene | 0.462 | 0.380 | 0.375 | 0.375 | 0.365 | 0.383 | 0.385 | 0.377 | 0.388 | 7.85 |
| 62) | T,P | bromoform | 0.141 | 0.118 | 0.119 | 0.127 | 0.117 | 0.137 | 0.143 | 0.131 | 0.129 | 8.30 |
| 63) | S | 4-bromofluorob... | 0.460 | 0.458 | 0.455 | 0.461 | 0.450 | 0.466 | 0.469 | 0.469 | 0.461 | 1.45 |
| 64) | | 1,2,3-trichlor... | 0.166 | 0.139 | 0.134 | 0.137 | 0.121 | 0.137 | 0.140 | 0.133 | 0.138 | 9.11 |
| 65) | T | n-propylbenzene | 2.151 | 1.869 | 1.759 | 1.545 | 1.881 | 1.899 | 1.868 | 1.862 | 1.854 | 9.01 |
| 66) | T | 2-chlorotoluene | 1.378 | 1.161 | 1.128 | 1.065 | 1.133 | 1.165 | 1.155 | 1.142 | 1.166 | 7.83 |
| 67) | T | 4-chlorotoluene | 1.581 | 1.322 | 1.293 | 1.210 | 1.282 | 1.328 | 1.311 | 1.306 | 1.329 | 8.15 |
| 68) | T | 1,3,5-trimethy... | 1.575 | 1.344 | 1.290 | 1.182 | 1.344 | 1.366 | 1.333 | 1.329 | 1.345 | 8.12 |
| 69) | I | 1,4-dichlorobenzen... | ---------- | | | ISTD | | | | | | |
| 70) | T | 1,1,2,2-tetrac... | 0.359 | 0.298 | 0.314 | 0.315 | 0.287 | 0.311 | 0.326 | 0.300 | 0.314 | 7.01 |
| 71) | T | tert-butylbenzene | 2.410 | 2.107 | 2.054 | 1.769 | 2.282 | 2.181 | 2.175 | 2.117 | 2.137 | 8.71 |
| 72) | T | sec-butylbenzene | 3.450 | 3.048 | 2.920 | 2.459 | 3.311 | 3.147 | 3.118 | 3.040 | 3.062 | 9.62 |
| 73) | T | 1,2,4-trimethy... | 3.151 | 2.711 | 2.646 | 2.467 | 2.777 | 2.709 | 2.724 | 2.636 | 2.728 | 7.14 |
| 74) | T | 1,3-dichlorobe... | 1.680 | 1.425 | 1.382 | 1.333 | 1.399 | 1.394 | 1.394 | 1.360 | 1.421 | 7.62 |
| 75) | T | p-isopropyltol... | 2.862 | 2.511 | 2.480 | 2.130 | 2.789 | 2.588 | 2.613 | 2.536 | 2.563 | 8.61 |
| 76) | T | dicyclopentadiene | 3.356 | 2.673 | 2.627 | 2.239 | 2.672 | 2.697 | 2.788 | 2.678 | 2.716 | 11.27 |
| 77) | T | 1,4-dichlorobe... | 1.722 | 1.459 | 1.372 | 1.317 | 1.341 | 1.337 | 1.325 | 1.297 | 1.396 | 10.08 |
| 78) | T | 1,2-dichlorobe... | 1.384 | 1.163 | 1.137 | 1.122 | 1.098 | 1.130 | 1.115 | 1.095 | 1.155 | 8.23 |
| 79) | T | n-butylbenzene | 2.637 | 2.362 | 2.296 | 1.974 | 2.611 | 2.453 | 2.421 | 2.362 | 2.389 | 8.64 |
| 80) | T | 1,2-dibromo-3-... | 0.058 | 0.054 | 0.052 | 0.052 | 0.046 | 0.052 | 0.055 | 0.049 | 0.052 | 7.11 |
| 81) | T | 1,2,4-trichlor... | 0.972 | 0.820 | 0.785 | 0.760 | 0.733 | 0.753 | 0.753 | 0.708 | 0.785 | 10.49 |
| 82) | T | hexachlorobuta... | 0.637 | 0.574 | 0.544 | 0.471 | 0.614 | 0.565 | 0.570 | 0.536 | 0.564 | 8.94 |

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounts

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 83) | T | naphthalene | 1.330 | 1.077 | 1.005 | 0.941 | 0.805 | 0.878 | 0.888 | 0.835 | 0.970 | 17.58 |
| 84) | T | 1,2,3-trichlor... | 0.724 | 0.630 | 0.597 | 0.571 | 0.518 | 0.562 | 0.557 | 0.530 | 0.586 | 11.26 |
| 85) | T | 2-methyl napht... | 0.609 | 0.494 | 0.466 | 0.395 | 0.292 | 0.371 | 0.382 | 0.340 | 0.418 | 23.97 |

(#) = Out of Range

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033111.D
Acq On : 31 Mar 2008 1:17 pm
Sample : ,ical,ical_w25 1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 31 13:58:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:57:52 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 550760 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 421228 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 220574 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 129347 | 10.11 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.10% | | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 113417 | 9.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.40% | | | |
| 44) toluene-d8 | 9.253 | 98 | 526171 | 9.81 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.10% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 193739 | 9.90 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.609 | 85 | 5265 | 0.87 | ug/L | 92 |
| 3) chloromethane | 1.822 | 50 | 14644 | 1.21 | ug/L | 95 |
| 4) vinyl chloride | 1.937 | 62 | 14505 | 1.16 | ug/L | 92 |
| 5) 1,3-butadiene | 1.974 | 39 | 14261 | 1.25 | ug/L | 88 |
| 6) bromomethane | 2.332 | 94 | 3272 | 1.04 | ug/L | 91 |
| 7) chloroethane | 2.442 | 64 | 9229 | 1.26 | ug/L | 99 |
| 8) trichlorofluoromethane | 2.728 | 101 | 20521 | 1.07 | ug/L | 95 |
| 9) acrolein | 3.287 | 56 | 1012 | 8.13 | ug/L | 81 |
| 10) 1,1-dichloroethene | 3.348 | 96 | 11871 | 1.17 | ug/L | 95 |
| 11) acetone | 3.476 | 43 | 2406 | 1.80 | ug/L | 92 |
| 12) carbon disulfide | 3.591 | 76 | 39302 | 1.13 | ug/L | 98 |
| 13) methylene chloride | 3.968 | 84 | 31162 | 2.09 | ug/L | 97 |
| 14) acrylonitrile | 4.309 | 53 | 17427 | 11.01 | ug/L | 88 |
| 15) trans-1,2-dichloroethene | 4.272 | 96 | 16110 | 1.21 | ug/L | 97 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 26687 | 1.38 | ug/L | 95 |
| 17) acetonitrile | 3.828 | 41 | 8094 | 12.96 | ug/L | 91 |
| 18) hexane | 4.546 | 57 | 18132 | 1.13 | ug/L | 95 |
| 19) 1,1-dichloroethane | 4.801 | 63 | 31274 | 1.21 | ug/L | 97 |
| 20) vinyl acetate | 4.880 | 43 | 8995 | 1.19 | ug/L | 98 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 17326 | 1.20 | ug/L | 92 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 27370 | 1.17 | ug/L | 97 |
| 23) 2-butanone | 5.592 | 72 | 201 | 0.52 | ug/L # | 41 |
| 24) methyl acrylate | 5.689 | 55 | 5424 | 1.18 | ug/L | 100 |
| 25) chloroform | 5.963 | 83 | 32369 | 1.25 | ug/L | 98 |
| 27) 1,1,1-trichloroethane | 6.139 | 97 | 29374 | 1.19 | ug/L | 84 |
| 28) cyclohexane | 6.170 | 56 | 23428 | 1.13 | ug/L | 95 |
| 29) carbon tetrachloride | 6.340 | 117 | 23250 | 1.15 | ug/L | 92 |
| 31) benzene | 6.632 | 78 | 63783 | 1.24 | ug/L | 98 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 21457 | 1.17 | ug/L | 95 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 17878 | 1.26 | ug/L | 94 |
| 34) trichloroethene | 7.514 | 95 | 17808 | 1.19 | ug/L | 92 |
| 35) ethyl acrylate | 7.696 | 55 | 8171 | 1.19 | ug/L | 95 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 15385 | 1.25 | ug/L | 94 |
| 37) methyl methacrylate | 8.012 | 41 | 6065 | 1.19 | ug/L | 92 |
| 38) dibromomethane | 8.031 | 93 | 6194 | 1.23 | ug/L | 88 |

CS 3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033111.D
Acq On : 31 Mar 2008 1:17 pm
Sample : ,ical,ical_w25 1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 31 13:58:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:57:52 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

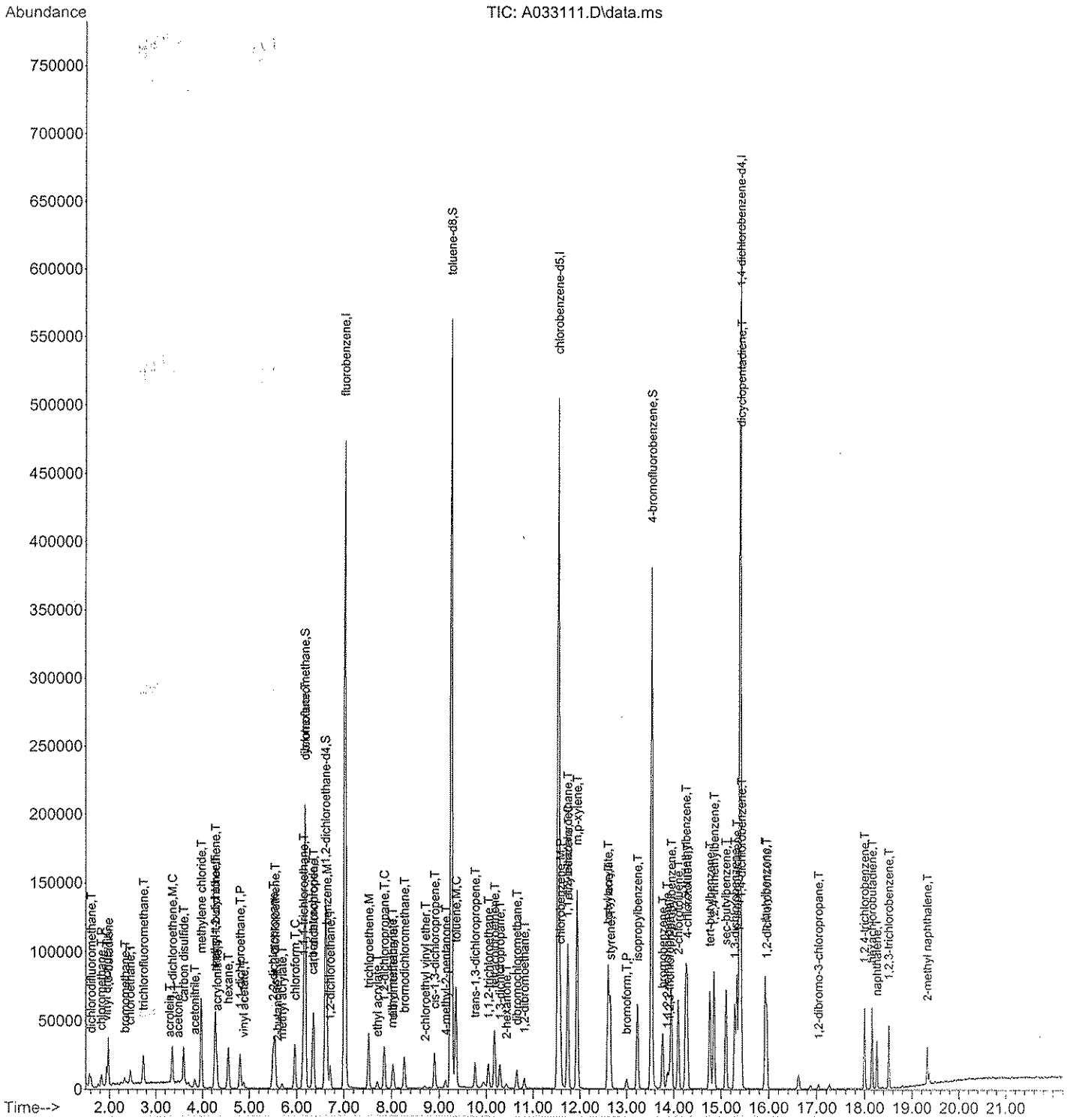
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.268 | 83 | 20564 | 1.19 ug/L | 92 |
| 40) 2-chloroethyl vinyl ether | 8.706 | 63 | 841 | 1.32 ug/L # | 70 |
| 42) cis-1,3-dichloropropene | 8.900 | 75 | 19627 | 1.12 ug/L | 97 |
| 43) 4-methyl-2-pentanone | 9.137 | 43 | 5865 | 1.16 ug/L | 84 |
| 45) toluene | 9.350 | 92 | 43317 | 1.22 ug/L | 89 |
| 46) 1,1,2-trichloroethane | 10.044 | 83 | 6812 | 1.17 ug/L | 91 |
| 47) 1,3-dichloropropane | 10.293 | 76 | 14207 | 1.14 ug/L | 91 |
| 48) tetrachloroethene | 10.177 | 164 | 14987 | 1.19 ug/L | 97 |
| 49) trans-1,3-dichloropropene | 9.758 | 75 | 14534 | 1.12 ug/L | 88 |
| 50) 2-hexanone | 10.427 | 43 | 3642 | 1.10 ug/L | 77 |
| 51) dibromochloromethane | 10.652 | 129 | 10528 | 1.10 ug/L | 97 |
| 52) 1,2-dibromoethane | 10.810 | 107 | 7946 | 1.14 ug/L | 99 |
| 53) chlorobenzene | 11.576 | 112 | 45614 | 1.23 ug/L | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 14673 | 1.13 ug/L | 95 |
| 55) ethylbenzene | 11.740 | 91 | 83680 | 1.19 ug/L | 98 |
| 56) m,p-xylene | 11.935 | 106 | 63600 | 2.41 ug/L # | 84 |
| 57) butyl acrylate | 12.598 | 55 | 16780 | 1.14 ug/L | 91 |
| 58) o-xylene | 12.604 | 106 | 30677 | 1.22 ug/L | 89 |
| 59) styrene | 12.652 | 104 | 47727 | 1.19 ug/L | 99 |
| 60) isopropylbenzene | 13.230 | 105 | 68532 | 1.16 ug/L | 94 |
| 61) bromobenzene | 13.765 | 156 | 19441 | 1.22 ug/L | 98 |
| 62) bromoform | 12.999 | 173 | 5955 | 1.13 ug/L | 90 |
| 64) 1,2,3-trichloropropane | 13.905 | 75 | 6999 | 1.20 ug/L | 97 |
| 65) n-propylbenzene | 13.942 | 91 | 90586 | 1.16 ug/L | 96 |
| 66) 2-chlorotoluene | 14.094 | 91 | 58038 | 1.19 ug/L | 92 |
| 67) 4-chlorotoluene | 14.282 | 91 | 66591 | 1.20 ug/L | 96 |
| 68) 1,3,5-trimethylbenzene | 14.252 | 105 | 66353 | 1.18 ug/L | 85 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 7926 | 1.16 ug/L | 95 |
| 71) tert-butylbenzene | 14.763 | 119 | 53149 | 1.14 ug/L | 96 |
| 72) sec-butylbenzene | 15.097 | 105 | 76108 | 1.13 ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 69499 | 1.16 ug/L | 85 |
| 74) 1,3-dichlorobenzene | 15.286 | 146 | 37055 | 1.20 ug/L | 94 |
| 75) p-isopropyltoluene | 15.328 | 119 | 63119 | 1.12 ug/L | 95 |
| 76) dicyclopentadiene | 15.401 | 66 | 74035 | 1.23 ug/L | 97 |
| 77) 1,4-dichlorobenzene | 15.426 | 146 | 37992 | 1.24 ug/L | 92 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 30535 | 1.22 ug/L | 95 |
| 79) n-butylbenzene | 15.924 | 91 | 58172 | 1.10 ug/L | 93 |
| 80) 1,2-dibromo-3-chloropr... | 17.037 | 75 | 1272 | 1.11 ug/L # | 58 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 21439 | 1.26 ug/L | 89 |
| 82) hexachlorobutadiene | 18.156 | 225 | 14055 | 1.12 ug/L | 93 |
| 83) naphthalene | 18.259 | 128 | 29328 | 1.47 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 15970 | 1.25 ug/L | 92 |
| 85) 2-methyl naphthalene | 19.324 | 142 | 13422 | 1.54 ug/L | 99 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033111.D
Acq On : 31 Mar 2008 1:17 pm
Sample : ,ical,ical_w25 1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 31 13:58:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:57:52 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033111.D 25ML0331.M Mon Mar 31 13:58:17 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033110.D
Acq On : 31 Mar 2008 12:42 pm
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 31 13:42:48 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:38:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 570843 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 437862 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.392 | 152 | 227186 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 131999 | 9.90 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.00% | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 114766 | 9.57 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.70% | | | |
| 44) toluene-d8 | 9.250 | 98 | 546758 | 9.76 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.60% | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 200497 | 9.85 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.50% | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 10088 | 1.59 | ug/L | | 99 |
| 3) chloromethane | 1.824 | 50 | 24528 | 1.97 | ug/L | | 96 |
| 4) vinyl chloride | 1.940 | 62 | 25321 | 1.96 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.976 | 39 | 23311 | 1.92 | ug/L | | 84 |
| 6) bromomethane | 2.329 | 94 | 6513 | 2.07 | ug/L | | 93 |
| 7) chloroethane | 2.451 | 64 | 15884 | 2.10 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.730 | 101 | 36948 | 1.80 | ug/L | | 93 |
| 9) acrolein | 3.284 | 56 | 1491 | 10.30 | ug/L | | 95 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 20844 | 1.95 | ug/L | | 92 |
| 11) acetone | 3.472 | 43 | 2781 | 2.01 | ug/L | | 84 |
| 12) carbon disulfide | 3.594 | 76 | 69430 | 1.91 | ug/L | | 98 |
| 13) methylene chloride | 3.965 | 84 | 42114 | 2.63 | ug/L | | 97 |
| 14) acrylonitrile | 4.305 | 53 | 30114 | 17.87 | ug/L | | 89 |
| 15) trans-1,2-dichloroethene | 4.269 | 96 | 27898 | 1.99 | ug/L | | 96 |
| 16) methyl-t-butyl ether | 4.275 | 73 | 46584 | 2.32 | ug/L | | 91 |
| 17) acetonitrile | 3.831 | 41 | 12501 | 18.64 | ug/L | | 99 |
| 18) hexane | 4.549 | 57 | 30872 | 1.82 | ug/L | | 98 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 55216 | 2.04 | ug/L | | 94 |
| 20) vinyl acetate | 4.877 | 43 | 15658 | 2.00 | ug/L | | 88 |
| 21) cis-1,2-dichloroethene | 5.540 | 96 | 30813 | 2.05 | ug/L | | 95 |
| 22) 2,2-dichloropropane | 5.497 | 77 | 48870 | 2.00 | ug/L | | 97 |
| 23) 2-butanone | 5.595 | 72 | 774 | 1.96 | ug/L | # | 36 |
| 24) methyl acrylate | 5.692 | 55 | 9166 | 1.91 | ug/L | | 91 |
| 25) chloroform | 5.960 | 83 | 54842 | 2.03 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.142 | 97 | 52608 | 2.05 | ug/L | | 86 |
| 28) cyclohexane | 6.166 | 56 | 41241 | 1.88 | ug/L | | 93 |
| 29) carbon tetrachloride | 6.337 | 117 | 42399 | 2.01 | ug/L | | 86 |
| 31) benzene | 6.635 | 78 | 113207 | 2.13 | ug/L | | 97 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 39470 | 2.08 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.708 | 62 | 30028 | 2.02 | ug/L | | 95 |
| 34) trichloroethene | 7.516 | 95 | 31984 | 2.06 | ug/L | | 94 |
| 35) ethyl acrylate | 7.693 | 55 | 14132 | 1.97 | ug/L | | 94 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 26273 | 2.07 | ug/L | | 94 |
| 37) methyl methacrylate | 8.015 | 41 | 10780 | 2.03 | ug/L | | 94 |
| 38) dibromomethane | 8.039 | 93 | 10452 | 1.99 | ug/L | | 92 |

CF 3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033110.D
Acq On : 31 Mar 2008 12:42 pm
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 31 13:42:48 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:38:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

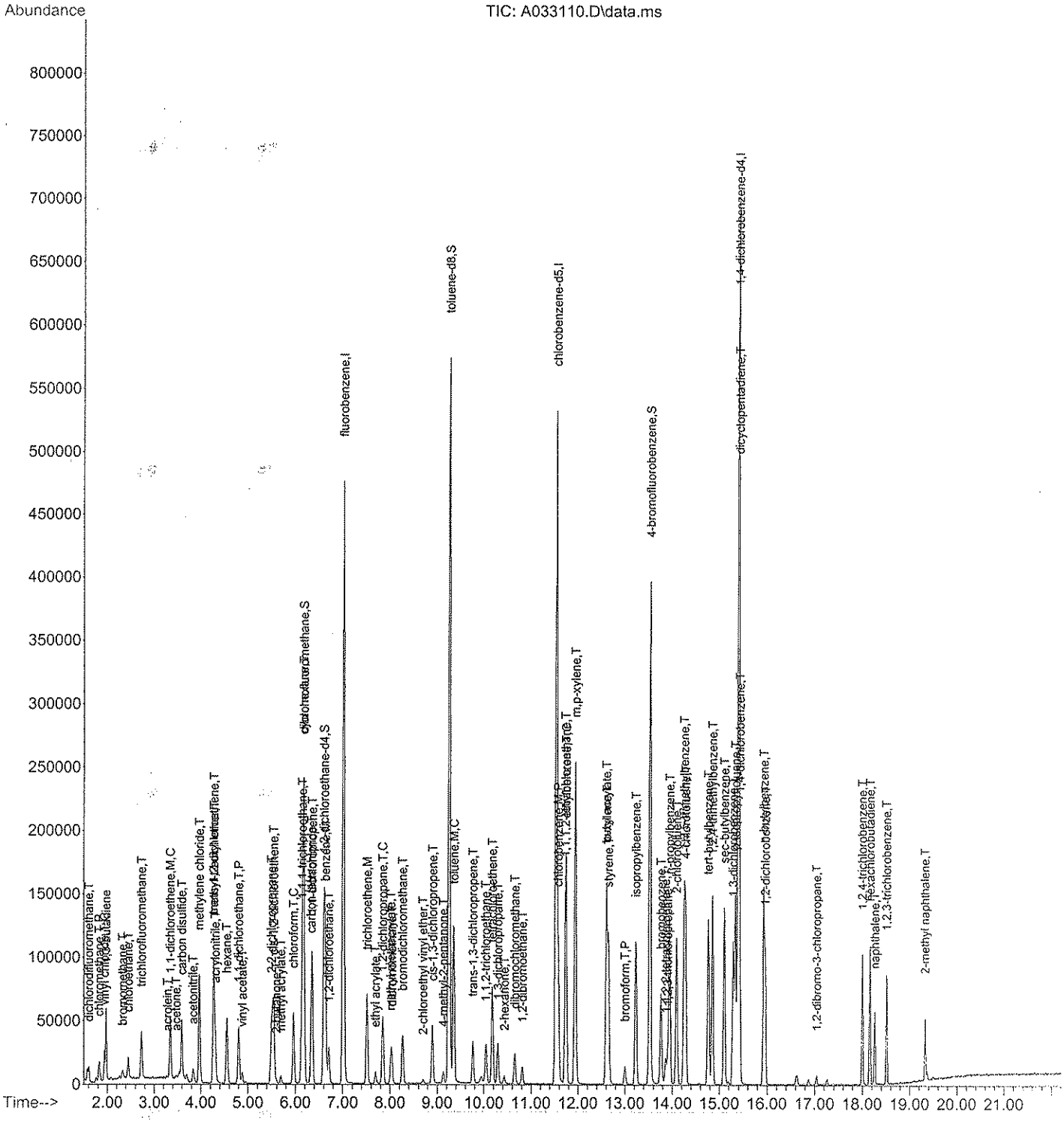
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.264 | 83 | 36232 | 2.03 | ug/L | | 94 |
| 40) | 2-chloroethyl vinyl ether | 8.696 | 63 | 1957 | 3.54 | ug/L | | 93 |
| 42) | cis-1,3-dichloropropene | 8.903 | 75 | 35136 | 1.90 | ug/L | | 93 |
| 43) | 4-methyl-2-pentanone | 9.134 | 43 | 10591 | 2.02 | ug/L | | 96 |
| 45) | toluene | 9.353 | 92 | 75817 | 2.02 | ug/L | | 89 |
| 46) | 1,1,2-trichloroethane | 10.034 | 83 | 12006 | 1.96 | ug/L | | 95 |
| 47) | 1,3-dichloropropane | 10.296 | 76 | 25354 | 1.94 | ug/L | | 93 |
| 48) | tetrachloroethene | 10.174 | 164 | 26583 | 2.02 | ug/L | | 91 |
| 49) | trans-1,3-dichloropropene | 9.760 | 75 | 25964 | 1.92 | ug/L | | 88 |
| 50) | 2-hexanone | 10.429 | 43 | 6483 | 1.87 | ug/L | # | 62 |
| 51) | dibromochloromethane | 10.654 | 129 | 18842 | 1.87 | ug/L | | 100 |
| 52) | 1,2-dibromoethane | 10.813 | 107 | 14414 | 1.98 | ug/L | | 96 |
| 53) | chlorobenzene | 11.573 | 112 | 78804 | 2.05 | ug/L | | 95 |
| 54) | 1,1,1,2-tetrachloroethane | 11.725 | 131 | 26499 | 1.95 | ug/L | | 96 |
| 55) | ethylbenzene | 11.743 | 91 | 147965 | 2.02 | ug/L | | 98 |
| 56) | m,p-xylene | 11.938 | 106 | 111818 | 4.06 | ug/L | # | 80 |
| 57) | butyl acrylate | 12.600 | 55 | 29905 | 1.93 | ug/L | | 95 |
| 58) | o-xylene | 12.607 | 106 | 53152 | 2.03 | ug/L | | 93 |
| 59) | styrene | 12.643 | 104 | 84695 | 2.03 | ug/L | | 96 |
| 60) | isopropylbenzene | 13.227 | 105 | 125069 | 2.03 | ug/L | | 95 |
| 61) | bromobenzene | 13.762 | 156 | 33296 | 1.99 | ug/L | | 93 |
| 62) | bromoform | 13.002 | 173 | 10346 | 1.88 | ug/L | | 98 |
| 64) | 1,2,3-trichloropropane | 13.902 | 75 | 12158 | 1.99 | ug/L | | 98 |
| 65) | n-propylbenzene | 13.944 | 91 | 163684 | 2.02 | ug/L | | 99 |
| 66) | 2-chlorotoluene | 14.090 | 91 | 101645 | 1.99 | ug/L | | 94 |
| 67) | 4-chlorotoluene | 14.279 | 91 | 115781 | 1.98 | ug/L | | 95 |
| 68) | 1,3,5-trimethylbenzene | 14.248 | 105 | 117689 | 2.00 | ug/L | | 82 |
| 70) | 1,1,2,2-tetrachloroethane | 13.859 | 83 | 13525 | 1.89 | ug/L | | 96 |
| 71) | tert-butylbenzene | 14.759 | 119 | 95717 | 1.99 | ug/L | | 95 |
| 72) | sec-butylbenzene | 15.100 | 105 | 138485 | 1.99 | ug/L | | 99 |
| 73) | 1,2,4-trimethylbenzene | 14.844 | 105 | 123164 | 1.98 | ug/L | | 83 |
| 74) | 1,3-dichlorobenzene | 15.282 | 146 | 64740 | 2.02 | ug/L | | 90 |
| 75) | p-isopropyltoluene | 15.331 | 119 | 114080 | 1.95 | ug/L | | 98 |
| 76) | dicyclopentadiene | 15.404 | 66 | 121464 | 1.92 | ug/L | | 96 |
| 77) | 1,4-dichlorobenzene | 15.422 | 146 | 66277 | 2.10 | ug/L | | 92 |
| 78) | 1,2-dichlorobenzene | 15.957 | 146 | 52824 | 2.03 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.927 | 91 | 107329 | 1.96 | ug/L | | 93 |
| 80) | 1,2-dibromo-3-chloropr... | 17.040 | 75 | 2442 | 2.07 | ug/L | # | 69 |
| 81) | 1,2,4-trichlorobenzene | 17.995 | 180 | 37244 | 2.12 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.159 | 225 | 26083 | 1.99 | ug/L | | 97 |
| 83) | naphthalene | 18.262 | 128 | 48914 | 2.44 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.505 | 180 | 28646 | 2.17 | ug/L | | 95 |
| 85) | 2-methyl naphthalene | 19.320 | 142 | 22426 | 2.53 | ug/L | | 95 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033110.D
Acq On : 31 Mar 2008 12:42 pm
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 31 13:42:48 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:38:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033110.D 25ML0331.M Mon Mar 31 13:42:50 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033109.D
Acq On : 31 Mar 2008 12:06 pm
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 31 12:34:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:05:59 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 586946 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 448463 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 229651 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 134872 | 9.79 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.90% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 116245 | 9.30 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 93.00% | | | |
| 44) toluene-d8 | 9.248 | 98 | 560537 | 9.74 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.40% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 203843 | 9.72 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.20% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 20118 | 3.04 | ug/L | 92 |
| 3) chloromethane | 1.822 | 50 | 47163 | 3.70 | ug/L | 96 |
| 4) vinyl chloride | 1.938 | 62 | 49858 | 3.75 | ug/L | 96 |
| 5) 1,3-butadiene | 1.974 | 39 | 46051 | 3.57 | ug/L | 83 |
| 6) bromomethane | 2.321 | 94 | 12130 | 3.68 | ug/L | 94 |
| 7) chloroethane | 2.443 | 64 | 30122 | 3.84 | ug/L | 95 |
| 8) trichlorofluoromethane | 2.729 | 101 | 74587 | 3.44 | ug/L | 88 |
| 9) acrolein | 3.276 | 56 | 2622 | 15.82 | ug/L | 93 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 39990 | 3.60 | ug/L | 91 |
| 11) acetone | 3.477 | 43 | 5882 | 4.16 | ug/L | 82 |
| 12) carbon disulfide | 3.592 | 76 | 131059 | 3.50 | ug/L | 99 |
| 13) methylene chloride | 3.963 | 84 | 69050 | 4.25 | ug/L | 98 |
| 14) acrylonitrile | 4.304 | 53 | 60154 | 33.97 | ug/L | 94 |
| 15) trans-1,2-dichloroethene | 4.267 | 96 | 55676 | 3.87 | ug/L | 96 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 92972 | 4.59 | ug/L | 92 |
| 17) acetonitrile | 3.829 | 41 | 23486 | 33.25 | ug/L | 95 |
| 18) hexane | 4.547 | 57 | 67596 | 3.82 | ug/L | 96 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 107318 | 3.86 | ug/L | 95 |
| 20) vinyl acetate | 4.875 | 43 | 32018 | 4.03 | ug/L | 89 |
| 21) cis-1,2-dichloroethene | 5.532 | 96 | 60018 | 3.90 | ug/L | 94 |
| 22) 2,2-dichloropropane | 5.496 | 77 | 96733 | 3.86 | ug/L | 99 |
| 23) 2-butanone | 5.593 | 72 | 1510 | 3.70 | ug/L # | 36 |
| 24) methyl acrylate | 5.690 | 55 | 18969 | 3.85 | ug/L | 100 |
| 25) chloroform | 5.958 | 83 | 106874 | 3.85 | ug/L | 97 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 102071 | 3.88 | ug/L | 88 |
| 28) cyclohexane | 6.165 | 56 | 85772 | 3.73 | ug/L | 92 |
| 29) carbon tetrachloride | 6.335 | 117 | 81310 | 3.75 | ug/L | 91 |
| 31) benzene | 6.627 | 78 | 219755 | 4.07 | ug/L | 97 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 74361 | 3.82 | ug/L | 97 |
| 33) 1,2-dichloroethane | 6.700 | 62 | 56148 | 3.67 | ug/L | 95 |
| 34) trichloroethene | 7.509 | 95 | 63102 | 4.00 | ug/L | 95 |
| 35) ethyl acrylate | 7.691 | 55 | 29325 | 3.98 | ug/L | 97 |
| 36) 1,2-dichloropropane | 7.837 | 63 | 51694 | 3.99 | ug/L | 93 |
| 37) methyl methacrylate | 8.013 | 41 | 21533 | 3.93 | ug/L | 98 |
| 38) dibromomethane | 8.032 | 93 | 21619 | 4.05 | ug/L | 89 |

4/1/08

3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033109.D
Acq On : 31 Mar 2008 12:06 pm
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 31 12:34:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:05:59 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

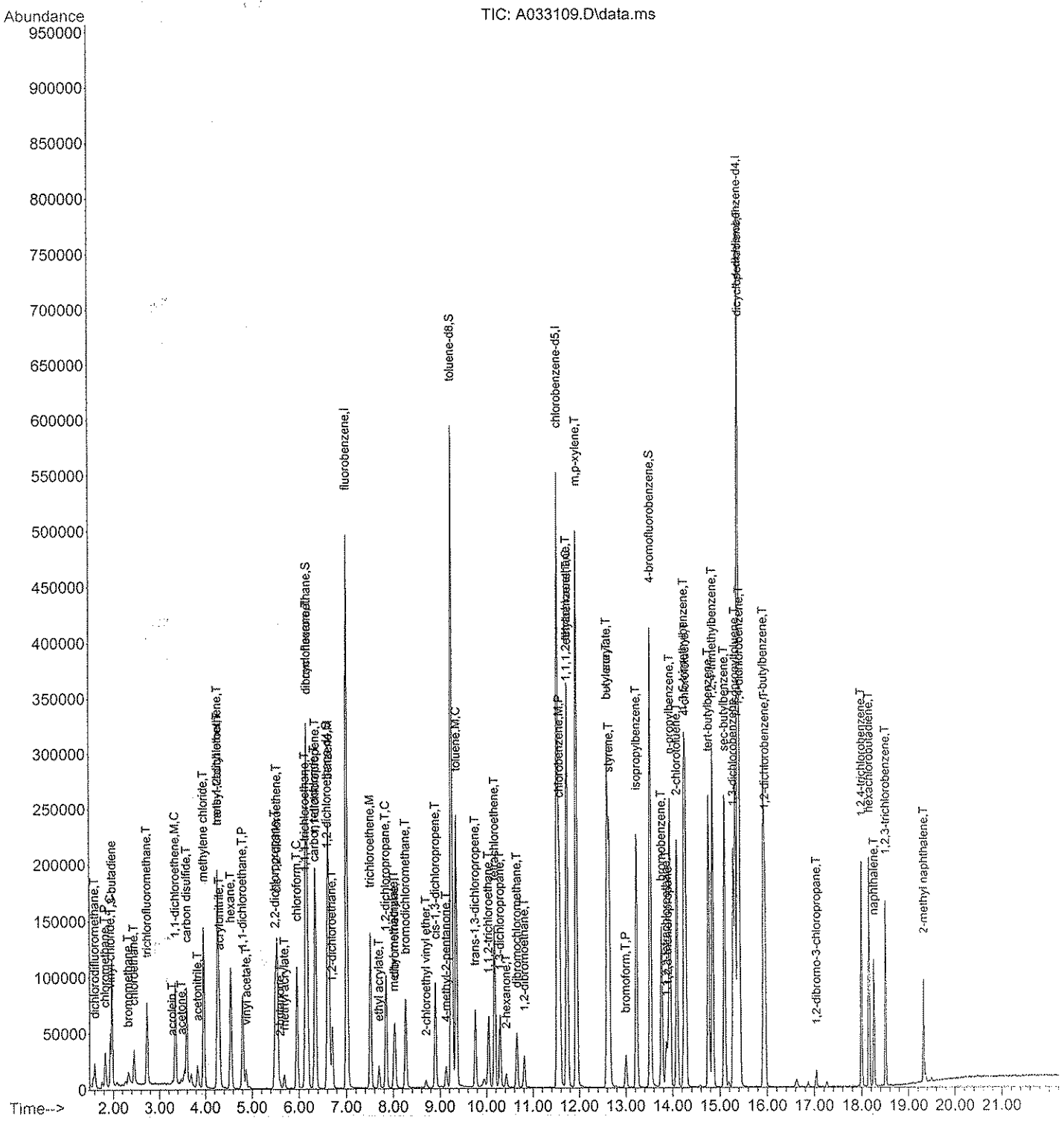
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.263 | 83 | 72037 | 3.94 | ug/L | | 94 |
| 40) 2-chloroethyl vinyl ether | 8.700 | 63 | 3689 | 7.74 | ug/L | | 92 |
| 42) cis-1,3-dichloropropene | 8.901 | 75 | 70433 | 3.71 | ug/L | | 96 |
| 43) 4-methyl-2-pentanone | 9.132 | 43 | 20365 | 3.79 | ug/L | | 97 |
| 45) toluene | 9.351 | 92 | 145400 | 3.79 | ug/L | # | 86 |
| 46) 1,1,2-trichloroethane | 10.038 | 83 | 23905 | 3.81 | ug/L | | 90 |
| 47) 1,3-dichloropropane | 10.288 | 76 | 51022 | 3.81 | ug/L | | 97 |
| 48) tetrachloroethene | 10.172 | 164 | 51426 | 3.81 | ug/L | | 94 |
| 49) trans-1,3-dichloropropene | 9.753 | 75 | 52585 | 3.79 | ug/L | | 88 |
| 50) 2-hexanone | 10.421 | 43 | 13767 | 3.89 | ug/L | # | 54 |
| 51) dibromochloromethane | 10.653 | 129 | 38347 | 3.71 | ug/L | | 95 |
| 52) 1,2-dibromoethane | 10.811 | 107 | 29084 | 3.93 | ug/L | | 99 |
| 53) chlorobenzene | 11.571 | 112 | 155191 | 3.95 | ug/L | | 96 |
| 54) 1,1,1,2-tetrachloroethane | 11.729 | 131 | 53302 | 3.84 | ug/L | | 96 |
| 55) ethylbenzene | 11.741 | 91 | 292217 | 3.91 | ug/L | | 99 |
| 56) m,p-xylene | 11.936 | 106 | 221733 | 7.88 | ug/L | # | 80 |
| 57) butyl acrylate | 12.599 | 55 | 62356 | 3.89 | ug/L | | 93 |
| 58) o-xylene | 12.599 | 106 | 106367 | 3.97 | ug/L | | 94 |
| 59) styrene | 12.641 | 104 | 168799 | 3.97 | ug/L | | 97 |
| 60) isopropylbenzene | 13.225 | 105 | 244926 | 3.89 | ug/L | | 91 |
| 61) bromobenzene | 13.760 | 156 | 67315 | 3.96 | ug/L | | 94 |
| 62) bromoform | 12.994 | 173 | 21259 | 3.78 | ug/L | | 95 |
| 64) 1,2,3-trichloropropane | 13.900 | 75 | 24071 | 3.85 | ug/L | | 85 |
| 65) n-propylbenzene | 13.943 | 91 | 315605 | 3.78 | ug/L | | 98 |
| 66) 2-chlorotoluene | 14.089 | 91 | 202319 | 3.87 | ug/L | | 93 |
| 67) 4-chlorotoluene | 14.277 | 91 | 232027 | 3.88 | ug/L | | 93 |
| 68) 1,3,5-trimethylbenzene | 14.247 | 105 | 231487 | 3.84 | ug/L | | 88 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 28801 | 4.01 | ug/L | | 97 |
| 71) tert-butylbenzene | 14.764 | 119 | 188725 | 3.89 | ug/L | | 96 |
| 72) sec-butylbenzene | 15.098 | 105 | 268241 | 3.80 | ug/L | | 99 |
| 73) 1,2,4-trimethylbenzene | 14.849 | 105 | 243020 | 3.88 | ug/L | | 86 |
| 74) 1,3-dichlorobenzene | 15.280 | 146 | 126944 | 3.93 | ug/L | | 92 |
| 75) p-isopropyltoluene | 15.329 | 119 | 227781 | 3.86 | ug/L | | 97 |
| 76) dicyclopentadiene | 15.402 | 66 | 241324 | 3.71 | ug/L | | 96 |
| 77) 1,4-dichlorobenzene | 15.426 | 146 | 126009 | 3.97 | ug/L | | 92 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 104476 | 3.99 | ug/L | | 95 |
| 79) n-butylbenzene | 15.925 | 91 | 210890 | 3.79 | ug/L | | 91 |
| 80) 1,2-dibromo-3-chloropr... | 17.044 | 75 | 4794 | 4.05 | ug/L | # | 78 |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 72156 | 4.10 | ug/L | | 93 |
| 82) hexachlorobutadiene | 18.157 | 225 | 49980 | 3.75 | ug/L | | 94 |
| 83) naphthalene | 18.260 | 128 | 92284 | 4.68 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.510 | 180 | 54806 | 4.14 | ug/L | | 92 |
| 85) 2-methyl naphthalene | 19.325 | 142 | 42831 | 4.86 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033109.D
Acq On : 31 Mar 2008 12:06 pm
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 31 12:34:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 12:05:59 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033109.D 25ML0331.M Mon Mar 31 12:34:41 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033108.D
Acq On : 31 Mar 2008 11:31 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 31 12:04:35 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 11:31:37 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.017 | 96 | 603711 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 459539 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.385 | 152 | 235884 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 140378 | 9.88 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.80% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 120589 | 9.26 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 92.60% | | | | |
| 44) toluene-d8 | 9.255 | 98 | 574093 | 9.69 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.90% | | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 211660 | 9.81 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.10% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 30622 | 4.27 | ug/L | | 98 |
| 3) chloromethane | 1.824 | 50 | 78550 | 5.87 | ug/L | | 95 |
| 4) vinyl chloride | 1.940 | 62 | 78919 | 5.59 | ug/L | | 98 |
| 5) 1,3-butadiene | 1.976 | 39 | 58493 | 4.09 | ug/L | | 82 |
| 6) bromomethane | 2.323 | 94 | 26344 | 7.58 | ug/L | | 99 |
| 7) chloroethane | 2.450 | 64 | 50352 | 6.10 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.730 | 101 | 113484 | 4.81 | ug/L | | 93 |
| 9) acrolein | 3.284 | 56 | 5656 | 30.91 | ug/L | | 94 |
| 10) 1,1-dichloroethene | 3.350 | 96 | 64999 | 5.46 | ug/L | | 96 |
| 11) acetone | 3.478 | 43 | 11873 | 8.28 | ug/L | | 77 |
| 12) carbon disulfide | 3.594 | 76 | 216934 | 5.42 | ug/L | | 99 |
| 13) methylene chloride | 3.971 | 84 | 130387 | 7.87 | ug/L | | 96 |
| 14) acrylonitrile | 4.305 | 53 | 132623 | 72.08 | ug/L | | 92 |
| 15) trans-1,2-dichloroethene | 4.275 | 96 | 100367 | 6.62 | ug/L | | 95 |
| 16) methyl-t-butyl ether | 4.269 | 73 | 197015 | 9.61 | ug/L | | 94 |
| 17) acetonitrile | 3.831 | 41 | 49055 | 66.37 | ug/L | | 95 |
| 18) hexane | 4.548 | 57 | 80033 | 4.11 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 205164 | 7.05 | ug/L | | 95 |
| 20) vinyl acetate | 4.877 | 43 | 70411 | 8.69 | ug/L | | 92 |
| 21) cis-1,2-dichloroethene | 5.540 | 96 | 119608 | 7.49 | ug/L | | 95 |
| 22) 2,2-dichloropropane | 5.503 | 77 | 170447 | 6.43 | ug/L | | 100 |
| 23) 2-butanone | 5.594 | 72 | 3881 | 9.24 | ug/L | # | 73 |
| 24) methyl acrylate | 5.692 | 55 | 40389 | 7.93 | ug/L | | 95 |
| 25) chloroform | 5.965 | 83 | 211903 | 7.33 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.142 | 97 | 171617 | 6.11 | ug/L | | 88 |
| 28) cyclohexane | 6.172 | 56 | 110631 | 4.38 | ug/L | | 93 |
| 29) carbon tetrachloride | 6.342 | 117 | 129920 | 5.56 | ug/L | | 93 |
| 31) benzene | 6.634 | 78 | 413653 | 7.35 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 124331 | 5.98 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.707 | 62 | 119384 | 7.52 | ug/L | | 95 |
| 34) trichloroethene | 7.510 | 95 | 115289 | 6.99 | ug/L | | 93 |
| 35) ethyl acrylate | 7.692 | 55 | 63160 | 8.38 | ug/L | | 98 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 105955 | 7.93 | ug/L | | 95 |
| 37) methyl methacrylate | 8.015 | 41 | 47303 | 8.38 | ug/L | | 97 |
| 38) dibromomethane | 8.039 | 93 | 45517 | 8.31 | ug/L | | 97 |

3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033108.D
Acq On : 31 Mar 2008 11:31 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 31 12:04:35 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 11:31:37 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

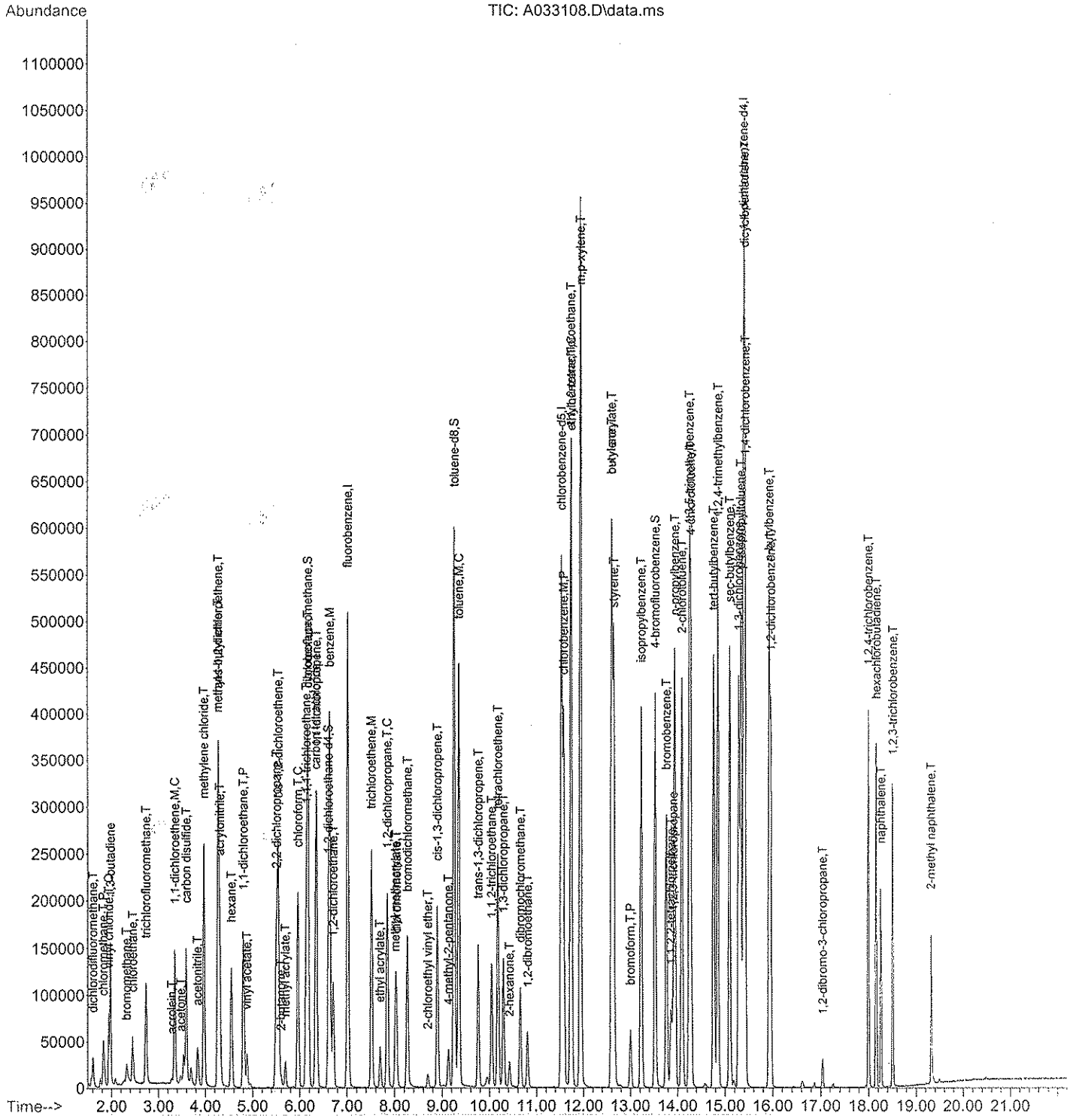
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.270 | 83 | 148011 | 7.86 | ug/L | | 93 |
| 40) | 2-chloroethyl vinyl ether | 8.696 | 63 | 8327 | 21.55 | ug/L | | 92 |
| 42) | cis-1,3-dichloropropene | 8.897 | 75 | 149822 | 7.65 | ug/L | | 96 |
| 43) | 4-methyl-2-pentanone | 9.134 | 43 | 44010 | 7.95 | ug/L | | 95 |
| 45) | toluene | 9.353 | 92 | 277359 | 6.93 | ug/L | | 88 |
| 46) | 1,1,2-trichloroethane | 10.040 | 83 | 50143 | 7.78 | ug/L | | 91 |
| 47) | 1,3-dichloropropane | 10.289 | 76 | 109167 | 7.93 | ug/L | | 97 |
| 48) | tetrachloroethene | 10.174 | 164 | 86940 | 6.08 | ug/L | | 94 |
| 49) | trans-1,3-dichloropropene | 9.760 | 75 | 112474 | 7.89 | ug/L | | 88 |
| 50) | 2-hexanone | 10.423 | 43 | 28998 | 7.94 | ug/L | # | 52 |
| 51) | dibromochloromethane | 10.654 | 129 | 84215 | 7.95 | ug/L | | 97 |
| 52) | 1,2-dibromoethane | 10.812 | 107 | 61623 | 8.13 | ug/L | | 98 |
| 53) | chlorobenzene | 11.578 | 112 | 303844 | 7.47 | ug/L | | 95 |
| 54) | 1,1,1,2-tetrachloroethane | 11.730 | 131 | 107918 | 7.52 | ug/L | | 93 |
| 55) | ethylbenzene | 11.743 | 91 | 542904 | 6.94 | ug/L | | 96 |
| 56) | m,p-xylene | 11.937 | 106 | 412736 | 14.03 | ug/L | # | 81 |
| 57) | butyl acrylate | 12.600 | 55 | 129758 | 7.79 | ug/L | | 98 |
| 58) | o-xylene | 12.600 | 106 | 205761 | 7.39 | ug/L | | 91 |
| 59) | styrene | 12.649 | 104 | 339489 | 7.71 | ug/L | | 96 |
| 60) | isopropylbenzene | 13.227 | 105 | 435881 | 6.56 | ug/L | | 93 |
| 61) | bromobenzene | 13.762 | 156 | 137869 | 7.89 | ug/L | | 96 |
| 62) | bromoform | 13.002 | 173 | 46553 | 8.08 | ug/L | | 98 |
| 64) | 1,2,3-trichloropropane | 13.908 | 75 | 50193 | 7.81 | ug/L | | 95 |
| 65) | n-propylbenzene | 13.944 | 91 | 568070 | 6.45 | ug/L | | 98 |
| 66) | 2-chlorotoluene | 14.090 | 91 | 391673 | 7.19 | ug/L | | 94 |
| 67) | 4-chlorotoluene | 14.279 | 91 | 444679 | 7.12 | ug/L | | 92 |
| 68) | 1,3,5-trimethylbenzene | 14.248 | 105 | 434427 | 6.88 | ug/L | | 87 |
| 70) | 1,1,2,2-tetrachloroethane | 13.859 | 83 | 59380 | 8.06 | ug/L | | 92 |
| 71) | tert-butylbenzene | 14.759 | 119 | 333799 | 6.51 | ug/L | | 96 |
| 72) | sec-butylbenzene | 15.100 | 105 | 464013 | 6.19 | ug/L | | 99 |
| 73) | 1,2,4-trimethylbenzene | 14.850 | 105 | 465481 | 7.12 | ug/L | | 85 |
| 74) | 1,3-dichlorobenzene | 15.282 | 146 | 251559 | 7.52 | ug/L | | 90 |
| 75) | p-isopropyltoluene | 15.331 | 119 | 401924 | 6.45 | ug/L | | 97 |
| 76) | dicyclopentadiene | 15.404 | 66 | 422537 | 6.09 | ug/L | | 96 |
| 77) | 1,4-dichlorobenzene | 15.422 | 146 | 248457 | 7.56 | ug/L | | 93 |
| 78) | 1,2-dichlorobenzene | 15.957 | 146 | 211637 | 7.84 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.921 | 91 | 372460 | 6.31 | ug/L | | 93 |
| 80) | 1,2-dibromo-3-chloropr... | 17.046 | 75 | 9898 | 8.13 | ug/L | | 88 |
| 81) | 1,2,4-trichlorobenzene | 17.994 | 180 | 143430 | 7.95 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.158 | 225 | 88909 | 6.32 | ug/L | | 95 |
| 83) | naphthalene | 18.262 | 128 | 177529 | 8.93 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.511 | 180 | 107733 | 7.97 | ug/L | | 94 |
| 85) | 2-methyl naphthalene | 19.320 | 142 | 74547 | 8.27 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033108.D
Acq On : 31 Mar 2008 11:31 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 31 12:04:35 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 11:31:37 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033107.D
Acq On : 31 Mar 2008 10:56 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 31 11:27:28 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Thu Mar 27 16:48:50 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 616390 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 463224 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 229798 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 138869 | 9.52 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 118692 | 8.79 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 87.90% | | | | |
| 44) toluene-d8 | 9.247 | 98 | 581121 | 9.66 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.60% | | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 208533 | 9.52 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.20% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 58716 | 7.89 | ug/L | | 98 |
| 3) chloromethane | 1.822 | 50 | 111662 | 8.11 | ug/L | | 95 |
| 4) vinyl chloride | 1.937 | 62 | 129939 | 8.96 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.974 | 39 | 128632 | 8.51 | ug/L | | 82 |
| 6) bromomethane | 2.327 | 94 | 40632 | 11.18 | ug/L | | 98 |
| 7) chloroethane | 2.448 | 64 | 73296 | 8.58 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.728 | 101 | 201020 | 8.09 | ug/L | | 94 |
| 9) acrolein | 3.281 | 56 | 6911 | 34.80 | ug/L | | 94 |
| 10) 1,1-dichloroethene | 3.348 | 96 | 113700 | 9.25 | ug/L | | 94 |
| 11) acetone | 3.470 | 43 | 11021 | 6.91 | ug/L | | 85 |
| 12) carbon disulfide | 3.592 | 76 | 374391 | 8.84 | ug/L | | 98 |
| 13) methylene chloride | 3.969 | 84 | 151083 | 8.91 | ug/L | | 99 |
| 14) acrylonitrile | 4.303 | 53 | 152377 | 79.89 | ug/L | | 91 |
| 15) trans-1,2-dichloroethene | 4.273 | 96 | 152740 | 9.85 | ug/L | | 97 |
| 16) methyl-t-butyl ether | 4.273 | 73 | 220615 | 10.65 | ug/L | | 94 |
| 17) acetonitrile | 3.829 | 41 | 57910 | 74.94 | ug/L | | 95 |
| 18) hexane | 4.552 | 57 | 208026 | 10.32 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 290253 | 9.73 | ug/L | | 95 |
| 20) vinyl acetate | 4.875 | 43 | 80215 | 9.69 | ug/L | | 94 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 160645 | 9.87 | ug/L | | 94 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 281020 | 10.37 | ug/L | | 99 |
| 23) 2-butanone | 5.586 | 72 | 4342 | 10.23 | ug/L | # | 75 |
| 24) methyl acrylate | 5.690 | 55 | 42360 | 8.02 | ug/L | | 99 |
| 25) chloroform | 5.963 | 83 | 280928 | 9.47 | ug/L | | 95 |
| 27) 1,1,1-trichloroethane | 6.140 | 97 | 284909 | 9.88 | ug/L | | 88 |
| 28) cyclohexane | 6.170 | 56 | 252056 | 9.65 | ug/L | | 93 |
| 29) carbon tetrachloride | 6.340 | 117 | 241651 | 10.09 | ug/L | | 91 |
| 31) benzene | 6.632 | 78 | 576028 | 10.04 | ug/L | | 97 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 218726 | 10.29 | ug/L | | 100 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 142317 | 8.68 | ug/L | | 95 |
| 34) trichloroethene | 7.514 | 95 | 171705 | 10.23 | ug/L | | 94 |
| 35) ethyl acrylate | 7.696 | 55 | 67089 | 8.64 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 133681 | 9.81 | ug/L | | 91 |
| 37) methyl methacrylate | 8.013 | 41 | 47966 | 8.16 | ug/L | | 96 |
| 38) dibromomethane | 8.037 | 93 | 51575 | 9.18 | ug/L | | 96 |

mo 4/01/08

4/13/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033107.D
Acq On : 31 Mar 2008 10:56 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 31 11:27:28 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Thu Mar 27 16:48:50 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

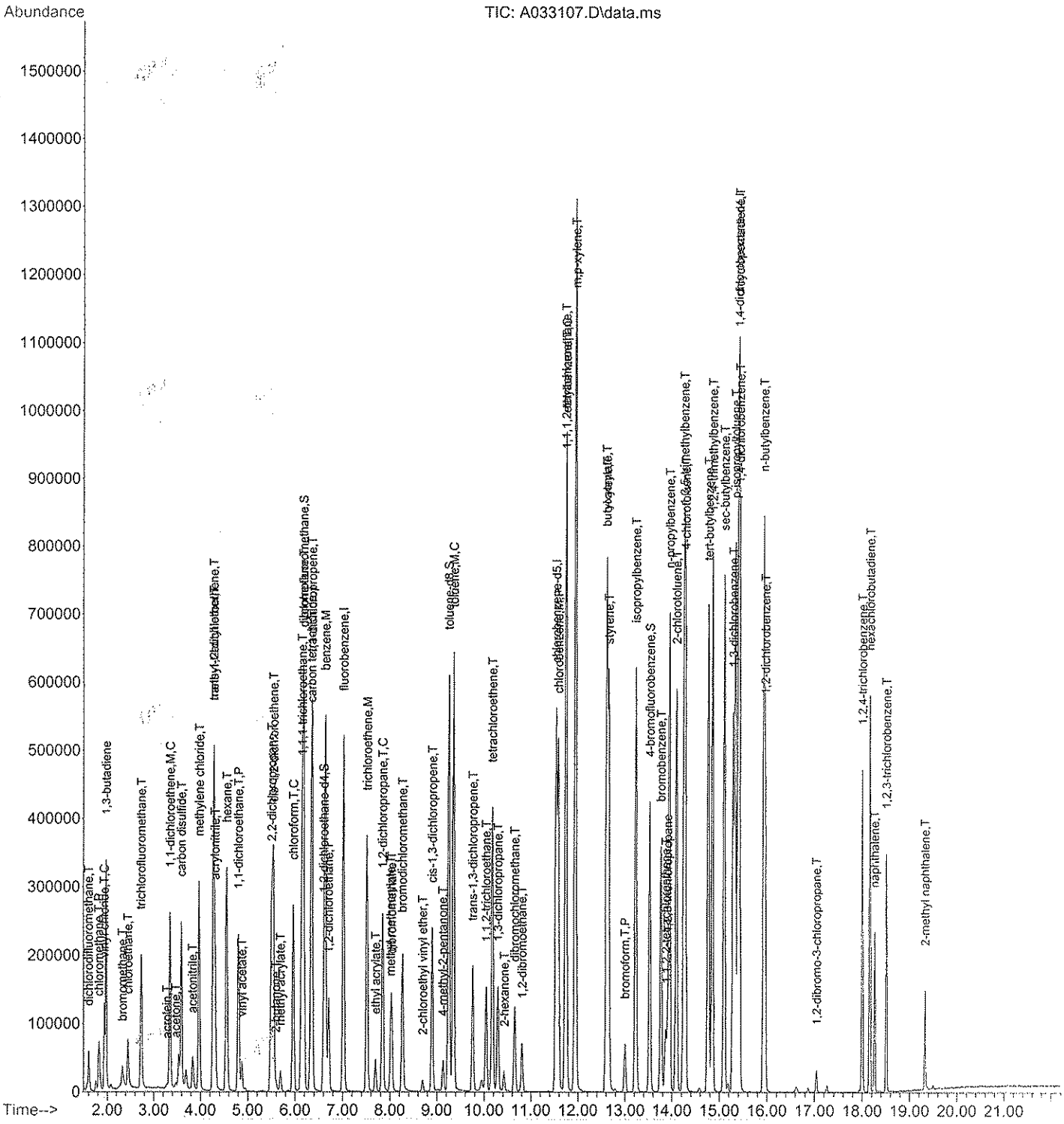
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.262 | 83 | 183369 | 9.50 | ug/L | | 92 |
| 40) 2-chloroethyl vinyl ether | 8.700 | 63 | 9336 | 34.95 | ug/L | | 97 |
| 42) cis-1,3-dichloropropene | 8.901 | 75 | 185153 | 9.32 | ug/L | | 96 |
| 43) 4-methyl-2-pentanone | 9.126 | 43 | 47637 | 8.43 | ug/L | | 96 |
| 45) toluene | 9.351 | 92 | 388156 | 9.54 | ug/L | | 89 |
| 46) 1,1,2-trichloroethane | 10.044 | 83 | 58519 | 8.94 | ug/L | # | 88 |
| 47) 1,3-dichloropropane | 10.293 | 76 | 125720 | 8.99 | ug/L | | 93 |
| 48) tetrachloroethene | 10.172 | 164 | 145466 | 10.06 | ug/L | | 92 |
| 49) trans-1,3-dichloropropene | 9.758 | 75 | 134113 | 9.25 | ug/L | | 86 |
| 50) 2-hexanone | 10.427 | 43 | 31713 | 8.47 | ug/L | # | 60 |
| 51) dibromochloromethane | 10.652 | 129 | 98364 | 9.12 | ug/L | | 97 |
| 52) 1,2-dibromoethane | 10.810 | 107 | 70747 | 9.20 | ug/L | | 91 |
| 53) chlorobenzene | 11.576 | 112 | 396779 | 9.64 | ug/L | | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 137512 | 9.45 | ug/L | | 95 |
| 55) ethylbenzene | 11.741 | 91 | 778443 | 9.80 | ug/L | | 97 |
| 56) m,p-xylene | 11.935 | 106 | 585902 | 19.63 | ug/L | # | 79 |
| 57) butyl acrylate | 12.598 | 55 | 136986 | 7.95 | ug/L | | 95 |
| 58) o-xylene | 12.604 | 106 | 274571 | 9.71 | ug/L | | 89 |
| 59) styrene | 12.647 | 104 | 429462 | 9.61 | ug/L | | 96 |
| 60) isopropylbenzene | 13.224 | 105 | 670375 | 9.92 | ug/L | | 94 |
| 61) bromobenzene | 13.760 | 156 | 169091 | 9.56 | ug/L | | 96 |
| 62) bromoform | 12.999 | 173 | 54173 | 9.25 | ug/L | | 99 |
| 64) 1,2,3-trichloropropane | 13.905 | 75 | 56224 | 8.59 | ug/L | | 100 |
| 65) n-propylbenzene | 13.942 | 91 | 871366 | 9.67 | ug/L | | 99 |
| 66) 2-chlorotoluene | 14.088 | 91 | 524639 | 9.44 | ug/L | | 92 |
| 67) 4-chlorotoluene | 14.276 | 91 | 593849 | 9.29 | ug/L | | 92 |
| 68) 1,3,5-trimethylbenzene | 14.246 | 105 | 622757 | 9.64 | ug/L | | 87 |
| 70) 1,1,2,2-tetrachloroethane | 13.863 | 83 | 65989 | 9.20 | ug/L | | 97 |
| 71) tert-butylbenzene | 14.763 | 119 | 524388 | 10.50 | ug/L | | 96 |
| 72) sec-butylbenzene | 15.097 | 105 | 760924 | 10.36 | ug/L | | 98 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 638136 | 9.99 | ug/L | | 85 |
| 74) 1,3-dichlorobenzene | 15.286 | 146 | 321388 | 9.86 | ug/L | | 90 |
| 75) p-isopropyltoluene | 15.329 | 119 | 640872 | 10.52 | ug/L | | 97 |
| 76) dicyclopentadiene | 15.401 | 66 | 614046 | 8.94 | ug/L | | 96 |
| 77) 1,4-dichlorobenzene | 15.420 | 146 | 308178 | 9.61 | ug/L | | 91 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 252239 | 9.59 | ug/L | | 95 |
| 79) n-butylbenzene | 15.924 | 91 | 599951 | 10.36 | ug/L | | 92 |
| 80) 1,2-dibromo-3-chloropr... | 17.043 | 75 | 10463 | 8.75 | ug/L | # | 80 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 168372 | 9.65 | ug/L | | 94 |
| 82) hexachlorobutadiene | 18.156 | 225 | 141081 | 10.27 | ug/L | | 95 |
| 83) naphthalene | 18.260 | 128 | 184882 | 9.71 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 119026 | 9.10 | ug/L | | 97 |
| 85) 2-methyl naphthalene | 19.324 | 142 | 66987 | 7.81 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033107.D
Acq On : 31 Mar 2008 10:56 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 31 11:27:28 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Thu Mar 27 16:48:50 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033112.D
Acq On : 31 Mar 2008 1:52 pm
Sample : ,ical,ical_w25 15 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 31 15:04:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 568671 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 424981 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 219864 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 26) dibromofluoromethane | 6.175 | 113 | 131673 | 10.01 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.10% | | | |
| 30) 1,2-dichloroethane-d4 | 6.607 | 65 | 116016 | 9.96 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.60% | | | |
| 44) toluene-d8 | 9.253 | 98 | 534302 | 9.95 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.50% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 199196 | 10.13 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.30% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.608 | 85 | 83485 | 13.59 | ug/L | 95 |
| 3) chloromethane | 1.827 | 50 | 157317 | 12.56 | ug/L | 95 |
| 4) vinyl chloride | 1.937 | 62 | 185004 | 14.33 | ug/L | 96 |
| 5) 1,3-butadiene | 1.973 | 39 | 194800 | 16.76 | ug/L | 84 |
| 6) bromomethane | 2.314 | 94 | 56281 | 17.62 | ug/L | 95 |
| 7) chloroethane | 2.448 | 64 | 108563 | 14.43 | ug/L | 97 |
| 8) trichlorofluoromethane | 2.727 | 101 | 304815 | 15.68 | ug/L | 93 |
| 9) acrolein | 3.287 | 56 | 23011 | 219.19 | ug/L | 97 |
| 10) 1,1-dichloroethene | 3.348 | 96 | 163458 | 15.80 | ug/L | 90 |
| 11) acetone | 3.475 | 43 | 18325 | 13.31 | ug/L | 69 |
| 12) carbon disulfide | 3.597 | 76 | 521833 | 15.05 | ug/L | 98 |
| 13) methylene chloride | 3.968 | 84 | 205305 | 13.35 | ug/L | 95 |
| 14) acrylonitrile | 4.308 | 53 | 243774 | 153.17 | ug/L | 91 |
| 15) trans-1,2-dichloroethene | 4.272 | 96 | 206892 | 15.09 | ug/L | 95 |
| 16) methyl-t-butyl ether | 4.272 | 73 | 325971 | 16.05 | ug/L | 92 |
| 17) acetonitrile | 3.834 | 41 | 89775 | 141.91 | ug/L | 97 |
| 18) hexane | 4.552 | 57 | 283357 | 17.22 | ug/L | 98 |
| 19) 1,1-dichloroethane | 4.807 | 63 | 406583 | 15.17 | ug/L | 96 |
| 20) vinyl acetate | 4.880 | 43 | 117916 | 14.90 | ug/L | 92 |
| 21) cis-1,2-dichloroethene | 5.543 | 96 | 225367 | 15.05 | ug/L | 93 |
| 22) 2,2-dichloropropane | 5.506 | 77 | 379592 | 15.86 | ug/L | 98 |
| 23) 2-butanone | 5.592 | 72 | 6689 | 17.65 | ug/L # | 74 |
| 24) methyl acrylate | 5.689 | 55 | 68325 | 14.38 | ug/L | 99 |
| 25) chloroform | 5.963 | 83 | 405211 | 15.05 | ug/L | 95 |
| 27) 1,1,1-trichloroethane | 6.145 | 97 | 415239 | 16.32 | ug/L | 86 |
| 28) cyclohexane | 6.169 | 56 | 366879 | 17.31 | ug/L | 92 |
| 29) carbon tetrachloride | 6.340 | 117 | 346398 | 16.76 | ug/L | 92 |
| 31) benzene | 6.632 | 78 | 812670 | 15.14 | ug/L | 97 |
| 32) 1,1-dichloropropene | 6.358 | 75 | 308143 | 16.33 | ug/L | 99 |
| 33) 1,2-dichloroethane | 6.711 | 62 | 218281 | 14.86 | ug/L | 95 |
| 34) trichloroethene | 7.513 | 95 | 242211 | 15.65 | ug/L | 96 |
| 35) ethyl acrylate | 7.696 | 55 | 108081 | 15.20 | ug/L | 96 |
| 36) 1,2-dichloropropane | 7.848 | 63 | 193709 | 15.07 | ug/L | 96 |
| 37) methyl methacrylate | 8.012 | 41 | 78727 | 14.97 | ug/L | 99 |
| 38) dibromomethane | 8.036 | 93 | 77537 | 14.80 | ug/L | 94 |

A033112.D 25ML0331.M Mon Mar 31 15:04:41 2008 Page: 1

3/31/14

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033112.D
Acq On : 31 Mar 2008 1:52 pm
Sample : ,ical,ical_w25 15 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 31 15:04:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

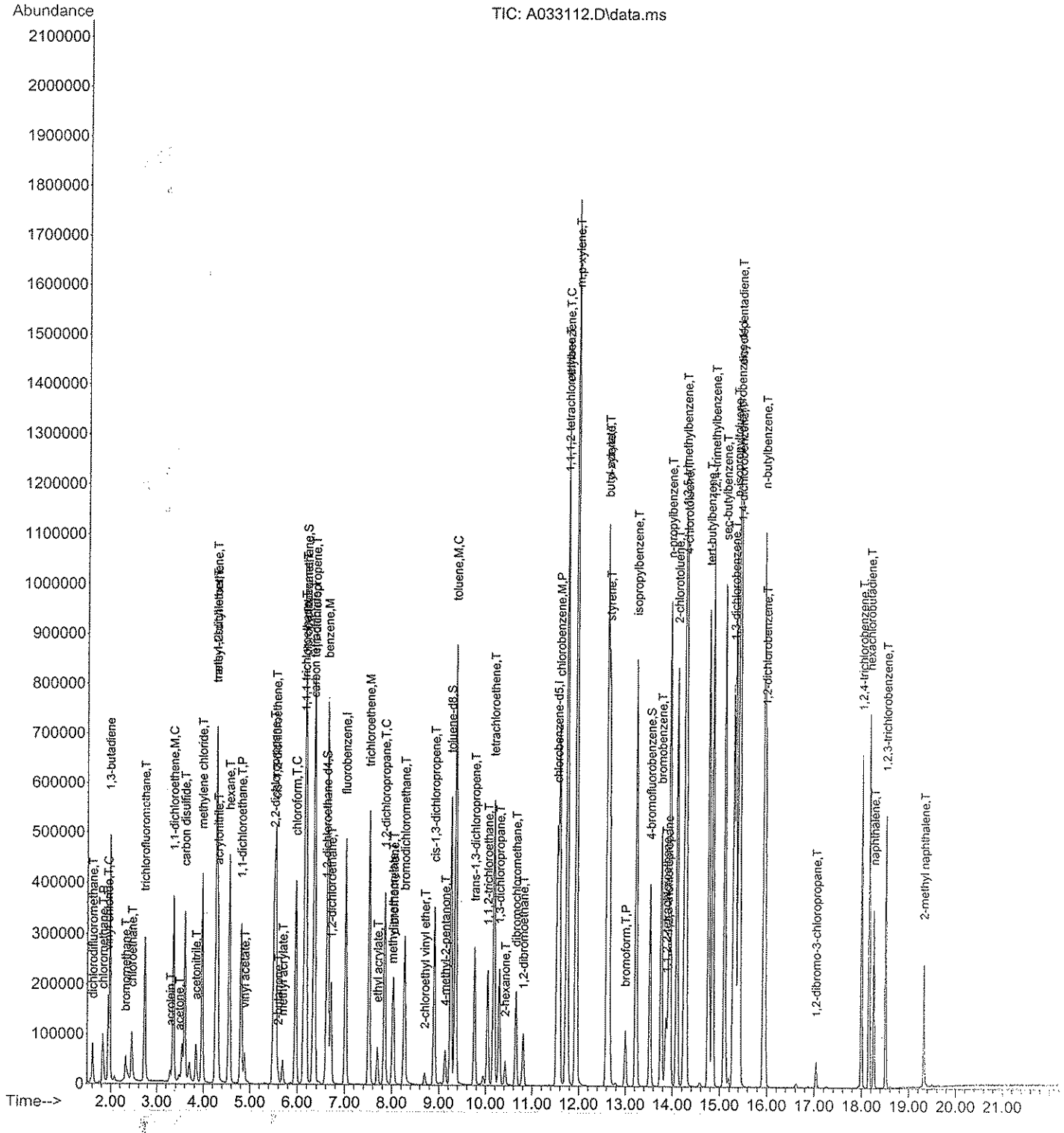
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.267 | 83 | 273169 | 15.22 ug/L | 96 |
| 40) 2-chloroethyl vinyl ether | 8.699 | 63 | 13538 | 19.65 ug/L | 97 |
| 42) cis-1,3-dichloropropene | 8.900 | 75 | 268570 | 15.23 ug/L | 97 |
| 43) 4-methyl-2-pentanone | 9.131 | 43 | 75770 | 14.78 ug/L | 94 |
| 45) toluene | 9.350 | 92 | 534400 | 14.91 ug/L | 89 |
| 46) 1,1,2-trichloroethane | 10.043 | 83 | 85579 | 14.63 ug/L | 91 |
| 47) 1,3-dichloropropane | 10.292 | 76 | 186104 | 14.85 ug/L | 97 |
| 48) tetrachloroethene | 10.177 | 164 | 198626 | 15.75 ug/L | 94 |
| 49) trans-1,3-dichloropropene | 9.757 | 75 | 199061 | 15.17 ug/L | 89 |
| 50) 2-hexanone | 10.420 | 43 | 50116 | 14.93 ug/L # | 56 |
| 51) dibromochloromethane | 10.651 | 129 | 146956 | 15.27 ug/L | 99 |
| 52) 1,2-dibromoethane | 10.809 | 107 | 106175 | 15.06 ug/L | 95 |
| 53) chlorobenzene | 11.576 | 112 | 551040 | 14.67 ug/L | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 198373 | 15.24 ug/L | 95 |
| 55) ethylbenzene | 11.740 | 91 | 1073576 | 15.16 ug/L | 96 |
| 56) m,p-xylene | 11.941 | 106 | 794825 | 29.86 ug/L # | 81 |
| 57) butyl acrylate | 12.597 | 55 | 223635 | 15.09 ug/L | 96 |
| 58) o-xylene | 12.603 | 106 | 376198 | 14.70 ug/L # | 86 |
| 59) styrene | 12.646 | 104 | 614073 | 15.06 ug/L | 95 |
| 60) isopropylbenzene | 13.224 | 105 | 911045 | 15.28 ug/L | 94 |
| 61) bromobenzene | 13.759 | 156 | 240260 | 14.77 ug/L | 93 |
| 62) bromoform | 12.999 | 173 | 83553 | 15.54 ug/L | 99 |
| 64) 1,2,3-trichloropropane | 13.905 | 75 | 85033 | 14.45 ug/L | 96 |
| 65) n-propylbenzene | 13.941 | 91 | 1186824 | 15.22 ug/L | 98 |
| 66) 2-chlorotoluene | 14.093 | 91 | 727832 | 14.79 ug/L | 92 |
| 67) 4-chlorotoluene | 14.282 | 91 | 832357 | 14.81 ug/L | 93 |
| 68) 1,3,5-trimethylbenzene | 14.245 | 105 | 847474 | 14.92 ug/L | 86 |
| 70) 1,1,2,2-tetrachloroethane | 13.862 | 83 | 98917 | 14.53 ug/L | 94 |
| 71) tert-butylbenzene | 14.762 | 119 | 698224 | 15.15 ug/L | 94 |
| 72) sec-butylbenzene | 15.097 | 105 | 1002635 | 15.13 ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.847 | 105 | 869506 | 14.65 ug/L | 86 |
| 74) 1,3-dichlorobenzene | 15.285 | 146 | 448362 | 14.52 ug/L | 90 |
| 75) p-isopropyltoluene | 15.328 | 119 | 836220 | 15.04 ug/L | 96 |
| 76) dicyclopentadiene | 15.401 | 66 | 883134 | 14.73 ug/L | 97 |
| 77) 1,4-dichlorobenzene | 15.425 | 146 | 427651 | 14.04 ug/L | 91 |
| 78) 1,2-dichlorobenzene | 15.960 | 146 | 360994 | 14.36 ug/L | 94 |
| 79) n-butylbenzene | 15.924 | 91 | 778821 | 14.99 ug/L | 93 |
| 80) 1,2-dibromo-3-chloropr... | 17.043 | 75 | 16131 | 14.09 ug/L # | 82 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 233387 | 13.62 ug/L | 94 |
| 82) hexachlorobutadiene | 18.156 | 225 | 176805 | 14.38 ug/L | 94 |
| 83) naphthalene | 18.259 | 128 | 275448 | 13.09 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.508 | 180 | 174951 | 13.68 ug/L | 94 |
| 85) 2-methyl naphthalene | 19.323 | 142 | 112259 | 12.47 ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033112.D
Acq On : 31 Mar 2008 1:52 pm
Sample : ,ical,ical_w25 15 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 31 15:04:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033112.D 25ML0331.M Mon Mar 31 15:04:42 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033113.D
Acq On : 31 Mar 2008 2:28 pm
Sample : ,ical,ical_w25 20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 31 15:04:44 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.013 | 96 | 576302 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.531 | 117 | 429066 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.387 | 152 | 219870 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.173 | 113 | 132735 | 9.96 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.60% | | | |
| 30) 1,2-dichloroethane-d4 | 6.605 | 65 | 117467 | 9.95 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.50% | | | |
| 44) toluene-d8 | 9.251 | 98 | 543623 | 10.02 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.20% | | | |
| 63) 4-bromofluorobenzene | 13.526 | 95 | 199962 | 10.07 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.606 | 85 | 111331 | 17.88 | ug/L | 97 |
| 3) chloromethane | 1.825 | 50 | 217541 | 17.13 | ug/L | 95 |
| 4) vinyl chloride | 1.935 | 62 | 252793 | 19.33 | ug/L | 97 |
| 5) 1,3-butadiene | 1.977 | 39 | 254309 | 21.59 | ug/L | 81 |
| 6) bromomethane | 2.318 | 94 | 84047 | 25.96 | ug/L | 92 |
| 7) chloroethane | 2.446 | 64 | 143620 | 18.84 | ug/L | 97 |
| 8) trichlorofluoromethane | 2.731 | 101 | 418937 | 21.26 | ug/L | 94 |
| 9) acrolein | 3.285 | 56 | 32877 | 309.01 | ug/L | 97 |
| 10) 1,1-dichloroethene | 3.346 | 96 | 222862 | 21.25 | ug/L | 93 |
| 11) acetone | 3.473 | 43 | 24234 | 17.37 | ug/L | 76 |
| 12) carbon disulfide | 3.595 | 76 | 709827 | 20.21 | ug/L | 99 |
| 13) methylene chloride | 3.966 | 84 | 268798 | 17.24 | ug/L | 98 |
| 14) acrylonitrile | 4.306 | 53 | 327221 | 202.88 | ug/L | 91 |
| 15) trans-1,2-dichloroethene | 4.270 | 96 | 285035 | 20.52 | ug/L | 94 |
| 16) methyl-t-butyl ether | 4.270 | 73 | 447705 | 21.76 | ug/L | 94 |
| 17) acetonitrile | 3.832 | 41 | 118264 | 184.47 | ug/L | 96 |
| 18) hexane | 4.550 | 57 | 369347 | 22.15 | ug/L | 99 |
| 19) 1,1-dichloroethane | 4.805 | 63 | 557676 | 20.53 | ug/L | 96 |
| 20) vinyl acetate | 4.878 | 43 | 160060 | 19.96 | ug/L | 92 |
| 21) cis-1,2-dichloroethene | 5.541 | 96 | 309915 | 20.42 | ug/L | 97 |
| 22) 2,2-dichloropropane | 5.505 | 77 | 513233 | 21.17 | ug/L | 98 |
| 23) 2-butanone | 5.590 | 72 | 8851 | 23.05 | ug/L # | 88 |
| 24) methyl acrylate | 5.693 | 55 | 92881 | 19.29 | ug/L | 99 |
| 25) chloroform | 5.961 | 83 | 548260 | 20.10 | ug/L | 97 |
| 27) 1,1,1-trichloroethane | 6.143 | 97 | 559391 | 21.69 | ug/L | 88 |
| 28) cyclohexane | 6.173 | 56 | 488508 | 22.74 | ug/L | 93 |
| 29) carbon tetrachloride | 6.344 | 117 | 476473 | 22.75 | ug/L | 94 |
| 31) benzene | 6.636 | 78 | 1100267 | 20.23 | ug/L | 97 |
| 32) 1,1-dichloropropene | 6.356 | 75 | 420832 | 22.00 | ug/L | 98 |
| 33) 1,2-dichloroethane | 6.709 | 62 | 296228 | 19.89 | ug/L | 95 |
| 34) trichloroethene | 7.511 | 95 | 331940 | 21.16 | ug/L | 94 |
| 35) ethyl acrylate | 7.694 | 55 | 147063 | 20.41 | ug/L | 95 |
| 36) 1,2-dichloropropane | 7.846 | 63 | 262451 | 20.15 | ug/L | 95 |
| 37) methyl methacrylate | 8.016 | 41 | 109282 | 20.50 | ug/L | 95 |
| 38) dibromomethane | 8.034 | 93 | 105828 | 19.93 | ug/L | 94 |

4/01/08
3/31/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033113.D
Acq On : 31 Mar 2008 2:28 pm
Sample : ,ical,ical_w25 20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 31 15:04:44 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

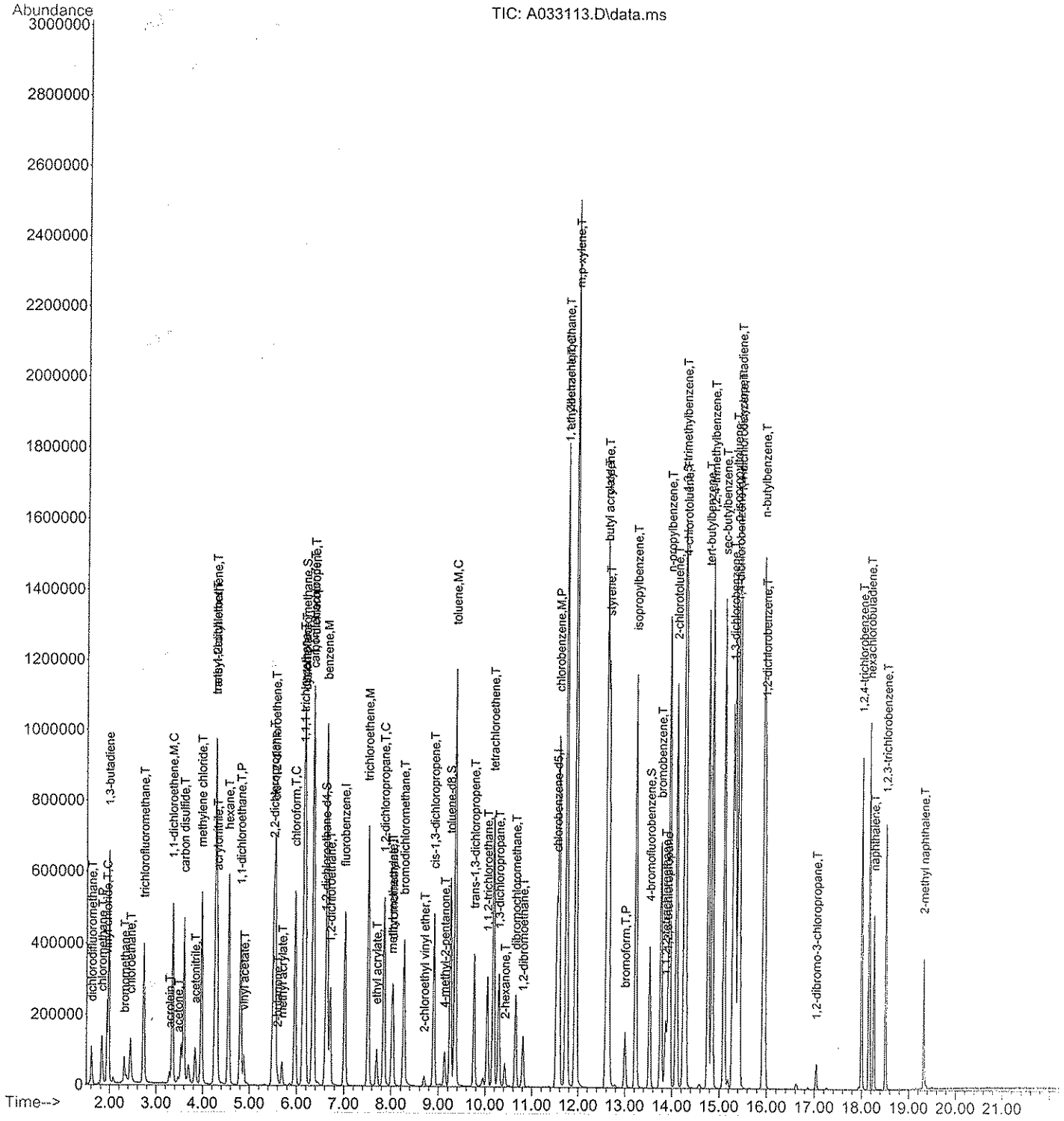
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.265 | 83 | 373010 | 20.50 | ug/L | | 95 |
| 40) 2-chloroethyl vinyl ether | 8.697 | 63 | 16714 | 23.93 | ug/L | | 97 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 367368 | 20.63 | ug/L | | 98 |
| 43) 4-methyl-2-pentanone | 9.129 | 43 | 103737 | 20.04 | ug/L | | 96 |
| 45) toluene | 9.354 | 92 | 729398 | 20.16 | ug/L | | 89 |
| 46) 1,1,2-trichloroethane | 10.041 | 83 | 116546 | 19.73 | ug/L | | 90 |
| 47) 1,3-dichloropropane | 10.291 | 76 | 256230 | 20.25 | ug/L | | 97 |
| 48) tetrachloroethene | 10.175 | 164 | 271294 | 21.30 | ug/L | | 93 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 271188 | 20.47 | ug/L | | 90 |
| 50) 2-hexanone | 10.424 | 43 | 69523 | 20.52 | ug/L | # | 54 |
| 51) dibromochloromethane | 10.649 | 129 | 204381 | 21.03 | ug/L | | 99 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 144969 | 20.37 | ug/L | | 97 |
| 53) chlorobenzene | 11.574 | 112 | 760071 | 20.05 | ug/L | | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.732 | 131 | 268916 | 20.46 | ug/L | | 95 |
| 55) ethylbenzene | 11.744 | 91 | 1452072 | 20.31 | ug/L | | 96 |
| 56) m,p-xylene | 11.939 | 106 | 1083315 | 40.32 | ug/L | # | 78 |
| 57) butyl acrylate | 12.595 | 55 | 306872 | 20.51 | ug/L | | 93 |
| 58) o-xylene | 12.601 | 106 | 516793 | 20.01 | ug/L | # | 86 |
| 59) styrene | 12.644 | 104 | 832563 | 20.22 | ug/L | | 94 |
| 60) isopropylbenzene | 13.228 | 105 | 1255586 | 20.86 | ug/L | | 95 |
| 61) bromobenzene | 13.763 | 156 | 328827 | 20.03 | ug/L | | 95 |
| 62) bromoform | 13.003 | 173 | 117547 | 21.65 | ug/L | | 98 |
| 64) 1,2,3-trichloropropane | 13.903 | 75 | 117161 | 19.72 | ug/L | | 94 |
| 65) n-propylbenzene | 13.939 | 91 | 1629873 | 20.71 | ug/L | | 97 |
| 66) 2-chlorotoluene | 14.091 | 91 | 999370 | 20.12 | ug/L | | 92 |
| 67) 4-chlorotoluene | 14.280 | 91 | 1139957 | 20.09 | ug/L | | 91 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 1171889 | 20.43 | ug/L | | 87 |
| 70) 1,1,2,2-tetrachloroethane | 13.860 | 83 | 136623 | 20.07 | ug/L | | 98 |
| 71) tert-butylbenzene | 14.760 | 119 | 959043 | 20.81 | ug/L | | 95 |
| 72) sec-butylbenzene | 15.101 | 105 | 1383650 | 20.89 | ug/L | | 99 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 1191128 | 20.07 | ug/L | | 85 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 612933 | 19.85 | ug/L | | 91 |
| 75) p-isopropyltoluene | 15.326 | 119 | 1138158 | 20.47 | ug/L | | 96 |
| 76) dicyclopentadiene | 15.405 | 66 | 1185894 | 19.78 | ug/L | | 96 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 588023 | 19.30 | ug/L | | 91 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 496749 | 19.76 | ug/L | | 94 |
| 79) n-butylbenzene | 15.922 | 91 | 1078710 | 20.76 | ug/L | | 92 |
| 80) 1,2-dibromo-3-chloropr... | 17.041 | 75 | 22724 | 19.85 | ug/L | # | 84 |
| 81) 1,2,4-trichlorobenzene | 17.996 | 180 | 331202 | 19.32 | ug/L | | 93 |
| 82) hexachlorobutadiene | 18.160 | 225 | 248578 | 20.21 | ug/L | | 95 |
| 83) naphthalene | 18.257 | 128 | 386184 | 18.35 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.512 | 180 | 247243 | 19.33 | ug/L | | 95 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 163135 | 18.12 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033113.D
Acq On : 31 Mar 2008 2:28 pm
Sample : ,ical,ical_w25 20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 31 15:04:44 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 13:59:21 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033113.D 25ML0331.M Mon Mar 31 15:04:45 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033114.D
Acq On : 31 Mar 2008 3:03 pm
Sample : ,ical,ical_w25 40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 31 15:33:22 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 15:15:05 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) fluorobenzene | 7.018 | 96 | 602786 | 10.00 ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 447240 | 10.00 ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.392 | 152 | 226242 | 10.00 ug/L | 0.00 |
| System Monitoring Compounds | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 137641 | 9.91 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.10% | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 123232 | 10.09 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.90% | |
| 44) toluene-d8 | 9.249 | 98 | 560580 | 9.95 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.50% | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 209632 | 10.15 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.50% | |
| Target Compounds | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 235478 | 36.86 ug/L | 98 |
| 3) chloromethane | 1.818 | 50 | 451814 | 35.31 ug/L | 96 |
| 4) vinyl chloride | 1.934 | 62 | 533971 | 39.50 ug/L | 97 |
| 5) 1,3-butadiene | 1.976 | 39 | 557964 | 44.80 ug/L | 81 |
| 6) bromomethane | 2.311 | 94 | 103403 | 28.24 ug/L | 95 |
| 7) chloroethane | 2.426 | 64 | 286908 | 36.38 ug/L | 98 |
| 8) trichlorofluoromethane | 2.724 | 101 | 884348 | 43.36 ug/L | 93 |
| 9) acrolein | 3.278 | 56 | 71443 | 611.06 ug/L | 98 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 453504 | 40.65 ug/L | 94 |
| 11) acetone | 3.478 | 43 | 53255 | 37.80 ug/L | 80 |
| 12) carbon disulfide | 3.594 | 76 | 1488086 | 40.91 ug/L | 99 |
| 13) methylene chloride | 3.965 | 84 | 523049 | 32.61 ug/L | 96 |
| 14) acrylonitrile | 4.305 | 53 | 677516 | 403.80 ug/L | 91 |
| 15) trans-1,2-dichloroethene | 4.269 | 96 | 583294 | 39.68 ug/L | 93 |
| 16) methyl-t-butyl ether | 4.269 | 73 | 905688 | 40.39 ug/L | 94 |
| 17) acetonitrile | 3.831 | 41 | 242472 | 368.96 ug/L | 96 |
| 18) hexane | 4.549 | 57 | 794823 | 44.82 ug/L | 99 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 1155529 | 40.20 ug/L | 95 |
| 20) vinyl acetate | 4.877 | 43 | 338816 | 40.01 ug/L | 90 |
| 21) cis-1,2-dichloroethene | 5.540 | 96 | 632412 | 39.37 ug/L | 94 |
| 22) 2,2-dichloropropane | 5.503 | 77 | 1056850 | 40.82 ug/L | 100 |
| 23) 2-butanone | 5.589 | 72 | 18742 | 45.53 ug/L # | 92 |
| 24) methyl acrylate | 5.686 | 55 | 205645 | 41.42 ug/L | 100 |
| 25) chloroform | 5.959 | 83 | 1142993 | 39.72 ug/L | 96 |
| 27) 1,1,1-trichloroethane | 6.142 | 97 | 1175342 | 42.58 ug/L | 88 |
| 28) cyclohexane | 6.172 | 56 | 1053838 | 45.91 ug/L | 94 |
| 29) carbon tetrachloride | 6.343 | 117 | 991818 | 43.94 ug/L | 92 |
| 31) benzene | 6.635 | 78 | 2293799 | 39.73 ug/L | 97 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 877443 | 42.75 ug/L | 99 |
| 33) 1,2-dichloroethane | 6.707 | 62 | 636777 | 40.82 ug/L | 94 |
| 34) trichloroethene | 7.510 | 95 | 689305 | 41.14 ug/L | 94 |
| 35) ethyl acrylate | 7.693 | 55 | 333122 | 44.25 ug/L | 95 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 548487 | 39.72 ug/L | 94 |
| 37) methyl methacrylate | 8.015 | 41 | 238409 | 42.89 ug/L | 97 |
| 38) dibromomethane | 8.033 | 93 | 222369 | 39.77 ug/L | 92 |

Mon/01/08
CB 31 3/25/08

A033114.D 25ML0331.M Mon Mar 31 15:33:23 2008

Page: 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033114.D
Acq On : 31 Mar 2008 3:03 pm
Sample : ,ical,ical_w25 40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 31 15:33:22 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 15:15:05 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

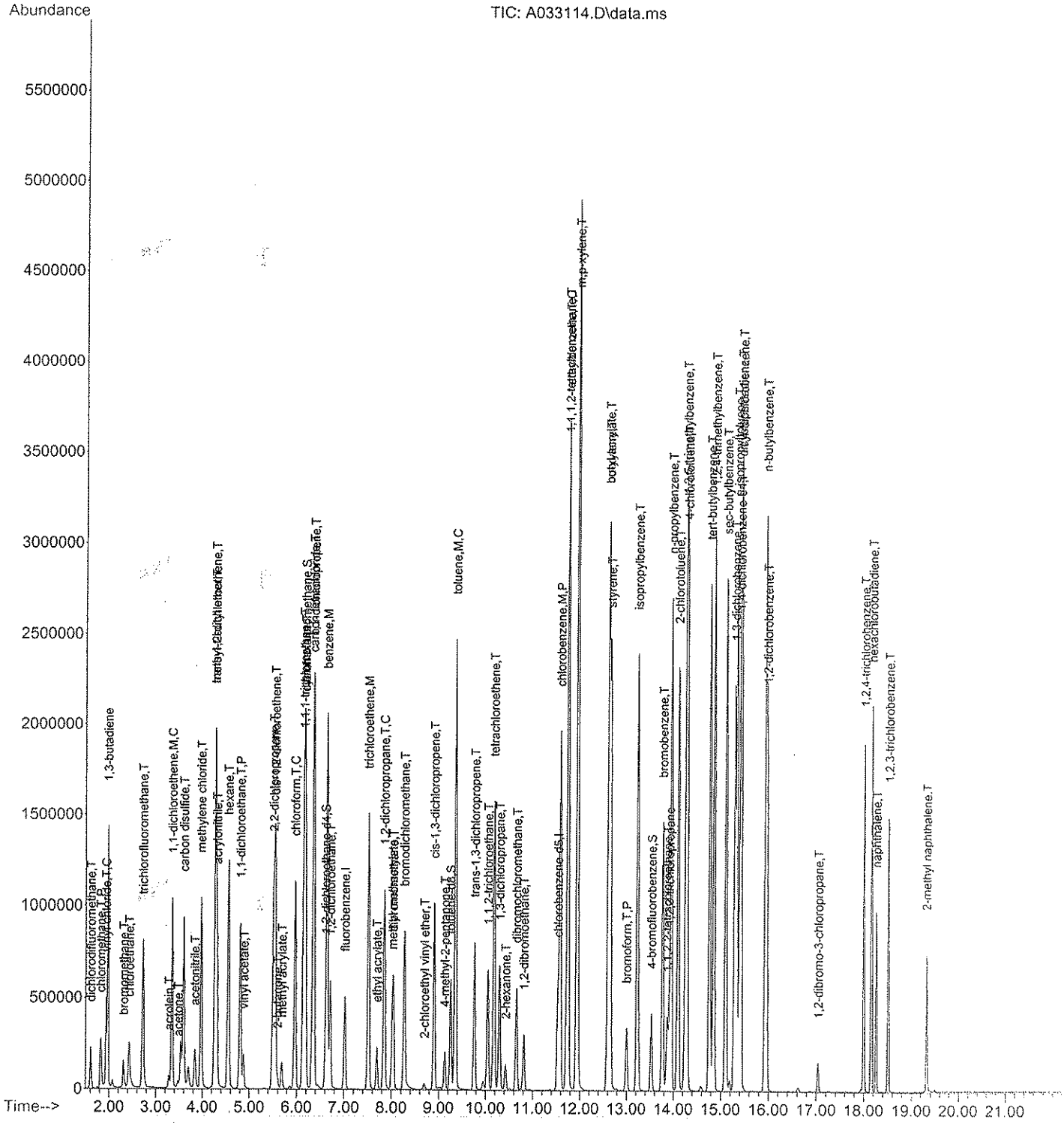
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.264 | 83 | 790759 | 41.10 ug/L | 94 |
| 40) 2-chloroethyl vinyl ether | 8.696 | 63 | 20616 | 24.13 ug/L | 97 |
| 42) cis-1,3-dichloropropene | 8.897 | 75 | 776267 | 41.49 ug/L | 98 |
| 43) 4-methyl-2-pentanone | 9.128 | 43 | 223419 | 41.54 ug/L | 97 |
| 45) toluene | 9.353 | 92 | 1503125 | 39.52 ug/L | 90 |
| 46) 1,1,2-trichloroethane | 10.046 | 83 | 249123 | 40.46 ug/L | 89 |
| 47) 1,3-dichloropropane | 10.289 | 76 | 538018 | 40.60 ug/L | 94 |
| 48) tetrachloroethene | 10.174 | 164 | 556826 | 41.15 ug/L | 93 |
| 49) trans-1,3-dichloropropene | 9.760 | 75 | 585557 | 42.21 ug/L | 88 |
| 50) 2-hexanone | 10.423 | 43 | 152717 | 43.41 ug/L # | 58 |
| 51) dibromochloromethane | 10.654 | 129 | 439286 | 42.96 ug/L | 98 |
| 52) 1,2-dibromoethane | 10.806 | 107 | 306626 | 41.02 ug/L | 96 |
| 53) chlorobenzene | 11.579 | 112 | 1559728 | 39.18 ug/L | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.731 | 131 | 566702 | 41.00 ug/L | 94 |
| 55) ethylbenzene | 11.743 | 91 | 2965705 | 39.42 ug/L | 96 |
| 56) m,p-xylene | 11.937 | 106 | 2165209 | 76.67 ug/L # | 78 |
| 57) butyl acrylate | 12.600 | 55 | 657981 | 42.42 ug/L | 95 |
| 58) o-xylene | 12.606 | 106 | 1047254 | 38.67 ug/L # | 86 |
| 59) styrene | 12.649 | 104 | 1701835 | 39.27 ug/L | 93 |
| 60) isopropylbenzene | 13.227 | 105 | 2571266 | 40.54 ug/L | 93 |
| 61) bromobenzene | 13.762 | 156 | 688186 | 39.89 ug/L | 94 |
| 62) bromoform | 13.002 | 173 | 256292 | 44.65 ug/L | 99 |
| 64) 1,2,3-trichloropropane | 13.908 | 75 | 250397 | 40.54 ug/L | 98 |
| 65) n-propylbenzene | 13.944 | 91 | 3341964 | 40.41 ug/L | 98 |
| 66) 2-chlorotoluene | 14.090 | 91 | 2066989 | 39.74 ug/L | 93 |
| 67) 4-chlorotoluene | 14.279 | 91 | 2344901 | 39.49 ug/L | 91 |
| 68) 1,3,5-trimethylbenzene | 14.248 | 105 | 2384706 | 39.67 ug/L | 86 |
| 70) 1,1,2,2-tetrachloroethane | 13.859 | 83 | 294690 | 41.80 ug/L | 97 |
| 71) tert-butylbenzene | 14.759 | 119 | 1968423 | 40.94 ug/L | 93 |
| 72) sec-butylbenzene | 15.100 | 105 | 2821994 | 40.92 ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.850 | 105 | 2465484 | 40.09 ug/L | 86 |
| 74) 1,3-dichlorobenzene | 15.288 | 146 | 1261958 | 39.41 ug/L | 91 |
| 75) p-isopropyltoluene | 15.331 | 119 | 2364744 | 40.97 ug/L | 96 |
| 76) dicyclopentadiene | 15.404 | 66 | 2523472 | 41.03 ug/L | 97 |
| 77) 1,4-dichlorobenzene | 15.422 | 146 | 1199325 | 38.16 ug/L | 91 |
| 78) 1,2-dichlorobenzene | 15.957 | 146 | 1008849 | 38.74 ug/L | 94 |
| 79) n-butylbenzene | 15.927 | 91 | 2190582 | 40.62 ug/L | 93 |
| 80) 1,2-dibromo-3-chloropr... | 17.046 | 75 | 49862 | 42.39 ug/L # | 82 |
| 81) 1,2,4-trichlorobenzene | 18.001 | 180 | 681378 | 38.55 ug/L | 93 |
| 82) hexachlorobutadiene | 18.159 | 225 | 515737 | 40.60 ug/L | 95 |
| 83) naphthalene | 18.256 | 128 | 803888 | 37.00 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.511 | 180 | 504210 | 38.18 ug/L | 94 |
| 85) 2-methyl naphthalene | 19.320 | 142 | 345303 | 37.21 ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A033108\A033114.D
Acq On : 31 Mar 2008 3:03 pm
Sample : ,ical,ical_w25 40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : JDB
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 31 15:33:22 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 15:15:05 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A033114.D 25ML0331.M Mon Mar 31 15:33:24 2008 Page: 3

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Thu Apr 03 13:49:20 2008
Response Via : Initial Calibration

Calibration Files
1 =A040307.D 2 =A040306.D 4 =A040305.D 8 =A040304.D 10 =A040303.D 20 =A040308.D 40 =A040309.D

| | | Compound | 1 | 2 | 4 | 8 | 10 | 20 | 40 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | fluorobenzene | 1 | 2 | 4 | ISTD | 10 | 20 | 40 | Avg | |
| 2) | T | dichlorodifluo... | 0.216 | 0.194 | 0.219 | 0.213 | 0.206 | 0.190 | 0.206 | 0.206 | 5.32 |
| 3) | T,P | chloromethane | 0.381 | 0.352 | 0.350 | 0.332 | 0.307 | 0.292 | 0.292 | 0.329 | 10.26 |
| 4) | T,C | vinyl chloride | 0.383 | 0.351 | 0.371 | 0.362 | 0.335 | 0.327 | 0.335 | 0.352 | 5.98 |
| 5) | | 1,3-butadiene | 0.371 | 0.316 | 0.337 | 0.287 | 0.336 | 0.331 | 0.339 | 0.331 | 7.66 |
| 6) | T | bromomethane | 0.144 | 0.126 | 0.149 | 0.145 | 0.133 | 0.090 | 0.084 | 0.124 | 21.56 |
| 7) | T | chloroethane | 0.249 | 0.207 | 0.219 | 0.213 | 0.196 | 0.192 | 0.179 | 0.208 | 10.83 |
| 8) | T | trichlorofluor... | 0.674 | 0.579 | 0.633 | 0.644 | 0.605 | 0.614 | 0.600 | 0.621 | 5.07 |
| 9) | T | acrolein | 0.005 | 0.004 | 0.004 | 0.004 | 0.003 | 0.004 | 0.004 | 0.004 | 14.35 |
| 10) | M,C | 1,1-dichloroet... | 0.319 | 0.264 | 0.288 | 0.258 | 0.252 | 0.261 | 0.269 | 0.273 | 8.50 |
| 11) | T | acetone | PQL=5 | | 0.045 | 0.037 | 0.033 | 0.034 | 0.030 | 0.036 | 16.17 |
| 12) | T | carbon disulfide | 1.041 | 0.871 | 0.881 | 0.841 | 0.849 | 0.861 | 0.879 | 0.889 | 7.71 |
| 13) | T | methylene chlo... | PQL=2 | 0.425 | 0.378 | 0.315 | 0.278 | 0.274 | 0.265 | 0.323 | 20.20 |
| 14) | T | acrylonitrile | 0.041 | 0.035 | 0.038 | 0.037 | 0.030 | 0.034 | 0.035 | 0.036 | 8.77 |
| 15) | T | trans-1,2-dich... | 0.333 | 0.301 | 0.306 | 0.290 | 0.275 | 0.291 | 0.300 | 0.299 | 5.98 |
| 16) | T | methyl-t-butyl... | 0.538 | 0.466 | 0.483 | 0.475 | 0.400 | 0.450 | 0.423 | 0.462 | 9.61 |
| 17) | T | acetonitrile | 0.020 | 0.017 | 0.016 | 0.015 | 0.013 | 0.014 | 0.013 | 0.015 | 15.69 |
| 18) | T | hexane | 0.387 | 0.357 | 0.376 | 0.314 | 0.384 | 0.401 | 0.424 | 0.377 | 9.21 |
| 19) | T,P | 1,1-dichloroet... | 0.682 | 0.570 | 0.604 | 0.591 | 0.544 | 0.585 | 0.597 | 0.596 | 7.20 |
| 20) | T | vinyl acetate | 0.178 | 0.156 | 0.174 | 0.172 | 0.147 | 0.163 | 0.168 | 0.166 | 6.68 |
| 21) | T | cis-1,2-dichlo... | 0.344 | 0.295 | 0.311 | 0.298 | 0.275 | 0.303 | 0.309 | 0.305 | 6.92 |
| 22) | T | 2,2-dichloropr... | 0.638 | 0.569 | 0.601 | 0.575 | 0.549 | 0.585 | 0.614 | 0.590 | 5.07 |
| 23) | T | 2-butanone | 0.006 | 0.010 | 0.007 | 0.008 | 0.007 | 0.007 | 0.008 | 0.008 | 16.11 |
| 24) | T | methyl acrylate | 0.099 | 0.088 | 0.095 | 0.093 | 0.077 | 0.092 | 0.094 | 0.091 | 7.64 |
| 25) | T,C | chloroform | 0.681 | 0.589 | 0.616 | 0.587 | 0.546 | 0.587 | 0.593 | 0.600 | 6.88 |
| 26) | S | dibromofluorom... | 0.269 | 0.263 | 0.260 | 0.263 | 0.254 | 0.261 | 0.252 | 0.260 | 2.24 |
| 27) | T | 1,1,1-trichlor... | 0.689 | 0.613 | 0.653 | 0.611 | 0.586 | 0.633 | 0.645 | 0.633 | 5.34 |
| 28) | T | cyclohexane | 0.477 | 0.432 | 0.496 | 0.417 | 0.479 | 0.512 | 0.529 | 0.477 | 8.54 |
| 29) | T | carbon tetrach... | 0.604 | 0.517 | 0.553 | 0.520 | 0.512 | 0.548 | 0.561 | 0.545 | 5.93 |
| 30) | S | 1,2-dichloroet... | 0.261 | 0.253 | 0.254 | 0.253 | 0.239 | 0.247 | 0.241 | 0.250 | 3.14 |
| 31) | M | benzene | 1.267 | 1.086 | 1.139 | 1.096 | 1.029 | 1.108 | 1.115 | 1.120 | 6.54 |
| 32) | T | 1,1-dichloropr... | 0.468 | 0.408 | 0.441 | 0.420 | 0.402 | 0.440 | 0.455 | 0.433 | 5.63 |
| 33) | T | 1,2-dichloroet... | 0.410 | 0.342 | 0.352 | 0.347 | 0.304 | 0.337 | 0.334 | 0.346 | 9.30 |
| 34) | M | trichloroethene | 0.371 | 0.319 | 0.343 | 0.327 | 0.304 | 0.339 | 0.348 | 0.336 | 6.50 |
| 35) | T | ethyl acrylate | PQL=2 | 0.125 | 0.142 | 0.143 | 0.118 | 0.145 | 0.146 | 0.136 | 8.86 |
| 36) | T,C | 1,2-dichloropr... | 0.284 | 0.246 | 0.258 | 0.255 | 0.230 | 0.253 | 0.259 | 0.255 | 6.35 |
| 37) | T | methyl methacr... | PQL=2 | 0.099 | 0.115 | 0.114 | 0.093 | 0.114 | 0.112 | 0.108 | 8.64 |
| 38) | T | dibromomethane | 0.126 | 0.110 | 0.117 | 0.111 | 0.096 | 0.108 | 0.109 | 0.111 | 8.23 |

Aver %RSD < 15%.
2-Ceve 46%

4/8/04



04/8/01

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0403.M

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 39) | T | bromodichlorom... | 0.435 | 0.373 | 0.410 | 0.398 | 0.356 | 0.398 | 0.400 | 0.396 | 6.43 |
| 40) | T | 2-chloroethyl ... | 0.014 | 0.010 | 0.014 | 0.012 | 0.006 | 0.009 | 0.002 | 0.010 | 45.72 |
| 41) | I | chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | |
| 42) | T | cis-1,3-dichlo... | 0.428 | 0.373 | 0.407 | 0.414 | 0.381 | 0.427 | 0.444 | 0.411 | 6.27 |
| 43) | T | 4-methyl-2-pen... | 0.144 | 0.114 | 0.126 | 0.122 | 0.111 | 0.123 | 0.122 | 0.123 | 8.58 |
| 44) | S | toluene-d8 | 1.211 | 1.201 | 1.205 | 1.203 | 1.245 | 1.226 | 1.212 | 1.215 | 1.30 |
| 45) | M,C | toluene | 0.971 | 0.831 | 0.881 | 0.848 | 0.827 | 0.863 | 0.875 | 0.871 | 5.58 |
| 46) | T | 1,1,2-trichlor... | 0.152 | 0.135 | 0.136 | 0.134 | 0.122 | 0.137 | 0.138 | 0.136 | 6.38 |
| 47) | T | 1,3-dichloropr... | 0.315 | 0.273 | 0.295 | 0.296 | 0.266 | 0.299 | 0.301 | 0.292 | 5.79 |
| 48) | T | tetrachloroethene | 0.343 | 0.305 | 0.324 | 0.304 | 0.306 | 0.315 | 0.332 | 0.318 | 4.77 |
| 49) | T | trans-1,3-dich... | 0.315 | 0.279 | 0.311 | 0.322 | 0.286 | 0.325 | 0.339 | 0.311 | 6.90 |
| 50) | T | 2-hexanone | 0.080 | 0.065 | 0.072 | 0.075 | 0.065 | 0.080 | 0.082 | 0.074 | 9.52 |
| 51) | T | dibromochlorom... | 0.254 | 0.223 | 0.244 | 0.243 | 0.217 | 0.246 | 0.254 | 0.240 | 6.13 |
| 52) | T | 1,2-dibromoethane | 0.170 | 0.153 | 0.166 | 0.161 | 0.147 | 0.166 | 0.171 | 0.162 | 5.63 |
| 53) | M,P | chlorobenzene | 1.017 | 0.844 | 0.883 | 0.879 | 0.819 | 0.869 | 0.880 | 0.884 | 7.13 |
| 54) | T | 1,1,1,2-tetrac... | 0.357 | 0.313 | 0.326 | 0.329 | 0.306 | 0.330 | 0.337 | 0.328 | 5.06 |
| 55) | T,C | ethylbenzene | 1.858 | 1.648 | 1.804 | 1.751 | 1.711 | 1.777 | 1.811 | 1.766 | 3.96 |
| 56) | T | m,p-xylene | 0.690 | 0.619 | 0.662 | 0.625 | 0.621 | 0.645 | 0.646 | 0.644 | 4.00 |
| 57) | T | butyl acrylate | 0.320 | 0.363 | 0.374 | 0.326 | 0.372 | 0.359 | 0.352 | | 6.69 |
| 58) | T | o-xylene | 0.639 | 0.549 | 0.626 | 0.610 | 0.575 | 0.614 | 0.608 | 0.603 | 5.11 |
| 59) | T | styrene | 1.023 | 0.916 | 0.981 | 0.976 | 0.914 | 0.988 | 0.969 | 0.967 | 4.07 |
| 60) | T | isopropylbenzene | 1.473 | 1.363 | 1.497 | 1.470 | 1.486 | 1.569 | 1.589 | 1.492 | 4.97 |
| 61) | T | bromobenzene | 0.410 | 0.364 | 0.389 | 0.384 | 0.354 | 0.388 | 0.384 | 0.382 | 4.76 |
| 62) | T,P | bromoform | 0.134 | 0.120 | 0.134 | 0.140 | 0.121 | 0.142 | 0.145 | 0.134 | 7.41 |
| 63) | S | 4-bromofluorob... | 0.508 | 0.513 | 0.512 | 0.512 | 0.509 | 0.521 | 0.506 | 0.512 | 0.96 |
| 64) | | 1,2,3-trichlor... | 0.170 | 0.148 | 0.151 | 0.145 | 0.133 | 0.144 | 0.141 | 0.148 | 7.73 |
| 65) | T | n-propylbenzene | 2.090 | 1.883 | 2.040 | 1.955 | 2.000 | 2.090 | 2.089 | 2.021 | 3.96 |
| 66) | T | 2-chlorotoluene | 1.316 | 1.183 | 1.257 | 1.228 | 1.203 | 1.289 | 1.263 | 1.248 | 3.77 |
| 67) | T | 4-chlorotoluene | 1.624 | 1.358 | 1.476 | 1.435 | 1.414 | 1.479 | 1.464 | 1.464 | 5.61 |
| 68) | T | 1,3,5-trimethy... | 1.454 | 1.328 | 1.459 | 1.410 | 1.435 | 1.487 | 1.496 | 1.438 | 3.95 |
| 69) | I | 1,4-dichlorobenzen... | ----------ISTD---------- | | | | | | | | |
| 70) | T | 1,1,2,2-tetrac... | 0.301 | 0.275 | 0.285 | 0.277 | 0.247 | 0.274 | 0.291 | 0.278 | 6.04 |
| 71) | T | tert-butylbenzene | 2.037 | 1.844 | 2.030 | 1.927 | 2.009 | 2.122 | 2.274 | 2.035 | 6.77 |
| 72) | T | sec-butylbenzene | 2.955 | 2.707 | 2.966 | 2.840 | 2.985 | 3.078 | 3.312 | 2.977 | 6.35 |
| 73) | T | 1,2,4-trimethy... | 2.718 | 2.404 | 2.621 | 2.560 | 2.554 | 2.633 | 2.769 | 2.608 | 4.57 |
| 74) | T | 1,3-dichlorobe... | 1.465 | 1.270 | 1.362 | 1.287 | 1.238 | 1.297 | 1.363 | 1.326 | 5.78 |
| 75) | T | p-isopropyltol... | 2.465 | 2.299 | 2.463 | 2.387 | 2.487 | 2.545 | 2.772 | 2.488 | 5.94 |
| 76) | T | dicyclopentadiene | 2.938 | 2.515 | 2.730 | 2.513 | 2.613 | 2.787 | 2.915 | 2.716 | 6.50 |
| 77) | T | 1,4-dichlorobe... | 1.535 | 1.324 | 1.337 | 1.277 | 1.217 | 1.250 | 1.295 | 1.319 | 7.84 |
| 78) | T | 1,2-dichlorobe... | 1.218 | 1.046 | 1.123 | 1.065 | 0.991 | 1.049 | 1.071 | 1.081 | 6.69 |
| 79) | T | n-butylbenzene | 2.280 | 2.169 | 2.326 | 2.265 | 2.418 | 2.470 | 2.638 | 2.367 | 6.58 |
| 80) | T | 1,2-dibromo-3-... | 0.073 | 0.048 | 0.055 | 0.051 | 0.045 | 0.051 | 0.052 | 0.053 | 16.74 |
| 81) | T | 1,2,4-trichlor... | 0.721 | 0.641 | 0.684 | 0.655 | 0.624 | 0.658 | 0.699 | 0.669 | 5.14 |
| 82) | T | hexachlorobuta... | 0.639 | 0.579 | 0.561 | 0.528 | 0.557 | 0.572 | 0.637 | 0.582 | 7.15 |
| 83) | T | naphthalene | 0.716 | 0.675 | 0.727 | 0.724 | 0.664 | 0.706 | 0.751 | 0.709 | 4.30 |
| 84) | T | 1,2,3-trichlor... | 0.586 | 0.516 | 0.543 | 0.497 | 0.460 | 0.488 | 0.507 | 0.514 | 7.94 |

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0403.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 85) | T | 2-methyl napht... | 0.396 | 0.366 | 0.403 | 0.351 | 0.299 | 0.295 | 0.314 | 0.346 | 12.90 |

(#) = Out of Range

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040307.D
Acq On : 3 Apr 2008 11:44 am
Sample : ,ical,ical_w25-1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 03 12:08:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:32:57 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 572325 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 493126 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 280475 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 154106 | 10.96 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.60% | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 149534 | 11.50 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.00% | | | |
| 44) toluene-d8 | 9.244 | 98 | 597184 | 9.80 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.00% | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 250479 | 10.40 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.606 | 85 | 12352 | 1.42 | ug/L | 92 |
| 3) chloromethane | 1.819 | 50 | 21787 | 1.40 | ug/L | 86 |
| 4) vinyl chloride | 1.935 | 62 | 21943 | 1.31 | ug/L | 97 |
| 5) 1,3-butadiene | 1.971 | 39 | 21213 | 1.34 | ug/L | 87 |
| 6) bromomethane | 2.324 | 94 | 8253 | 1.45 | ug/L | 94 |
| 7) chloroethane | 2.451 | 64 | 14235 | 1.45 | ug/L | 93 |
| 8) trichlorofluoromethane | 2.731 | 101 | 38566 | 1.37 | ug/L | 97 |
| 9) acrolein | 3.279 | 56 | 2963 | 16.26 | ug/L | 93 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 18248 | 1.38 | ug/L | 94 |
| 11) acetone | 3.473 | 43 | 4488 | 2.62 | ug/L | 99 |
| 12) carbon disulfide | 3.589 | 76 | 59571 | 1.39 | ug/L | 100 |
| 13) methylene chloride | 3.966 | 84 | 34694 | 2.03 | ug/L | 97 |
| 14) acrylonitrile | 4.300 | 53 | 23199 | 12.62 | ug/L | 99 |
| 15) trans-1,2-dichloroethene | 4.270 | 96 | 19033 | 1.21 | ug/L | 95 |
| 16) methyl-t-butyl ether | 4.264 | 73 | 30765 | 1.25 | ug/L | 99 |
| 17) acetonitrile | 3.826 | 41 | 11397 | 14.98 | ug/L | 94 |
| 18) hexane | 4.550 | 57 | 22124 | 1.13 | ug/L | 89 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 39061 | 1.26 | ug/L | 96 |
| 20) vinyl acetate | 4.872 | 43 | 10211 | 1.16 | ug/L | 90 |
| 21) cis-1,2-dichloroethene | 5.535 | 96 | 19716 | 1.20 | ug/L | 96 |
| 22) 2,2-dichloropropane | 5.504 | 77 | 36521 | 1.24 | ug/L | 100 |
| 23) 2-butanone | 5.589 | 72 | 325 | 0.77 | ug/L # | 71 |
| 24) methyl acrylate | 5.693 | 55 | 5657 | 1.13 | ug/L | 86 |
| 25) chloroform | 5.954 | 83 | 38976 | 1.25 | ug/L | 95 |
| 27) 1,1,1-trichloroethane | 6.137 | 97 | 39459 | 1.24 | ug/L | 99 |
| 28) cyclohexane | 6.167 | 56 | 27302 | 1.08 | ug/L | 93 |
| 29) carbon tetrachloride | 6.337 | 117 | 34563 | 1.29 | ug/L | 96 |
| 31) benzene | 6.629 | 78 | 72521 | 1.21 | ug/L | 95 |
| 32) 1,1-dichloropropene | 6.356 | 75 | 26788 | 1.19 | ug/L | 87 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 23483 | 1.34 | ug/L | 93 |
| 34) trichloroethene | 7.511 | 95 | 21255 | 1.20 | ug/L | 96 |
| 35) ethyl acrylate | 7.694 | 55 | 7353 | 0.98 | ug/L | 90 |
| 36) 1,2-dichloropropane | 7.833 | 63 | 16251 | 1.16 | ug/L | 100 |
| 37) methyl methacrylate | 8.016 | 41 | 6356 | 1.10 | ug/L | 87 |
| 38) dibromomethane | 8.034 | 93 | 7199 | 1.23 | ug/L | 88 |

4/8/08

A040307.D 25ML0403.M Thu Apr 03 12:08:02 2008 voa1 Page: 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040307.D
Acq On : 3 Apr 2008 11:44 am
Sample : ,ical,ical_w25-1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 03 12:08:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:32:57 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

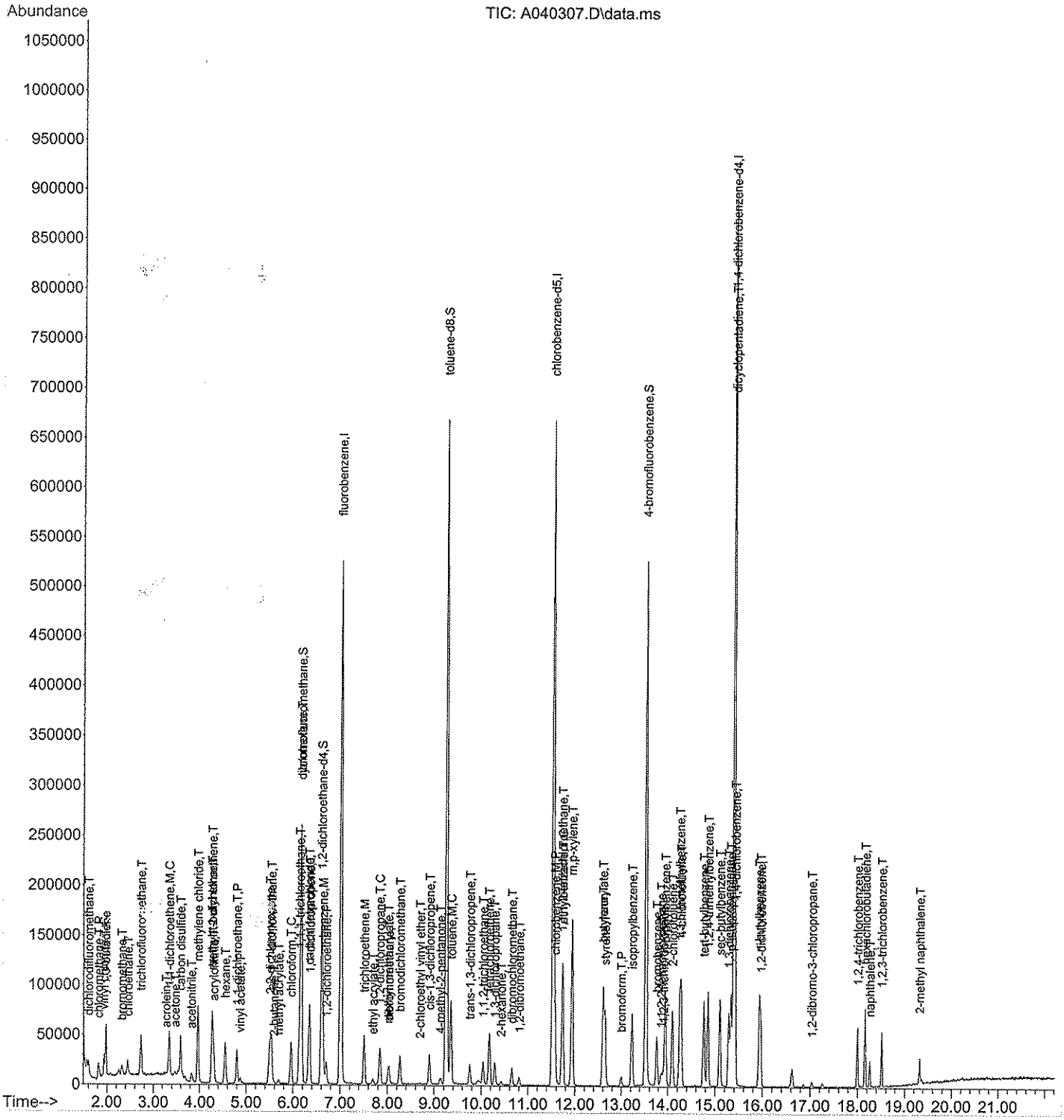
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.265 | 83 | 24875 | 1.21 ug/L | 94 |
| 40) 2-chloroethyl vinyl ether | 8.697 | 63 | 796 | 1.16 ug/L # | 47 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 21124 | 1.03 ug/L | 96 |
| 43) 4-methyl-2-pentanone | 9.129 | 43 | 7090 | 1.18 ug/L | 96 |
| 45) toluene | 9.354 | 92 | 47879 | 1.12 ug/L | 93 |
| 46) 1,1,2-trichloroethane | 10.035 | 83 | 7479 | 1.11 ug/L | 92 |
| 47) 1,3-dichloropropane | 10.284 | 76 | 15533 | 1.07 ug/L | 99 |
| 48) tetrachloroethene | 10.163 | 164 | 16892 | 1.08 ug/L | 95 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 15518 | 1.01 ug/L | 99 |
| 50) 2-hexanone | 10.424 | 43 | 3956 | 1.05 ug/L | 93 |
| 51) dibromochloromethane | 10.649 | 129 | 12505 | 1.07 ug/L | 95 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 8363 | 1.03 ug/L | 95 |
| 53) chlorobenzene | 11.573 | 112 | 50159 | 1.14 ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.725 | 131 | 17618 | 1.11 ug/L | 92 |
| 55) ethylbenzene | 11.738 | 91 | 91636 | 1.07 ug/L | 98 |
| 56) m,p-xylene | 11.932 | 106 | 68043 | 2.15 ug/L | 90 |
| 57) butyl acrylate | 12.601 | 55 | 16007 | 0.92 ug/L | 88 |
| 58) o-xylene | 12.601 | 106 | 31499 | 1.05 ug/L | 97 |
| 59) styrene | 12.644 | 104 | 50437 | 1.05 ug/L | 99 |
| 60) isopropylbenzene | 13.228 | 105 | 72614 | 1.00 ug/L | 94 |
| 61) bromobenzene | 13.763 | 156 | 20227 | 1.06 ug/L | 95 |
| 62) bromoform | 12.996 | 173 | 6594 | 1.00 ug/L | 96 |
| 64) 1,2,3-trichloropropane | 13.903 | 75 | 8388 | 1.18 ug/L | 93 |
| 65) n-propylbenzene | 13.939 | 91 | 103076 | 1.07 ug/L | 100 |
| 66) 2-chlorotoluene | 14.091 | 91 | 64896 | 1.08 ug/L | 97 |
| 67) 4-chlorotoluene | 14.274 | 91 | 80084 | 1.16 ug/L | 100 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 71696 | 1.04 ug/L | 91 |
| 70) 1,1,2,2-tetrachloroethane | 13.854 | 83 | 8437 | 1.01 ug/L | 87 |
| 71) tert-butylbenzene | 14.760 | 119 | 57128 | 0.98 ug/L | 98 |
| 72) sec-butylbenzene | 15.101 | 105 | 82889 | 0.97 ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.851 | 105 | 76223 | 1.02 ug/L | 96 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 41098 | 1.07 ug/L | 99 |
| 75) p-isopropyltoluene | 15.332 | 119 | 69147 | 0.97 ug/L | 99 |
| 76) dicyclopentadiene | 15.399 | 66 | 82416 | 1.07 ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 43042 | 1.13 ug/L | 95 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 34175 | 1.09 ug/L | 95 |
| 79) n-butylbenzene | 15.922 | 91 | 63936 | 0.96 ug/L | 97 |
| 80) 1,2-dibromo-3-chloropr... | 17.034 | 75 | 2039 | 1.41 ug/L | 88 |
| 81) 1,2,4-trichlorobenzene | 18.001 | 180 | 20231 | 1.00 ug/L | 89 |
| 82) hexachlorobutadiene | 18.160 | 225 | 17924 | 1.13 ug/L | 97 |
| 83) naphthalene | 18.257 | 128 | 20085 | 0.85 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 16443 | 1.07 ug/L | 98 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 11110 | 1.02 ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040307.D
Acq On : 3 Apr 2008 11:44 am
Sample : ,ical,ical_w25-1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 03 12:08:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:32:57 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040306.D
Acq On : 3 Apr 2008 10:53 am
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 11:32:32 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.014 | 96 | 582681 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.533 | 117 | 509493 | 10.00 | ug/L | | 0.01 |
| 69) 1,4-dichlorobenzene-d4 | 15.388 | 152 | 295062 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.169 | 113 | 153464 | 11.25 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 112.50% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 147699 | 12.24 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 122.40% | | | | |
| 44) toluene-d8 | 9.252 | 98 | 611845 | 9.59 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.90% | | | | |
| 63) 4-bromofluorobenzene | 13.521 | 95 | 261220 | 10.95 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.50% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.602 | 85 | 22570 | 3.73 | ug/L | | 98 |
| 3) chloromethane | 1.815 | 50 | 41071 | 3.29 | ug/L | | 92 |
| 4) vinyl chloride | 1.930 | 62 | 40887 | 3.03 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.973 | 39 | 36775 | 2.81 | ug/L | | 90 |
| 6) bromomethane | 2.320 | 94 | 14740 | 3.77 | ug/L | | 97 |
| 7) chloroethane | 2.441 | 64 | 24156 | 3.00 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.727 | 101 | 67522 | 3.15 | ug/L | | 89 |
| 9) acrolein | 3.274 | 56 | 4486 | 35.49 | ug/L | | 96 |
| 10) 1,1-dichloroethene | 3.341 | 96 | 30736 | 2.76 | ug/L | # | 83 |
| 11) acetone | 3.475 | 43 | 6889 | 4.83 | ug/L | | 96 |
| 12) carbon disulfide | 3.591 | 76 | 101524 | 2.77 | ug/L | | 99 |
| 13) methylene chloride | 3.961 | 84 | 49513 | 3.13 | ug/L | # | 82 |
| 14) acrylonitrile | 4.302 | 53 | 41303 | 25.02 | ug/L | | 82 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 35066 | 2.42 | ug/L | # | 86 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 54260 | 2.30 | ug/L | | 95 |
| 17) acetonitrile | 3.828 | 41 | 19429 | 29.72 | ug/L | | 96 |
| 18) hexane | 4.545 | 57 | 41599 | 2.36 | ug/L | | 100 |
| 19) 1,1-dichloroethane | 4.801 | 63 | 66470 | 2.33 | ug/L | | 95 |
| 20) vinyl acetate | 4.874 | 43 | 18160 | 2.17 | ug/L | | 95 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 34403 | 2.19 | ug/L | | 88 |
| 22) 2,2-dichloropropane | 5.500 | 77 | 66299 | 2.55 | ug/L | | 98 |
| 23) 2-butanone | 5.603 | 72 | 1127m3 | 2.79 | ug/L | | |
| 24) methyl acrylate | 5.689 | 55 | 10260 | 2.11 | ug/L | | 87 |
| 25) chloroform | 5.956 | 83 | 68613 | 2.40 | ug/L | | 96 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 71467 | 2.56 | ug/L | | 89 |
| 28) cyclohexane | 6.163 | 56 | 50287 | 2.19 | ug/L | | 92 |
| 29) carbon tetrachloride | 6.339 | 117 | 60263 | 2.62 | ug/L | | 91 |
| 31) benzene | 6.631 | 78 | 126559 | 2.22 | ug/L | | 90 |
| 32) 1,1-dichloropropene | 6.345 | 75 | 47555 | 2.33 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.704 | 62 | 39800 | 2.54 | ug/L | | 96 |
| 34) trichloroethene | 7.507 | 95 | 37229 | 2.25 | ug/L | | 91 |
| 35) ethyl acrylate | 7.695 | 55 | 14515 | 1.96 | ug/L | | 92 |
| 36) 1,2-dichloropropane | 7.847 | 63 | 28704 | 2.12 | ug/L | | 81 |
| 37) methyl methacrylate | 8.018 | 41 | 11573 | 2.10 | ug/L | | 96 |
| 38) dibromomethane | 8.042 | 93 | 12855 | 2.32 | ug/L | # | 82 |

4/8/08

4/8/08

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040306.D
Acq On : 3 Apr 2008 10:53 am
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 11:32:32 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

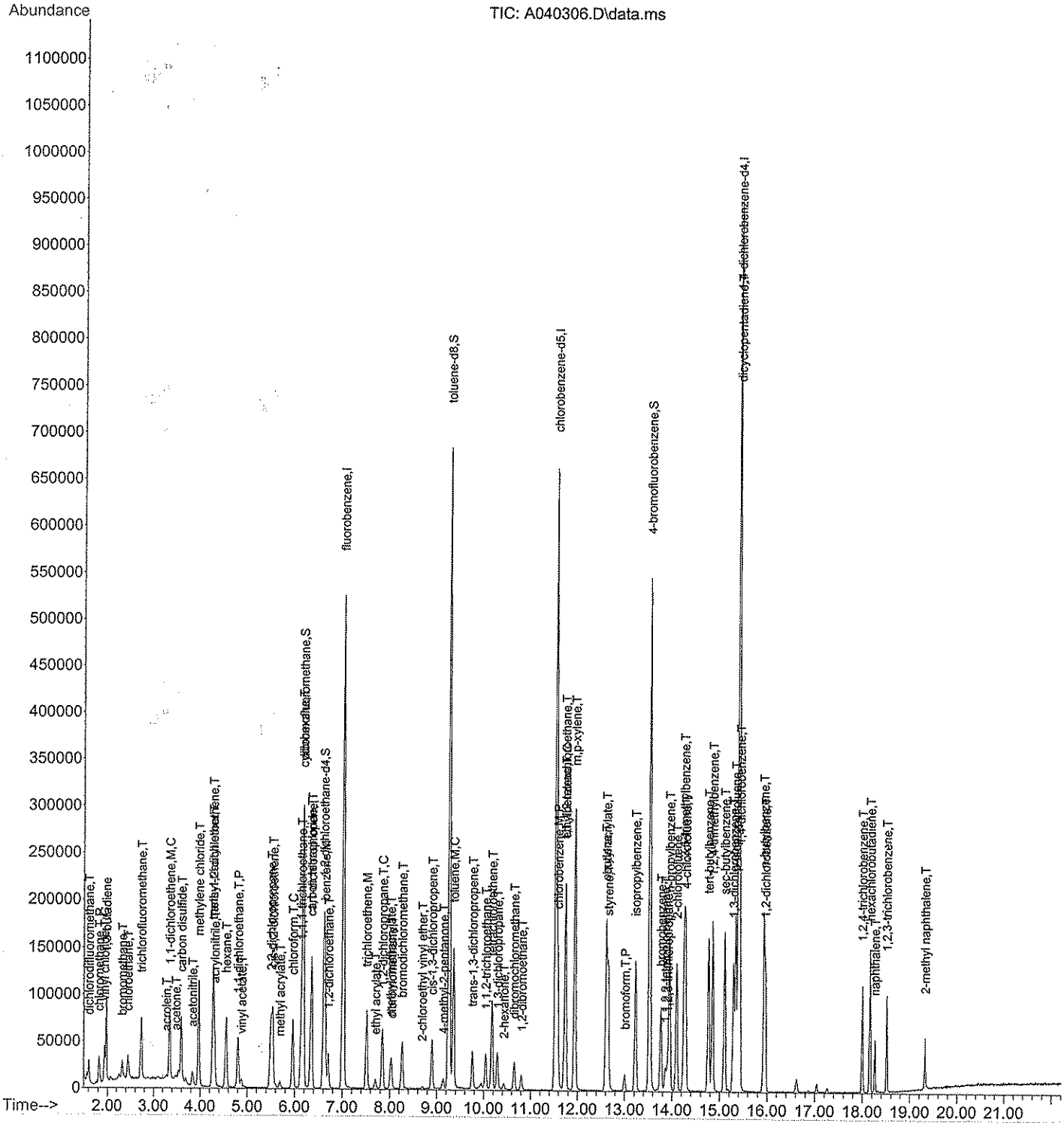
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.261 | 83 | 43476 | 2.27 | ug/L | | 97 |
| 40) | 2-chloroethyl vinyl ether | 8.687 | 63 | 1176 | 1.47 | ug/L | # | 72 |
| 42) | cis-1,3-dichloropropene | 8.893 | 75 | 38046 | 1.79 | ug/L | | 93 |
| 43) | 4-methyl-2-pentanone | 9.137 | 43 | 11658 | 1.89 | ug/L | | 99 |
| 45) | toluene | 9.350 | 92 | 84728 | 1.95 | ug/L | # | 85 |
| 46) | 1,1,2-trichloroethane | 10.037 | 83 | 13753 | 1.96 | ug/L | | 91 |
| 47) | 1,3-dichloropropane | 10.292 | 76 | 27771 | 1.84 | ug/L | | 92 |
| 48) | tetrachloroethene | 10.171 | 164 | 31045 | 2.01 | ug/L | | 93 |
| 49) | trans-1,3-dichloropropene | 9.757 | 75 | 28453 | 1.80 | ug/L | | 98 |
| 50) | 2-hexanone | 10.426 | 43 | 6633 | 1.66 | ug/L | # | 59 |
| 51) | dibromochloromethane | 10.645 | 129 | 22686 | 1.94 | ug/L | | 96 |
| 52) | 1,2-dibromoethane | 10.815 | 107 | 15558 | 1.83 | ug/L | | 96 |
| 53) | chlorobenzene | 11.575 | 112 | 85971 | 1.90 | ug/L | | 98 |
| 54) | 1,1,1,2-tetrachloroethane | 11.733 | 131 | 31855 | 2.01 | ug/L | | 86 |
| 55) | ethylbenzene | 11.740 | 91 | 167947 | 1.95 | ug/L | | 93 |
| 56) | m,p-xylene | 11.940 | 106 | 126068 | 3.92 | ug/L | # | 86 |
| 57) | butyl acrylate | 12.603 | 55 | 32599 | 1.83 | ug/L | | 92 |
| 58) | o-xylene | 12.597 | 106 | 55969 | 1.82 | ug/L | # | 81 |
| 59) | styrene | 12.646 | 104 | 93359 | 1.89 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.223 | 105 | 138870 | 1.91 | ug/L | | 96 |
| 61) | bromobenzene | 13.765 | 156 | 37140 | 1.89 | ug/L | | 96 |
| 62) | bromoform | 13.004 | 173 | 12187 | 1.84 | ug/L | | 98 |
| 64) | 1,2,3-trichloropropane | 13.904 | 75 | 15031 | 2.11 | ug/L | | 80 |
| 65) | n-propylbenzene | 13.941 | 91 | 191885 | 2.01 | ug/L | | 94 |
| 66) | 2-chlorotoluene | 14.093 | 91 | 120533 | 2.01 | ug/L | | 90 |
| 67) | 4-chlorotoluene | 14.281 | 91 | 138409 | 2.02 | ug/L | | 92 |
| 68) | 1,3,5-trimethylbenzene | 14.251 | 105 | 135296 | 1.96 | ug/L | | 91 |
| 70) | 1,1,2,2-tetrachloroethane | 13.856 | 83 | 16211 | 1.78 | ug/L | | 97 |
| 71) | tert-butylbenzene | 14.762 | 119 | 108795 | 1.75 | ug/L | | 92 |
| 72) | sec-butylbenzene | 15.096 | 105 | 159722 | 1.79 | ug/L | | 93 |
| 73) | 1,2,4-trimethylbenzene | 14.847 | 105 | 141893 | 1.78 | ug/L | | 86 |
| 74) | 1,3-dichlorobenzene | 15.285 | 146 | 74974 | 1.81 | ug/L | | 93 |
| 75) | p-isopropyltoluene | 15.327 | 119 | 135669 | 1.82 | ug/L | | 94 |
| 76) | dicyclopentadiene | 15.400 | 66 | 148392 | 1.86 | ug/L | | 96 |
| 77) | 1,4-dichlorobenzene | 15.425 | 146 | 78137 | 1.92 | ug/L | | 88 |
| 78) | 1,2-dichlorobenzene | 15.954 | 146 | 61746 | 1.83 | ug/L | | 92 |
| 79) | n-butylbenzene | 15.923 | 91 | 128024 | 1.83 | ug/L | | 89 |
| 80) | 1,2-dibromo-3-chloropr... | 17.036 | 75 | 2836 | 1.84 | ug/L | # | 63 |
| 81) | 1,2,4-trichlorobenzene | 17.997 | 180 | 37808 | 1.66 | ug/L | | 92 |
| 82) | hexachlorobutadiene | 18.161 | 225 | 34172 | 2.08 | ug/L | | 90 |
| 83) | naphthalene | 18.259 | 128 | 39813 | 1.42 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.508 | 180 | 30445 | 1.78 | ug/L | | 95 |
| 85) | 2-methyl naphthalene | 19.323 | 142 | 21609 | 1.75 | ug/L | | 86 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040306.D
Acq On : 3 Apr 2008 10:53 am
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 11:27:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040306.D 25ML0403.M Thu Apr 03 11:27:04 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040305.D
Acq On : 3 Apr 2008 10:18 am
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 11:26:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 595747 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 516987 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 297014 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 155096 | 11.12 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 151055 | 12.25 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 122.50% | | | | |
| 44) toluene-d8 | 9.254 | 98 | 622910 | 9.62 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.20% | | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 264699 | 10.94 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.40% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 52147 | 8.42 | ug/L | | 93 |
| 3) chloromethane | 1.822 | 50 | 83387 | 6.54 | ug/L | | 98 |
| 4) vinyl chloride | 1.938 | 62 | 88429 | 6.41 | ug/L | | 95 |
| 5) 1,3-butadiene | 1.974 | 39 | 80401 | 6.01 | ug/L | | 85 |
| 6) bromomethane | 2.321 | 94 | 35415 | 8.85 | ug/L | | 99 |
| 7) chloroethane | 2.449 | 64 | 52106 | 6.32 | ug/L | | 93 |
| 8) trichlorofluoromethane | 2.729 | 101 | 150808 | 6.89 | ug/L | | 93 |
| 9) acrolein | 3.276 | 56 | 9440 | 73.05 | ug/L | | 92 |
| 10) 1,1-dichloroethene | 3.349 | 96 | 68734 | 6.04 | ug/L | # | 87 |
| 11) acetone | 3.470 | 43 | 10777 | 7.39 | ug/L | | 97 |
| 12) carbon disulfide | 3.592 | 76 | 209916 | 5.61 | ug/L | | 99 |
| 13) methylene chloride | 3.969 | 84 | 90087 | 5.57 | ug/L | | 92 |
| 14) acrylonitrile | 4.304 | 53 | 89860 | 53.24 | ug/L | | 89 |
| 15) trans-1,2-dichloroethene | 4.273 | 96 | 73010 | 4.93 | ug/L | | 90 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 115031 | 4.76 | ug/L | | 96 |
| 17) acetonitrile | 3.835 | 41 | 39035 | 58.40 | ug/L | | 96 |
| 18) hexane | 4.553 | 57 | 89647 | 4.98 | ug/L | | 96 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 143945 | 4.93 | ug/L | | 97 |
| 20) vinyl acetate | 4.875 | 43 | 41508 | 4.86 | ug/L | | 90 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 74164 | 4.62 | ug/L | | 90 |
| 22) 2,2-dichloropropane | 5.502 | 77 | 143140 | 5.39 | ug/L | | 98 |
| 23) 2-butanone | 5.593 | 72 | 1762 | 4.27 | ug/L | # | 62 |
| 24) methyl acrylate | 5.690 | 55 | 22585 | 4.55 | ug/L | | 92 |
| 25) chloroform | 5.964 | 83 | 146816 | 5.01 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.140 | 97 | 155627 | 5.46 | ug/L | | 87 |
| 28) cyclohexane | 6.171 | 56 | 118155 | 5.04 | ug/L | | 96 |
| 29) carbon tetrachloride | 6.341 | 117 | 131704 | 5.61 | ug/L | | 91 |
| 31) benzene | 6.633 | 78 | 271427 | 4.66 | ug/L | | 93 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 105048 | 5.04 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.706 | 62 | 83996 | 5.23 | ug/L | | 97 |
| 34) trichloroethene | 7.508 | 95 | 81828 | 4.84 | ug/L | | 89 |
| 35) ethyl acrylate | 7.697 | 55 | 33734 | 4.46 | ug/L | | 96 |
| 36) 1,2-dichloropropane | 7.843 | 63 | 61559 | 4.44 | ug/L | | 92 |
| 37) methyl methacrylate | 8.019 | 41 | 27364 | 4.85 | ug/L | | 94 |
| 38) dibromomethane | 8.038 | 93 | 27877 | 4.92 | ug/L | # | 81 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040305.D
Acq On : 3 Apr 2008 10:18 am
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 11:26:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

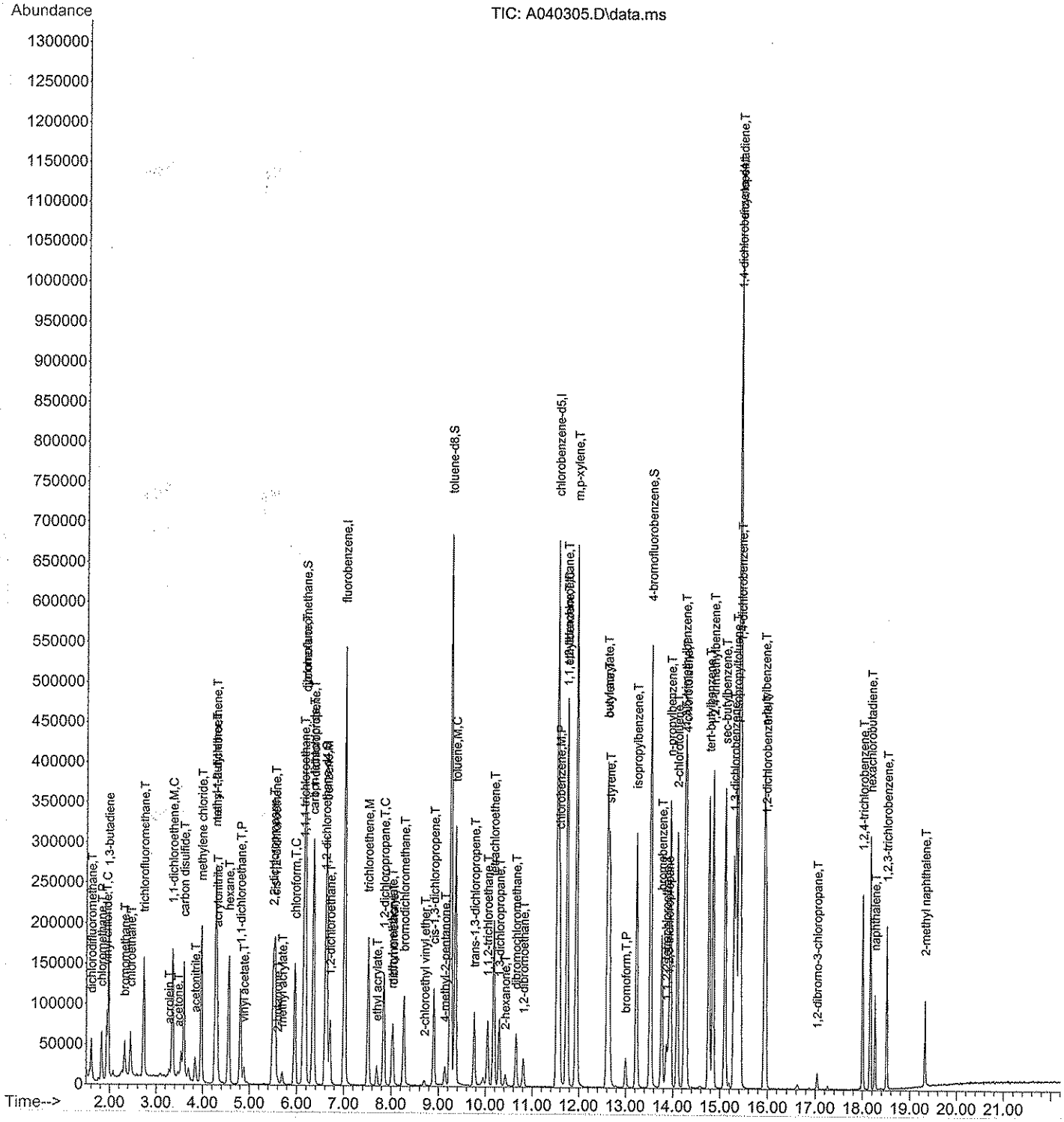
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.269 | 83 | 97741 | 4.99 | ug/L | | 96 |
| 40) | 2-chloroethyl vinyl ether | 8.706 | 63 | 3414 | 4.17 | ug/L | | 85 |
| 42) | cis-1,3-dichloropropene | 8.895 | 75 | 84179 | 3.91 | ug/L | | 95 |
| 43) | 4-methyl-2-pentanone | 9.132 | 43 | 26069 | 4.16 | ug/L | | 90 |
| 45) | toluene | 9.351 | 92 | 182170 | 4.14 | ug/L | # | 84 |
| 46) | 1,1,2-trichloroethane | 10.038 | 83 | 28073 | 3.95 | ug/L | | 92 |
| 47) | 1,3-dichloropropane | 10.294 | 76 | 60971 | 3.99 | ug/L | | 100 |
| 48) | tetrachloroethene | 10.172 | 164 | 67100 | 4.28 | ug/L | | 90 |
| 49) | trans-1,3-dichloropropene | 9.759 | 75 | 64376 | 4.01 | ug/L | | 90 |
| 50) | 2-hexanone | 10.421 | 43 | 14849 | 3.67 | ug/L | # | 50 |
| 51) | dibromochloromethane | 10.646 | 129 | 50560 | 4.26 | ug/L | | 97 |
| 52) | 1,2-dibromoethane | 10.811 | 107 | 34257 | 3.97 | ug/L | | 98 |
| 53) | chlorobenzene | 11.577 | 112 | 182658 | 3.97 | ug/L | | 99 |
| 54) | 1,1,1,2-tetrachloroethane | 11.729 | 131 | 67504 | 4.20 | ug/L | | 94 |
| 55) | ethylbenzene | 11.741 | 91 | 373051 | 4.27 | ug/L | | 96 |
| 56) | m,p-xylene | 11.936 | 106 | 273948 | 8.39 | ug/L | # | 77 |
| 57) | butyl acrylate | 12.599 | 55 | 75059 | 4.16 | ug/L | | 95 |
| 58) | o-xylene | 12.605 | 106 | 129441 | 4.14 | ug/L | # | 86 |
| 59) | styrene | 12.647 | 104 | 202956 | 4.05 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.225 | 105 | 309582 | 4.19 | ug/L | | 92 |
| 61) | bromobenzene | 13.760 | 156 | 80418 | 4.03 | ug/L | | 93 |
| 62) | bromoform | 13.000 | 173 | 27757 | 4.14 | ug/L | | 95 |
| 64) | 1,2,3-trichloropropane | 13.906 | 75 | 31252 | 4.32 | ug/L | | 93 |
| 65) | n-propylbenzene | 13.936 | 91 | 421897 | 4.37 | ug/L | | 95 |
| 66) | 2-chlorotoluene | 14.088 | 91 | 259935 | 4.28 | ug/L | | 89 |
| 67) | 4-chlorotoluene | 14.277 | 91 | 305288 | 4.39 | ug/L | | 92 |
| 68) | 1,3,5-trimethylbenzene | 14.247 | 105 | 301667 | 4.30 | ug/L | | 83 |
| 70) | 1,1,2,2-tetrachloroethane | 13.857 | 83 | 33814 | 3.69 | ug/L | | 95 |
| 71) | tert-butylbenzene | 14.763 | 119 | 241120 | 3.86 | ug/L | | 93 |
| 72) | sec-butylbenzene | 15.098 | 105 | 352325 | 3.93 | ug/L | | 98 |
| 73) | 1,2,4-trimethylbenzene | 14.849 | 105 | 311377 | 3.88 | ug/L | | 87 |
| 74) | 1,3-dichlorobenzene | 15.280 | 146 | 161780 | 3.89 | ug/L | | 88 |
| 75) | p-isopropyltoluene | 15.329 | 119 | 292621 | 3.90 | ug/L | | 94 |
| 76) | dicyclopentadiene | 15.396 | 66 | 324384 | 4.03 | ug/L | | 97 |
| 77) | 1,4-dichlorobenzene | 15.420 | 146 | 158807 | 3.87 | ug/L | | 92 |
| 78) | 1,2-dichlorobenzene | 15.955 | 146 | 133476 | 3.94 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.925 | 91 | 276322 | 3.93 | ug/L | | 94 |
| 80) | 1,2-dibromo-3-chloropr... | 17.038 | 75 | 6484 | 4.19 | ug/L | # | 53 |
| 81) | 1,2,4-trichlorobenzene | 17.999 | 180 | 81262 | 3.54 | ug/L | | 91 |
| 82) | hexachlorobutadiene | 18.157 | 225 | 66646 | 4.03 | ug/L | | 95 |
| 83) | naphthalene | 18.260 | 128 | 86372 | 3.05 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.510 | 180 | 64462 | 3.75 | ug/L | | 93 |
| 85) | 2-methyl naphthalene | 19.324 | 142 | 47881 | 3.84 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040305.D
Acq On : 3 Apr 2008 10:18 am
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 11:26:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040304.D
Acq On : 3 Apr 2008 9:43 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 11:26:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth: VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 619228 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 529142 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 305040 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 162725 | 11.23 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.30% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 156668 | 12.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 122.20% | | |
| 44) toluene-d8 | 9.247 | 98 | 636646 | 9.61 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.10% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 270938 | 10.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.40% | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 105691 | 16.42 | ug/L | 98 |
| 3) chloromethane | 1.816 | 50 | 164348 | 12.40 | ug/L | 96 |
| 4) vinyl chloride | 1.937 | 62 | 179342 | 12.50 | ug/L | 98 |
| 5) 1,3-butadiene | 1.974 | 39 | 142290 | 10.23 | ug/L | 90 |
| 6) bromomethane | 2.320 | 94 | 71692 | 17.23 | ug/L | 96 |
| 7) chloroethane | 2.448 | 64 | 105597 | 12.33 | ug/L | 97 |
| 8) trichlorofluoromethane | 2.728 | 101 | 319219 | 14.02 | ug/L | 93 |
| 9) acrolein | 3.275 | 56 | 19371 | 144.22 | ug/L | 94 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 127600 | 10.78 | ug/L # | 82 |
| 11) acetone | 3.470 | 43 | 18327 | 12.09 | ug/L | 70 |
| 12) carbon disulfide | 3.591 | 76 | 416799 | 10.72 | ug/L | 100 |
| 13) methylene chloride | 3.962 | 84 | 156241 | 9.29 | ug/L | 90 |
| 14) acrylonitrile | 4.297 | 53 | 180974 | 103.16 | ug/L | 92 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 143530 | 9.33 | ug/L | 90 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 235179 | 9.37 | ug/L | 97 |
| 17) acetonitrile | 3.829 | 41 | 72626 | 104.53 | ug/L | 94 |
| 18) hexane | 4.546 | 57 | 155572 | 8.31 | ug/L | 99 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 292524 | 9.65 | ug/L | 95 |
| 20) vinyl acetate | 4.874 | 43 | 85273 | 9.60 | ug/L | 96 |
| 21) cis-1,2-dichloroethene | 5.531 | 96 | 147695 | 8.84 | ug/L # | 87 |
| 22) 2,2-dichloropropane | 5.495 | 77 | 284921 | 10.32 | ug/L | 94 |
| 23) 2-butanone | 5.586 | 72 | 3816 | 8.90 | ug/L # | 91 |
| 24) methyl acrylate | 5.689 | 55 | 46229 | 8.96 | ug/L | 97 |
| 25) chloroform | 5.957 | 83 | 290782 | 9.55 | ug/L | 98 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 302703 | 10.21 | ug/L | 90 |
| 28) cyclohexane | 6.164 | 56 | 206417 | 8.46 | ug/L | 95 |
| 29) carbon tetrachloride | 6.340 | 117 | 257660 | 10.56 | ug/L | 93 |
| 31) benzene | 6.632 | 78 | 543144 | 8.96 | ug/L | 95 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 208032 | 9.59 | ug/L | 98 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 171827 | 10.30 | ug/L | 95 |
| 34) trichloroethene | 7.508 | 95 | 161824 | 9.20 | ug/L | 92 |
| 35) ethyl acrylate | 7.690 | 55 | 70687 | 8.98 | ug/L | 94 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 126279 | 8.77 | ug/L | 96 |
| 37) methyl methacrylate | 8.012 | 41 | 56301 | 9.60 | ug/L | 92 |
| 38) dibromomethane | 8.031 | 93 | 54945 | 9.33 | ug/L # | 88 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040304.D
Acq On : 3 Apr 2008 9:43 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 11:26:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

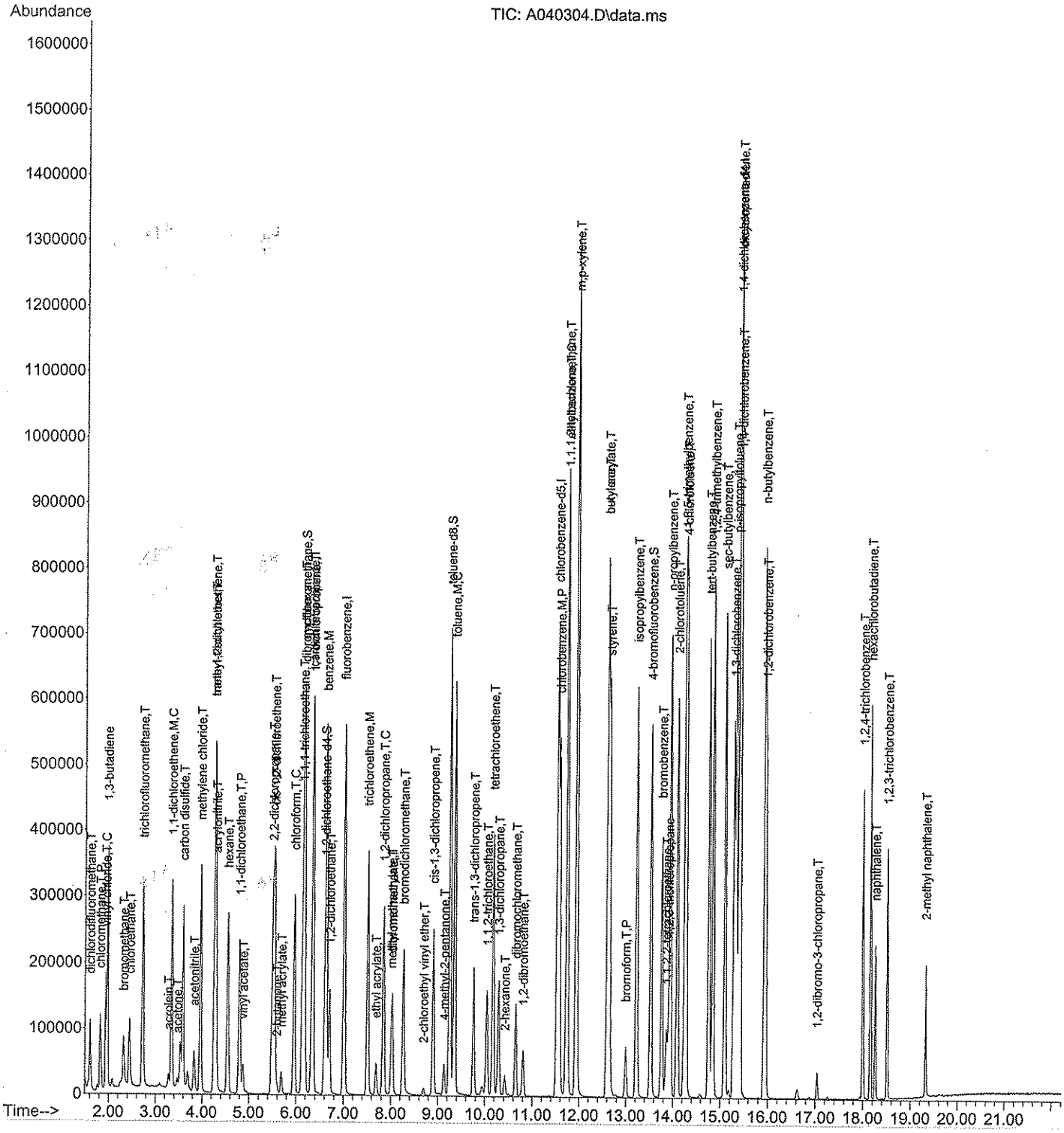
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.262 | 83 | 197374 | 9.69 | ug/L | | 93 |
| 40) | 2-chloroethyl vinyl ether | 8.694 | 63 | 5742 | 6.74 | ug/L | | 90 |
| 42) | cis-1,3-dichloropropene | 8.894 | 75 | 175080 | 7.94 | ug/L | | 90 |
| 43) | 4-methyl-2-pentanone | 9.131 | 43 | 51753 | 8.08 | ug/L | | 95 |
| 45) | toluene | 9.350 | 92 | 358796 | 7.96 | ug/L | | 87 |
| 46) | 1,1,2-trichloroethane | 10.044 | 83 | 56620 | 7.78 | ug/L | | 88 |
| 47) | 1,3-dichloropropane | 10.287 | 76 | 125271 | 8.01 | ug/L | | 93 |
| 48) | tetrachloroethene | 10.171 | 164 | 128592 | 8.01 | ug/L | | 93 |
| 49) | trans-1,3-dichloropropene | 9.752 | 75 | 136494 | 8.31 | ug/L | | 98 |
| 50) | 2-hexanone | 10.421 | 43 | 31911 | 7.71 | ug/L | # | 56 |
| 51) | dibromochloromethane | 10.652 | 129 | 102808 | 8.45 | ug/L | | 93 |
| 52) | 1,2-dibromoethane | 10.804 | 107 | 67991 | 7.69 | ug/L | | 99 |
| 53) | chlorobenzene | 11.570 | 112 | 372136 | 7.91 | ug/L | | 98 |
| 54) | 1,1,1,2-tetrachloroethane | 11.728 | 131 | 139416 | 8.47 | ug/L | | 91 |
| 55) | ethylbenzene | 11.740 | 91 | 741087 | 8.28 | ug/L | | 94 |
| 56) | m,p-xylene | 11.935 | 106 | 529561 | 15.84 | ug/L | # | 69 |
| 57) | butyl acrylate | 12.598 | 55 | 158250 | 8.57 | ug/L | | 93 |
| 58) | o-xylene | 12.598 | 106 | 258030 | 8.06 | ug/L | # | 82 |
| 59) | styrene | 12.646 | 104 | 413264 | 8.05 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.224 | 105 | 622456 | 8.24 | ug/L | | 92 |
| 61) | bromobenzene | 13.759 | 156 | 162356 | 7.94 | ug/L | | 91 |
| 62) | bromoform | 12.999 | 173 | 59079 | 8.61 | ug/L | | 95 |
| 64) | 1,2,3-trichloropropane | 13.905 | 75 | 61557 | 8.32 | ug/L | | 99 |
| 65) | n-propylbenzene | 13.942 | 91 | 827616 | 8.37 | ug/L | | 95 |
| 66) | 2-chlorotoluene | 14.088 | 91 | 519856 | 8.36 | ug/L | | 91 |
| 67) | 4-chlorotoluene | 14.276 | 91 | 607383 | 8.53 | ug/L | | 87 |
| 68) | 1,3,5-trimethylbenzene | 14.246 | 105 | 596769 | 8.31 | ug/L | | 83 |
| 70) | 1,1,2,2-tetrachloroethane | 13.857 | 83 | 67689 | 7.19 | ug/L | | 93 |
| 71) | tert-butylbenzene | 14.757 | 119 | 470230 | 7.33 | ug/L | | 90 |
| 72) | sec-butylbenzene | 15.097 | 105 | 693080 | 7.52 | ug/L | | 97 |
| 73) | 1,2,4-trimethylbenzene | 14.848 | 105 | 624763 | 7.59 | ug/L | | 84 |
| 74) | 1,3-dichlorobenzene | 15.286 | 146 | 314022 | 7.35 | ug/L | | 90 |
| 75) | p-isopropyltoluene | 15.328 | 119 | 582601 | 7.56 | ug/L | | 95 |
| 76) | dicyclopentadiene | 15.401 | 66 | 613241 | 7.42 | ug/L | | 97 |
| 77) | 1,4-dichlorobenzene | 15.420 | 146 | 311676 | 7.40 | ug/L | | 91 |
| 78) | 1,2-dichlorobenzene | 15.955 | 146 | 259887 | 7.46 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.924 | 91 | 552724 | 7.66 | ug/L | | 90 |
| 80) | 1,2-dibromo-3-chloropr... | 17.037 | 75 | 12533 | 7.88 | ug/L | # | 64 |
| 81) | 1,2,4-trichlorobenzene | 17.998 | 180 | 159778 | 6.79 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.156 | 225 | 128749 | 7.58 | ug/L | | 96 |
| 83) | naphthalene | 18.259 | 128 | 176767 | 6.09 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.509 | 180 | 121247 | 6.87 | ug/L | | 92 |
| 85) | 2-methyl naphthalene | 19.324 | 142 | 85737 | 6.70 | ug/L | | 98 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040304.D
Acq On : 3 Apr 2008 9:43 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 11:26:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040304.D 25ML0403.M Thu Apr 03 11:26:57 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040303.D
Acq On : 3 Apr 2008 9:08 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 03 11:26:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 609711 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.522 | 117 | 500750 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 287117 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.165 | 113 | 154807 | 10.85 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 108.50% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.597 | 65 | 145797 | 11.55 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.50% | | | | |
| 44) toluene-d8 | 9.248 | 98 | 623514 | 9.94 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.40% | | | | |
| 63) 4-bromofluorobenzene | 13.517 | 95 | 254852 | 10.87 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 108.70% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 125823 | 19.85 | ug/L | | 94 |
| 3) chloromethane | 1.817 | 50 | 187232 | 14.35 | ug/L | | 92 |
| 4) vinyl chloride | 1.932 | 62 | 204100 | 14.45 | ug/L | | 99 |
| 5) 1,3-butadiene | 1.975 | 39 | 204668 | 14.95 | ug/L | | 91 |
| 6) bromomethane | 2.315 | 94 | 81101 | 19.80 | ug/L | | 92 |
| 7) chloroethane | 2.443 | 64 | 119673 | 14.19 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.723 | 101 | 368690 | 16.45 | ug/L | | 94 |
| 9) acrolein | 3.276 | 56 | 20777 | 157.11 | ug/L | | 100 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 153949 | 13.21 | ug/L | # | 86 |
| 11) acetone | 3.471 | 43 | 19911 | 13.34 | ug/L | | 83 |
| 12) carbon disulfide | 3.586 | 76 | 517792 | 13.53 | ug/L | | 98 |
| 13) methylene chloride | 3.963 | 84 | 169377 | 10.23 | ug/L | | 92 |
| 14) acrylonitrile | 4.298 | 53 | 185803 | 107.57 | ug/L | | 90 |
| 15) trans-1,2-dichloroethene | 4.261 | 96 | 167557 | 11.06 | ug/L | | 89 |
| 16) methyl-t-butyl ether | 4.261 | 73 | 243975 | 9.87 | ug/L | | 94 |
| 17) acetonitrile | 3.824 | 41 | 79945 | 116.86 | ug/L | | 98 |
| 18) hexane | 4.547 | 57 | 233925 | 12.69 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.797 | 63 | 331680 | 11.11 | ug/L | | 95 |
| 20) vinyl acetate | 4.863 | 43 | 89617 | 10.25 | ug/L | | 95 |
| 21) cis-1,2-dichloroethene | 5.532 | 96 | 167573 | 10.19 | ug/L | # | 87 |
| 22) 2,2-dichloropropane | 5.496 | 77 | 334723 | 12.31 | ug/L | | 96 |
| 23) 2-butanone | 5.575 | 72 | 4380 | 10.38 | ug/L | # | 76 |
| 24) methyl acrylate | 5.684 | 55 | 47034 | 9.26 | ug/L | | 99 |
| 25) chloroform | 5.952 | 83 | 333159 | 11.11 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 357138 | 12.24 | ug/L | | 89 |
| 28) cyclohexane | 6.165 | 56 | 291844 | 12.15 | ug/L | | 94 |
| 29) carbon tetrachloride | 6.335 | 117 | 312362 | 13.00 | ug/L | | 92 |
| 31) benzene | 6.627 | 78 | 627503 | 10.52 | ug/L | | 95 |
| 32) 1,1-dichloropropene | 6.347 | 75 | 244935 | 11.47 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.700 | 62 | 185158 | 11.28 | ug/L | | 94 |
| 34) trichloroethene | 7.503 | 95 | 185203 | 10.69 | ug/L | | 92 |
| 35) ethyl acrylate | 7.691 | 55 | 71653 | 9.25 | ug/L | | 96 |
| 36) 1,2-dichloropropane | 7.837 | 63 | 140199 | 9.88 | ug/L | | 99 |
| 37) methyl methacrylate | 8.007 | 41 | 56690 | 9.82 | ug/L | | 89 |
| 38) dibromomethane | 8.026 | 93 | 58350 | 10.06 | ug/L | # | 86 |

A040303.D 25ML0403.M Thu Apr 03 11:26:53 2008 voa1 Page: 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040303.D
Acq On : 3 Apr 2008 9:08 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 03 11:26:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

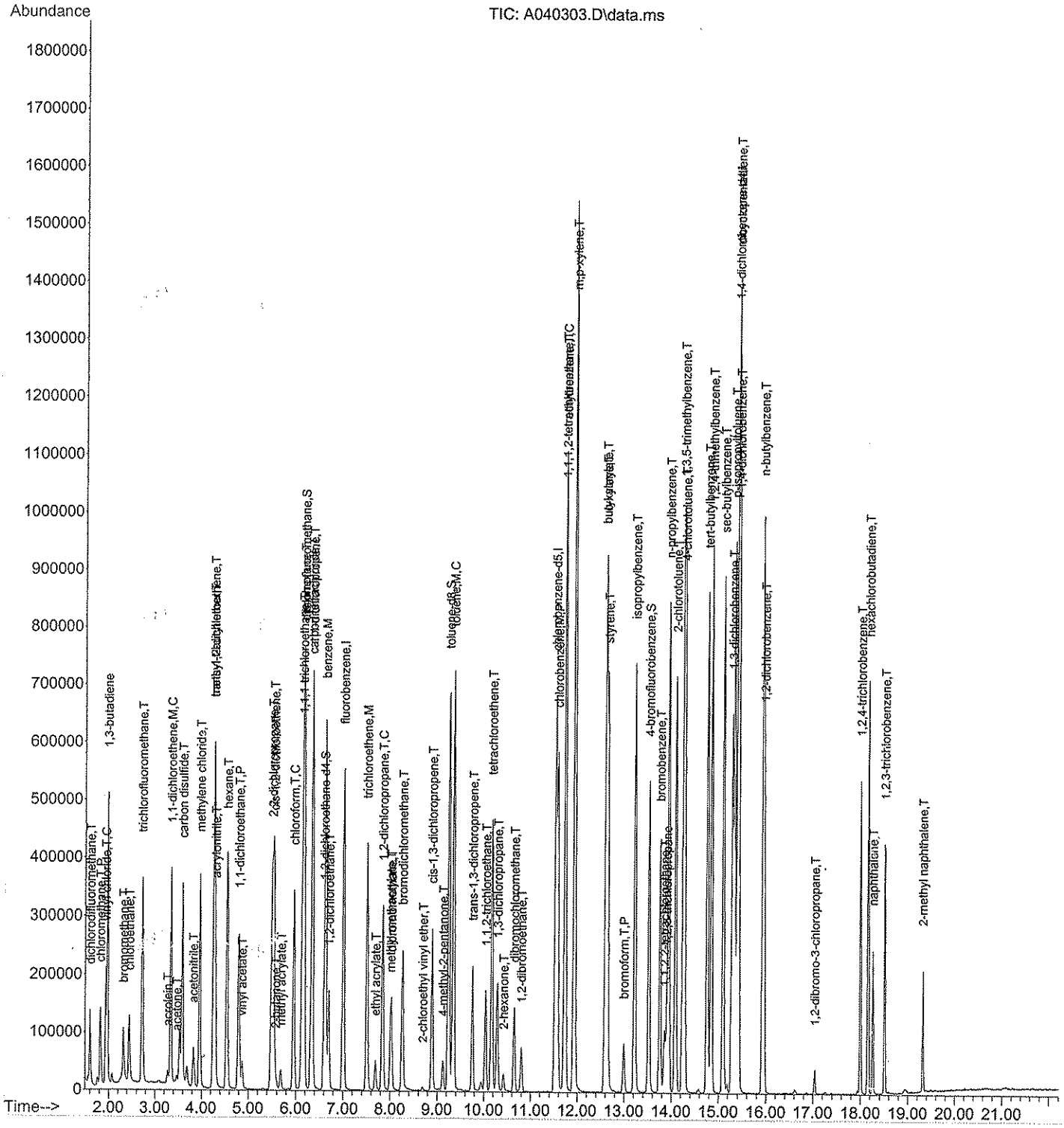
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.257 | 83 | 216794 | 10.81 | ug/L | | 94 |
| 40) 2-chloroethyl vinyl ether | 8.695 | 63 | 3489 | 4.16 | ug/L | | 81 |
| 42) cis-1,3-dichloropropene | 8.889 | 75 | 190915 | 9.15 | ug/L | | 93 |
| 43) 4-methyl-2-pentanone | 9.126 | 43 | 55407 | 9.14 | ug/L | | 88 |
| 45) toluene | 9.345 | 92 | 414343 | 9.71 | ug/L | | 86 |
| 46) 1,1,2-trichloroethane | 10.039 | 83 | 61059 | 8.87 | ug/L | | 91 |
| 47) 1,3-dichloropropane | 10.288 | 76 | 133425 | 9.01 | ug/L | | 95 |
| 48) tetrachloroethene | 10.166 | 164 | 153091 | 10.08 | ug/L | | 92 |
| 49) trans-1,3-dichloropropene | 9.753 | 75 | 143443 | 9.23 | ug/L | | 94 |
| 50) 2-hexanone | 10.422 | 43 | 32568 | 8.31 | ug/L | | 70 |
| 51) dibromochloromethane | 10.647 | 129 | 108427 | 9.42 | ug/L | | 92 |
| 52) 1,2-dibromoethane | 10.799 | 107 | 73433 | 8.78 | ug/L | | 95 |
| 53) chlorobenzene | 11.571 | 112 | 409924 | 9.20 | ug/L | | 99 |
| 54) 1,1,1,2-tetrachloroethane | 11.723 | 131 | 153322 | 9.84 | ug/L | | 90 |
| 55) ethylbenzene | 11.735 | 91 | 856669 | 10.12 | ug/L | | 95 |
| 56) m,p-xylene | 11.930 | 106 | 621755 | 19.66 | ug/L | # | 71 |
| 57) butyl acrylate | 12.593 | 55 | 163120 | 9.33 | ug/L | | 93 |
| 58) o-xylene | 12.599 | 106 | 287744 | 9.50 | ug/L | # | 79 |
| 59) styrene | 12.641 | 104 | 457480 | 9.41 | ug/L | | 90 |
| 60) isopropylbenzene | 13.219 | 105 | 744301 | 10.41 | ug/L | | 92 |
| 61) bromobenzene | 13.754 | 156 | 177252 | 9.16 | ug/L | # | 86 |
| 62) bromoform | 12.994 | 173 | 60697 | 9.35 | ug/L | | 100 |
| 64) 1,2,3-trichloropropane | 13.900 | 75 | 66718 | 9.53 | ug/L | | 95 |
| 65) n-propylbenzene | 13.937 | 91 | 1001304 | 10.70 | ug/L | | 96 |
| 66) 2-chlorotoluene | 14.089 | 91 | 602162 | 10.24 | ug/L | | 90 |
| 67) 4-chlorotoluene | 14.277 | 91 | 708028 | 10.51 | ug/L | | 90 |
| 68) 1,3,5-trimethylbenzene | 14.247 | 105 | 718340 | 10.57 | ug/L | | 83 |
| 70) 1,1,2,2-tetrachloroethane | 13.852 | 83 | 70980 | 8.01 | ug/L | | 96 |
| 71) tert-butylbenzene | 14.758 | 119 | 576922 | 9.56 | ug/L | | 90 |
| 72) sec-butylbenzene | 15.098 | 105 | 856965 | 9.88 | ug/L | | 97 |
| 73) 1,2,4-trimethylbenzene | 14.843 | 105 | 733372 | 9.46 | ug/L | | 84 |
| 74) 1,3-dichlorobenzene | 15.281 | 146 | 355364 | 8.84 | ug/L | | 90 |
| 75) p-isopropyltoluene | 15.323 | 119 | 713975 | 9.85 | ug/L | | 93 |
| 76) dicyclopentadiene | 15.396 | 66 | 750103 | 9.64 | ug/L | | 96 |
| 77) 1,4-dichlorobenzene | 15.421 | 146 | 349476 | 8.82 | ug/L | | 91 |
| 78) 1,2-dichlorobenzene | 15.956 | 146 | 284640 | 8.68 | ug/L | | 91 |
| 79) n-butylbenzene | 15.919 | 91 | 694264 | 10.22 | ug/L | | 90 |
| 80) 1,2-dibromo-3-chloropr... | 17.038 | 75 | 13022 | 8.70 | ug/L | # | 66 |
| 81) 1,2,4-trichlorobenzene | 17.993 | 180 | 179026 | 8.08 | ug/L | | 90 |
| 82) hexachlorobutadiene | 18.157 | 225 | 159959 | 10.00 | ug/L | | 95 |
| 83) naphthalene | 18.255 | 128 | 190599 | 6.97 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.504 | 180 | 132030 | 7.94 | ug/L | | 92 |
| 85) 2-methyl naphthalene | 19.319 | 142 | 85859 | 7.13 | ug/L | | 96 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040303.D
Acq On : 3 Apr 2008 9:08 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 03 11:26:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040303.D 25ML0403.M Thu Apr 03 11:26:53 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040308.D
Acq On : 3 Apr 2008 12:31 pm
Sample : ,ical,ical_w25-20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 03 13:09:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:09:32 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.006 | 96 | 636403 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.531 | 117 | 538672 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 314672 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 166143 | 10.44 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.40% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 156883 | 10.53 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.30% | | | | |
| 44) toluene-d8 | 9.250 | 98 | 660414 | 9.96 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.60% | | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 280840 | 10.54 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.40% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 241802 | 22.68 | ug/L | | 98 |
| 3) chloromethane | 1.819 | 50 | 371463 | 20.46 | ug/L | | 98 |
| 4) vinyl chloride | 1.934 | 62 | 416256 | 21.27 | ug/L | | 98 |
| 5) 1,3-butadiene | 1.971 | 39 | 420959 | 22.74 | ug/L | | 99 |
| 6) bromomethane | 2.311 | 94 | 113926 | 16.30 | ug/L | | 99 |
| 7) chloroethane | 2.439 | 64 | 244620 | 21.13 | ug/L | | 96 |
| 8) trichlorofluoromethane | 2.725 | 101 | 781680 | 23.27 | ug/L | | 99 |
| 9) acrolein | 3.278 | 56 | 46057 | 200.90 | ug/L | | 95 |
| 10) 1,1-dichloroethene | 3.339 | 96 | 332816 | 21.41 | ug/L | | 97 |
| 11) acetone | 3.473 | 43 | 43244 | 22.72 | ug/L | | 98 |
| 12) carbon disulfide | 3.588 | 76 | 1096322 | 21.78 | ug/L | | 99 |
| 13) methylene chloride | 3.959 | 84 | 349065 | 18.40 | ug/L | | 94 |
| 14) acrylonitrile | 4.300 | 53 | 437615 | 207.00 | ug/L | | 100 |
| 15) trans-1,2-dichloroethene | 4.263 | 96 | 370232 | 20.81 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.263 | 73 | 573250 | 20.55 | ug/L | | 100 |
| 17) acetonitrile | 3.825 | 41 | 177781 | 200.29 | ug/L | | 98 |
| 18) hexane | 4.543 | 57 | 509855 | 22.89 | ug/L | | 96 |
| 19) 1,1-dichloroethane | 4.798 | 63 | 744301 | 21.11 | ug/L | | 99 |
| 20) vinyl acetate | 4.871 | 43 | 207861 | 20.98 | ug/L | | 100 |
| 21) cis-1,2-dichloroethene | 5.534 | 96 | 385248 | 20.88 | ug/L | | 99 |
| 22) 2,2-dichloropropane | 5.498 | 77 | 744338 | 21.96 | ug/L | | 100 |
| 23) 2-butanone | 5.583 | 72 | 8949 | 18.46 | ug/L | # | 28 |
| 24) methyl acrylate | 5.680 | 55 | 117557 | 21.17 | ug/L | | 96 |
| 25) chloroform | 5.954 | 83 | 747101 | 21.13 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.136 | 97 | 805319 | 21.95 | ug/L | | 99 |
| 28) cyclohexane | 6.167 | 56 | 651395 | 22.80 | ug/L | | 99 |
| 29) carbon tetrachloride | 6.337 | 117 | 697082 | 22.26 | ug/L | | 99 |
| 31) benzene | 6.623 | 78 | 1409643 | 20.91 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.349 | 75 | 559480 | 21.78 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 428522 | 21.28 | ug/L | | 98 |
| 34) trichloroethene | 7.505 | 95 | 432060 | 21.53 | ug/L | | 98 |
| 35) ethyl acrylate | 7.693 | 55 | 184129 | 22.04 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.839 | 63 | 321899 | 20.69 | ug/L | | 96 |
| 37) methyl methacrylate | 8.009 | 41 | 145089 | 22.58 | ug/L | | 92 |
| 38) dibromomethane | 8.034 | 93 | 137981 | 20.78 | ug/L | | 94 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040308.D
Acq On : 3 Apr 2008 12:31 pm
Sample : ,ical,ical_w25-20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 03 13:09:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:09:32 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

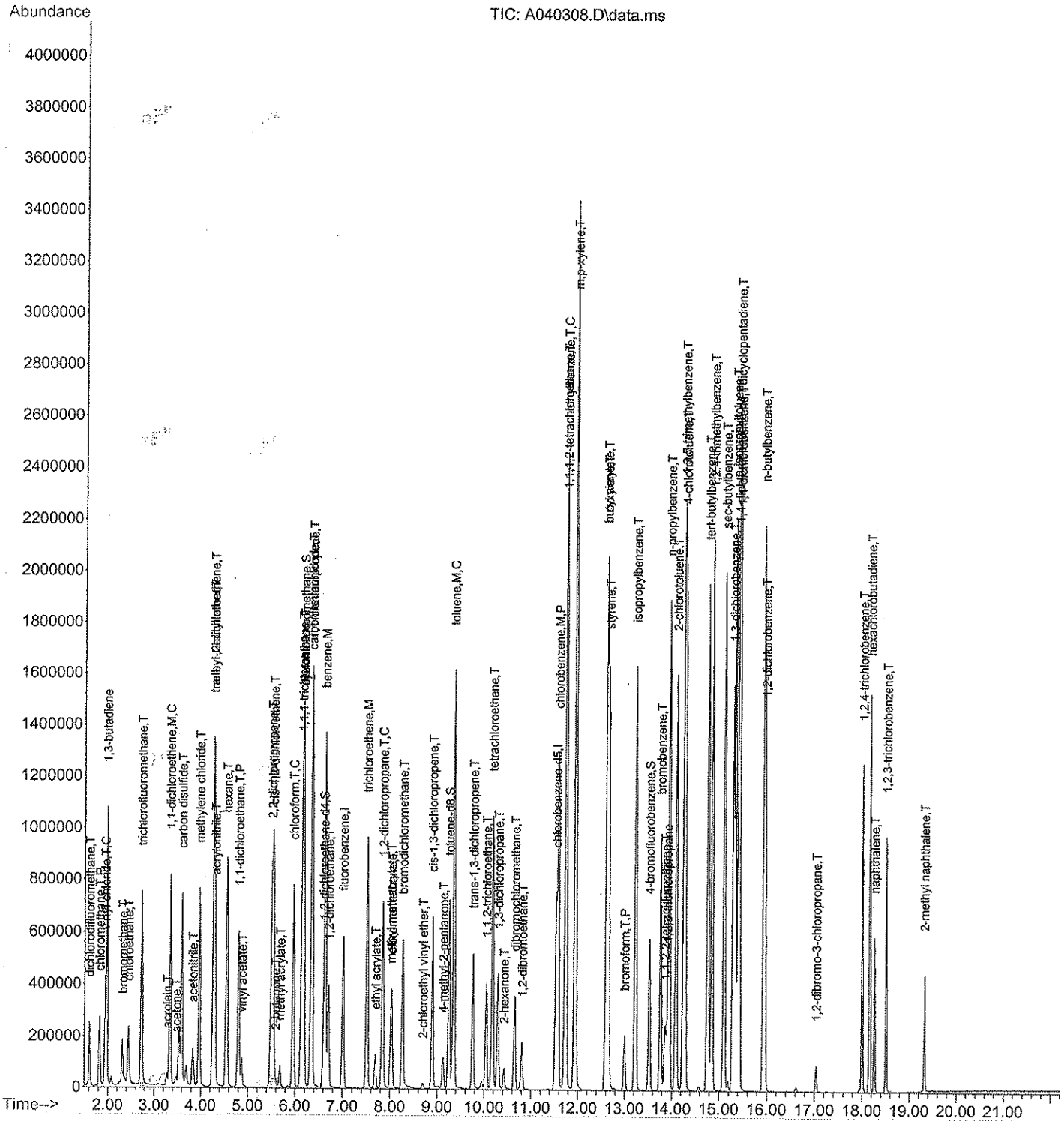
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.259 | 83 | 506387 | 21.62 | ug/L | 100 |
| 40) 2-chloroethyl vinyl ether | 8.691 | 63 | 10882 | 14.47 | ug/L | 84 |
| 42) cis-1,3-dichloropropene | 8.891 | 75 | 460529 | 20.81 | ug/L | 98 |
| 43) 4-methyl-2-pentanone | 9.122 | 43 | 132270 | 20.01 | ug/L | 95 |
| 45) toluene | 9.347 | 92 | 929818 | 20.05 | ug/L | 97 |
| 46) 1,1,2-trichloroethane | 10.041 | 83 | 147766 | 20.18 | ug/L | 99 |
| 47) 1,3-dichloropropane | 10.290 | 76 | 322533 | 20.51 | ug/L | 99 |
| 48) tetrachloroethene | 10.168 | 164 | 339201 | 19.99 | ug/L | 95 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 350404 | 21.07 | ug/L | 98 |
| 50) 2-hexanone | 10.418 | 43 | 86356 | 21.28 | ug/L | 95 |
| 51) dibromochloromethane | 10.649 | 129 | 265517 | 20.82 | ug/L | 97 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 178842 | 20.40 | ug/L | 96 |
| 53) chlorobenzene | 11.573 | 112 | 936492 | 19.69 | ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.725 | 131 | 355085 | 20.49 | ug/L | 99 |
| 55) ethylbenzene | 11.737 | 91 | 1914631 | 20.60 | ug/L | 99 |
| 56) m,p-xylene | 11.932 | 106 | 1390218 | 40.67 | ug/L | 99 |
| 57) butyl acrylate | 12.595 | 55 | 401260 | 21.21 | ug/L | 100 |
| 58) o-xylene | 12.601 | 106 | 661803 | 20.58 | ug/L | 99 |
| 59) styrene | 12.643 | 104 | 1064837 | 20.55 | ug/L | 98 |
| 60) isopropylbenzene | 13.221 | 105 | 1690484 | 21.61 | ug/L | 99 |
| 61) bromobenzene | 13.756 | 156 | 418309 | 20.40 | ug/L | 96 |
| 62) bromoform | 12.996 | 173 | 153107 | 21.46 | ug/L | 98 |
| 64) 1,2,3-trichloropropane | 13.902 | 75 | 155632 | 19.97 | ug/L | 99 |
| 65) n-propylbenzene | 13.939 | 91 | 2251715 | 21.44 | ug/L | 100 |
| 66) 2-chlorotoluene | 14.091 | 91 | 1388369 | 21.37 | ug/L | 99 |
| 67) 4-chlorotoluene | 14.273 | 91 | 1593103 | 21.03 | ug/L | 97 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 1601551 | 21.40 | ug/L | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.860 | 83 | 172277 | 18.87 | ug/L | 97 |
| 71) tert-butylbenzene | 14.760 | 119 | 1335707 | 20.81 | ug/L | 100 |
| 72) sec-butylbenzene | 15.100 | 105 | 1937140 | 20.73 | ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 1656776 | 20.13 | ug/L | 98 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 816448 | 19.27 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.325 | 119 | 1601780 | 20.53 | ug/L | 99 |
| 76) dicyclopentadiene | 15.398 | 66 | 1753826 | 20.77 | ug/L | 100 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 786751 | 18.78 | ug/L | 100 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 660045 | 19.10 | ug/L | 98 |
| 79) n-butylbenzene | 15.921 | 91 | 1554308 | 21.14 | ug/L | 100 |
| 80) 1,2-dibromo-3-chloropr... | 17.040 | 75 | 31904 | 18.96 | ug/L | 98 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 414040 | 19.01 | ug/L | 94 |
| 82) hexachlorobutadiene | 18.159 | 225 | 359723 | 20.17 | ug/L | 99 |
| 83) naphthalene | 18.256 | 128 | 444086 | 18.49 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 307173 | 18.37 | ug/L | 99 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 185748 | 16.24 | ug/L | 95 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040308.D
Acq On : 3 Apr 2008 12:31 pm
Sample : ,ical,ical_w25-20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 03 13:09:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:09:32 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040308.D 25ML0403.M Thu Apr 03 13:09:58 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040309.D
Acq On : 3 Apr 2008 1:18 pm
Sample : ,ical,ical_w25-40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 03 13:46:50 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:11:01 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.013 | 96 | 734079 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 611872 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.387 | 152 | 332450 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 185071 | 9.93 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.30% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 177001 | 10.07 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.70% | | | | |
| 44) toluene-d8 | 9.251 | 98 | 741366 | 9.89 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.90% | | | | |
| 63) 4-bromofluorobenzene | 13.520 | 95 | 309777 | 10.09 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.90% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 605961 | 46.07 | ug/L | | 97 |
| 3) chloromethane | 1.813 | 50 | 858835 | 39.23 | ug/L | | 96 |
| 4) vinyl chloride | 1.935 | 62 | 983730 | 41.76 | ug/L | | 97 |
| 5) 1,3-butadiene | 1.971 | 39 | 996600 | 44.57 | ug/L | | 97 |
| 6) bromomethane | 2.306 | 94 | 246823 | 30.04 | ug/L | | 98 |
| 7) chloroethane | 2.421 | 64 | 524934 | 37.57 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.719 | 101 | 1762908 | 42.95 | ug/L | | 99 |
| 9) acrolein | 3.273 | 56 | 111850 | 412.01 | ug/L | | 92 |
| 10) 1,1-dichloroethene | 3.340 | 96 | 790471 | 42.60 | ug/L | | 99 |
| 11) acetone | 3.473 | 43 | 88839 | 37.74 | ug/L | | 94 |
| 12) carbon disulfide | 3.583 | 76 | 2579664 | 42.77 | ug/L | | 100 |
| 13) methylene chloride | 3.960 | 84 | 778785 | 34.90 | ug/L | | 96 |
| 14) acrylonitrile | 4.300 | 53 | 1013385 | 406.40 | ug/L | | 98 |
| 15) trans-1,2-dichloroethene | 4.264 | 96 | 881484 | 42.14 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.258 | 73 | 1240676 | 37.89 | ug/L | | 99 |
| 17) acetonitrile | 3.826 | 41 | 390796 | 369.42 | ug/L | | 96 |
| 18) hexane | 4.544 | 57 | 1244695 | 47.10 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 1753058 | 42.15 | ug/L | | 100 |
| 20) vinyl acetate | 4.866 | 43 | 492828 | 42.30 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.529 | 96 | 907131 | 42.01 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.498 | 77 | 1802839 | 44.65 | ug/L | | 99 |
| 23) 2-butanone | 5.584 | 72 | 24082 | 43.54 | ug/L | # | 73 |
| 24) methyl acrylate | 5.681 | 55 | 275514 | 42.30 | ug/L | | 99 |
| 25) chloroform | 5.955 | 83 | 1741268 | 41.66 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.131 | 97 | 1894570 | 43.38 | ug/L | | 98 |
| 28) cyclohexane | 6.167 | 56 | 1552714 | 46.00 | ug/L | | 99 |
| 29) carbon tetrachloride | 6.338 | 117 | 1647862 | 44.11 | ug/L | | 99 |
| 31) benzene | 6.630 | 78 | 3273357 | 41.34 | ug/L | | 100 |
| 32) 1,1-dichloropropene | 6.350 | 75 | 1334808 | 44.04 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.703 | 62 | 980095 | 40.90 | ug/L | | 99 |
| 34) trichloroethene | 7.505 | 95 | 1021221 | 43.24 | ug/L | | 99 |
| 35) ethyl acrylate | 7.688 | 55 | 429320 | 43.74 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.840 | 63 | 761657 | 41.90 | ug/L | | 95 |
| 37) methyl methacrylate | 8.010 | 41 | 329893 | 43.33 | ug/L | | 95 |
| 38) dibromomethane | 8.034 | 93 | 319724 | 40.93 | ug/L | | 95 |

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040309.D
Acq On : 3 Apr 2008 1:18 pm
Sample : ,ical,ical_w25-40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 03 13:46:50 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:11:01 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

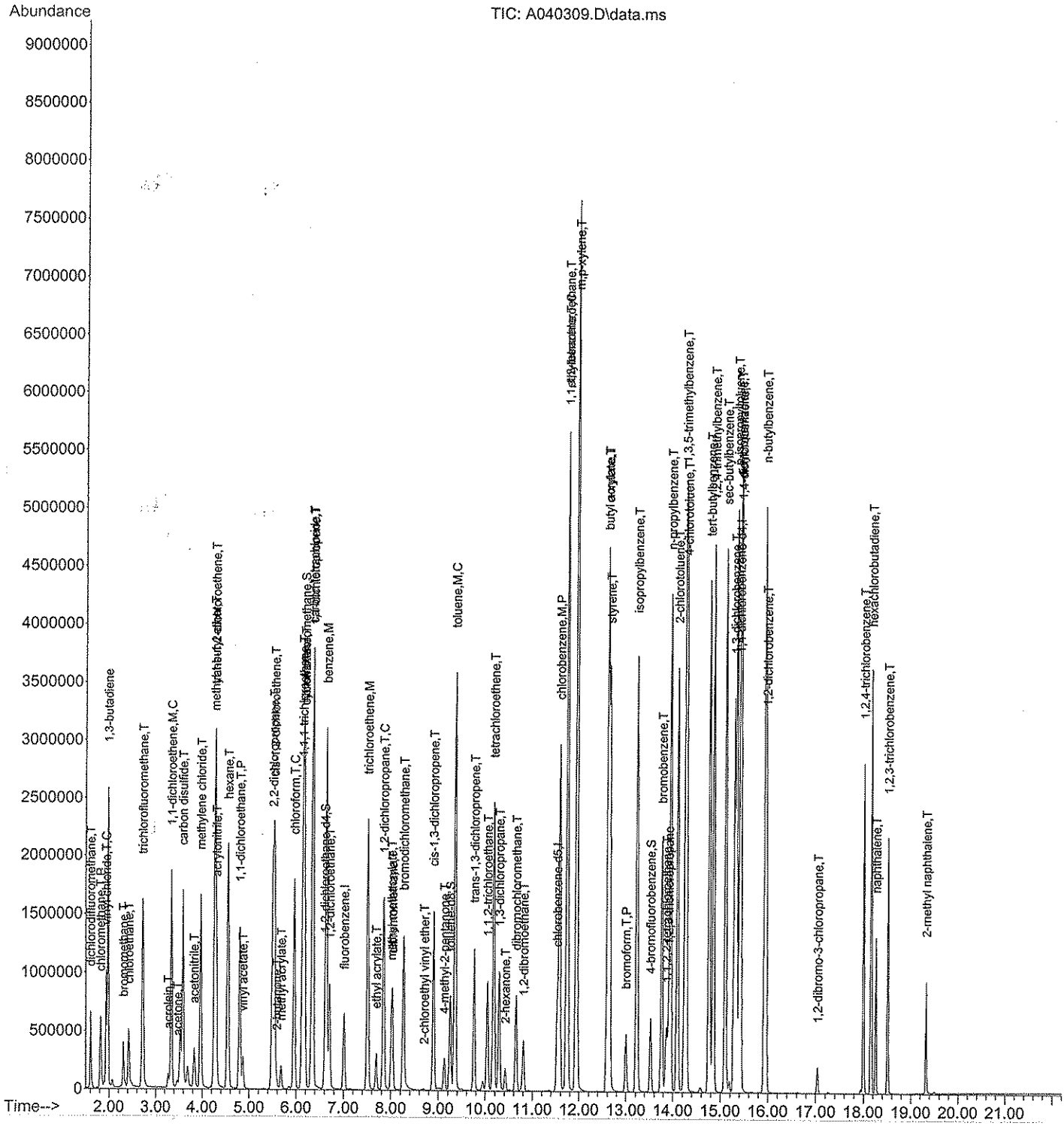
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.265 | 83 | 1174913 | 42.43 | ug/L | 99 |
| 40) | 2-chloroethyl vinyl ether | 8.703 | 63 | 6974 | 8.58 | ug/L | 73 |
| 42) | cis-1,3-dichloropropene | 8.892 | 75 | 1086425 | 43.22 | ug/L | 99 |
| 43) | 4-methyl-2-pentanone | 9.123 | 43 | 298084 | 39.62 | ug/L | 96 |
| 45) | toluene | 9.348 | 92 | 2142474 | 40.60 | ug/L | 97 |
| 46) | 1,1,2-trichloroethane | 10.041 | 83 | 336608 | 40.42 | ug/L | 98 |
| 47) | 1,3-dichloropropane | 10.284 | 76 | 736374 | 41.20 | ug/L | 100 |
| 48) | tetrachloroethene | 10.169 | 164 | 812967 | 42.20 | ug/L | 98 |
| 49) | trans-1,3-dichloropropene | 9.755 | 75 | 830863 | 43.82 | ug/L | 98 |
| 50) | 2-hexanone | 10.418 | 43 | 199529 | 43.36 | ug/L | 88 |
| 51) | dibromochloromethane | 10.649 | 129 | 621272 | 42.69 | ug/L | 94 |
| 52) | 1,2-dibromoethane | 10.807 | 107 | 419358 | 42.20 | ug/L | 99 |
| 53) | chlorobenzene | 11.574 | 112 | 2154356 | 39.97 | ug/L | 97 |
| 54) | 1,1,1,2-tetrachloroethane | 11.732 | 131 | 825230 | 41.67 | ug/L | 98 |
| 55) | ethylbenzene | 11.738 | 91 | 4432216 | 41.72 | ug/L | 99 |
| 56) | m,p-xylene | 11.939 | 106 | 3161736 | 81.20 | ug/L | 96 |
| 57) | butyl acrylate | 12.595 | 55 | 877966 | 40.61 | ug/L | 99 |
| 58) | o-xylene | 12.601 | 106 | 1487187 | 40.61 | ug/L | 97 |
| 59) | styrene | 12.644 | 104 | 2372249 | 40.21 | ug/L | 98 |
| 60) | isopropylbenzene | 13.228 | 105 | 3889253 | 43.37 | ug/L | 98 |
| 61) | bromobenzene | 13.763 | 156 | 941046 | 40.33 | ug/L | 94 |
| 62) | bromoform | 12.997 | 173 | 355015 | 43.59 | ug/L | 98 |
| 64) | 1,2,3-trichloropropane | 13.903 | 75 | 345392 | 38.76 | ug/L | 97 |
| 65) | n-propylbenzene | 13.939 | 91 | 5112657 | 42.34 | ug/L | 99 |
| 66) | 2-chlorotoluene | 14.091 | 91 | 3091219 | 41.36 | ug/L | 99 |
| 67) | 4-chlorotoluene | 14.280 | 91 | 3582409 | 41.08 | ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.249 | 105 | 3661701 | 42.62 | ug/L | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 13.860 | 83 | 386505 | 40.72 | ug/L | 99 |
| 71) | tert-butylbenzene | 14.760 | 119 | 3024572 | 44.76 | ug/L | 99 |
| 72) | sec-butylbenzene | 15.101 | 105 | 4403808 | 44.74 | ug/L | 99 |
| 73) | 1,2,4-trimethylbenzene | 14.845 | 105 | 3682384 | 42.50 | ug/L | 99 |
| 74) | 1,3-dichlorobenzene | 15.283 | 146 | 1812690 | 40.87 | ug/L | 99 |
| 75) | p-isopropyltoluene | 15.326 | 119 | 3686652 | 44.82 | ug/L | 99 |
| 76) | dicyclopentadiene | 15.399 | 66 | 3876697 | 43.27 | ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.423 | 146 | 1722219 | 39.24 | ug/L | 99 |
| 78) | 1,2-dichlorobenzene | 15.958 | 146 | 1423562 | 39.36 | ug/L | 98 |
| 79) | n-butylbenzene | 15.922 | 91 | 3508447 | 45.12 | ug/L | 99 |
| 80) | 1,2-dibromo-3-chloropr... | 17.041 | 75 | 68777 | 38.78 | ug/L | 90 |
| 81) | 1,2,4-trichlorobenzene | 17.996 | 180 | 929979 | 41.12 | ug/L | 95 |
| 82) | hexachlorobutadiene | 18.160 | 225 | 846536 | 44.86 | ug/L | 99 |
| 83) | naphthalene | 18.257 | 128 | 998133 | 40.47 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.506 | 180 | 674184 | 38.84 | ug/L | 99 |
| 85) | 2-methyl naphthalene | 19.321 | 142 | 418035 | 35.51 | ug/L | 100 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040309.D
Acq On : 3 Apr 2008 1:18 pm
Sample : ,ical,ical_w25-40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 03 13:46:50 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:11:01 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# CONTINUING CALIBRATION RAW DATA

# Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040208\A040204.D
Acq On : 2 Apr 2008 9:20 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 02 09:51:07 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 59 | -0.01 |
| 2 | T | dichlorodifluoromethane | 0.090 | 0.048 | 46.7# | 30# | 0.00 |
| 3 | T,P | chloromethane | 0.198 | 0.146# | 26.3# | 48# | 0.00 |
| 4 | T,C | vinyl chloride | 0.216 | 0.186 | 13.9 | 52 | 0.00 |
| 5 | | 1,3-butadiene | 0.209 | 0.320 | -53.1# | 91 | 0.00 |
| 6 | T | bromomethane | 0.059 | 0.114 | -93.2# | 102 | 0.00 |
| 7 | T | chloroethane | 0.129 | 0.138 | -7.0 | 69 | 0.01 |
| 8 | T | trichlorofluoromethane | 0.333 | 0.449 | -34.8# | 82 | 0.00 |
| 9 | T | acrolein | 0.002 | 0.003 | -50.0# | 133 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.183 | 0.220 | -20.2# | 71 | 0.00 |
| 11 | T | acetone | 0.022 | 0.028 | -27.3# | 91 | -0.01 |
| 12 | T | carbon disulfide | 0.598 | 0.726 | -21.4# | 71 | 0.00 |
| 13 | T | methylene chloride | 0.267 | 0.274 | -2.6 | 66 | 0.00 |
| 14 | T | acrylonitrile | 0.028 | 0.031 | -10.7 | 74 | -0.01 |
| 15 | T | trans-1,2-dichloroethene | 0.245 | 0.255 | -4.1 | 61 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.400 | 0.368 | 8.0 | 61 | -0.01 |
| 17 | T | acetonitrile | 0.011 | 0.013 | -18.2 | 81 | 0.00 |
| 18 | T | hexane | 0.297 | 0.394 | -32.7# | 69 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.480 | 0.494 | -2.9 | 62 | -0.01 |
| 20 | T | vinyl acetate | 0.141 | 0.131 | 7.1 | 60 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.268 | 0.257 | 4.1 | 58 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.434 | 0.507 | -16.8 | 66 | 0.00 |
| 23 | T | 2-butanone | 0.007 | 0.006 | 14.3 | 53 | 0.00 |
| 24 | T | methyl acrylate | 0.082 | 0.077 | 6.1 | 66 | 0.00 |
| 25 | T,C | chloroform | 0.480 | 0.493 | -2.7 | 64 | 0.00 |
| 26 | S | dibromofluoromethane | 0.230 | 0.246 | -7.0 | 65 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.463 | 0.528 | -14.0 | 68 | 0.00 |
| 28 | T | cyclohexane | 0.385 | 0.473 | -22.9# | 68 | -0.01 |
| 29 | T | carbon tetrachloride | 0.379 | 0.454 | -19.8 | 69 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.201 | 0.229 | -13.9 | 71 | -0.01 |
| 31 | M | benzene | 0.967 | 0.946 | 2.2 | 60 | -0.01 |
| 32 | T | 1,1-dichloropropene | 0.344 | 0.374 | -8.7 | 62 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.260 | 0.276 | -6.2 | 71 | -0.01 |
| 34 | M | trichloroethene | 0.281 | 0.285 | -1.4 | 61 | 0.00 |
| 35 | T | ethyl acrylate | 0.126 | 0.119 | 5.6 | 65 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.231 | 0.212 | 8.2 | 58 | 0.00 |
| 37 | T | methyl methacrylate | 0.093 | 0.093 | 0.0 | 71 | 0.00 |
| 38 | T | dibromomethane | 0.094 | 0.091 | 3.2 | 64 | 0.00 |
| 39 | T | bromodichloromethane | 0.322 | 0.328 | -1.9 | 65 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.015 | 0.010 | 33.3# | 40# | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 63 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.419 | 0.374 | 10.7 | 59 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.120 | 0.099 | 17.5 | 60 | 0.00 |
| 44 | S | toluene-d8 | 1.254 | 1.245 | 0.7 | 62 | 0.00 |
| 45 | M,C | toluene | 0.853 | 0.792 | 7.2 | 59 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.138 | 0.121 | 12.3 | 60 | -0.01 |

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040208\A040204.D
Acq On : 2 Apr 2008 9:20 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 02 09:51:07 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.296 | 0.256 | 13.5 | 59 | 0.00 |
| 48 | T | tetrachloroethene | 0.304 | 0.290 | 4.6 | 58 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.277 | 10.9 | 60 | 0.00 |
| 50 | T | 2-hexanone | 0.079 | 0.066 | 16.5 | 60 | 0.00 |
| 51 | T | dibromochloromethane | 0.229 | 0.209 | 8.7 | 62 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.168 | 0.141 | 16.1 | 58 | 0.00 |
| 53 | M,P | chlorobenzene | 0.894 | 0.794 | 11.2 | 58 | -0.01 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.310 | 0.296 | 4.5 | 62 | 0.00 |
| 55 | T,C | ethylbenzene | 1.687 | 1.644 | 2.5 | 61 | 0.00 |
| 56 | T | m,p-xylene | 0.633 | 0.600 | 5.2 | 59 | 0.00 |
| 57 | T | butyl acrylate | 0.345 | 0.316 | 8.4 | 67 | 0.00 |
| 58 | T | o-xylene | 0.607 | 0.558 | 8.1 | 59 | -0.01 |
| 59 | T | styrene | 0.972 | 0.886 | 8.8 | 60 | 0.00 |
| 60 | T | isopropylbenzene | 1.423 | 1.408 | 1.1 | 61 | 0.00 |
| 61 | T | bromobenzene | 0.388 | 0.349 | 10.1 | 60 | 0.00 |
| 62 | T,P | bromoform | 0.129 | 0.117 | 9.3 | 63 | 0.00 |
| 63 | S | 4-bromofluorobenzene | 0.461 | 0.490 | -6.3 | 68 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.138 | 0.124 | 10.1 | 64 | 0.00 |
| 65 | T | n-propylbenzene | 1.854 | 1.878 | -1.3 | 62 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.166 | 1.132 | 2.9 | 63 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.329 | 1.326 | 0.2 | 65 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.345 | 1.343 | 0.1 | 63 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 69 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.314 | 0.254 | 19.1 | 61 | 0.00 |
| 71 | T | tert-butylbenzene | 2.137 | 2.017 | 5.6 | 61 | 0.00 |
| 72 | T | sec-butylbenzene | 3.062 | 2.955 | 3.5 | 61 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.728 | 2.517 | 7.7 | 62 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.421 | 1.251 | 12.0 | 61 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.563 | 2.466 | 3.8 | 61 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 2.776 | -2.2 | 71 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.396 | 1.221 | 12.5 | 62 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.155 | 1.006 | 12.9 | 63 | 0.00 |
| 79 | T | n-butylbenzene | 2.389 | 2.328 | 2.6 | 61 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.052 | 0.043 | 17.3 | 65 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.785 | 0.634 | 19.2 | 59 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.564 | 0.560 | 0.7 | 63 | 0.00 |
| 83 | T | naphthalene | 0.970 | 0.692 | 28.7# | 59 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.586 | 0.471 | 19.6 | 62 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.418 | 0.323 | 22.7# | 76 | 0.00 |

(#) = Out of Range SPCC's out = 1 CCC's out = 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040204.D
Acq On : 2 Apr 2008 9:20 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 02 09:51:07 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.006 | 96 | 365081 | 10.00 | ug/L | | -0.01 |
| 41) chlorobenzene-d5 | 11.524 | 117 | 289823 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 157605 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 89990 | 10.69 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.90% | | | |
| 30) 1,2-dichloroethane-d4 | 6.592 | 65 | 83783 | 11.41 | ug/L | | -0.01 |
| Spiked Amount 10.000 | | | Recovery = | 114.10% | | | |
| 44) toluene-d8 | 9.244 | 98 | 360689 | 9.93 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.30% | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 141898 | 10.62 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.20% | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 17493 | 5.32 | ug/L | | 94 |
| 3) chloromethane | 1.812 | 50 | 53194 | 7.35 | ug/L | | 91 |
| 4) vinyl chloride | 1.934 | 62 | 68041 | 8.62 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.970 | 39 | 116976 | 15.35 | ug/L | | 90 |
| 6) bromomethane | 2.317 | 94 | 41641 | 19.40 | ug/L | | 93 |
| 7) chloroethane | 2.439 | 64 | 50260 | 10.70 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.725 | 101 | 164005 | 13.50 | ug/L | | 94 |
| 9) acrolein | 3.272 | 56 | 9206 | 133.90 | ug/L | | 97 |
| 10) 1,1-dichloroethene | 3.339 | 96 | 80418 | 12.07 | ug/L | # | 84 |
| 11) acetone | 3.467 | 43 | 10057 | 12.51 | ug/L | | 95 |
| 12) carbon disulfide | 3.588 | 76 | 265007 | 12.15 | ug/L | | 98 |
| 13) methylene chloride | 3.959 | 84 | 100084 | 10.27 | ug/L | | 92 |
| 14) acrylonitrile | 4.294 | 53 | 112941 | 112.04 | ug/L | | 89 |
| 15) trans-1,2-dichloroethene | 4.263 | 96 | 92990 | 10.39 | ug/L | | 92 |
| 16) methyl-t-butyl ether | 4.257 | 73 | 134223 | 9.19 | ug/L | | 96 |
| 17) acetonitrile | 3.825 | 41 | 46639 | 118.78 | ug/L | | 96 |
| 18) hexane | 4.543 | 57 | 143888 | 13.29 | ug/L | | 95 |
| 19) 1,1-dichloroethane | 4.792 | 63 | 180487 | 10.29 | ug/L | | 95 |
| 20) vinyl acetate | 4.871 | 43 | 47745 | 9.26 | ug/L | | 92 |
| 21) cis-1,2-dichloroethene | 5.534 | 96 | 93800 | 9.59 | ug/L | | 91 |
| 22) 2,2-dichloropropane | 5.498 | 77 | 185148 | 11.68 | ug/L | | 97 |
| 23) 2-butanone | 5.589 | 72 | 2315 | 9.18 | ug/L | # | 69 |
| 24) methyl acrylate | 5.680 | 55 | 28118 | 9.37 | ug/L | | 99 |
| 25) chloroform | 5.954 | 83 | 180087 | 10.27 | ug/L | | 96 |
| 27) 1,1,1-trichloroethane | 6.136 | 97 | 192686 | 11.39 | ug/L | | 87 |
| 28) cyclohexane | 6.161 | 56 | 172514 | 12.27 | ug/L | | 95 |
| 29) carbon tetrachloride | 6.337 | 117 | 165778 | 11.98 | ug/L | | 93 |
| 31) benzene | 6.623 | 78 | 345326 | 9.78 | ug/L | | 95 |
| 32) 1,1-dichloropropene | 6.349 | 75 | 136563 | 10.86 | ug/L | | 94 |
| 33) 1,2-dichloroethane | 6.696 | 62 | 100878 | 10.62 | ug/L | | 92 |
| 34) trichloroethene | 7.505 | 95 | 104016 | 10.14 | ug/L | | 92 |
| 35) ethyl acrylate | 7.687 | 55 | 43396 | 9.45 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.839 | 63 | 77399 | 9.18 | ug/L | | 90 |
| 37) methyl methacrylate | 8.009 | 41 | 33836 | 10.01 | ug/L | | 93 |
| 38) dibromomethane | 8.028 | 93 | 33192 | 9.71 | ug/L | # | 83 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040204.D
Acq On : 2 Apr 2008 9:20 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 02 09:51:07 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

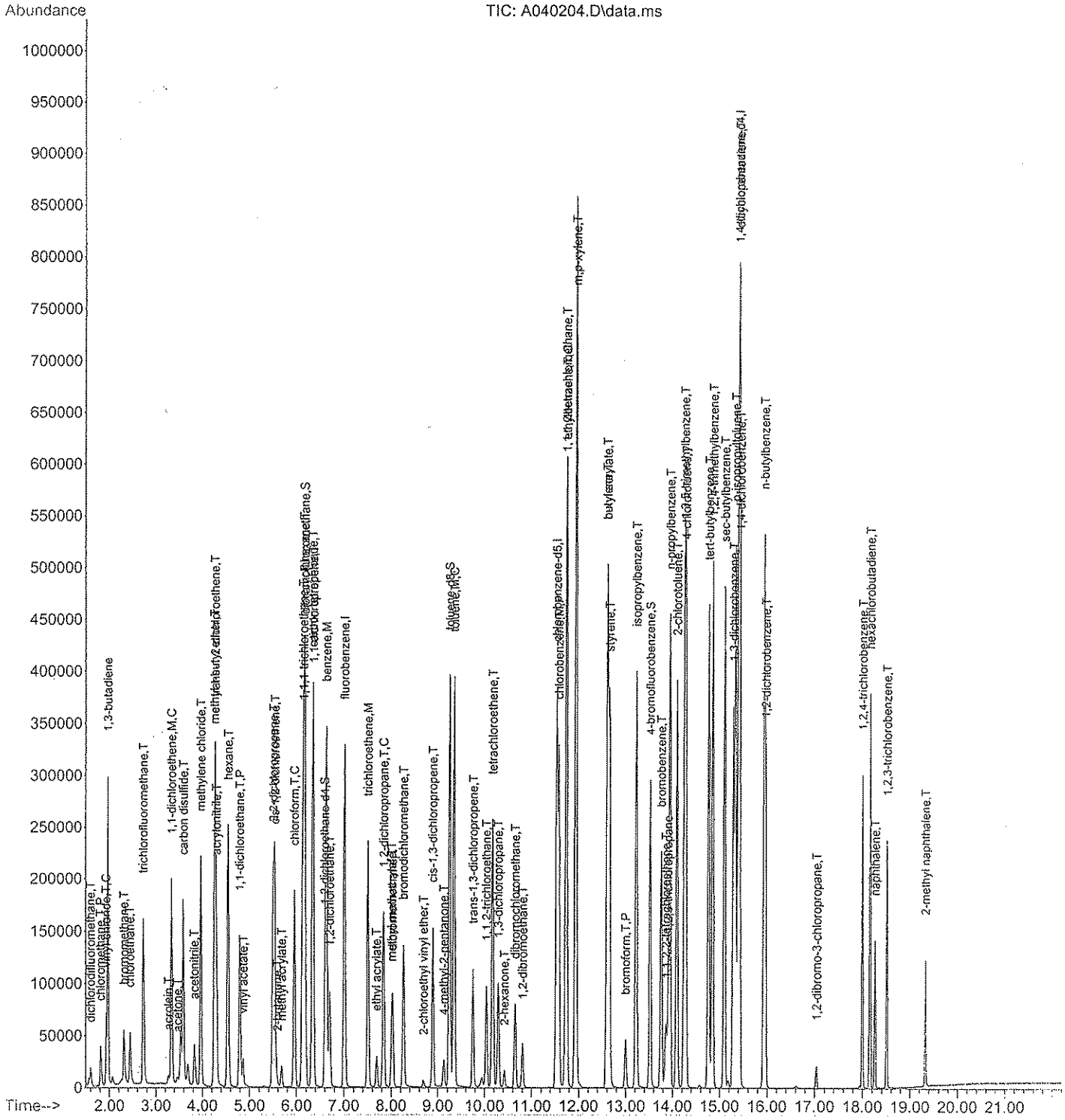
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.259 | 83 | 119582 | 10.18 | ug/L | | 95 |
| 40) | 2-chloroethyl vinyl ether | 8.690 | 63 | 3764 | 6.91 | ug/L | | 96 |
| 42) | cis-1,3-dichloropropene | 8.891 | 75 | 108507 | 8.94 | ug/L | | 93 |
| 43) | 4-methyl-2-pentanone | 9.128 | 43 | 28662 | 8.23 | ug/L | | 91 |
| 45) | toluene | 9.347 | 92 | 229583 | 9.28 | ug/L | | 86 |
| 46) | 1,1,2-trichloroethane | 10.034 | 83 | 34975 | 8.74 | ug/L | | 88 |
| 47) | 1,3-dichloropropane | 10.284 | 76 | 74324 | 8.65 | ug/L | | 91 |
| 48) | tetrachloroethene | 10.168 | 164 | 83931 | 9.51 | ug/L | | 90 |
| 49) | trans-1,3-dichloropropene | 9.755 | 75 | 80229 | 8.91 | ug/L | | 93 |
| 50) | 2-hexanone | 10.417 | 43 | 19088 | 8.37 | ug/L | # | 64 |
| 51) | dibromochloromethane | 10.649 | 129 | 60600 | 9.12 | ug/L | | 95 |
| 52) | 1,2-dibromoethane | 10.807 | 107 | 40787 | 8.39 | ug/L | | 96 |
| 53) | chlorobenzene | 11.567 | 112 | 230134 | 8.88 | ug/L | | 99 |
| 54) | 1,1,1,2-tetrachloroethane | 11.725 | 131 | 85658 | 9.53 | ug/L | | 95 |
| 55) | ethylbenzene | 11.737 | 91 | 476474 | 9.74 | ug/L | | 96 |
| 56) | m,p-xylene | 11.932 | 106 | 348051 | 18.97 | ug/L | # | 75 |
| 57) | butyl acrylate | 12.595 | 55 | 91708 | 9.18 | ug/L | | 92 |
| 58) | o-xylene | 12.595 | 106 | 161862 | 9.20 | ug/L | # | 84 |
| 59) | styrene | 12.643 | 104 | 256655 | 9.11 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.221 | 105 | 407928 | 9.89 | ug/L | | 93 |
| 61) | bromobenzene | 13.756 | 156 | 101120 | 9.00 | ug/L | | 91 |
| 62) | bromoform | 12.996 | 173 | 33867 | 9.05 | ug/L | | 96 |
| 64) | 1,2,3-trichloropropane | 13.902 | 75 | 36046 | 8.99 | ug/L | | 98 |
| 65) | n-propylbenzene | 13.939 | 91 | 544340 | 10.13 | ug/L | | 96 |
| 66) | 2-chlorotoluene | 14.085 | 91 | 328172 | 9.71 | ug/L | | 91 |
| 67) | 4-chlorotoluene | 14.273 | 91 | 384357 | 9.98 | ug/L | | 89 |
| 68) | 1,3,5-trimethylbenzene | 14.243 | 105 | 389377 | 9.99 | ug/L | | 83 |
| 70) | 1,1,2,2-tetrachloroethane | 13.860 | 83 | 39992 | 8.09 | ug/L | | 98 |
| 71) | tert-butylbenzene | 14.760 | 119 | 317878 | 9.44 | ug/L | | 92 |
| 72) | sec-butylbenzene | 15.094 | 105 | 465755 | 9.65 | ug/L | | 98 |
| 73) | 1,2,4-trimethylbenzene | 14.845 | 105 | 396722 | 9.23 | ug/L | | 84 |
| 74) | 1,3-dichlorobenzene | 15.283 | 146 | 197159 | 8.80 | ug/L | | 90 |
| 75) | p-isopropyltoluene | 15.325 | 119 | 388704 | 9.62 | ug/L | | 93 |
| 76) | dicyclopentadiene | 15.398 | 66 | 437514 | 10.22 | ug/L | | 98 |
| 77) | 1,4-dichlorobenzene | 15.422 | 146 | 192439 | 8.75 | ug/L | | 91 |
| 78) | 1,2-dichlorobenzene | 15.958 | 146 | 158584 | 8.71 | ug/L | | 94 |
| 79) | n-butylbenzene | 15.921 | 91 | 366855 | 9.74 | ug/L | | 93 |
| 80) | 1,2-dibromo-3-chloropr... | 17.040 | 75 | 6749 | 8.21 | ug/L | # | 76 |
| 81) | 1,2,4-trichlorobenzene | 17.995 | 180 | 99877 | 8.07 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.153 | 225 | 88240 | 9.93 | ug/L | | 95 |
| 83) | naphthalene | 18.256 | 128 | 109038 | 7.13 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.506 | 180 | 74254 | 8.04 | ug/L | | 92 |
| 85) | 2-methyl naphthalene | 19.321 | 142 | 50959 | 7.73 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040204.D
Acq On : 2 Apr 2008 9:20 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 02 09:51:07 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040204.D 25ML0331.M Wed Apr 02 09:51:08 2008 Page: 3

# Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040208\A040219.D
Acq On : 2 Apr 2008 7:07 pm
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 02 19:32:00 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

VC 11 OCE

4/2/08

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 57 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.090 | 0.240 | -166.7# | 143 | 0.00 |
| 3 | T,P | chloromethane | 0.198 | 0.335 | -69.2# | 105 | 0.00 |
| 4 | T,C | vinyl chloride | 0.216 | 0.358 | -65.7# | 97 | 0.00 |
| 5 | | 1,3-butadiene | 0.209 | 0.318 | -52.2# | 87 | 0.00 |
| 6 | T | bromomethane | 0.059 | 0.157 | -166.1# | 135 | 0.00 |
| 7 | T | chloroethane | 0.129 | 0.193 | -49.6# | 92 | 0.02 |
| 8 | T | trichlorofluoromethane | 0.333 | 0.584 | -75.4# | 102 | 0.00 |
| 9 | T | acrolein | 0.002 | 0.002 | 0.0 | 120 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.183 | 0.228 | -24.6# | 70 | 0.00 |
| 11 | T | acetone | 0.022 | 0.029 | -31.8# | 91 | -0.01 |
| 12 | T | carbon disulfide | 0.598 | 0.721 | -20.6# | 68 | 0.00 |
| 13 | T | methylene chloride | 0.267 | 0.243 | 9.0 | 57 | 0.00 |
| 14 | T | acrylonitrile | 0.028 | 0.030 | -7.1 | 70 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.245 | 0.256 | -4.5 | 59 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.400 | 0.384 | 4.0 | 61 | 0.00 |
| 17 | T | acetonitrile | 0.011 | 0.013 | -18.2 | 76 | 0.00 |
| 18 | T | hexane | 0.297 | 0.373 | -25.6# | 63 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.480 | 0.502 | -4.6 | 61 | 0.00 |
| 20 | T | vinyl acetate | 0.141 | 0.141 | 0.0 | 62 | -0.01 |
| 21 | T | cis-1,2-dichloroethene | 0.268 | 0.260 | 3.0 | 57 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.434 | 0.519 | -19.6 | 65 | 0.00 |
| 23 | T | 2-butanone | 0.007 | 0.007 | 0.0 | 53 | -0.01 |
| 24 | T | methyl acrylate | 0.082 | 0.080 | 2.4 | 66 | 0.00 |
| 25 | T,C | chloroform | 0.480 | 0.503 | -4.8 | 63 | 0.00 |
| 26 | S | dibromofluoromethane | 0.230 | 0.247 | -7.4 | 62 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.463 | 0.548 | -18.4 | 68 | 0.00 |
| 28 | T | cyclohexane | 0.385 | 0.462 | -20.0# | 64 | 0.00 |
| 29 | T | carbon tetrachloride | 0.379 | 0.472 | -24.5# | 69 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.201 | 0.239 | -18.9 | 71 | 0.00 |
| 31 | M | benzene | 0.967 | 0.961 | 0.6 | 59 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.344 | 0.382 | -11.0 | 61 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.260 | 0.285 | -9.6 | 70 | 0.00 |
| 34 | M | trichloroethene | 0.281 | 0.288 | -2.5 | 59 | 0.00 |
| 35 | T | ethyl acrylate | 0.126 | 0.122 | 3.2 | 64 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.231 | 0.223 | 3.5 | 59 | 0.00 |
| 37 | T | methyl methacrylate | 0.093 | 0.098 | -5.4 | 72 | 0.00 |
| 38 | T | dibromomethane | 0.094 | 0.092 | 2.1 | 63 | 0.00 |
| 39 | T | bromodichloromethane | 0.322 | 0.336 | -4.3 | 64 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.015 | 0.015 | 0.0 | 55 | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 60 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.419 | 0.379 | 9.5 | 57 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.120 | 0.108 | 10.0 | 63 | 0.00 |
| 44 | S | toluene-d8 | 1.254 | 1.263 | -0.7 | 61 | 0.00 |
| 45 | M,C | toluene | 0.853 | 0.804 | 5.7 | 58 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.138 | 0.123 | 10.9 | 59 | 0.00 |

mc/ord

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040208\A040219.D
Acq On : 2 Apr 2008 7:07 pm
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 02 19:32:00 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.296 | 0.267 | 9.8 | 59 | 0.00 |
| 48 | T | tetrachloroethene | 0.304 | 0.297 | 2.3 | 57 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.286 | 8.0 | 60 | 0.00 |
| 50 | T | 2-hexanone | 0.079 | 0.068 | 13.9 | 60 | 0.00 |
| 51 | T | dibromochloromethane | 0.229 | 0.219 | 4.4 | 62 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.168 | 0.148 | 11.9 | 58 | 0.00 |
| 53 | M,P | chlorobenzene | 0.894 | 0.824 | 7.8 | 58 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.310 | 0.296 | 4.5 | 60 | 0.00 |
| 55 | T,C | ethylbenzene | 1.687 | 1.678 | 0.5 | 60 | 0.00 |
| 56 | T | m,p-xylene | 0.633 | 0.610 | 3.6 | 58 | 0.00 |
| 57 | T | butyl acrylate | 0.345 | 0.326 | 5.5 | 66 | 0.00 |
| 58 | T | o-xylene | 0.607 | 0.567 | 6.6 | 58 | 0.00 |
| 59 | T | styrene | 0.972 | 0.910 | 6.4 | 59 | 0.00 |
| 60 | T | isopropylbenzene | 1.423 | 1.455 | -2.2 | 61 | 0.00 |
| 61 | T | bromobenzene | 0.388 | 0.357 | 8.0 | 59 | 0.00 |
| 62 | T,P | bromoform | 0.129 | 0.122 | 5.4 | 63 | 0.00 |
| 63 | S | 4-bromofluorobenzene | 0.461 | 0.506 | -9.8 | 68 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.138 | 0.132 | 4.3 | 66 | 0.00 |
| 65 | T | n-propylbenzene | 1.854 | 1.953 | -5.3 | 63 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.166 | 1.180 | -1.2 | 63 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.329 | 1.369 | -3.0 | 64 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.345 | 1.392 | -3.5 | 62 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 69 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.314 | 0.255 | 18.8 | 61 | 0.00 |
| 71 | T | tert-butylbenzene | 2.137 | 2.003 | 6.3 | 60 | 0.00 |
| 72 | T | sec-butylbenzene | 3.062 | 3.005 | 1.9 | 62 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.728 | 2.496 | 8.5 | 62 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.421 | 1.245 | 12.4 | 61 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.563 | 2.512 | 2.0 | 62 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 2.691 | 0.9 | 69 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.396 | 1.205 | 13.7 | 62 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.155 | 1.002 | 13.2 | 63 | 0.00 |
| 79 | T | n-butylbenzene | 2.389 | 2.402 | -0.5 | 63 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.052 | 0.046 | 11.5 | 70 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.785 | 0.630 | 19.7 | 59 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.564 | 0.572 | -1.4 | 64 | 0.00 |
| 83 | T | naphthalene | 0.970 | 0.658 | 32.2# | 56 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.586 | 0.477 | 18.6 | 63 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.418 | 0.314 | 24.9# | 74 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040219.D
Acq On : 2 Apr 2008 7:07 pm
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 02 19:32:00 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 351205 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 279257 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 157955 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.164 | 113 | 86725 | 10.71 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.10% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.596 | 65 | 83948 | 11.88 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 118.80% | | | | |
| 44) toluene-d8 | 9.248 | 98 | 352705 | 10.07 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.70% | | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 141266 | 10.98 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.80% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 84210 | 26.63 | ug/L | | 97 |
| 3) chloromethane | 1.816 | 50 | 117732 | 16.91 | ug/L | | 94 |
| 4) vinyl chloride | 1.932 | 62 | 125741 | 16.56 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.974 | 39 | 111537 | 15.22 | ug/L | | 89 |
| 6) bromomethane | 2.315 | 94 | 54971 | 26.62 | ug/L | | 97 |
| 7) chloroethane | 2.443 | 64 | 67769 | 15.00 | ug/L | | 96 |
| 8) trichlorofluoromethane | 2.722 | 101 | 204951 | 17.53 | ug/L | | 93 |
| 9) acrolein | 3.276 | 56 | 8294 | 125.40 | ug/L | | 95 |
| 10) 1,1-dichloroethene | 3.337 | 96 | 80019 | 12.48 | ug/L | # | 85 |
| 11) acetone | 3.464 | 43 | 10073 | 13.03 | ug/L | | 91 |
| 12) carbon disulfide | 3.586 | 76 | 253338 | 12.07 | ug/L | | 99 |
| 13) methylene chloride | 3.963 | 84 | 85418 | 9.11 | ug/L | | 93 |
| 14) acrylonitrile | 4.298 | 53 | 106900 | 110.24 | ug/L | | 89 |
| 15) trans-1,2-dichloroethene | 4.261 | 96 | 89970 | 10.45 | ug/L | | 89 |
| 16) methyl-t-butyl ether | 4.261 | 73 | 134793 | 9.59 | ug/L | | 96 |
| 17) acetonitrile | 3.823 | 41 | 44101 | 116.75 | ug/L | | 98 |
| 18) hexane | 4.541 | 57 | 131172 | 12.59 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.796 | 63 | 176336 | 10.45 | ug/L | | 96 |
| 20) vinyl acetate | 4.863 | 43 | 49444 | 9.96 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.532 | 96 | 91240 | 9.69 | ug/L | | 89 |
| 22) 2,2-dichloropropane | 5.496 | 77 | 182321 | 11.95 | ug/L | | 96 |
| 23) 2-butanone | 5.575 | 72 | 2315 | 9.55 | ug/L | # | 50 |
| 24) methyl acrylate | 5.678 | 55 | 28101 | 9.73 | ug/L | | 99 |
| 25) chloroform | 5.958 | 83 | 176792 | 10.48 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 192470 | 11.83 | ug/L | | 89 |
| 28) cyclohexane | 6.164 | 56 | 162224 | 11.99 | ug/L | | 95 |
| 29) carbon tetrachloride | 6.335 | 117 | 165754 | 12.45 | ug/L | | 94 |
| 31) benzene | 6.627 | 78 | 337488 | 9.94 | ug/L | | 95 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 134199 | 11.10 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.700 | 62 | 100151 | 10.96 | ug/L | | 94 |
| 34) trichloroethene | 7.508 | 95 | 101207 | 10.26 | ug/L | | 91 |
| 35) ethyl acrylate | 7.691 | 55 | 42895 | 9.71 | ug/L | | 95 |
| 36) 1,2-dichloropropane | 7.837 | 63 | 78297 | 9.65 | ug/L | | 93 |
| 37) methyl methacrylate | 8.007 | 41 | 34329 | 10.56 | ug/L | | 91 |
| 38) dibromomethane | 8.031 | 93 | 32430 | 9.86 | ug/L | # | 88 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040219.D
Acq On : 2 Apr 2008 7:07 pm
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 02 19:32:00 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

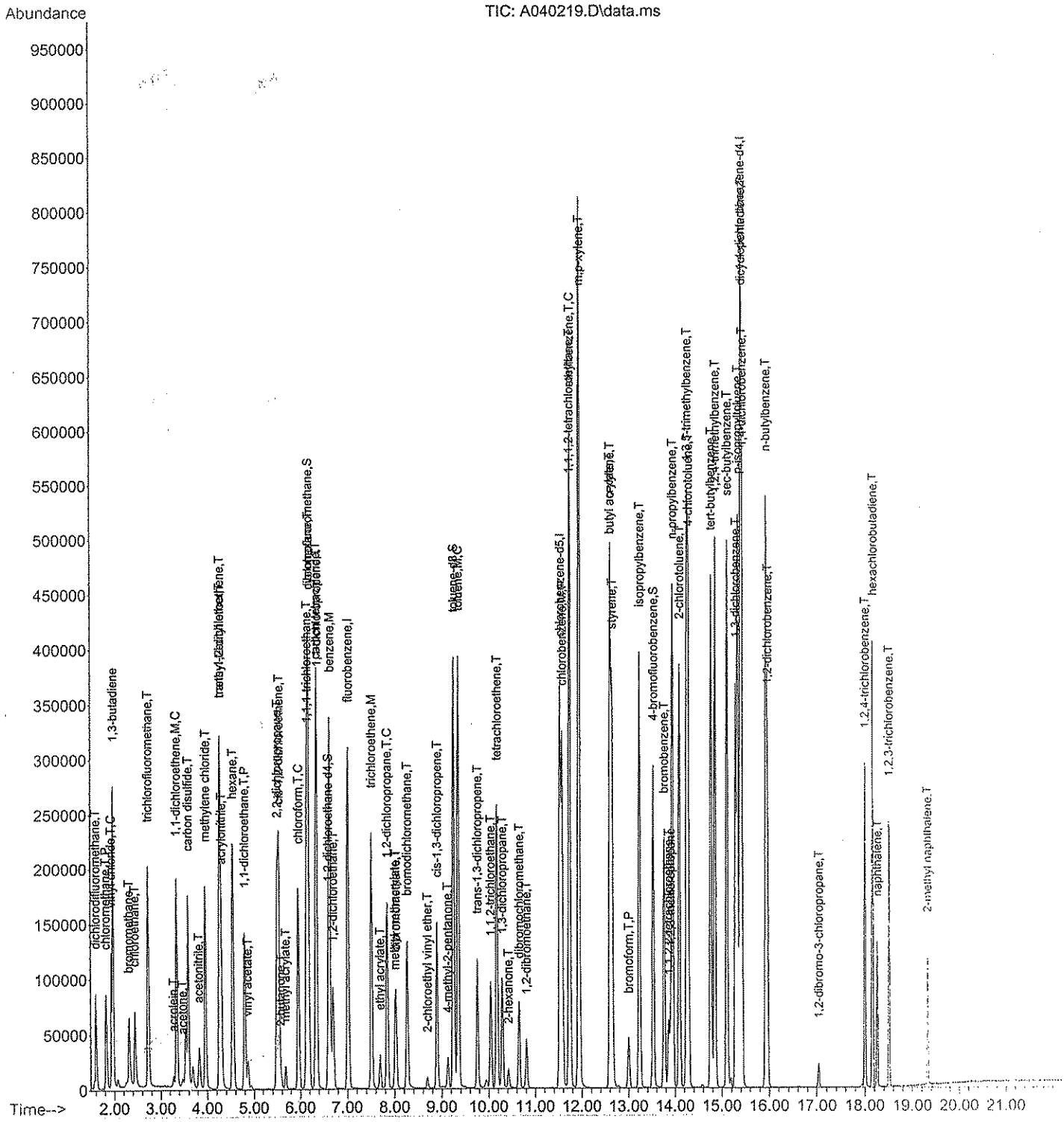
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.263 | 83 | 118175 | 10.46 | ug/L | | 96 |
| 40) 2-chloroethyl vinyl ether | 8.694 | 63 | 5099 | 9.72 | ug/L | | 97 |
| 42) cis-1,3-dichloropropene | 8.895 | 75 | 105958 | 9.06 | ug/L | | 93 |
| 43) 4-methyl-2-pentanone | 9.126 | 43 | 30021 | 8.95 | ug/L | | 97 |
| 45) toluene | 9.345 | 92 | 224631 | 9.43 | ug/L | # | 85 |
| 46) 1,1,2-trichloroethane | 10.038 | 83 | 34393 | 8.92 | ug/L | | 94 |
| 47) 1,3-dichloropropane | 10.288 | 76 | 74641 | 9.02 | ug/L | | 95 |
| 48) tetrachloroethene | 10.172 | 164 | 83039 | 9.77 | ug/L | | 92 |
| 49) trans-1,3-dichloropropene | 9.752 | 75 | 79991 | 9.22 | ug/L | | 95 |
| 50) 2-hexanone | 10.415 | 43 | 18945 | 8.62 | ug/L | # | 63 |
| 51) dibromochloromethane | 10.653 | 129 | 61020 | 9.53 | ug/L | | 97 |
| 52) 1,2-dibromoethane | 10.805 | 107 | 41253 | 8.80 | ug/L | | 99 |
| 53) chlorobenzene | 11.571 | 112 | 230053 | 9.21 | ug/L | | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.723 | 131 | 82559 | 9.54 | ug/L | | 93 |
| 55) ethylbenzene | 11.735 | 91 | 468508 | 9.94 | ug/L | | 96 |
| 56) m,p-xylene | 11.936 | 106 | 340891 | 19.28 | ug/L | # | 75 |
| 57) butyl acrylate | 12.592 | 55 | 91078 | 9.46 | ug/L | | 92 |
| 58) o-xylene | 12.599 | 106 | 158370 | 9.34 | ug/L | # | 81 |
| 59) styrene | 12.641 | 104 | 254041 | 9.36 | ug/L | | 93 |
| 60) isopropylbenzene | 13.225 | 105 | 406456 | 10.23 | ug/L | | 93 |
| 61) bromobenzene | 13.760 | 156 | 99616 | 9.20 | ug/L | | 94 |
| 62) bromoform | 13.000 | 173 | 34041 | 9.44 | ug/L | | 98 |
| 64) 1,2,3-trichloropropane | 13.900 | 75 | 36988 | 9.57 | ug/L | | 90 |
| 65) n-propylbenzene | 13.936 | 91 | 545494 | 10.53 | ug/L | | 95 |
| 66) 2-chlorotoluene | 14.088 | 91 | 329549 | 10.12 | ug/L | | 92 |
| 67) 4-chlorotoluene | 14.277 | 91 | 382422 | 10.30 | ug/L | | 90 |
| 68) 1,3,5-trimethylbenzene | 14.247 | 105 | 388680 | 10.34 | ug/L | | 84 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 40333 | 8.14 | ug/L | | 95 |
| 71) tert-butylbenzene | 14.757 | 119 | 316397 | 9.37 | ug/L | | 90 |
| 72) sec-butylbenzene | 15.098 | 105 | 474638 | 9.81 | ug/L | | 98 |
| 73) 1,2,4-trimethylbenzene | 14.849 | 105 | 394324 | 9.15 | ug/L | | 83 |
| 74) 1,3-dichlorobenzene | 15.280 | 146 | 196727 | 8.77 | ug/L | | 90 |
| 75) p-isopropyltoluene | 15.329 | 119 | 396807 | 9.80 | ug/L | | 94 |
| 76) dicyclopentadiene | 15.396 | 66 | 424980 | 9.90 | ug/L | | 96 |
| 77) 1,4-dichlorobenzene | 15.420 | 146 | 190397 | 8.63 | ug/L | | 91 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 158255 | 8.67 | ug/L | | 94 |
| 79) n-butylbenzene | 15.919 | 91 | 379369 | 10.05 | ug/L | | 92 |
| 80) 1,2-dibromo-3-chloropr... | 17.038 | 75 | 7301 | 8.86 | ug/L | # | 73 |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 99590 | 8.03 | ug/L | | 94 |
| 82) hexachlorobutadiene | 18.157 | 225 | 90323 | 10.14 | ug/L | | 95 |
| 83) naphthalene | 18.260 | 128 | 103863 | 6.78 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.503 | 180 | 75392 | 8.14 | ug/L | | 91 |
| 85) 2-methyl naphthalene | 19.318 | 142 | 49672 | 7.51 | ug/L | | 100 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040219.D
Acq On : 2 Apr 2008 7:07 pm
Sample : ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 02 19:32:00 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040308\A040312.D
Acq On : 3 Apr 2008 3:34 pm
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 16:11:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 113 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.206 | 0.158 | 23.3# | 86 | 0.00 |
| 3 | T,P | chloromethane | 0.329 | 0.583 | -77.2# | 215# | 0.00 |
| 4 | T,C | vinyl chloride | 0.352 | 0.293 | 16.8 | 99 | 0.00 |
| 5 | | 1,3-butadiene | 0.331 | 0.274 | 17.2 | 93 | 0.00 |
| 6 | T | bromomethane | 0.124 | 0.014 | 88.7# | 12# | 0.00 |
| 7 | T | chloroethane | 0.208 | 0.173 | 16.8 | 100 | 0.00 |
| 8 | T | trichlorofluoromethane | 0.621 | 0.488 | 21.4# | 91 | 0.00 |
| 9 | T | acrolein | 0.004 | 0.003 | 25.0# | 114 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.273 | 0.231 | 15.4 | 104 | 0.00 |
| 11 | T | acetone | 0.036 | 0.031 | 13.9 | 106 | 0.00 |
| 12 | T | carbon disulfide | 0.889 | 0.756 | 15.0 | 101 | 0.00 |
| 13 | T | methylene chloride | 0.323 | 0.302 | 6.5 | 123 | 0.00 |
| 14 | T | acrylonitrile | 0.036 | 0.032 | 11.1 | 118 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.299 | 0.280 | 6.4 | 115 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.462 | 0.416 | 10.0 | 118 | 0.00 |
| 17 | T | acetonitrile | 0.015 | 0.012 | 20.0 | 103 | 0.00 |
| 18 | T | hexane | 0.377 | 0.374 | 0.8 | 110 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.596 | 0.536 | 10.1 | 112 | 0.00 |
| 20 | T | vinyl acetate | 0.166 | 0.145 | 12.7 | 112 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.305 | 0.284 | 6.9 | 117 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.590 | 0.519 | 12.0 | 107 | 0.00 |
| 23 | T | 2-butanone | 0.008 | 0.008 | 0.0 | 122 | -0.01 |
| 24 | T | methyl acrylate | 0.091 | 0.082 | 9.9 | 121 | 0.00 |
| 25 | T,C | chloroform | 0.600 | 0.536 | 10.7 | 111 | 0.00 |
| 26 | S | dibromofluoromethane | 0.260 | 0.255 | 1.9 | 114 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.633 | 0.553 | 12.6 | 107 | 0.00 |
| 28 | T | cyclohexane | 0.477 | 0.464 | 2.7 | 110 | 0.00 |
| 29 | T | carbon tetrachloride | 0.545 | 0.459 | 15.8 | 101 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.250 | 0.235 | 6.0 | 111 | 0.00 |
| 31 | M | benzene | 1.120 | 1.027 | 8.3 | 113 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.433 | 0.392 | 9.5 | 110 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.346 | 0.295 | 14.7 | 110 | 0.00 |
| 34 | M | trichloroethene | 0.336 | 0.307 | 8.6 | 114 | 0.00 |
| 35 | T | ethyl acrylate | 0.136 | 0.128 | 5.9 | 123 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.255 | 0.236 | 7.5 | 116 | 0.00 |
| 37 | T | methyl methacrylate | 0.108 | 0.098 | 9.3 | 120 | 0.00 |
| 38 | T | dibromomethane | 0.111 | 0.096 | 13.5 | 114 | -0.01 |
| 39 | T | bromodichloromethane | 0.396 | 0.354 | 10.6 | 113 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.010 | 0.001 | 90.0# | 21# | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 118 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.411 | 0.374 | 9.0 | 115 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.123 | 0.108 | 12.2 | 115 | 0.00 |
| 44 | S | toluene-d8 | 1.215 | 1.206 | 0.7 | 114 | 0.00 |
| 45 | M,C | toluene | 0.871 | 0.794 | 8.8 | 113 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.136 | 0.123 | 9.6 | 119 | 0.00 |

Data File: C:\msdchem\1\DATA\A040308\A040312.D
Acq On : 3 Apr 2008 3:34 pm
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 16:11:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.292 | 0.267 | 8.6 | 118 | 0.00 |
| 48 | T | tetrachloroethene | 0.318 | 0.291 | 8.5 | 112 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.282 | 9.3 | 116 | 0.00 |
| 50 | T | 2-hexanone | 0.074 | 0.070 | 5.4 | 127 | 0.00 |
| 51 | T | dibromochloromethane | 0.240 | 0.215 | 10.4 | 117 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.162 | 0.149 | 8.0 | 119 | 0.00 |
| 53 | M,P | chlorobenzene | 0.884 | 0.814 | 7.9 | 117 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.328 | 0.293 | 10.7 | 112 | 0.00 |
| 55 | T,C | ethylbenzene | 1.766 | 1.640 | 7.1 | 113 | 0.00 |
| 56 | T | m,p-xylene | 0.644 | 0.605 | 6.1 | 115 | 0.00 |
| 57 | T | butyl acrylate | 0.352 | 0.321 | 8.8 | 116 | 0.00 |
| 58 | T | o-xylene | 0.603 | 0.570 | 5.5 | 117 | 0.00 |
| 59 | T | styrene | 0.967 | 0.895 | 7.4 | 115 | 0.00 |
| 60 | T | isopropylbenzene | 1.492 | 1.422 | 4.7 | 112 | 0.00 |
| 61 | T | bromobenzene | 0.382 | 0.351 | 8.1 | 117 | 0.00 |
| 62 | T,P | bromoform | 0.134 | 0.118 | 11.9 | 114 | 0.00 |
| 63 | S | 4-bromofluorobenzene | 0.512 | 0.502 | 2.0 | 116 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.148 | 0.125 | 15.5 | 111 | 0.00 |
| 65 | T | n-propylbenzene | 2.021 | 1.897 | 6.1 | 112 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.248 | 1.151 | 7.8 | 113 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.464 | 1.332 | 9.0 | 111 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.438 | 1.358 | 5.6 | 111 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 115 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.278 | 0.248 | 10.8 | 115 | 0.00 |
| 71 | T | tert-butylbenzene | 2.035 | 1.954 | 4.0 | 112 | 0.00 |
| 72 | T | sec-butylbenzene | 2.977 | 2.904 | 2.5 | 112 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.608 | 2.474 | 5.1 | 111 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.326 | 1.229 | 7.3 | 114 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.488 | 2.409 | 3.2 | 111 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 2.542 | 6.4 | 112 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.319 | 1.185 | 10.2 | 112 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.081 | 0.978 | 9.5 | 113 | 0.00 |
| 79 | T | n-butylbenzene | 2.367 | 2.288 | 3.3 | 109 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.053 | 0.043 | 18.9 | 109 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.669 | 0.620 | 7.3 | 114 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.582 | 0.516 | 11.3 | 106 | 0.00 |
| 83 | T | naphthalene | 0.709 | 0.660 | 6.9 | 114 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.514 | 0.467 | 9.1 | 117 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.346 | 0.300 | 13.3 | 115 | 0.00 |

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

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040312.D
Acq On : 3 Apr 2008 3:34 pm
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 16:11:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.006 | 96 | 690451 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 588786 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 329928 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.161 | 113 | 176227 | 9.80 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.00% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 162213 | 9.41 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 94.10% | | | | |
| 44) toluene-d8 | 9.244 | 98 | 710128 | 9.93 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.30% | | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 295498 | 9.81 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.10% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 108753 | 7.63 | ug/L | | 98 |
| 3) chloromethane | 1.807 | 50 | 402871 | 17.71 | ug/L | | 98 |
| 4) vinyl chloride | 1.928 | 62 | 202008 | 8.31 | ug/L | | 99 |
| 5) 1,3-butadiene | 1.971 | 39 | 189451 | 8.29 | ug/L | | 94 |
| 6) bromomethane | 2.311 | 94 | 9442 | 1.10 | ug/L | # | 82 |
| 7) chloroethane | 2.439 | 64 | 119698 | 8.34 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.725 | 101 | 337262 | 7.86 | ug/L | | 98 |
| 9) acrolein | 3.272 | 56 | 23747 | 86.81 | ug/L | | 96 |
| 10) 1,1-dichloroethene | 3.339 | 96 | 159657 | 8.47 | ug/L | | 96 |
| 11) acetone | 3.479 | 43 | 21164 | 8.56 | ug/L | | 98 |
| 12) carbon disulfide | 3.582 | 76 | 522002 | 8.50 | ug/L | | 100 |
| 13) methylene chloride | 3.959 | 84 | 208548 | 9.36 | ug/L | | 96 |
| 14) acrylonitrile | 4.300 | 53 | 219064 | 88.98 | ug/L | | 97 |
| 15) trans-1,2-dichloroethene | 4.263 | 96 | 193243 | 9.35 | ug/L | | 93 |
| 16) methyl-t-butyl ether | 4.263 | 73 | 287140 | 9.00 | ug/L | | 100 |
| 17) acetonitrile | 3.826 | 41 | 82643 | 77.57 | ug/L | | 98 |
| 18) hexane | 4.543 | 57 | 257954 | 9.90 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.793 | 63 | 370401 | 9.00 | ug/L | | 99 |
| 20) vinyl acetate | 4.866 | 43 | 100093 | 8.76 | ug/L | | 100 |
| 21) cis-1,2-dichloroethene | 5.534 | 96 | 196072 | 9.31 | ug/L | | 90 |
| 22) 2,2-dichloropropane | 5.492 | 77 | 358442 | 8.80 | ug/L | | 98 |
| 23) 2-butanone | 5.589 | 72 | 5356 | 10.27 | ug/L | # | 81 |
| 24) methyl acrylate | 5.680 | 55 | 56805 | 9.02 | ug/L | | 95 |
| 25) chloroform | 5.954 | 83 | 370398 | 8.94 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.130 | 97 | 381900 | 8.74 | ug/L | | 99 |
| 28) cyclohexane | 6.161 | 56 | 320370 | 9.72 | ug/L | | 97 |
| 29) carbon tetrachloride | 6.331 | 117 | 316799 | 8.42 | ug/L | | 99 |
| 31) benzene | 6.623 | 78 | 709185 | 9.17 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.349 | 75 | 270399 | 9.04 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.696 | 62 | 203360 | 8.50 | ug/L | | 98 |
| 34) trichloroethene | 7.505 | 95 | 211933 | 9.14 | ug/L | | 99 |
| 35) ethyl acrylate | 7.687 | 55 | 88272 | 9.39 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.839 | 63 | 163058 | 9.26 | ug/L | | 94 |
| 37) methyl methacrylate | 8.010 | 41 | 67946 | 9.12 | ug/L | | 92 |
| 38) dibromomethane | 8.028 | 93 | 66393 | 8.66 | ug/L | | 97 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040312.D
Acq On : 3 Apr 2008 3:34 pm
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 16:11:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

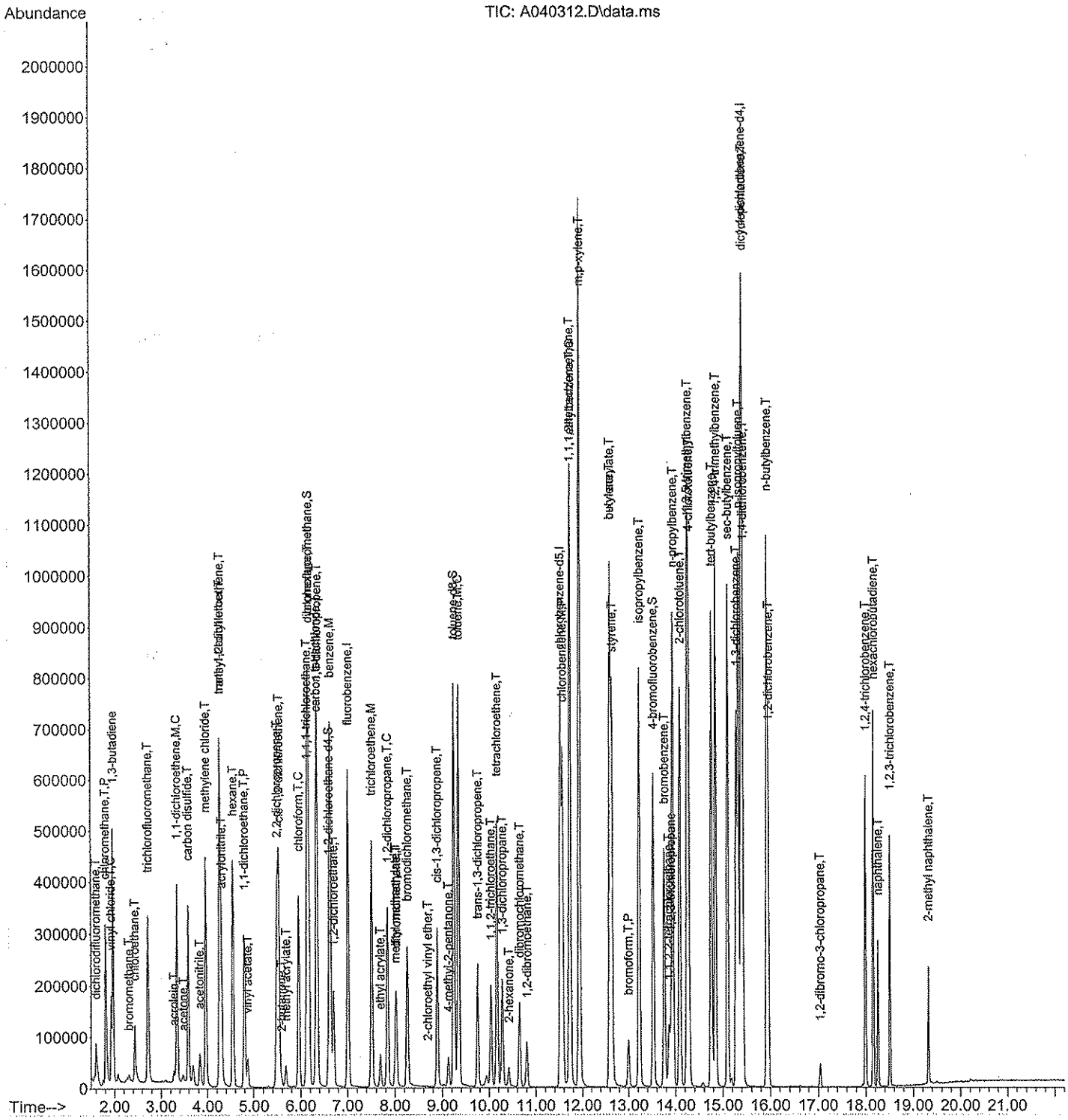
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.259 | 83 | 244339 | 8.94 | ug/L | | 98 |
| 40) 2-chloroethyl vinyl ether | 8.691 | 63 | 727 | 1.11 | ug/L | # | 47 |
| 42) cis-1,3-dichloropropene | 8.891 | 75 | 220464 | 9.12 | ug/L | | 96 |
| 43) 4-methyl-2-pentanone | 9.129 | 43 | 63445 | 8.75 | ug/L | | 97 |
| 45) toluene | 9.341 | 92 | 467311 | 9.11 | ug/L | | 97 |
| 46) 1,1,2-trichloroethane | 10.035 | 83 | 72694 | 9.07 | ug/L | | 98 |
| 47) 1,3-dichloropropane | 10.284 | 76 | 157088 | 9.13 | ug/L | | 100 |
| 48) tetrachloroethene | 10.168 | 164 | 171263 | 9.14 | ug/L | | 98 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 165830 | 9.05 | ug/L | | 96 |
| 50) 2-hexanone | 10.424 | 43 | 41242 | 9.44 | ug/L | | 96 |
| 51) dibromochloromethane | 10.649 | 129 | 126381 | 8.94 | ug/L | | 95 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 87684 | 9.20 | ug/L | | 92 |
| 53) chlorobenzene | 11.567 | 112 | 479259 | 9.20 | ug/L | | 100 |
| 54) 1,1,1,2-tetrachloroethane | 11.725 | 131 | 172223 | 8.91 | ug/L | | 96 |
| 55) ethylbenzene | 11.737 | 91 | 965428 | 9.29 | ug/L | | 99 |
| 56) m,p-xylene | 11.932 | 106 | 712667 | 18.79 | ug/L | | 94 |
| 57) butyl acrylate | 12.595 | 55 | 188728 | 9.10 | ug/L | | 99 |
| 58) o-xylene | 12.595 | 106 | 335317 | 9.45 | ug/L | | 96 |
| 59) styrene | 12.644 | 104 | 526756 | 9.25 | ug/L | | 96 |
| 60) isopropylbenzene | 13.221 | 105 | 837094 | 9.53 | ug/L | | 99 |
| 61) bromobenzene | 13.756 | 156 | 206593 | 9.19 | ug/L | | 93 |
| 62) bromoform | 12.996 | 173 | 69368 | 8.82 | ug/L | | 97 |
| 64) 1,2,3-trichloropropane | 13.902 | 75 | 73755 | 8.49 | ug/L | | 99 |
| 65) n-propylbenzene | 13.939 | 91 | 1116915 | 9.39 | ug/L | | 100 |
| 66) 2-chlorotoluene | 14.091 | 91 | 677854 | 9.22 | ug/L | | 98 |
| 67) 4-chlorotoluene | 14.273 | 91 | 784515 | 9.10 | ug/L | | 99 |
| 68) 1,3,5-trimethylbenzene | 14.243 | 105 | 799566 | 9.44 | ug/L | | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.854 | 83 | 81971 | 8.92 | ug/L | | 99 |
| 71) tert-butylbenzene | 14.760 | 119 | 644567 | 9.60 | ug/L | | 97 |
| 72) sec-butylbenzene | 15.094 | 105 | 958275 | 9.76 | ug/L | | 100 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 816264 | 9.48 | ug/L | | 99 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 405492 | 9.27 | ug/L | | 98 |
| 75) p-isopropyltoluene | 15.325 | 119 | 794799 | 9.68 | ug/L | | 99 |
| 76) dicyclopentadiene | 15.398 | 66 | 838547 | 9.36 | ug/L | | 100 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 390879 | 8.98 | ug/L | | 98 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 322730 | 9.05 | ug/L | | 98 |
| 79) n-butylbenzene | 15.921 | 91 | 754929 | 9.67 | ug/L | | 99 |
| 80) 1,2-dibromo-3-chloropr... | 17.034 | 75 | 14192 | 8.04 | ug/L | | 90 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 204502 | 9.27 | ug/L | | 95 |
| 82) hexachlorobutadiene | 18.159 | 225 | 170316 | 8.87 | ug/L | | 98 |
| 83) naphthalene | 18.257 | 128 | 217616 | 9.30 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 154053 | 9.09 | ug/L | | 98 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 99113 | 8.67 | ug/L | | 99 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040312.D
Acq On : 3 Apr 2008 3:34 pm
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 16:11:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040222.D
Acq On : 2 Apr 2008 9:07 pm
Sample : ,SAMP,ME0803A91-01A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 03 07:39:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

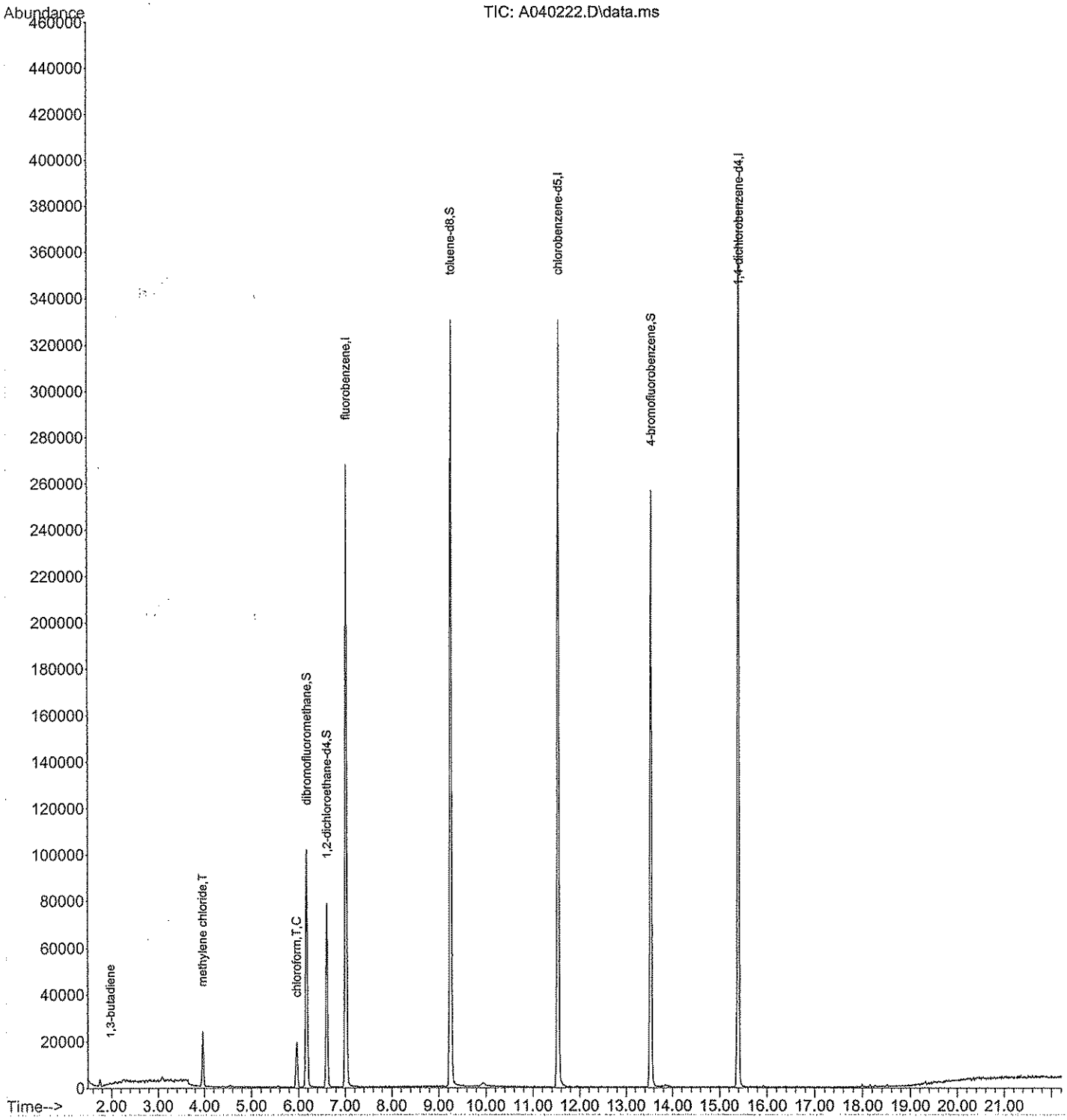
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 294869 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 250579 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 132104 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 78016 | 11.48 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.80% | | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 76763 | 12.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 129.40% | | | |
| 44) toluene-d8 | 9.248 | 98 | 298051 | 9.49 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 94.90% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 122229 | 10.58 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.80% | | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.981 | 39 | 221 | 0.04 | ug/L # | 14 |
| 13) methylene chloride | 3.963 | 84 | 10607 | 1.35 | ug/L | 91 |
| 25) chloroform | 5.958 | 83 | 19193 | 1.36 | ug/L | 100 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040208\A040222.D
Acq On : 2 Apr 2008 9:07 pm
Sample : ,SAMP,ME0803A91-01A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 03 07:39:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds
QLast Update : Mon Mar 31 16:38:00 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040208\\
Data File : A040222.D
Acq On : 2 Apr 2008 9:07 pmm
Operator : BRR
Sample : ,SAMP,ME0803A91-01A,1,,
Misc : 8260+_W255
ALS Vial : 22 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********

Raw results on 4/08/11

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040208\
Data File : A040222.D
Acq On : 2 Apr 2008 9:07 pm
Operator : BR
Sample : ,SAMP,ME0803A91-01A,1,
Misc : 8260+_W25
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040222.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.963 | 399 | 407 | 419 | rVB | 23543 | 51921 | 6.08% | 1.181% |
| 2 | 5.958 | 727 | 735 | 747 | rBV | 19324 | 50447 | 5.91% | 1.147% |
| 3 | 6.171 | 760 | 770 | 788 | rBV | 101657 | 262853 | 30.77% | 5.978% |
| 4 | 6.603 | 831 | 841 | 856 | rBV | 78614 | 190930 | 22.35% | 4.342% |
| 5 | 7.010 | 895 | 908 | 927 | rBV | 267848 | 679772 | 79.58% | 15.460% |
| 6 | 9.248 | 1261 | 1276 | 1290 | rBV | 330209 | 854239 | 100.00% | 19.428% |
| 7 | 11.528 | 1640 | 1651 | 1679 | rBV | 330246 | 834186 | 97.65% | 18.972% |
| 8 | 13.523 | 1969 | 1979 | 1998 | rBV | 256754 | 630881 | 73.85% | 14.348% |
| 9 | 15.384 | 2272 | 2285 | 2302 | rBV | 383345 | 841717 | 98.53% | 19.143% |

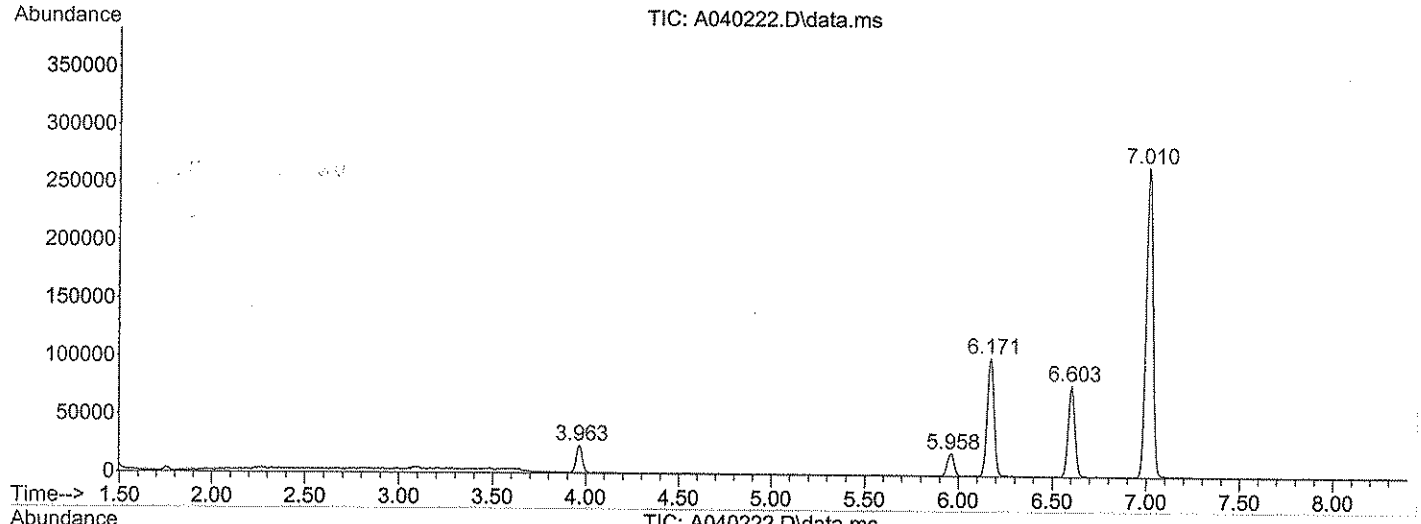
Sum of corrected areas: 4396946

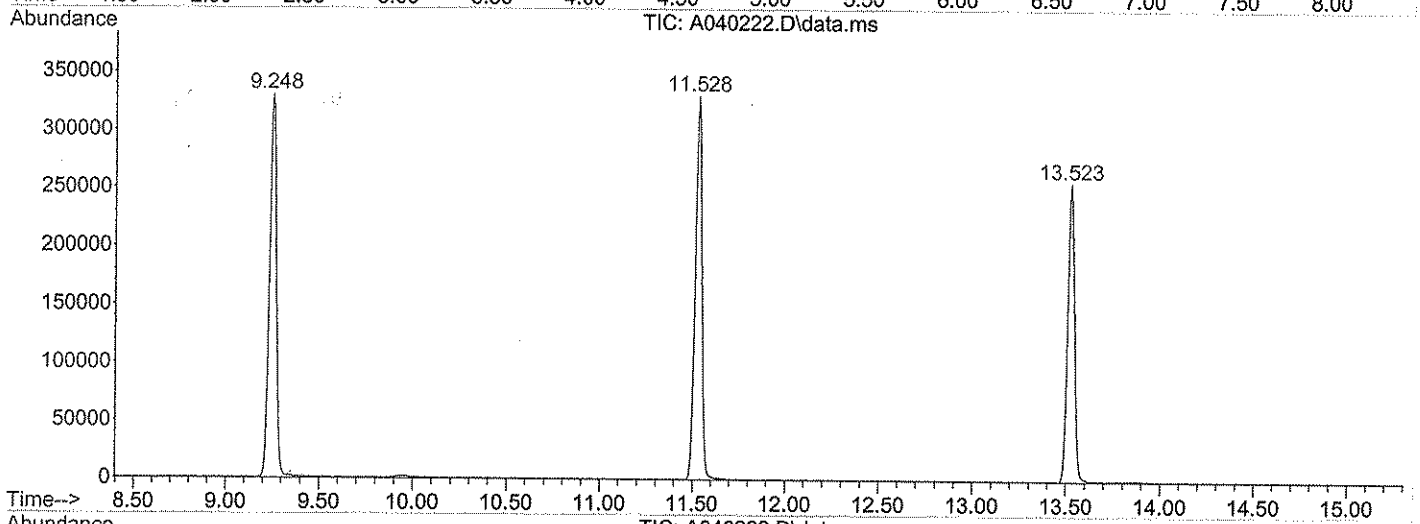
LSC Report - Integrated Chromatogram

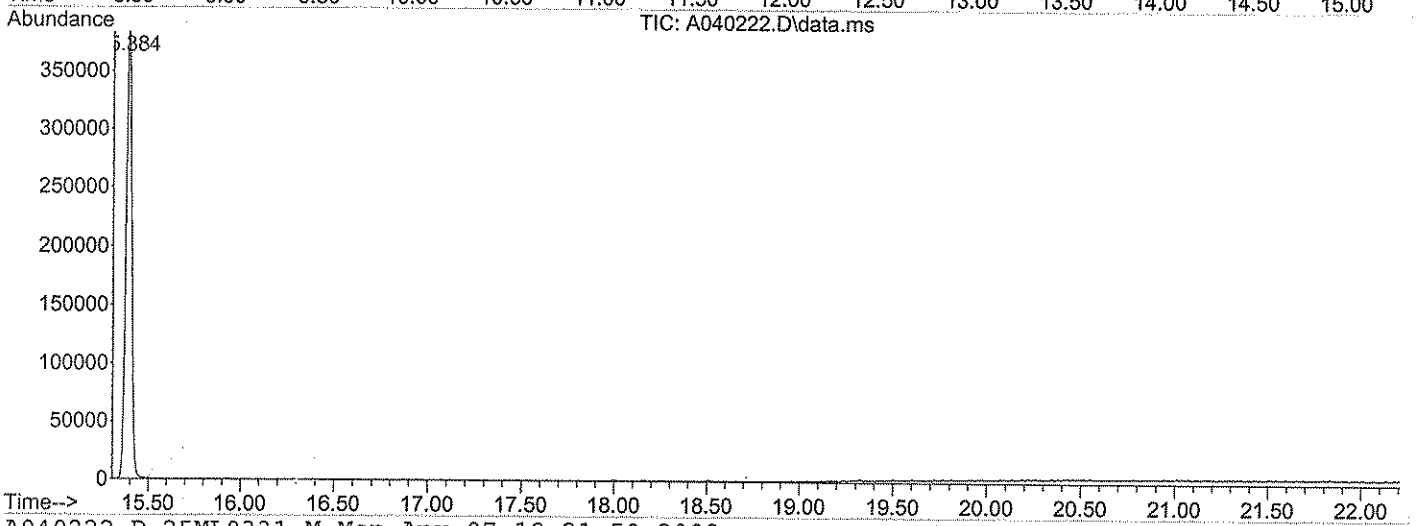
Data Path : C:\msdchem\1\DATA\A040208\
Data File : A040222.D
Acq On : 2 Apr 2008 9:07 pm
Operator : BR
Sample : ,SAMP,ME0803A91-01A,1,
Misc : 8260+_W25
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040222.D 25ML0331.M Mon Apr 07 18:21:50 2008 voa1 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040308\\
Data File : A040315.D
Acq On : 3 Apr 2008 5:31 pmm
Operator : BRR
Sample : ,SAMP,ME0803A91-02A,1,,
Misc : 8260+_w255
ALS Vial : 15 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

Raw Results 4/08/08

No Library Search Compounds Detected
**********

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040315.D
Acq On : 3 Apr 2008 5:31 pm
Sample : ,SAMP,ME0803A91-02A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 04 06:41:57 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

1 10 11 12 14-26 28 29

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 593998 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 528238 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 272725 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 153770 | 9.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.40% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 150377 | 10.14 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.40% | | |
| 44) toluene-d8 | 9.247 | 98 | 619605 | 9.66 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.60% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 254553 | 9.42 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 94.20% | | |
| **Target Compounds** | | | | | | Qvalue |
| 3) chloromethane | 1.804 | 50 | 16003 | 0.82 | ug/L | 96 |
| 5) 1,3-butadiene | 1.986 | 39 | 302 | 0.02 | ug/L # | 36 |
| 85) 2-methyl naphthalene | 19.318 | 142 | 2936 | 0.31 | ug/L # | 74 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FTC

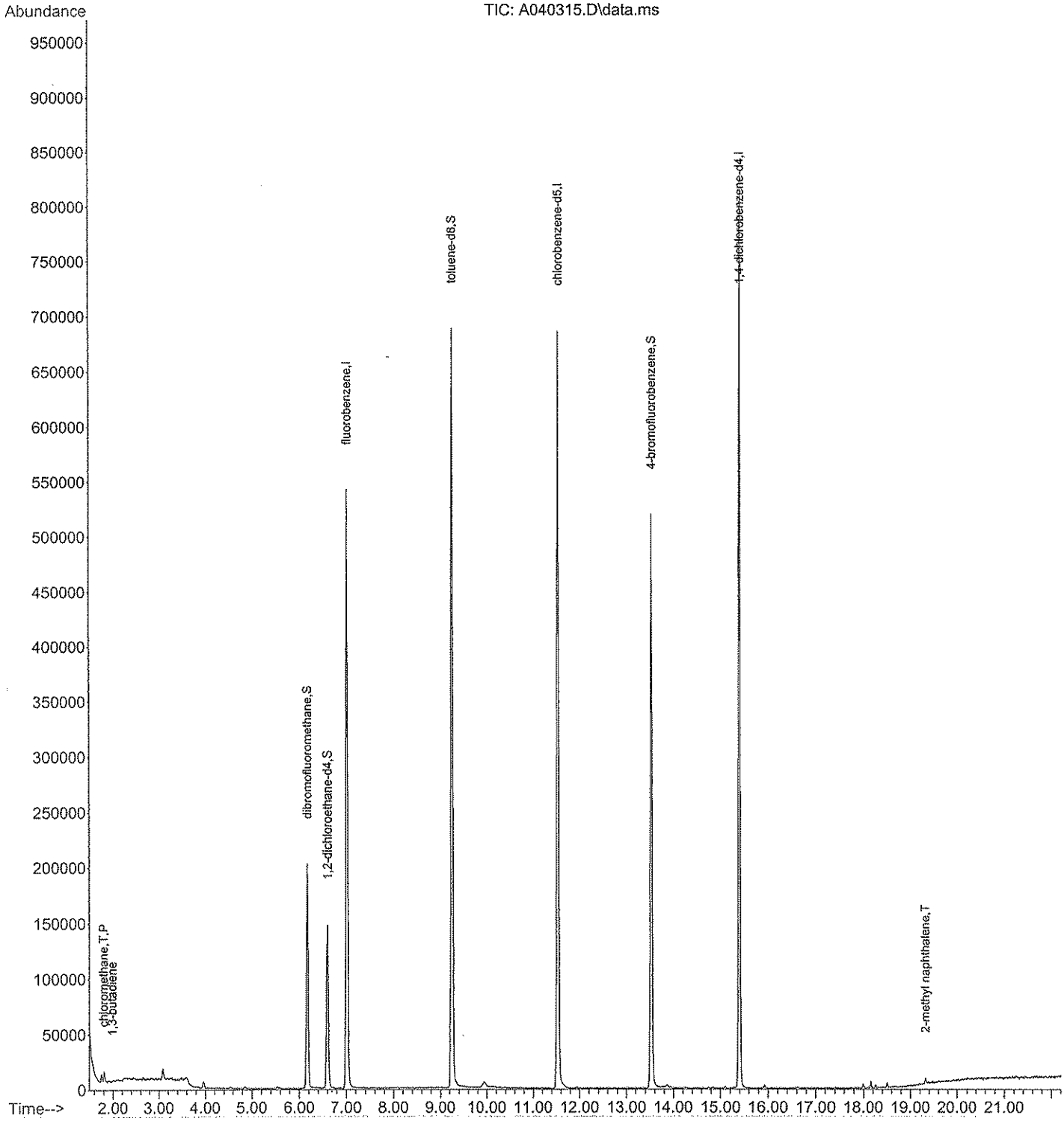
4/4/8

4/4/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040315.D
Acq On : 3 Apr 2008 5:31 pm
Sample : ,SAMP,ME0803A91-02A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 04 06:41:57 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040315.D
Acq On : 3 Apr 2008 5:31 pm
Operator : BR
Sample : ,SAMP,ME0803A91-02A,1,
Misc : 8260+_w25
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040315.D\data.ms

| Peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.170 | 757 | 770 | 783 | rBV | 202082 | 527107 | 29.84% | 5.959% |
| 2 | 6.602 | 830 | 841 | 856 | rBV2 | 146860 | 373484 | 21.14% | 4.222% |
| 3 | 7.009 | 895 | 908 | 940 | rBV | 542013 | 1376426 | 77.92% | 15.561% |
| 4 | 9.247 | 1260 | 1276 | 1290 | rBV | 687169 | 1766386 | 100.00% | 19.969% |
| 5 | 11.528 | 1638 | 1651 | 1681 | rBV | 685539 | 1754644 | 99.34% | 19.837% |
| 6 | 13.522 | 1961 | 1979 | 2003 | rBV | 519541 | 1328563 | 75.21% | 15.020% |
| 7 | 15.389 | 2272 | 2286 | 2302 | rBV | 807926 | 1718820 | 97.31% | 19.432% |

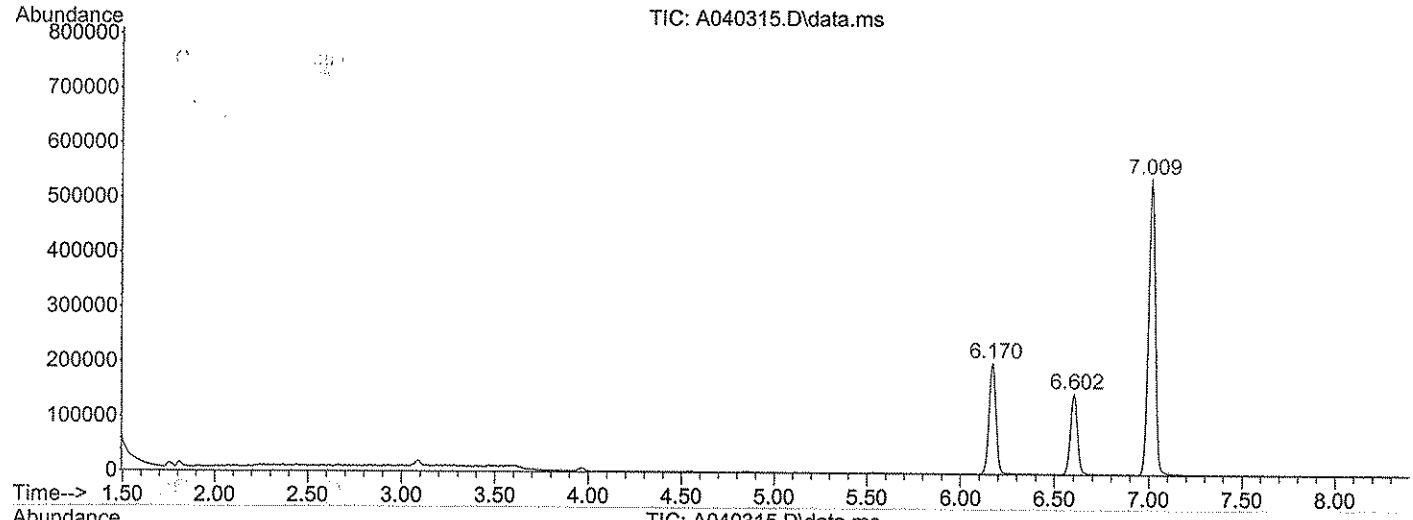
Sum of corrected areas: 8845430

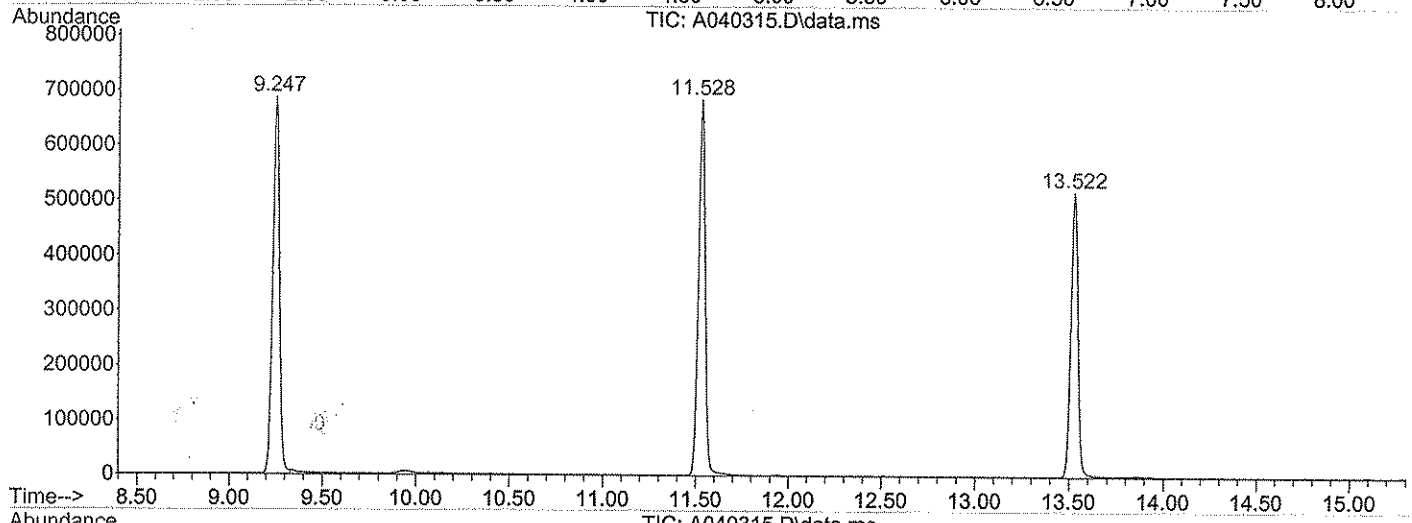
LSC Report - Integrated Chromatogram

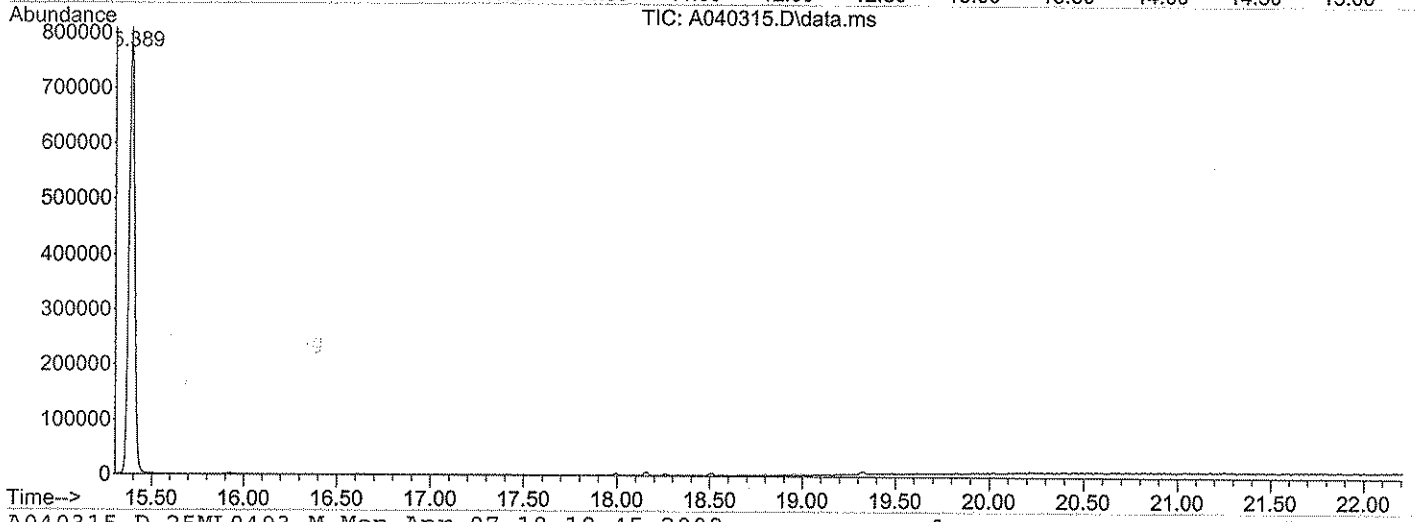
Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040315.D
Acq On : 3 Apr 2008 5:31 pm
Operator : BR
Sample : ,SAMP,ME0803A91-02A,1,
Misc : 8260+_w25
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040315.D 25ML0403.M Mon Apr 07 18:18:45 2008 voa1 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040308\\
Data File : A040316.D
Acq On : 3 Apr 2008 6:06 pmm
Operator : BRR
Sample : ,SAMP,ME0803A91-03A,1,,
Misc : 8260+_w255
ALS Vial : 16 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected

Raw results on 4/10/08

**********

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040316.D
Acq On : 3 Apr 2008 6:06 pm
Sample : ,SAMP,ME0803A91-03A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 04 06:42:00 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 560393 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.534 | 117 | 498901 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 264289 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 152999 | 10.48 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.80% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 145153 | 10.37 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.70% | | | |
| 44) toluene-d8 | 9.254 | 98 | 578897 | 9.55 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.50% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 246068 | 9.64 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.40% | | | |
| Target Compounds | | | | | | Qvalue |
| 3) chloromethane | 1.810 | 50 | 12950 | 0.70 | ug/L | 93 |
| 5) 1,3-butadiene | 1.992 | 39 | 358 | 0.02 | ug/L # | 10 |

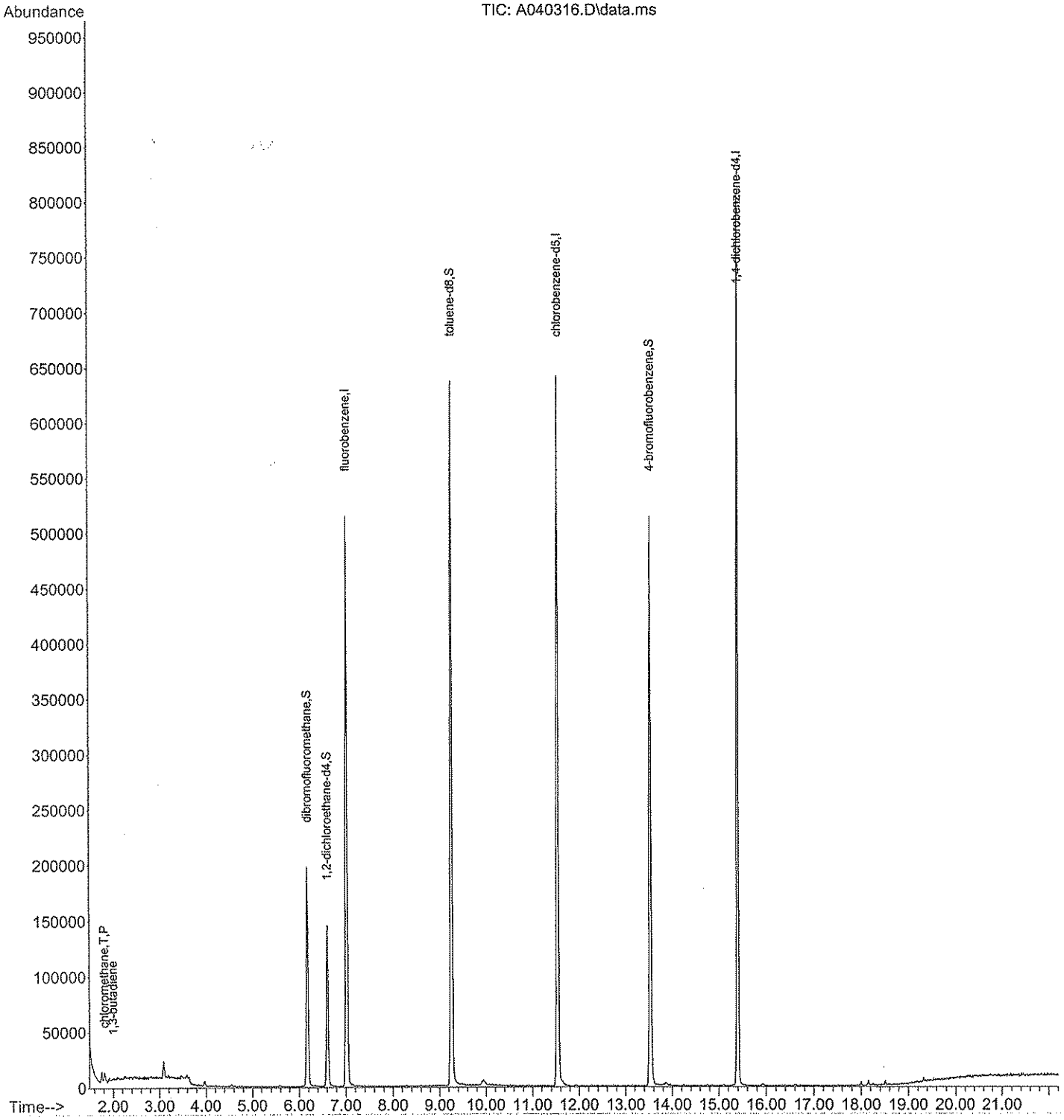
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040316.D
Acq On : 3 Apr 2008 6:06 pm
Sample : ,SAMP,ME0803A91-03A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 04 06:42:00 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040316.D
Acq On : 3 Apr 2008 6:06 pm
Operator : BR
Sample : ,SAMP,ME0803A91-03A,1,
Misc : 8260+_w25
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040316.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.170 | 759 | 770 | 784 | rBV2 | 196655 | 507179 | 30.06% | 5.969% |
| 2 | 6.608 | 829 | 842 | 862 | rBV | 144867 | 372688 | 22.09% | 4.386% |
| 3 | 7.016 | 898 | 909 | 925 | rBV | 514347 | 1288701 | 76.37% | 15.167% |
| 4 | 9.254 | 1262 | 1277 | 1303 | rBV | 636481 | 1680603 | 99.60% | 19.779% |
| 5 | 11.528 | 1640 | 1651 | 1676 | rBV | 641419 | 1675235 | 99.28% | 19.716% |
| 6 | 13.523 | 1967 | 1979 | 1998 | rBV | 513821 | 1284856 | 76.14% | 15.122% |
| 7 | 15.390 | 2272 | 2286 | 2313 | rBV | 803685 | 1687435 | 100.00% | 19.860% |

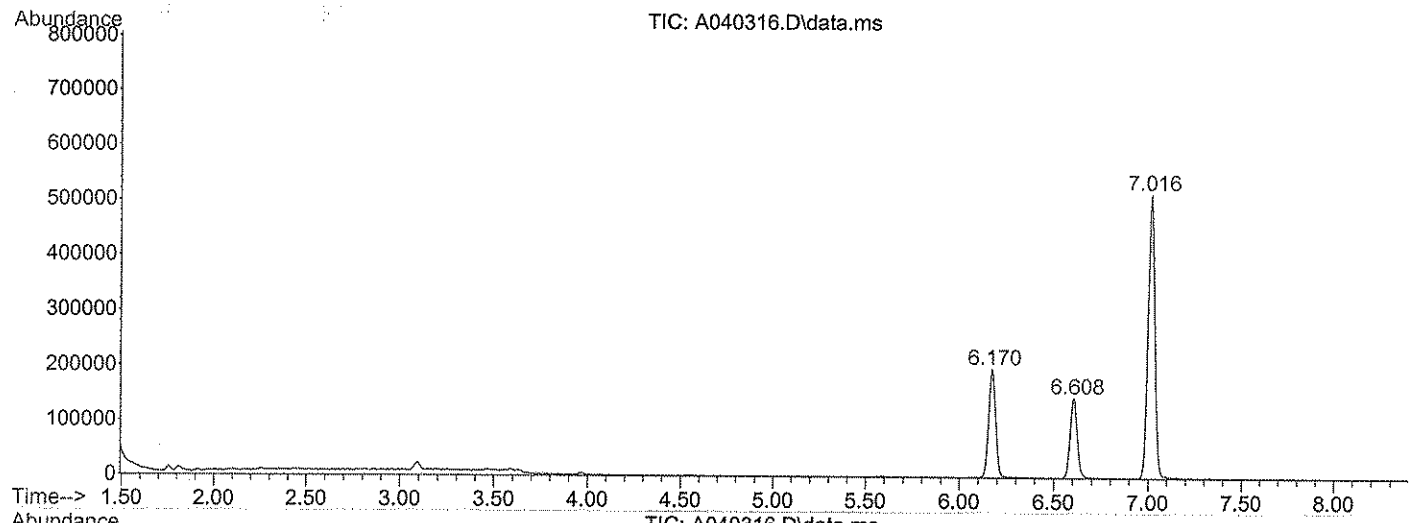
Sum of corrected areas: 8496697

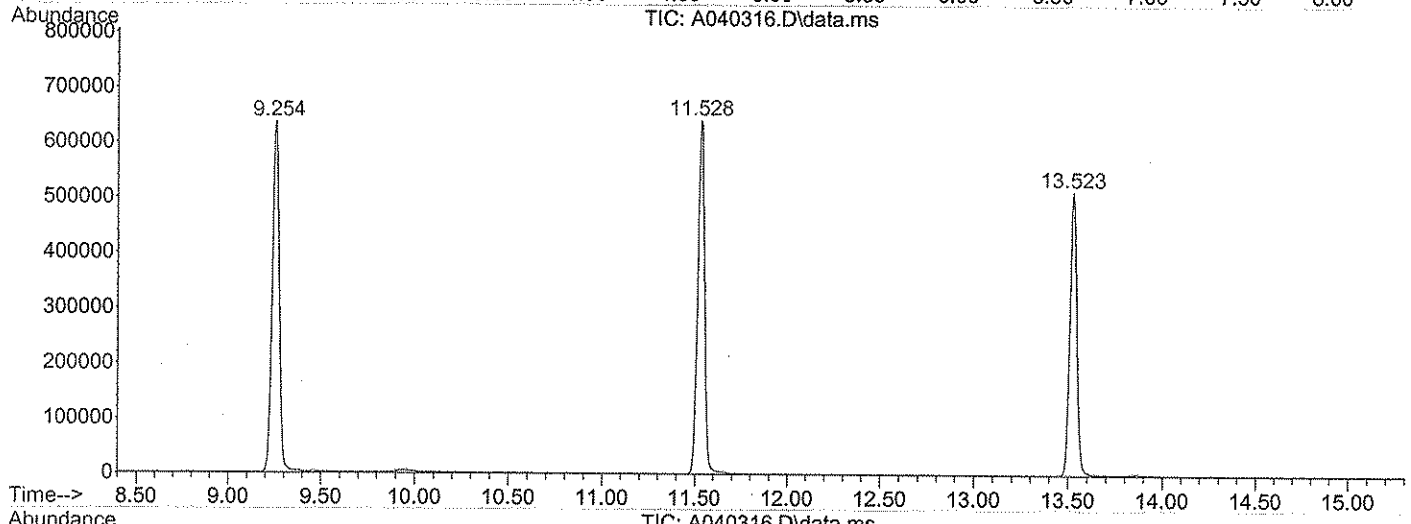
LSC Report - Integrated Chromatogram

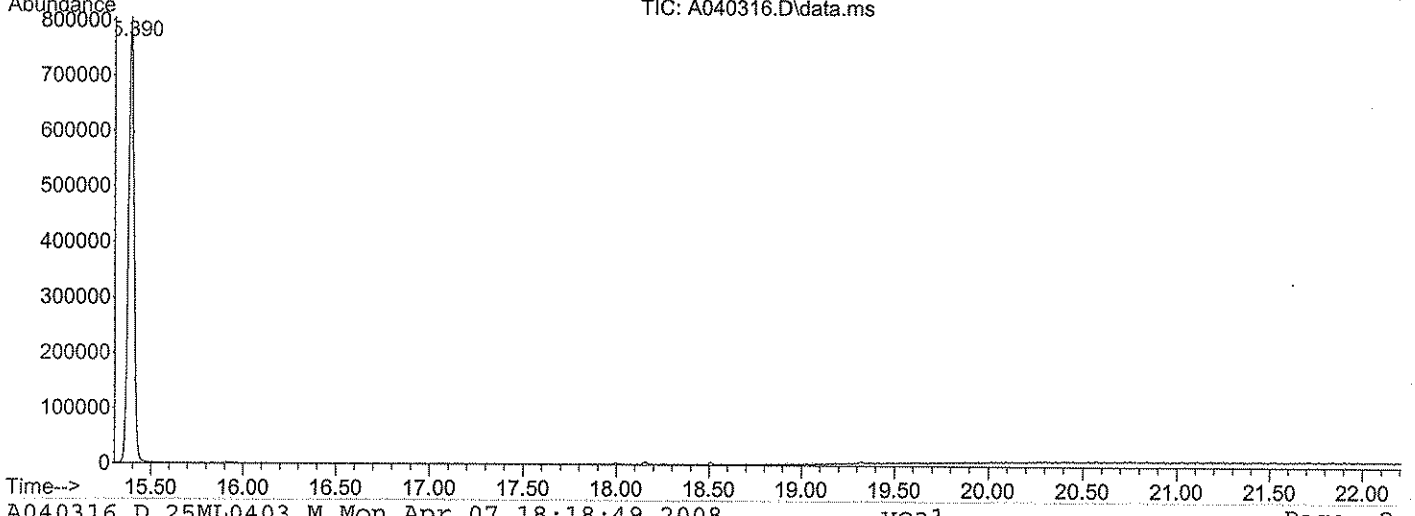
Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040316.D
Acq On : 3 Apr 2008 6:06 pm
Operator : BR
Sample : ,SAMP,ME0803A91-03A,1,
Misc : 8260+_w25
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040316.D 25ML0403.M Mon Apr 07 18:18:49 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040317.D
Acq On : 3 Apr 2008 6:42 pm
Sample : ,SAMP,ME0803A91-04A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 04 06:42:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 544575 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 491791 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 257079 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 146972 | 10.36 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 103.60% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 145089 | 10.67 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.70% | | |
| 44) toluene-d8 | 9.253 | 98 | 562702 | 9.42 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 94.20% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 237228 | 9.43 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 94.30% | | |
| Target Compounds | | | | | | Qvalue |
| 3) chloromethane | 1.809 | 50 | 13890 | 0.77 | ug/L | 97 |
| 11) 1,3-butadiene | 1.980 | 39 | 468 | 0.03 | ug/L # | 10 |

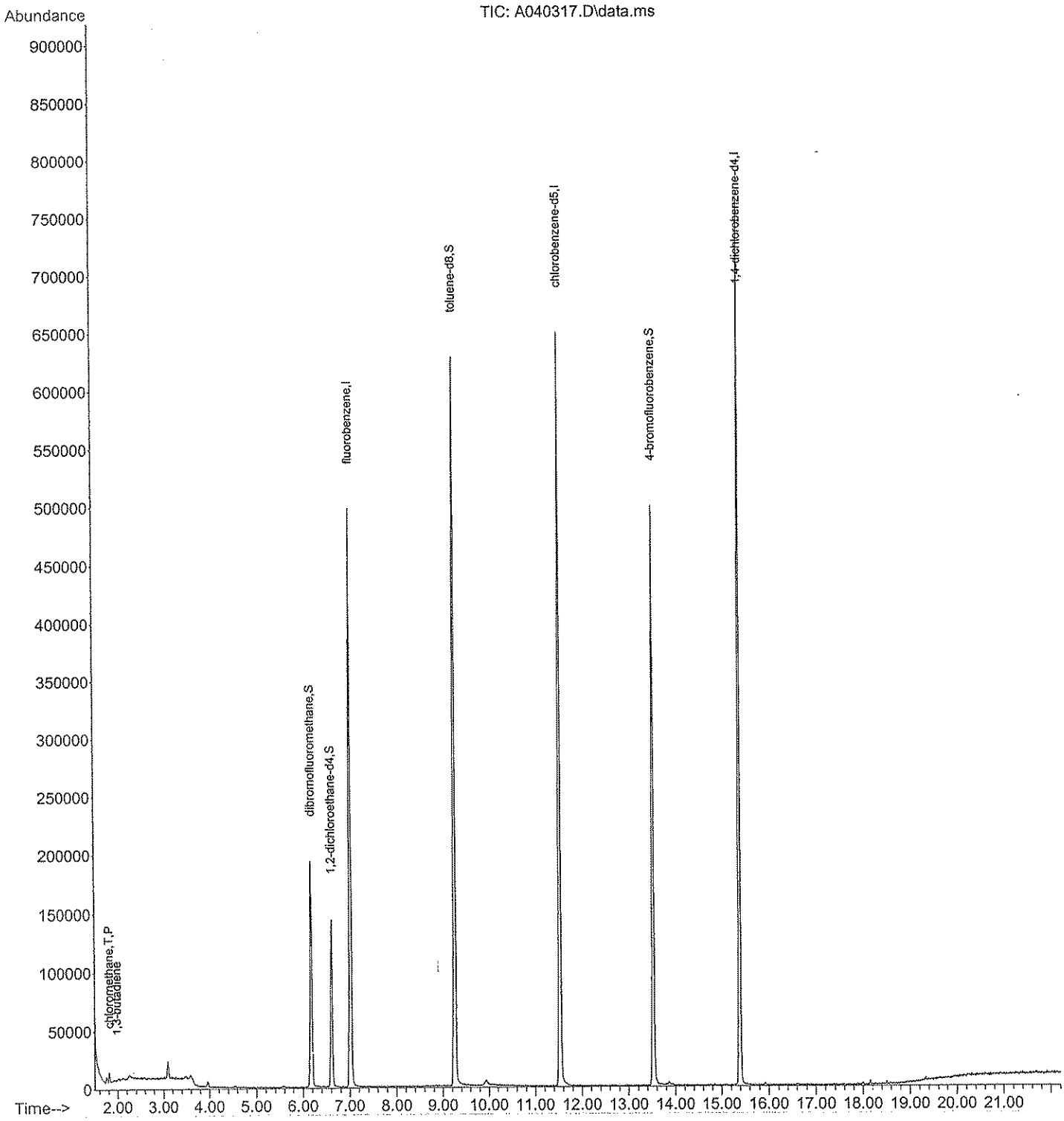
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/4/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040317.D
Acq On : 3 Apr 2008 6:42 pm
Sample : ,SAMP,ME0803A91-04A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 04 06:42:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040317.D 25ML0403.M Fri Apr 04 06:42:04 2008 voa1 Page: 2

Tentatively Identified Compound (LSC) summary

```
Data Path : C:\msdchem\1\DATA\A040308\\
Data File : A040317.D
Acq On    :  3 Apr 2008   6:42 pmm
Operator  : BRR
Sample    : ,SAMP,ME0803A91-04A,1,,
Misc      : 8260+_w255
ALS Vial  : 17   Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library    : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

                                                  |--Internal Standard---|
TIC Top Hit name      RT  EstConc Units Response |#    RT     Resp  Conc|
-----------------------------------------------------------------------------
```

A 4/08/08

No Library Search Compounds Detected

**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040317.D
Acq On : 3 Apr 2008 6:42 pm
Operator : BR
Sample : ,SAMP,ME0803A91-04A,1,
Misc : 8260+_w25
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040317.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.170 | 758 | 770 | 784 | rBV | 192870 | 495467 | 30.00% | 5.965% |
| 2 | 6.602 | 830 | 841 | 856 | rBV2 | 143022 | 360758 | 21.84% | 4.343% |
| 3 | 7.015 | 897 | 909 | 926 | rBV | 497167 | 1265201 | 76.61% | 15.233% |
| 4 | 9.253 | 1266 | 1277 | 1304 | rBV | 627148 | 1640088 | 99.31% | 19.746% |
| 5 | 11.527 | 1640 | 1651 | 1681 | rBV | 648265 | 1651477 | 100.00% | 19.883% |
| 6 | 13.522 | 1965 | 1979 | 1999 | rBV | 498327 | 1252175 | 75.82% | 15.076% |
| 7 | 15.389 | 2274 | 2286 | 2304 | rBV | 764876 | 1640687 | 99.35% | 19.753% |

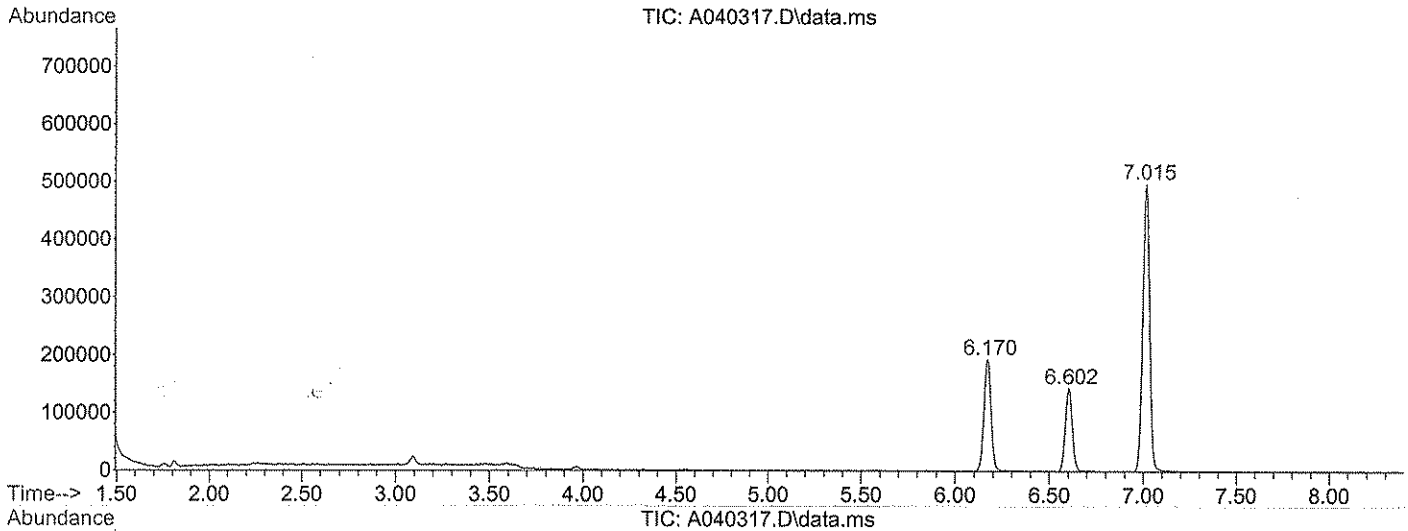
Sum of corrected areas: 8305853

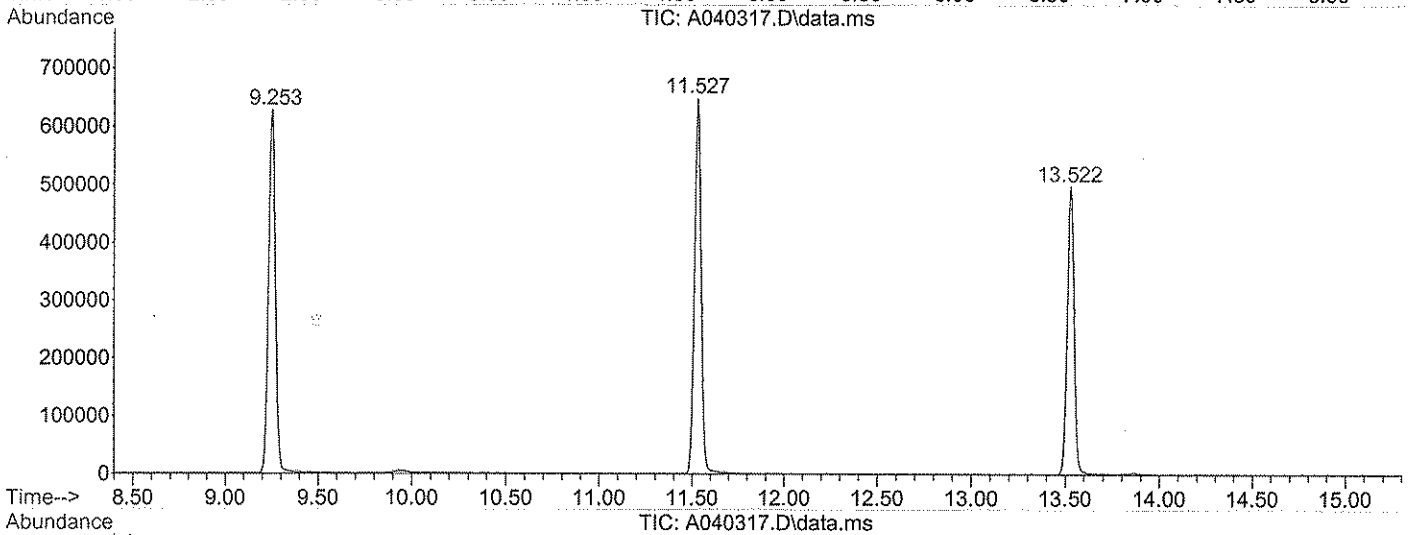
LSC Report - Integrated Chromatogram

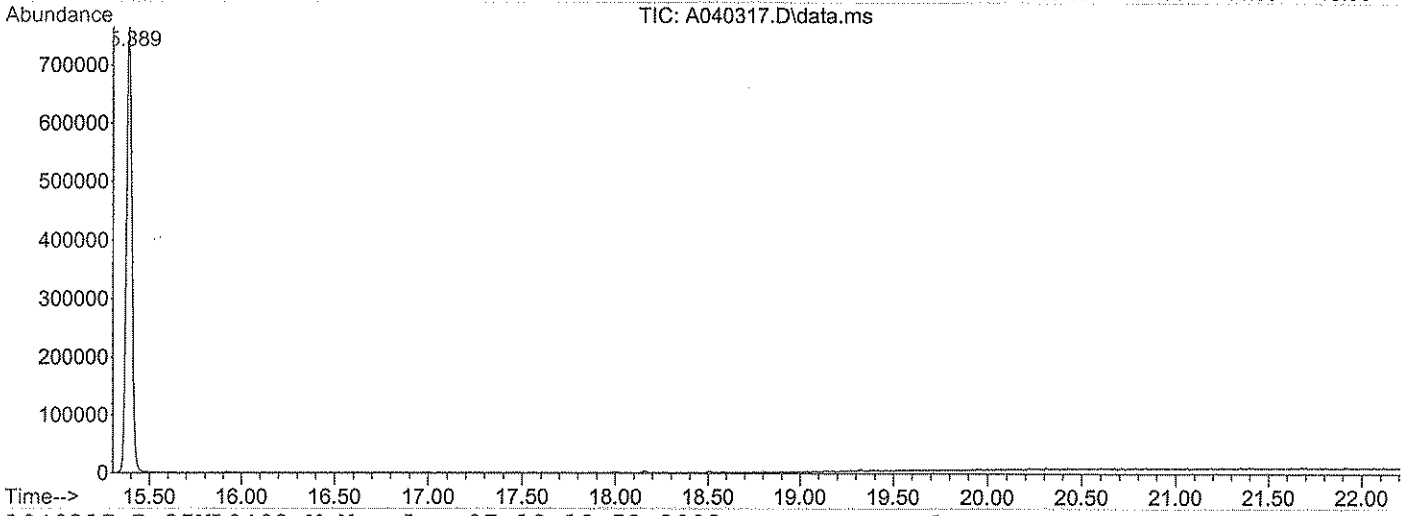
Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040317.D
Acq On : 3 Apr 2008 6:42 pm
Operator : BR
Sample : ,SAMP,ME0803A91-04A,1,
Misc : 8260+_w25
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040317.D 25ML0403.M Mon Apr 07 18:18:52 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040318.D
Acq On : 3 Apr 2008 7:18 pm
Sample : ,SAMP,ME0803A91-05A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 06:42:07 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.017 | 96 | 538821 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.529 | 117 | 488900 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.391 | 152 | 258794 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 142856 | 10.18 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.80% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 140775 | 10.46 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.60% | | | | |
| 44) toluene-d8 | 9.255 | 98 | 555060 | 9.35 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 93.50% | | | | |
| 63) 4-bromofluorobenzene | 13.524 | 95 | 245356 | 9.81 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.10% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 3) chloromethane | 1.811 | 50 | 11138 | 0.63 | ug/L | | 95 |
| 5) 1,3-butadiene | 1.981 | 39 | 376 | 0.02 | ug/L | # | 29 |
| 11) acetone | 3.471 | 43 | 4363 | 2.26 | ug/L | | 98 |
| 28) cyclohexane | 6.171 | 56 | 9990 | 0.39 | ug/L | | 89 |
| 35) ethyl acrylate | 7.704 | 55 | 7559 | 1.03 | ug/L | # | 59 |
| 53) chlorobenzene | 11.578 | 112 | 301983 | 6.98 | ug/L | | 97 |
| 77) 1,4-dichlorobenzene | 15.427 | 146 | 17439 | 0.51 | ug/L | | 92 |
| 78) 1,2-dichlorobenzene | 15.956 | 146 | 22449 | 0.80 | ug/L | | 95 |

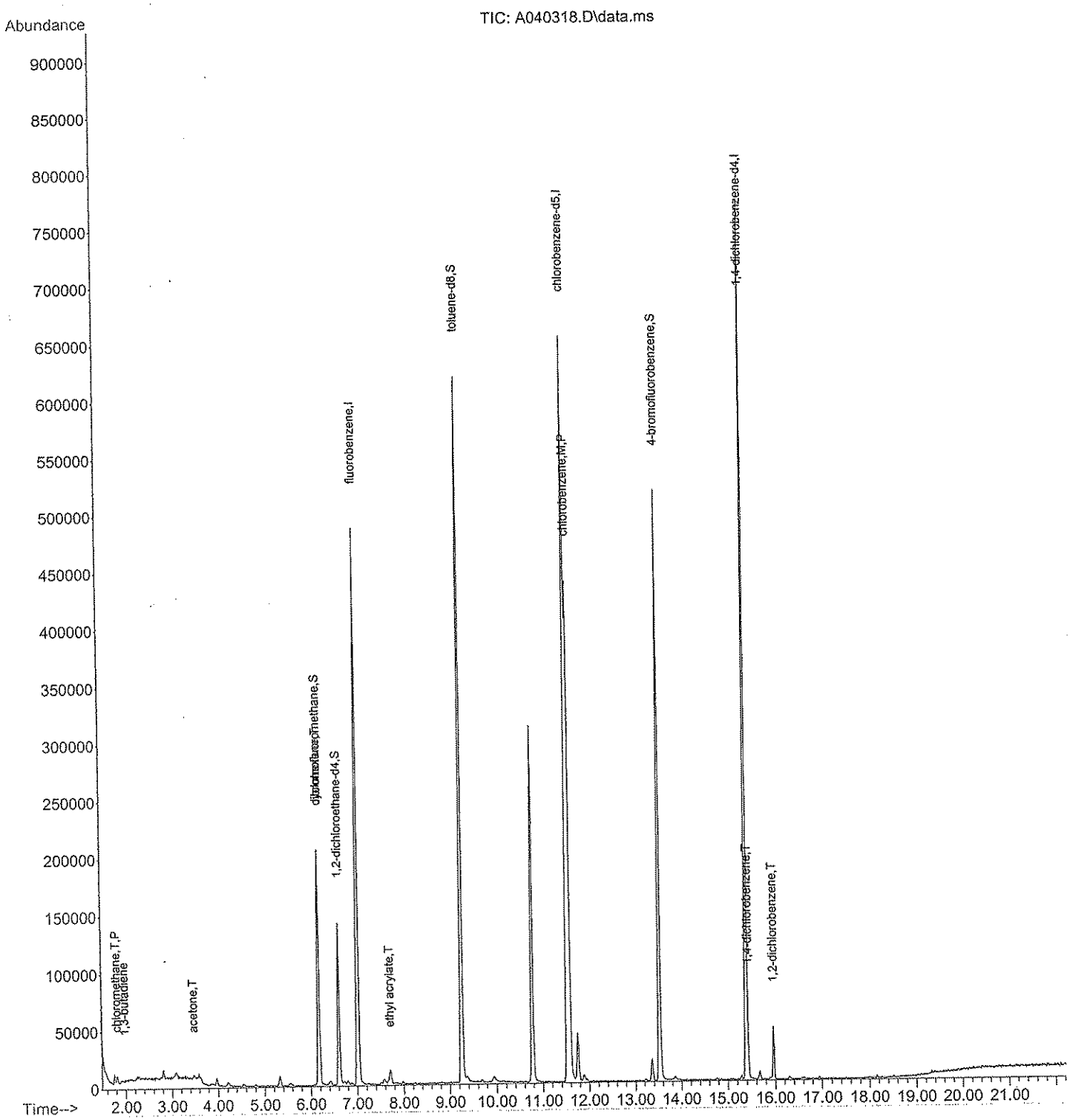
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/4/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040318.D
Acq On : 3 Apr 2008 7:18 pm
Sample : ,SAMP,ME0803A91-05A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 06:42:07 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040318.D
Acq On : 3 Apr 2008 7:18 pm
Operator : BR
Sample : ,SAMP,ME0803A91-05A,1,
Misc : 8260+_w25
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|
| Cyclohexene, 4-... | 10.769 | 4.7 | ug/L | 840274 | 2 | 11.529 | 1800230 | 10.0 |

Raw Results on 4/08/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040318.D
Acq On : 3 Apr 2008 7:18 pm
Operator : BR
Sample : ,SAMP,ME0803A91-05A,1,
Misc : 8260+_w25
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040318.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.171 | 759 | 770 | 784 | rBV | 205262 | 530041 | 29.44% | 5.511% |
| 2 | 6.603 | 930 | 841 | 855 | rBV | 141690 | 372721 | 20.70% | 3.875% |
| 3 | 7.017 | 896 | 909 | 935 | rBV | 487148 | 1254469 | 69.68% | 13.043% |
| 4 | 9.255 | 1265 | 1277 | 1291 | rBV | 618110 | 1604270 | 89.11% | 16.680% |
| 5 | 10.769 | 1513 | 1526 | 1542 | rBV2 | 311648 | 840274 | 46.68% | 8.736% |
| 6 | 11.529 | 1639 | 1651 | 1656 | rBV | 652736 | 1800227 | 100.00% | 18.717% |
| 7 | 11.748 | 1678 | 1687 | 1702 | rVB | 41548 | 118418 | 6.58% | 1.231% |
| 8 | 13.524 | 1965 | 1979 | 2006 | rBV | 517072 | 1279466 | 71.07% | 13.303% |
| 9 | 15.391 | 2276 | 2286 | 2303 | rBV | 771133 | 1723692 | 95.75% | 17.922% |
| 10 | 15.956 | 2371 | 2379 | 2388 | rVB | 45758 | 94423 | 5.25% | 0.982% |

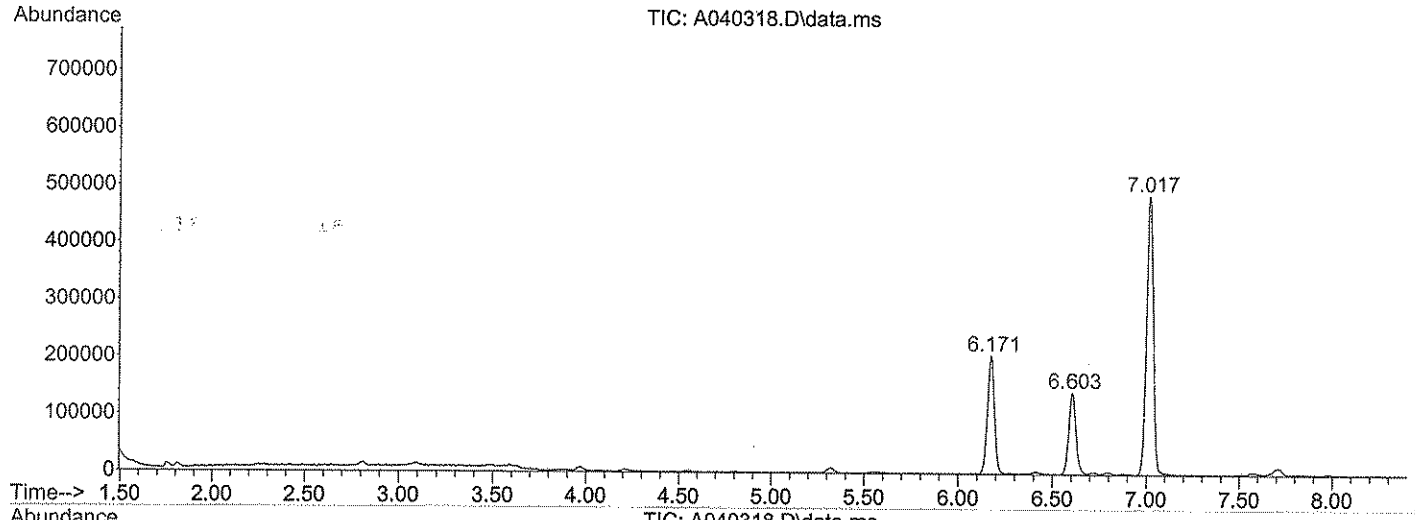
Sum of corrected areas: 9618001

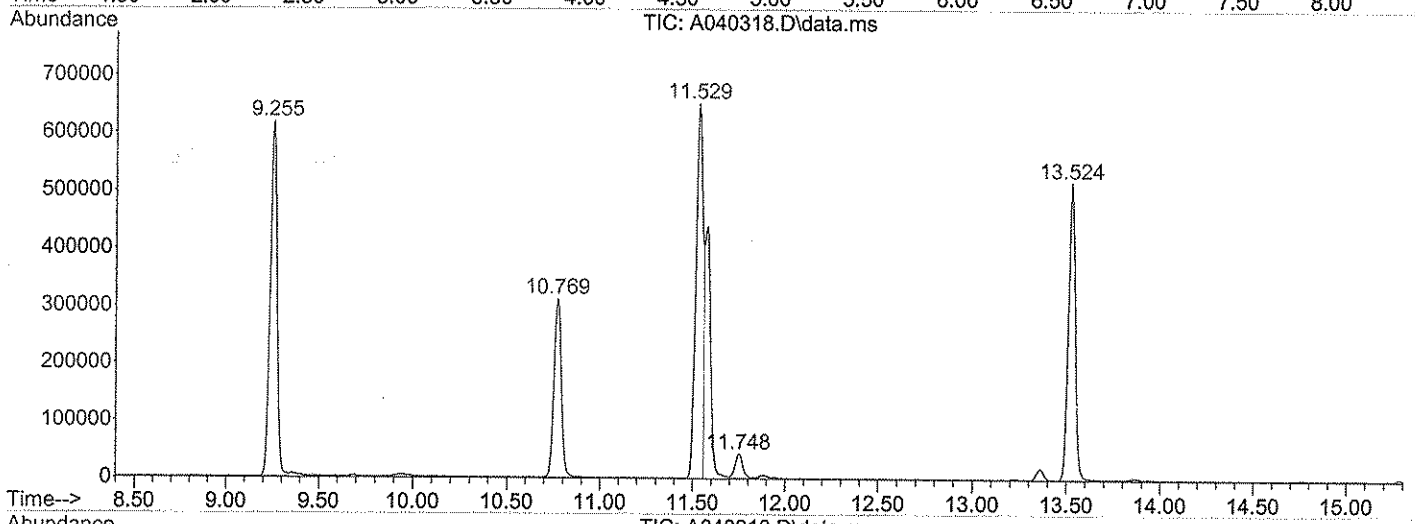
LSC Report - Integrated Chromatogram

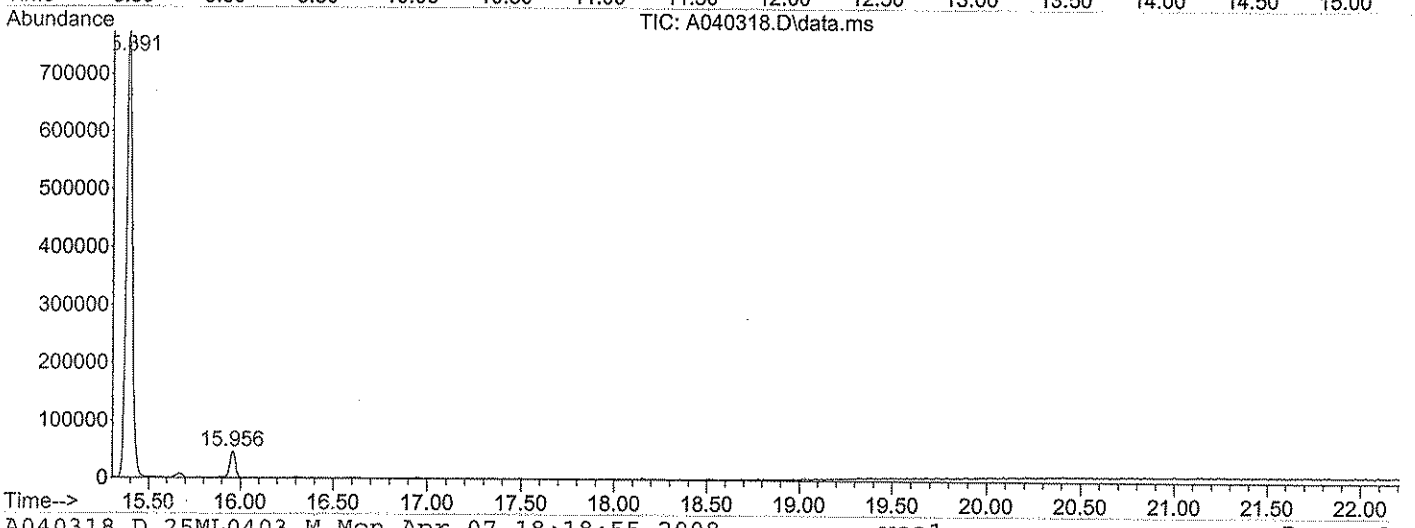
```
Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040318.D
Acq On    :  3 Apr 2008    7:18 pm
Operator  : BR
Sample    : ,SAMP,ME0803A91-05A,1,
Misc      : 8260+_w25
ALS Vial  : 18   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```




A040318.D 25ML0403.M Mon Apr 07 18:18:55 2008 voa1 Page: 2

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040318.D
Acq On : 3 Apr 2008 7:18 pm
Operator : BR
Sample : ,SAMP,ME0803A91-05A,1,
Misc : 8260+_w25
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

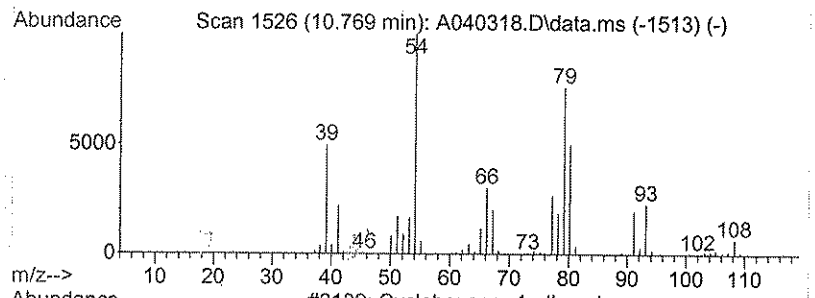
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

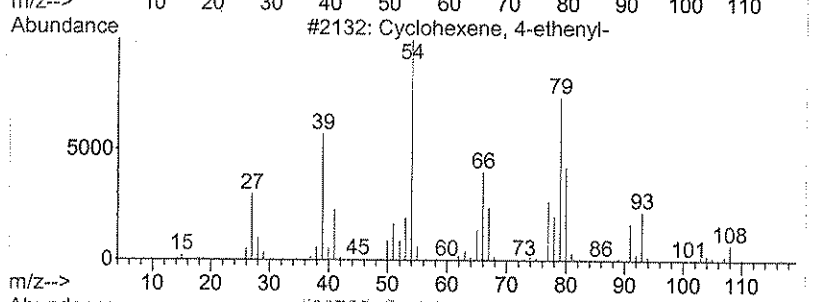
**********

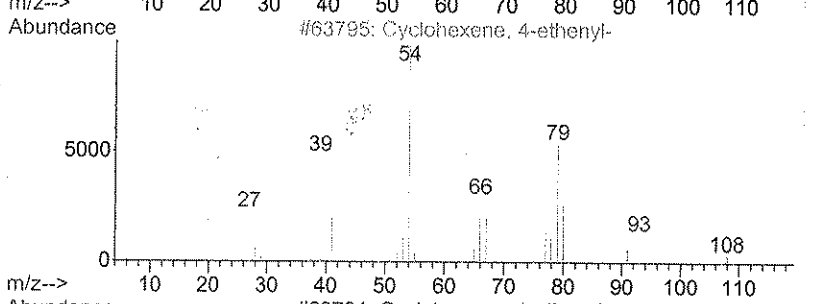
Peak Number 1 Cyclohexene, 4-ethenyl- Concentration Rank 1

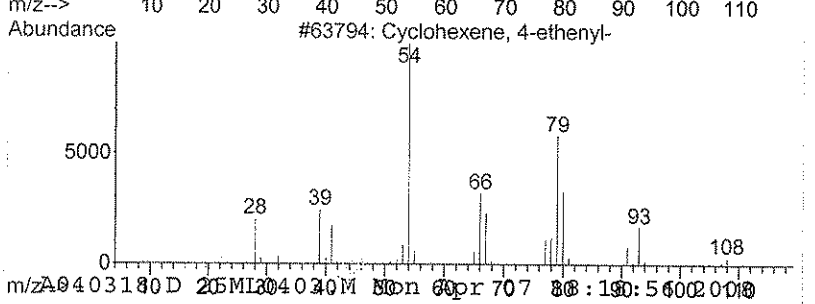
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.769 | 4.67 ug/L | 840274 | chlorobenzene-d5 | 11.529 |

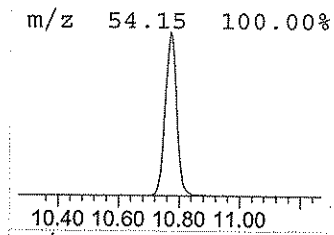
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexene, 4-ethenyl- | 108 | C8H12 | 000100-40-3 | 96 |
| 2 | Cyclohexene, 4-ethenyl- | 108 | C8H12 | 000100-40-3 | 90 |
| 3 | Cyclohexene, 4-ethenyl- | 108 | C8H12 | 000100-40-3 | 83 |
| 4 | Cyclohexene, 4-ethenyl- | 108 | C8H12 | 000100-40-3 | 80 |
| 5 | Cyclohexene, 4-ethenyl- | 108 | C8H12 | 000100-40-3 | 72 |

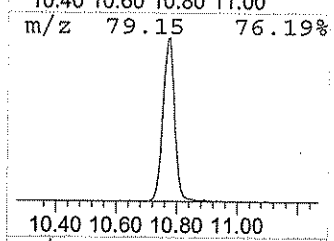


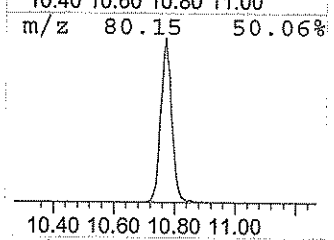



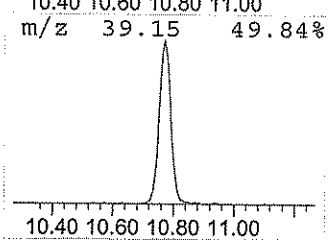



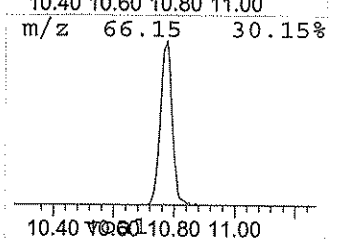



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040319.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,SAMP,ME0803A91-06A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 04 06:42:11 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 516693 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 460682 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 246211 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 138916 | 10.32 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 103.20% | | |
| 30) 1,2-dichloroethane-d4 | 6.596 | 65 | 138099 | 10.70 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 107.00% | | |
| 44) toluene-d8 | 9.254 | 98 | 532559 | 9.52 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.20% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 230474 | 9.78 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.80% | | |
| Target Compounds | | | | | | Qvalue |
| 3) chloromethane | 1.810 | 50 | 7896 | 0.46 | ug/L | 93 |
| 11) acetone | 3.477 | 43 | 5110 | 2.76 | ug/L | 90 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 17503 | 0.73 | ug/L | 85 |
| 31) benzene | 6.633 | 78 | 58948 | 1.02 | ug/L | 98 |
| 53) chlorobenzene | 11.577 | 112 | 9450 | 0.23 | ug/L | 94 |

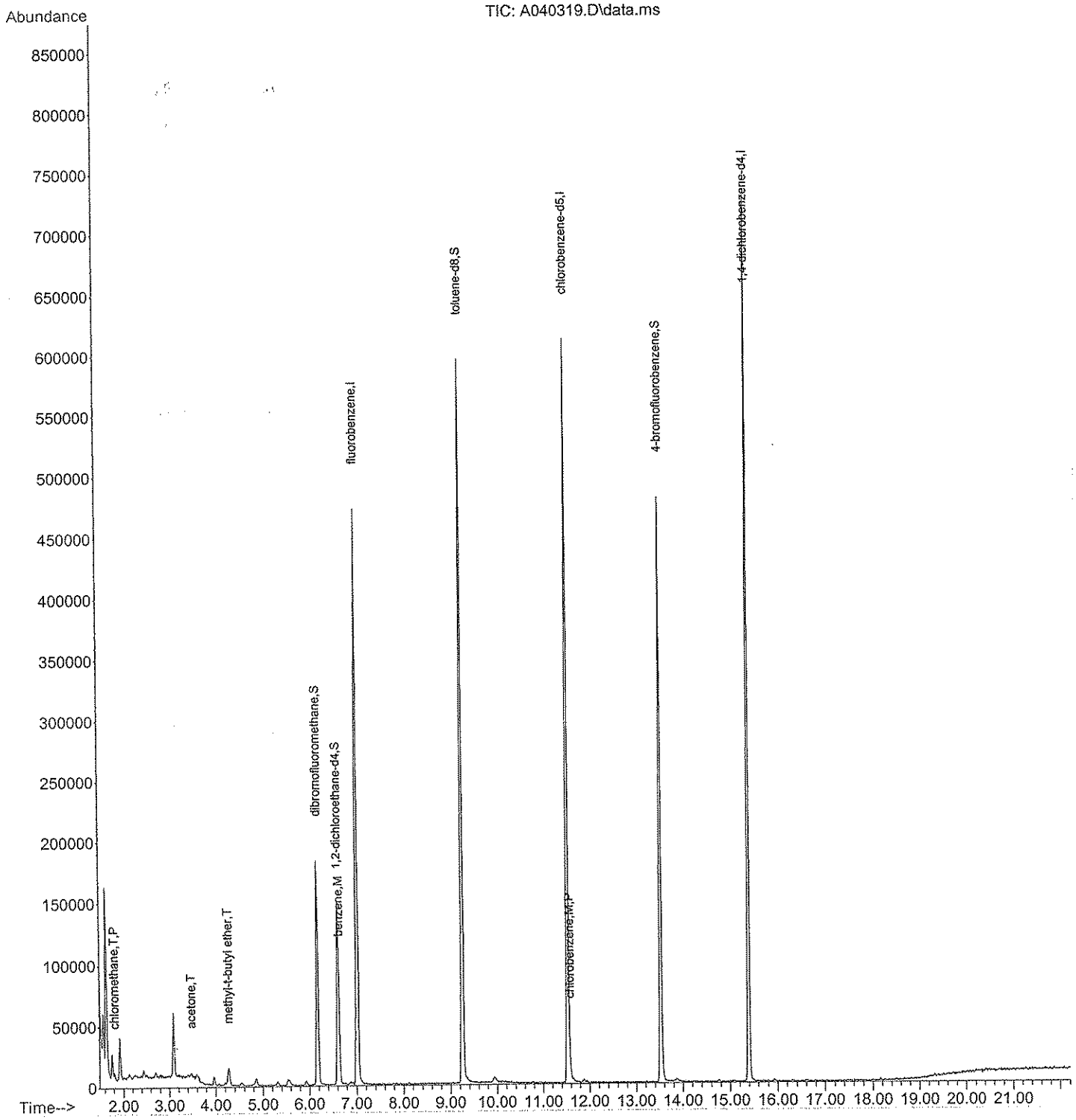
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BC 4/4/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040319.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,SAMP,ME0803A91-06A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 04 06:42:11 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040319.D
Acq On : 3 Apr 2008 7:53 pm
Operator : BR
Sample : ,SAMP,ME0803A91-06A,1,
Misc : 8260+_w25
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Methane, chloro... | 1.628 | 2.9 | ug/L | 349917 | 1 | 7.010 | 1207840 | 10.0 |

Raw Results on 4/08/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040319.D
Acq On : 3 Apr 2008 7:53 pm
Operator : BR
Sample : ,SAMP,ME0803A91-06A,1,
Misc : 8260+_w25
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040319.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.567 | 9 | 13 | 18 | rVB2 | 35752 | 58095 | 3.63% | 0.667% |
| 2 | 1.628 | 18 | 23 | 39 | rVB | 155073 | 349917 | 21.89% | 4.020% |
| 3 | 1.920 | 64 | 71 | 81 | rBV2 | 34652 | 71148 | 4.45% | 0.817% |
| 4 | 3.087 | 256 | 263 | 276 | rVB2 | 51771 | 109423 | 6.84% | 1.257% |
| 5 | 6.171 | 759 | 770 | 787 | rBV | 182067 | 469821 | 29.38% | 5.398% |
| 6 | 6.608 | 831 | 842 | 859 | rBV2 | 148119 | 491897 | 30.77% | 5.651% |
| 7 | 7.010 | 898 | 908 | 933 | rBV | 471859 | 1207836 | 75.54% | 13.876% |
| 8 | 9.254 | 1265 | 1277 | 1292 | rBV | 594141 | 1545954 | 96.69% | 17.761% |
| 9 | 11.528 | 1639 | 1651 | 1671 | rBV | 610593 | 1598853 | 100.00% | 18.369% |
| 10 | 13.523 | 1968 | 1979 | 1999 | rBV | 479547 | 1204398 | 75.33% | 13.837% |
| 11 | 15.390 | 2273 | 2286 | 2310 | rBV | 728455 | 1596871 | 99.88% | 18.346% |

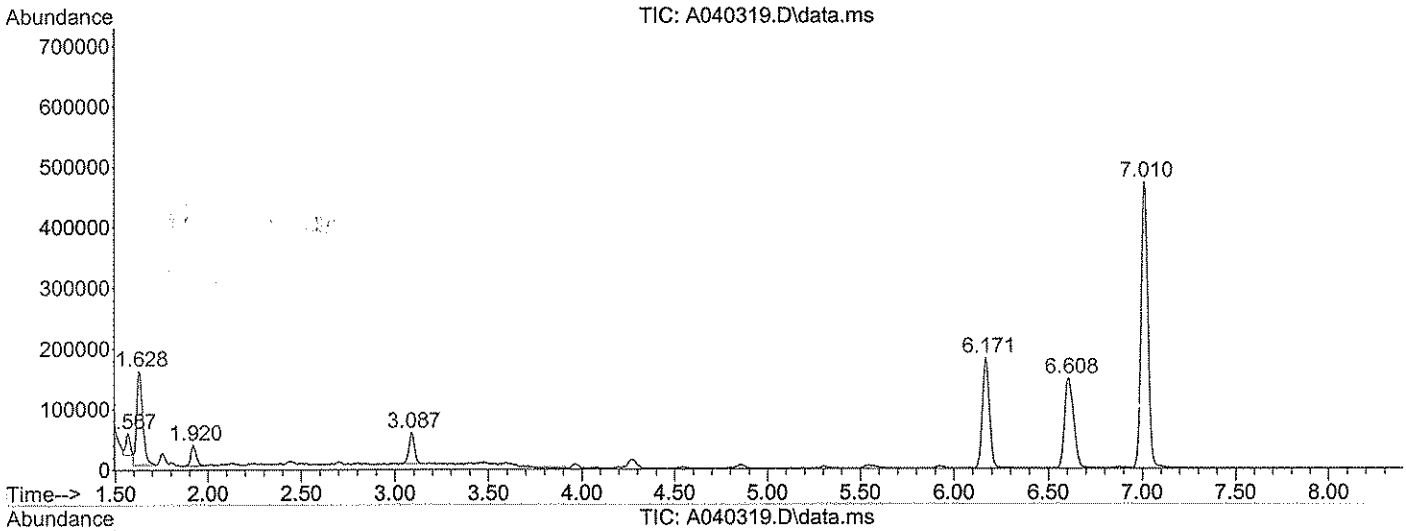
Sum of corrected areas: 8704213

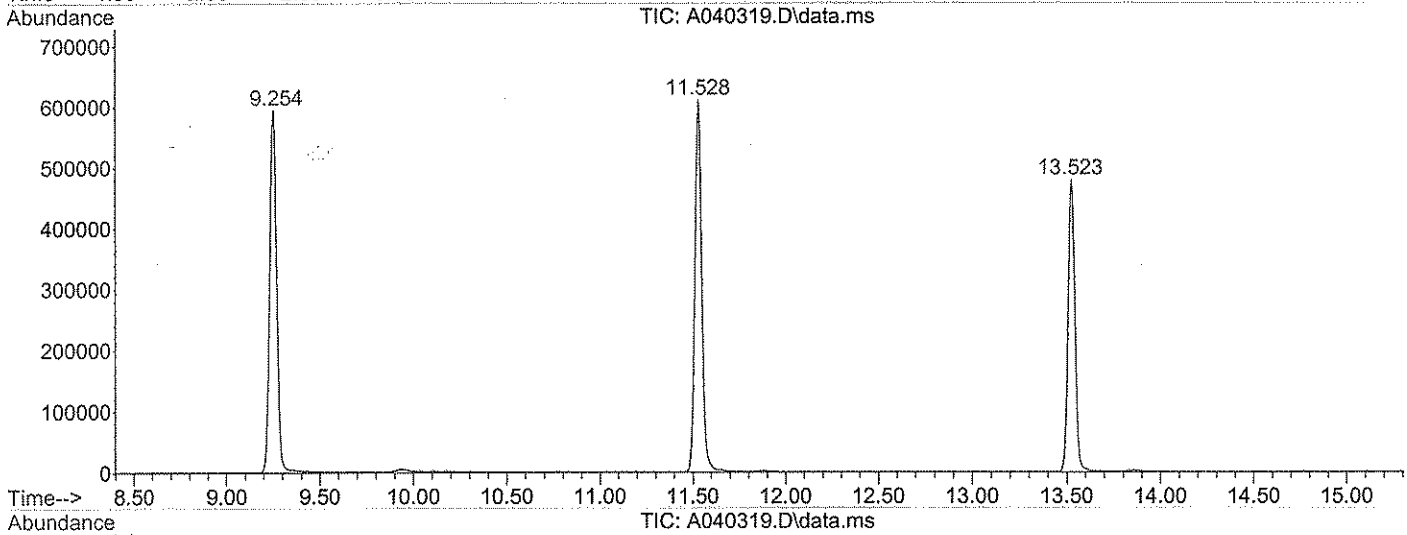
LSC Report - Integrated Chromatogram

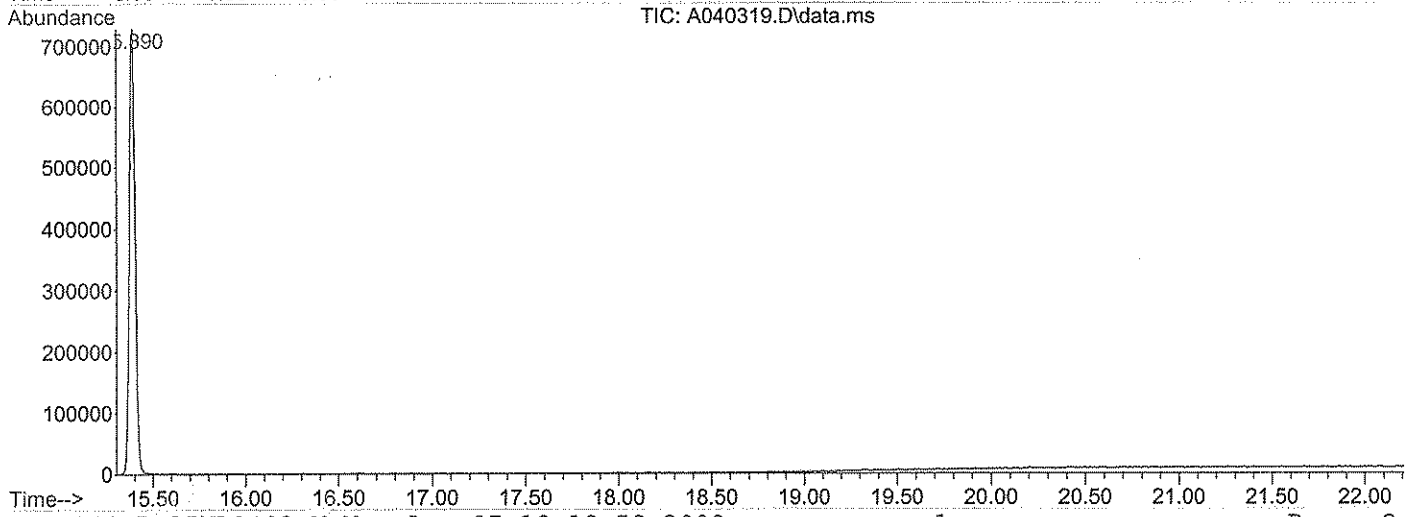
```
Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040319.D
Acq On    :  3 Apr 2008    7:53 pm
Operator  : BR
Sample    : ,SAMP,ME0803A91-06A,1,
Misc      : 8260+_w25
ALS Vial  : 19   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```




A040319.D 25ML0403.M Mon Apr 07 18:18:59 2008 voa1 Page: 2

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040319.D
Acq On : 3 Apr 2008 7:53 pm
Operator : BR
Sample : ,SAMP,ME0803A91-06A,1,
Misc : 8260+_w25
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

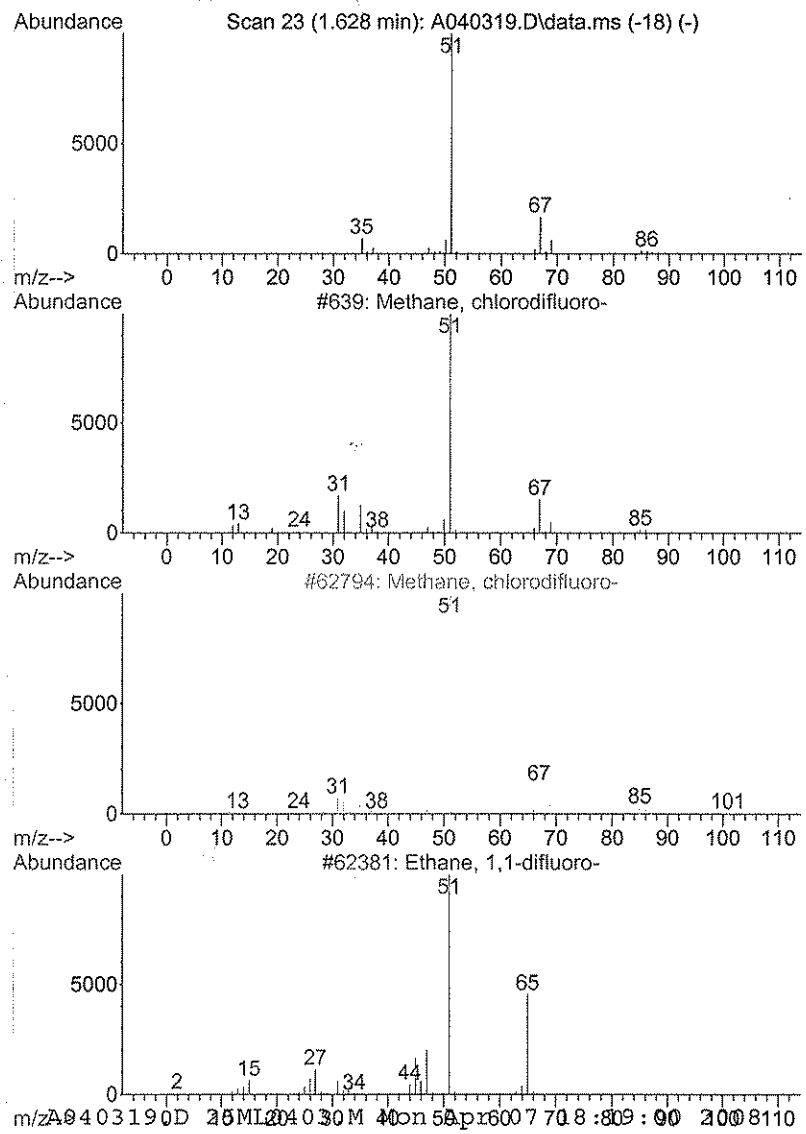
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

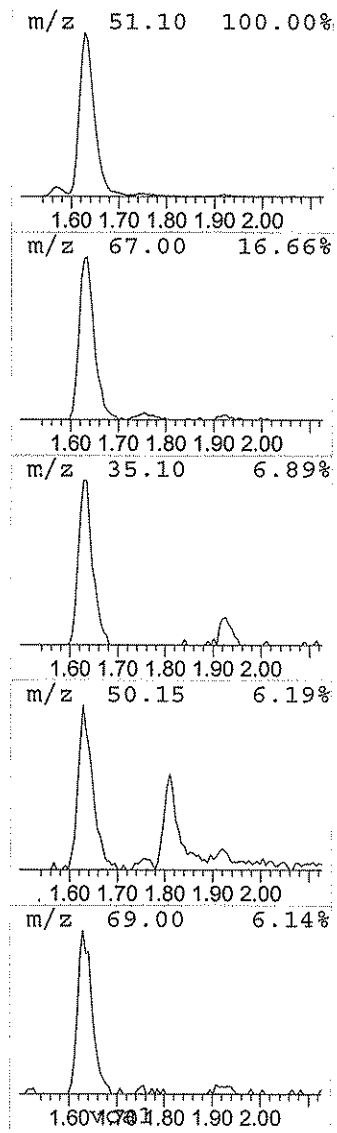
**********

Peak Number 1 Methane, chlorodifluoro- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.628 | 2.90 ug/L | 349917 | fluorobenzene | 7.010 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Methane, chlorodifluoro- | 86 | CHClF2 | 000075-45-6 | 91 |
| 2 | Methane, chlorodifluoro- | 86 | CHClF2 | 000075-45-6 | 83 |
| 3 | Ethane, 1,1-difluoro- | 66 | C2H4F2 | 000075-37-6 | 7 |
| 4 | Ethane, 1,1-difluoro- | 66 | C2H4F2 | 000075-37-6 | 5 |
| 5 | Propiolonitrile | 51 | C3HN | 001070-71-9 | 4 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040320.D
Acq On : 3 Apr 2008 8:30 pm
Sample : ,SAMP,ME0803A91-07A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 04 06:42:14 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.004 | 96 | 514849 | 10.00 | ug/L | -0.01 |
| 41) chlorobenzene-d5 | 11.529 | 117 | 455981 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 254278 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.159 | 113 | 139067 | 10.37 | ug/L | -0.01 |
| Spiked Amount 10.000 | | | Recovery = | 103.70% | | |
| 30) 1,2-dichloroethane-d4 | 6.591 | 65 | 136809 | 10.64 | ug/L | -0.01 |
| Spiked Amount 10.000 | | | Recovery = | 106.40% | | |
| 44) toluene-d8 | 9.248 | 98 | 528615 | 9.54 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.40% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 230686 | 9.89 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.90% | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.999 | 39 | 1253 | 0.07 | ug/L # | 49 |
| 7) chloroethane | 2.437 | 64 | 90383 | 8.45 | ug/L | 95 |
| 11) acetone | 3.465 | 43 | 6053 | 3.28 | ug/L | 93 |
| 16) methyl-t-butyl ether | 4.261 | 73 | 19013 | 0.80 | ug/L | 98 |
| 20) vinyl acetate | 4.839 | 43 | 22101 | 2.59 | ug/L | 80 |
| 31) benzene | 6.621 | 78 | 375674 | 6.51 | ug/L | 97 |
| 40) 2-chloroethyl vinyl ether | 8.749 | 63 | 410 | 0.84 | ug/L # | 47 |

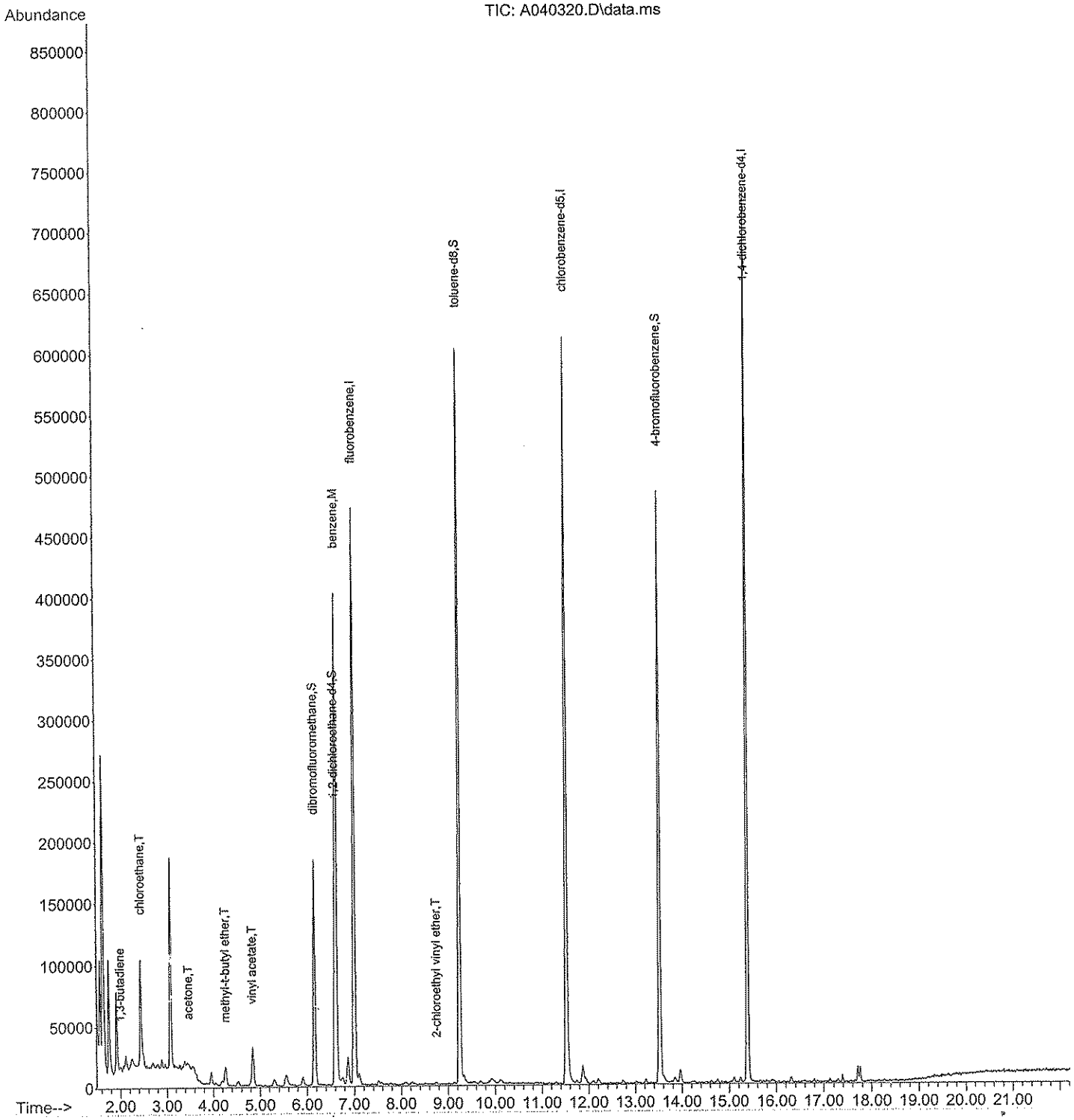
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/4/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040320.D
Acq On : 3 Apr 2008 8:30 pm
Sample : ,SAMP,ME0803A91-07A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 04 06:42:14 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040320.D
Acq On : 3 Apr 2008 8:30 pm
Operator : BR
Sample : ,SAMP,ME0803A91-07A,1,
Misc : 8260+_w25
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Methane, chloro... | 1.628 | 5.0 | ug/L | 597766 | 1 | 7.004 | 1206300 | 10.0 |
| Isobutane | 1.750 | 1.7 | ug/L | 204444 | 1 | 7.004 | 1206300 | 10.0 |
| Methane, chloro... | 1.914 | 1.1 | ug/L | 134345 | 1 | 7.004 | 1206300 | 10.0 |
| Ether | 3.076 | 3.1 | ug/L | 372638 | 1 | 7.004 | 1206300 | 10.0 |

4/08/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040320.D
Acq On : 3 Apr 2008 8:30 pm
Operator : BR
Sample : ,SAMP,ME0803A91-07A,1,
Misc : 8260+_w25
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040320.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.567 | 9 | 13 | 18 | rBV2 | 69324 | 110011 | 6.70% | 1.014% |
| 2 | 1.628 | 18 | 23 | 37 | rVB | 260063 | 597766 | 36.39% | 5.510% |
| 3 | 1.750 | 37 | 43 | 59 | rVB | 93715 | 204444 | 12.45% | 1.884% |
| 4 | 1.914 | 63 | 70 | 79 | rBV | 65056 | 134345 | 8.18% | 1.238% |
| 5 | 2.437 | 149 | 156 | 173 | rVB | 88542 | 223017 | 13.58% | 2.056% |
| 6 | 3.076 | 253 | 261 | 274 | rVB | 171176 | 372638 | 22.69% | 3.435% |
| 7 | 4.255 | 449 | 455 | 469 | rVB3 | 15695 | 50757 | 3.09% | 0.468% |
| 8 | 4.845 | 536 | 552 | 566 | rVB3 | 31571 | 101363 | 6.17% | 0.934% |
| 9 | 6.159 | 757 | 768 | 782 | rBV | 183612 | 478493 | 29.13% | 4.411% |
| 10 | 6.621 | 830 | 844 | 859 | rBV2 | 402084 | 1289099 | 78.48% | 11.882% |
| 11 | 6.870 | 875 | 885 | 896 | rVV2 | 21630 | 62068 | 3.78% | 0.572% |
| 12 | 7.004 | 896 | 907 | 920 | rVV | 471148 | 1206299 | 73.44% | 11.119% |
| 13 | 9.242 | 1264 | 1275 | 1288 | rBV | 601353 | 1542768 | 93.93% | 14.221% |
| 14 | 11.529 | 1638 | 1651 | 1679 | rBV | 610716 | 1603671 | 97.63% | 14.782% |
| 15 | 13.523 | 1966 | 1979 | 1994 | rBV | 483778 | 1229563 | 74.86% | 11.334% |
| 16 | 15.390 | 2272 | 2286 | 2305 | rBV | 726937 | 1642550 | 100.00% | 15.140% |

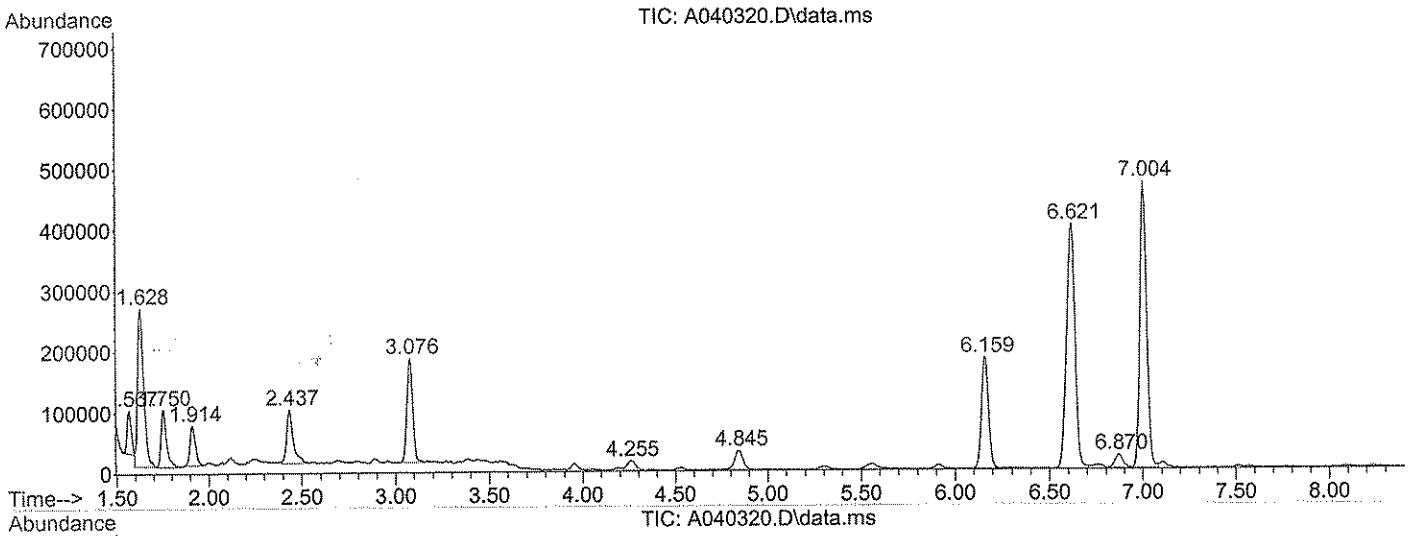
Sum of corrected areas: 10848852

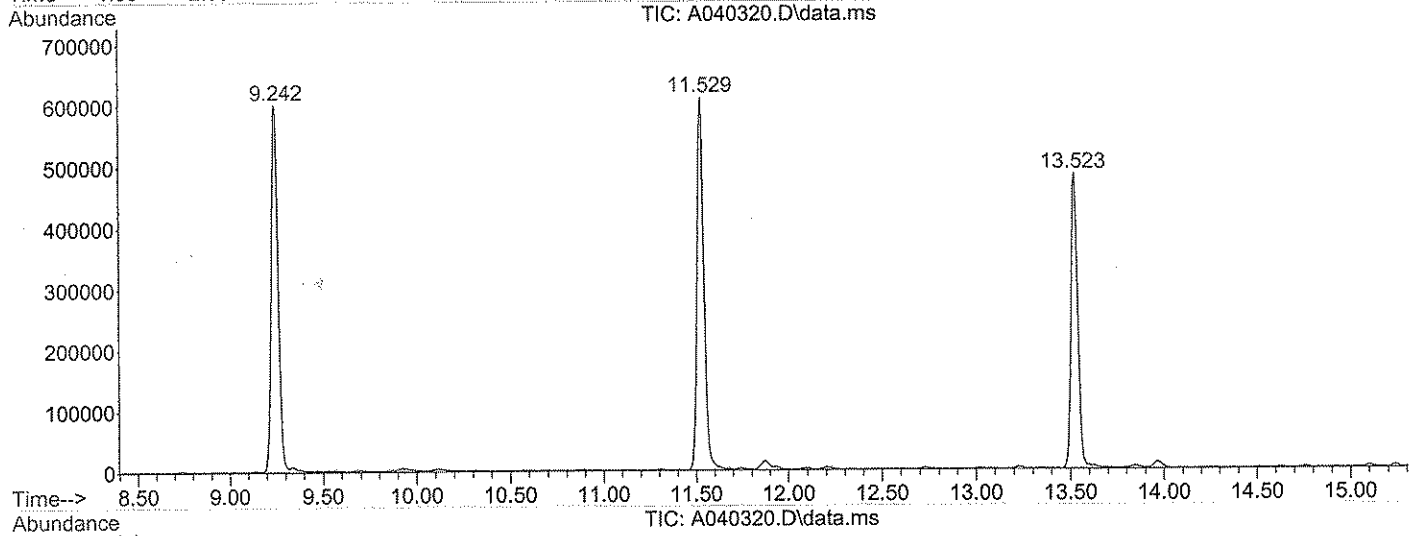
LSC Report - Integrated Chromatogram

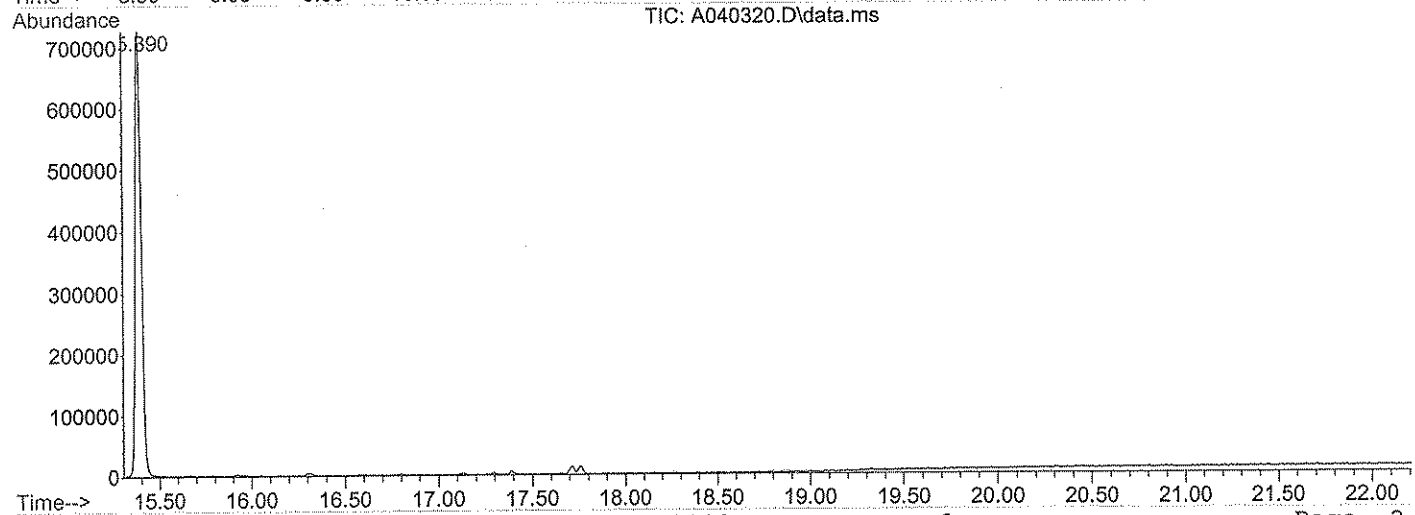
Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040320.D
Acq On : 3 Apr 2008 8:30 pm
Operator : BR
Sample : ,SAMP,ME0803A91-07A,1,
Misc : 8260+_w25
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040320.D 25ML0403.M Mon Apr 07 18:19:03 2008 voa1 Page: 2

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040320.D
Acq On : 3 Apr 2008 8:30 pm
Operator : BR
Sample : ,SAMP,ME0803A91-07A,1,
Misc : 8260+_w25
ALS Vial : 20 Sample Multiplier: 1

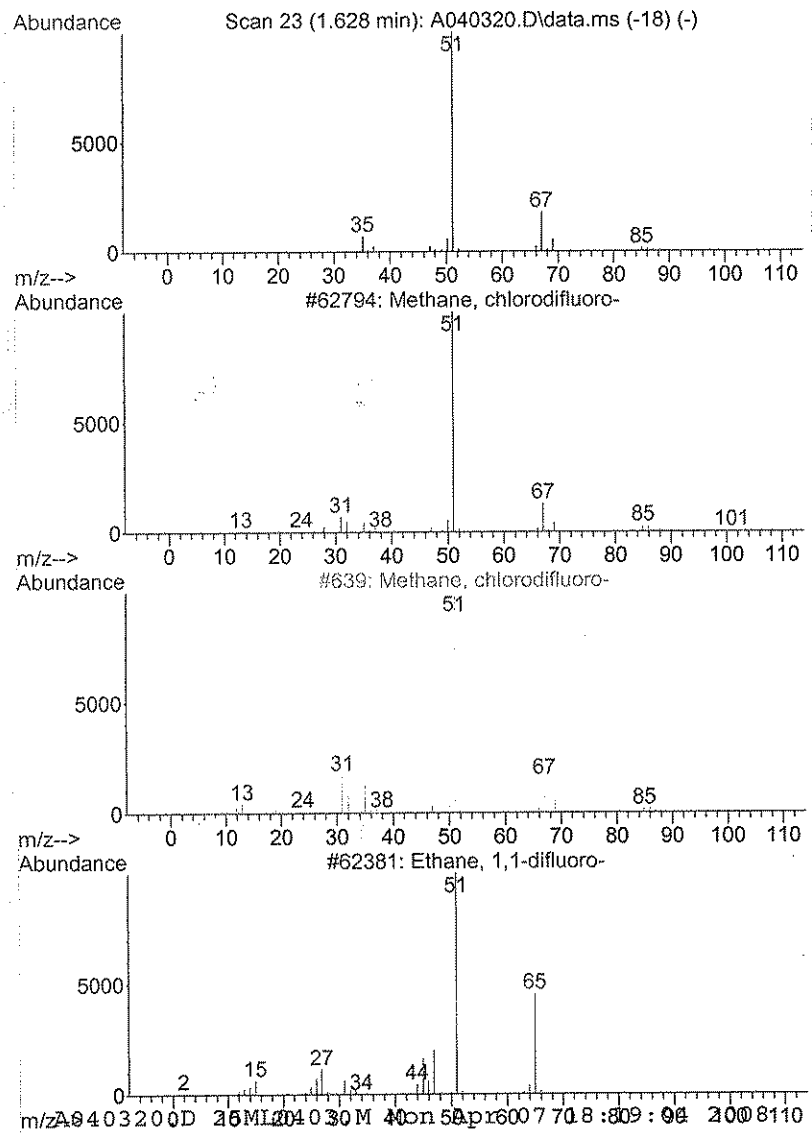
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 1 Methane, chlorodifluoro- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.628 | 4.96 ug/L | 597766 | fluorobenzene | 7.004 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Methane, chlorodifluoro- | 86 | CHClF2 | 000075-45-6 | 74 |
| 2 | Methane, chlorodifluoro- | 86 | CHClF2 | 000075-45-6 | 15 |
| 3 | Ethane, 1,1-difluoro- | 66 | C2H4F2 | 000075-37-6 | 7 |
| 4 | Ethane, 1,1-difluoro- | 66 | C2H4F2 | 000075-37-6 | 5 |
| 5 | Propiolonitrile | 51 | C3HN | 001070-71-9 | 4 |



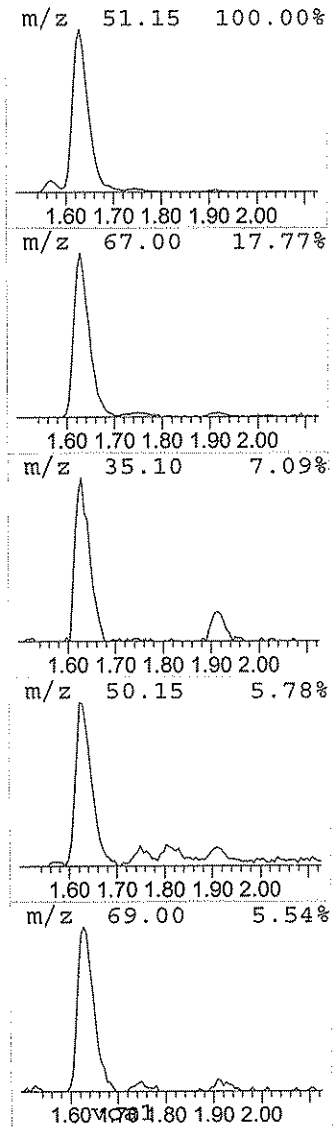












Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040320.D
Acq On : 3 Apr 2008 8:30 pm
Operator : BR
Sample : ,SAMP,ME0803A91-07A,1,
Misc : 8260+_w25
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

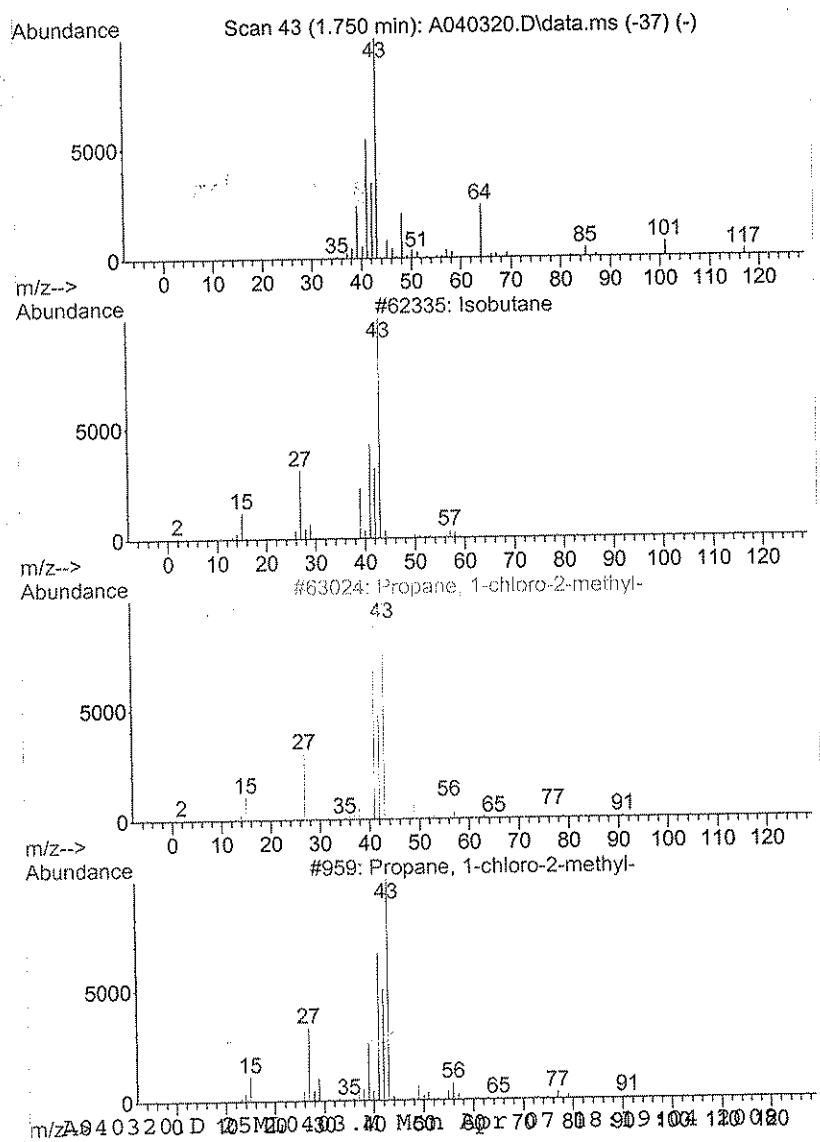
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

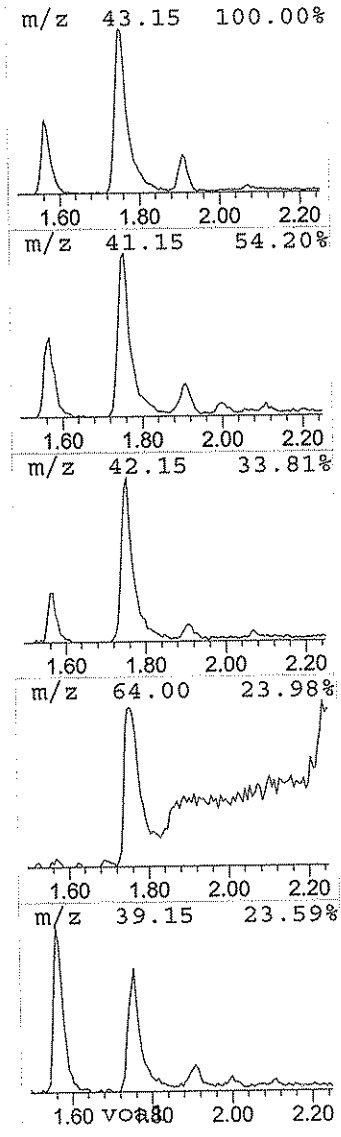
**********

Peak Number 2 Isobutane Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.750 | 1.69 ug/L | 204444 | fluorobenzene | 7.004 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Isobutane | 58 | C4H10 | 000075-28-5 | 27 |
| 2 | Propane, 1-chloro-2-methyl- | 92 | C4H9Cl | 000513-36-0 | 16 |
| 3 | Propane, 1-chloro-2-methyl- | 92 | C4H9Cl | 000513-36-0 | 16 |
| 4 | Isobutane | 58 | C4H10 | 000075-28-5 | 9 |
| 5 | Oxirane, ethyl- | 72 | C4H8O | 000106-88-7 | 9 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040320.D
Acq On : 3 Apr 2008 8:30 pm
Operator : BR
Sample : ,SAMP,ME0803A91-07A,1,
Misc : 8260+_w25
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

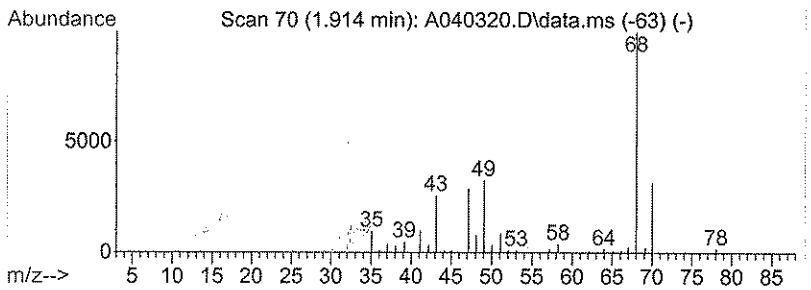
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

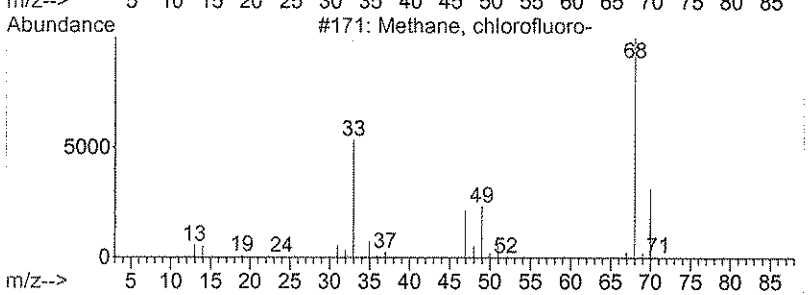
**********

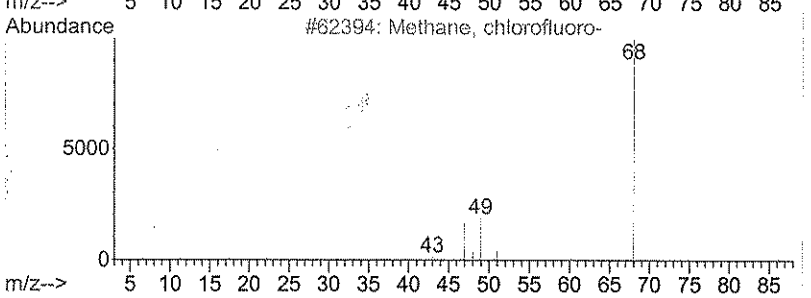
Peak Number 3 Methane, chlorofluoro- Concentration Rank 4

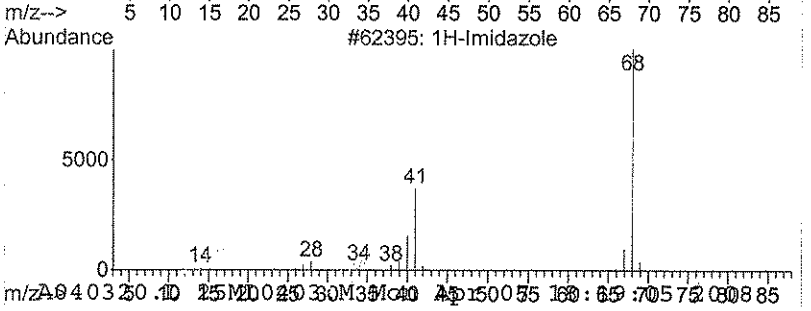
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.914 | 1.11 ug/L | 134345 | fluorobenzene | 7.004 |

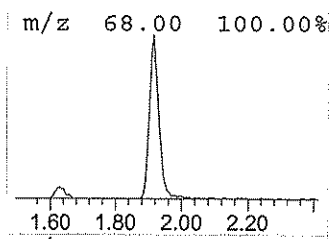
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Methane, chlorofluoro- | 68 | CH2ClF | 000593-70-4 | 91 |
| 2 | Methane, chlorofluoro- | 68 | CH2ClF | 000593-70-4 | 90 |
| 3 | 1H-Imidazole | 68 | C3H4N2 | 000288-32-4 | 9 |
| 4 | 1H-Imidazole | 68 | C3H4N2 | 000288-32-4 | 9 |
| 5 | 1H-Pyrazole | 68 | C3H4N2 | 000288-13-1 | 9 |

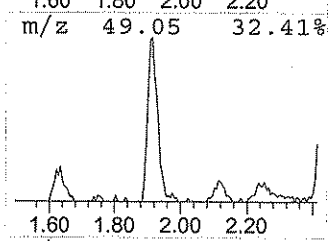


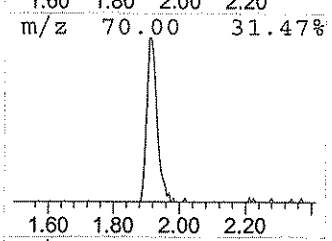



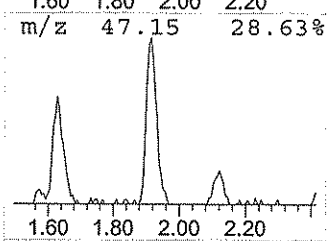



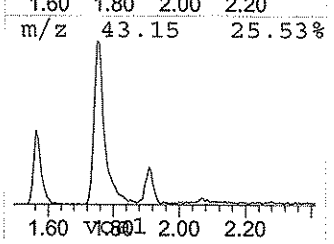



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040320.D
Acq On : 3 Apr 2008 8:30 pm
Operator : BR
Sample : ,SAMP,ME0803A91-07A,1,
Misc : 8260+_w25
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

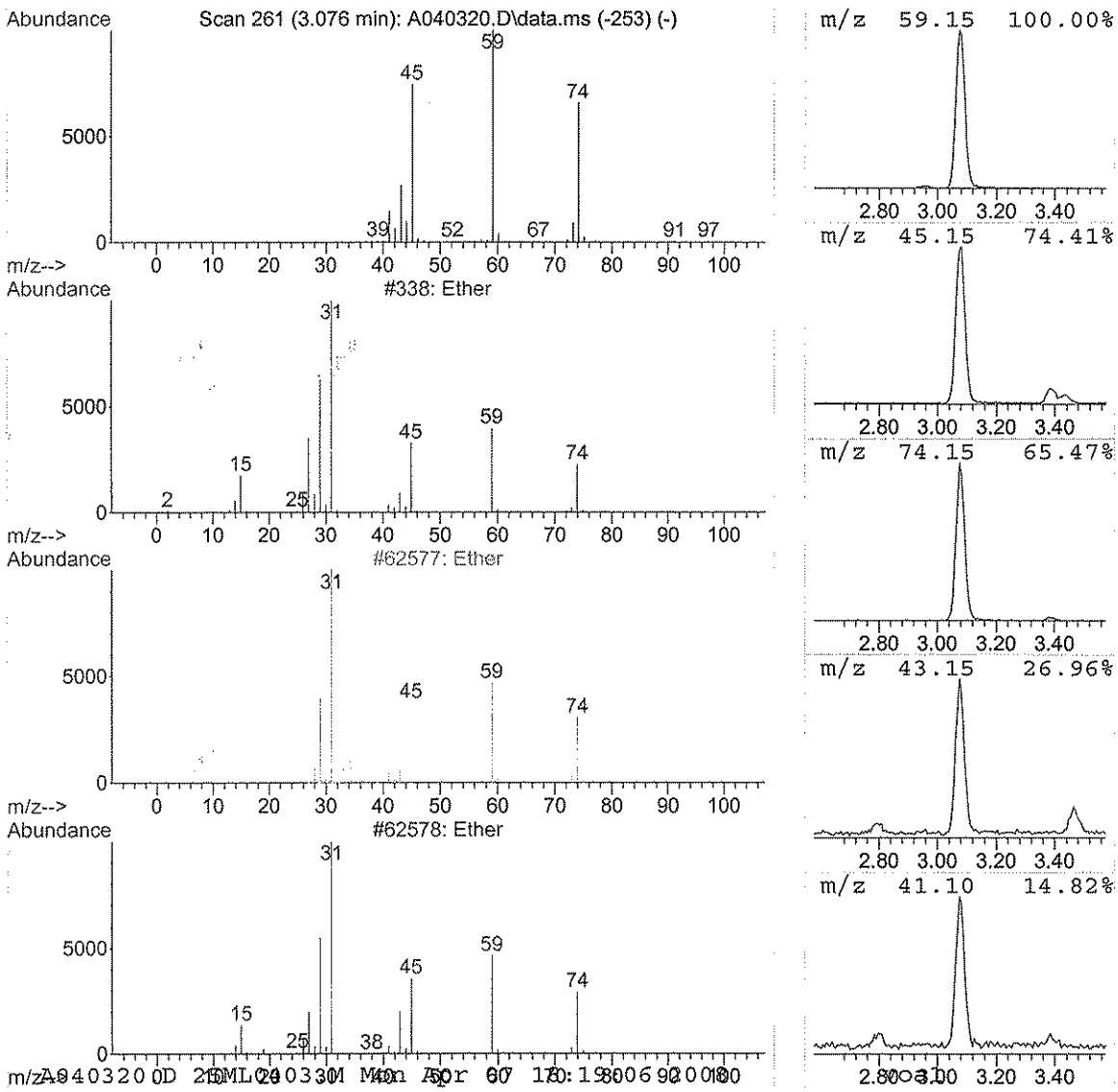
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 4 Ether Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.076 | 3.09 ug/L | 372638 | fluorobenzene | 7.004 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 86 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 86 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 45 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040321.D
Acq On : 3 Apr 2008 9:09 pm
Sample : ,SAMP,ME0803A91-08A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 04 06:42:18 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.006 | 96 | 495241 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 451338 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 243464 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.161 | 113 | 137538 | 10.66 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.60% | | |
| 30) 1,2-dichloroethane-d4 | 6.593 | 65 | 136332 | 11.02 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 110.20% | | |
| 44) toluene-d8 | 9.244 | 98 | 520519 | 9.49 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 94.90% | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 225991 | 9.79 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.90% | | |
| Target Compounds | | | | | | Qvalue |
| 3) chloromethane | 1.801 | 50 | 6660 | 0.41 | ug/L | 97 |
| 5) 1,3-butadiene | 1.934 | 39 | 365 | 0.02 | ug/L | 91 |
| 11) acetone | 3.467 | 43 | 4322 | 2.44 | ug/L | 99 |
| 53) chlorobenzene | 11.573 | 112 | 114907 | 2.88 | ug/L | 96 |

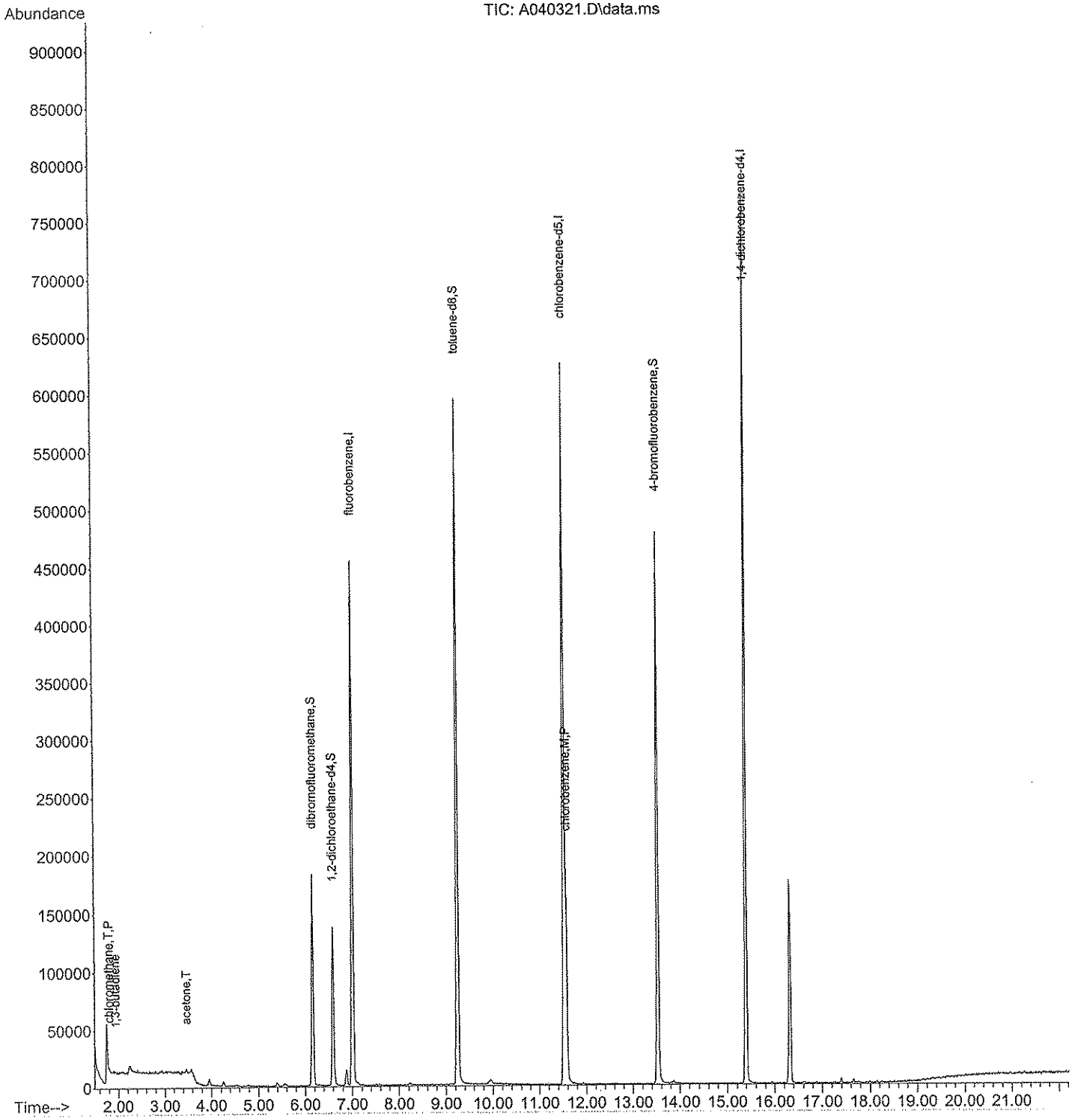
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/4/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040321.D
Acq On : 3 Apr 2008 9:09 pm
Sample : ,SAMP,ME0803A91-08A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 04 06:42:18 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040321.D
Acq On : 3 Apr 2008 9:09 pm
Operator : BR
Sample : ,SAMP,ME0803A91-08A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Bis(2-chloroiso... | 16.305 | 3.0 | ug/L | 471606 | 3 | 15.386 | 1576750 | 10.0 |

Raw Results 4/08/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040321.D
Acq On : 3 Apr 2008 9:09 pm
Operator : BR
Sample : ,SAMP,ME0803A91-08A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040321.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.752 | 36 | 43 | 55 | rBV | 51766 | 138865 | 7.06% | 1.570% |
| 2 | 6.161 | 758 | 768 | 786 | rBV | 182357 | 463732 | 23.58% | 5.242% |
| 3 | 6.593 | 827 | 839 | 854 | rBV2 | 136765 | 353287 | 17.96% | 3.994% |
| 4 | 7.006 | 895 | 907 | 921 | rBV | 454639 | 1163794 | 59.17% | 13.156% |
| 5 | 9.244 | 1264 | 1275 | 1299 | rBV | 594220 | 1513874 | 76.97% | 17.113% |
| 6 | 11.525 | 1639 | 1650 | 1680 | rBV2 | 624716 | 1966959 | 100.00% | 22.235% |
| 7 | 13.525 | 1963 | 1979 | 2004 | rBV | 478077 | 1197502 | 60.88% | 13.537% |
| 8 | 15.386 | 2272 | 2285 | 2306 | rBV | 771361 | 1576750 | 80.16% | 17.824% |
| 9 | 16.305 | 2425 | 2436 | 2449 | rBV2 | 175538 | 471606 | 23.98% | 5.331% |

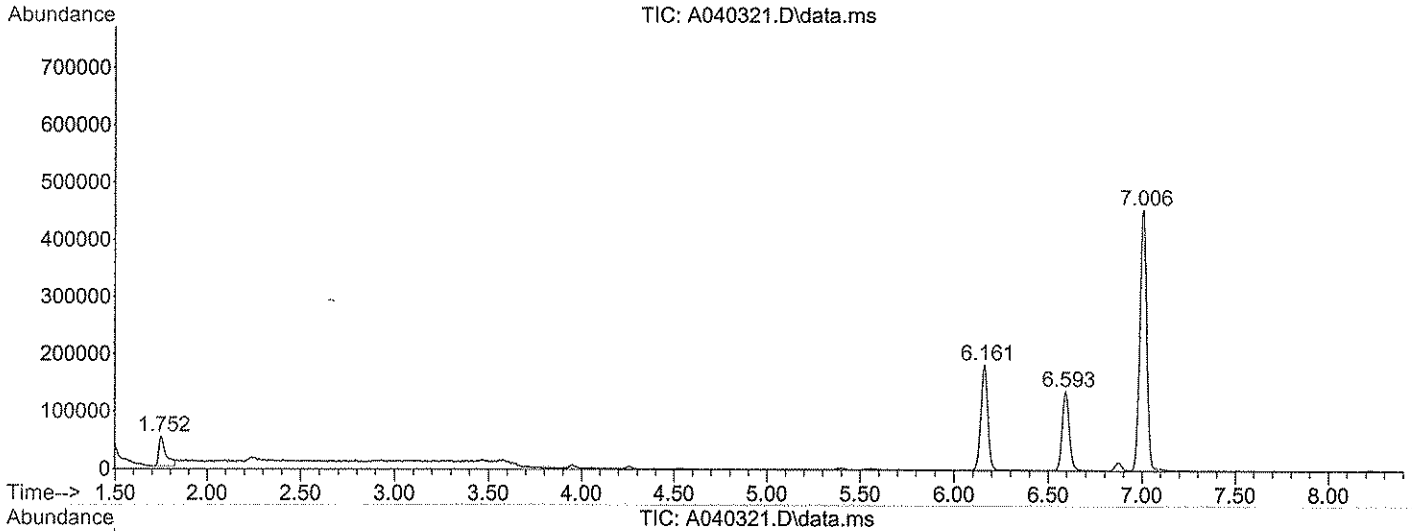
Sum of corrected areas: 8846369

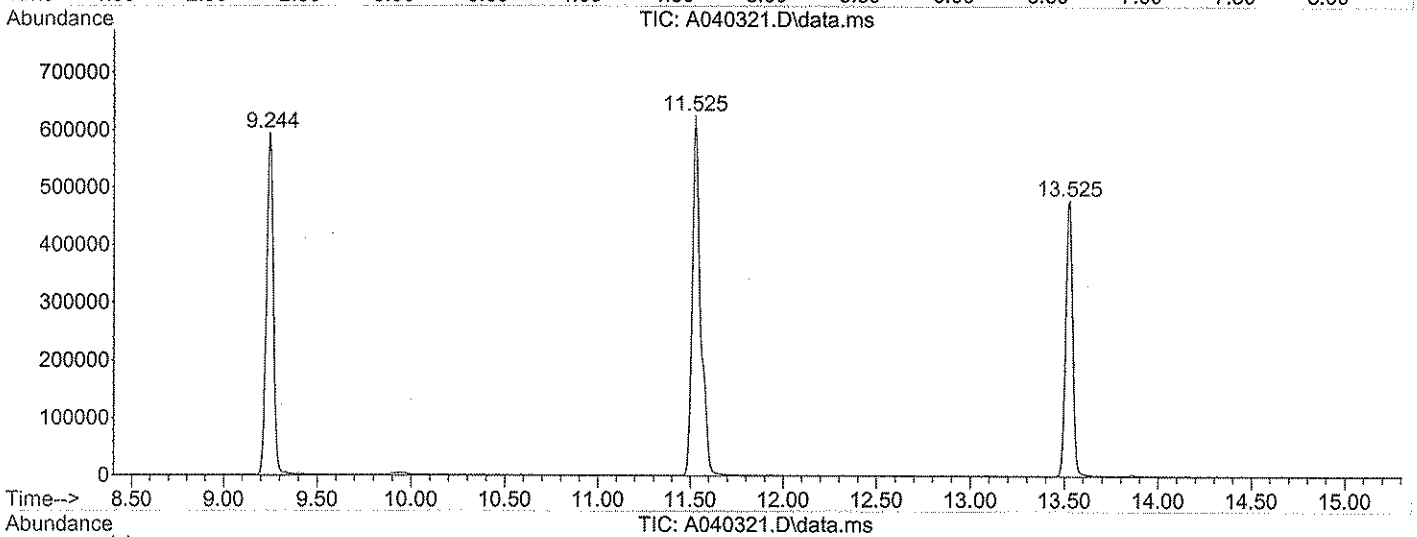
LSC Report - Integrated Chromatogram

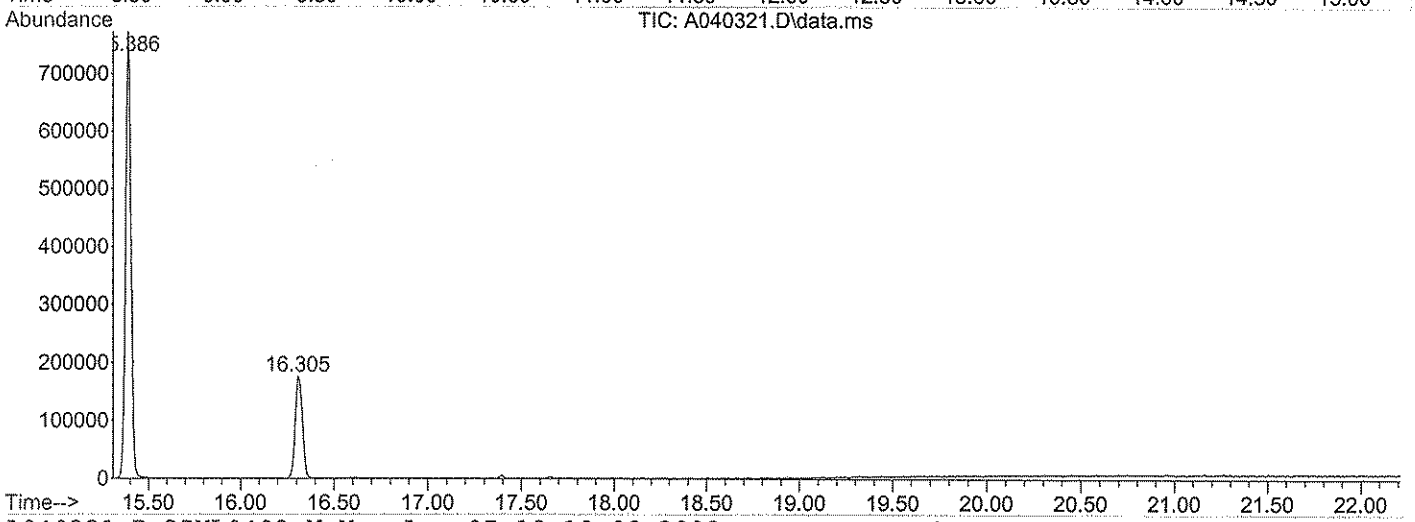
```
Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040321.D
Acq On    :  3 Apr 2008    9:09 pm
Operator  : BR
Sample    : ,SAMP,ME0803A91-08A,1,
Misc      : 8260+_w25
ALS Vial  : 21   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040321.D
Acq On : 3 Apr 2008 9:09 pm
Operator : BR
Sample : ,SAMP,ME0803A91-08A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

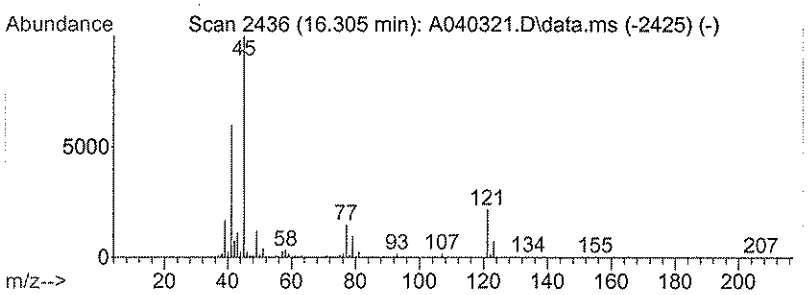
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

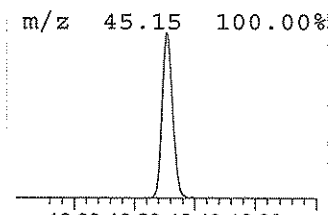
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

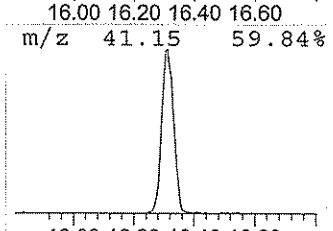
**********
Peak Number 1 Bis(2-chloroisopropyl) ether Concentration Rank 1

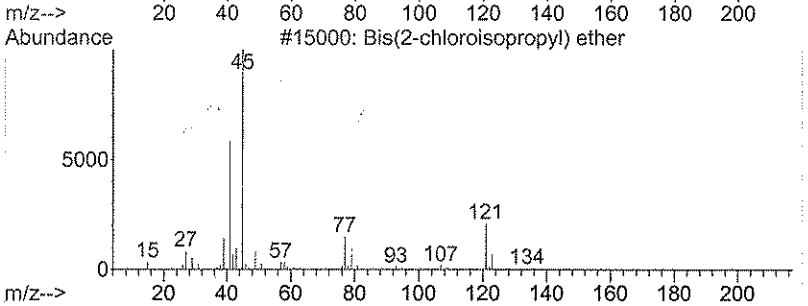
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.305 | 2.99 ug/L | 471606 | 1,4-dichlorobenzene-d4 | 15.386 |

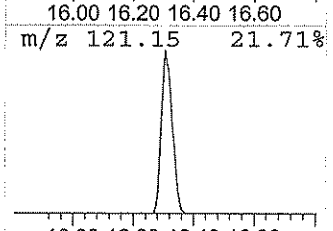
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Bis(2-chloroisopropyl) ether | 170 | C6H12Cl2O | 039638-32-9 | 83 |
| 2 | Bis(2-chloroisopropyl) ether | 170 | C6H12Cl2O | 039638-32-9 | 64 |
| 3 | Propane, 2,2'-oxybis[1-chloro- | 170 | C6H12Cl2O | 000108-60-1 | 64 |
| 4 | Bis(2-chloroisopropyl) ether | 170 | C6H12Cl2O | 039638-32-9 | 42 |
| 5 | Hydrazine, propyl- | 74 | C3H10N2 | 005039-61-2 | 38 |

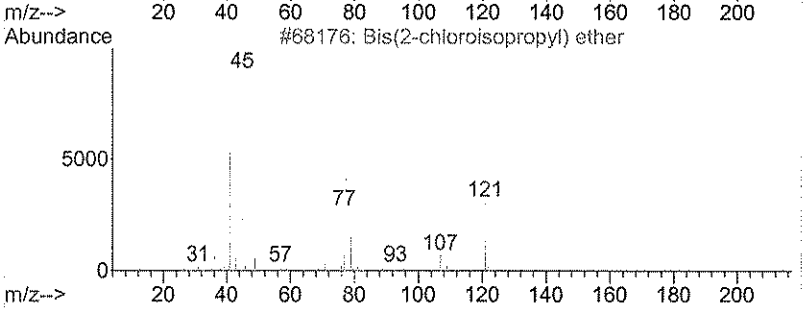


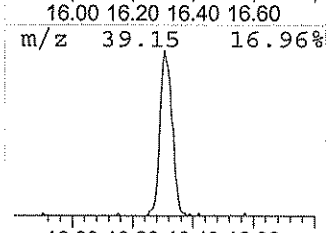



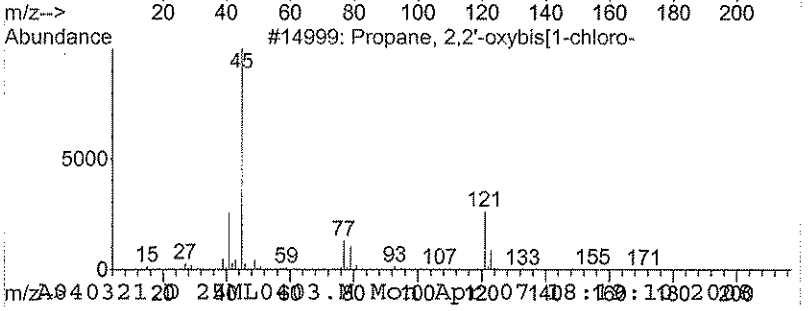



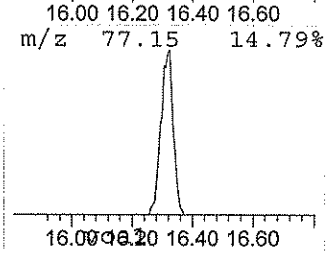



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040322.D
Acq On : 3 Apr 2008 9:50 pm
Sample : ,SAMP,ME0803A91-09A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 04 06:42:21 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.011 | 96 | 481614 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.529 | 117 | 442650 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.391 | 152 | 239769 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.166 | 113 | 134739 | 10.74 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.40% | | | |
| 30) 1,2-dichloroethane-d4 | 6.597 | 65 | 137550 | 11.44 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.40% | | | |
| 44) toluene-d8 | 9.249 | 98 | 513497 | 9.55 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.50% | | | |
| 63) 4-bromofluorobenzene | 13.524 | 95 | 224915 | 9.93 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.30% | | | |
| Target Compounds | | | | | | Qvalue |
| 3) chloromethane | 1.805 | 50 | 5735 | 0.36 | ug/L | 84 |
| 5) 1,3-butadiene | 1.994 | 39 | 159 | 0.01 | ug/L # | 10 |

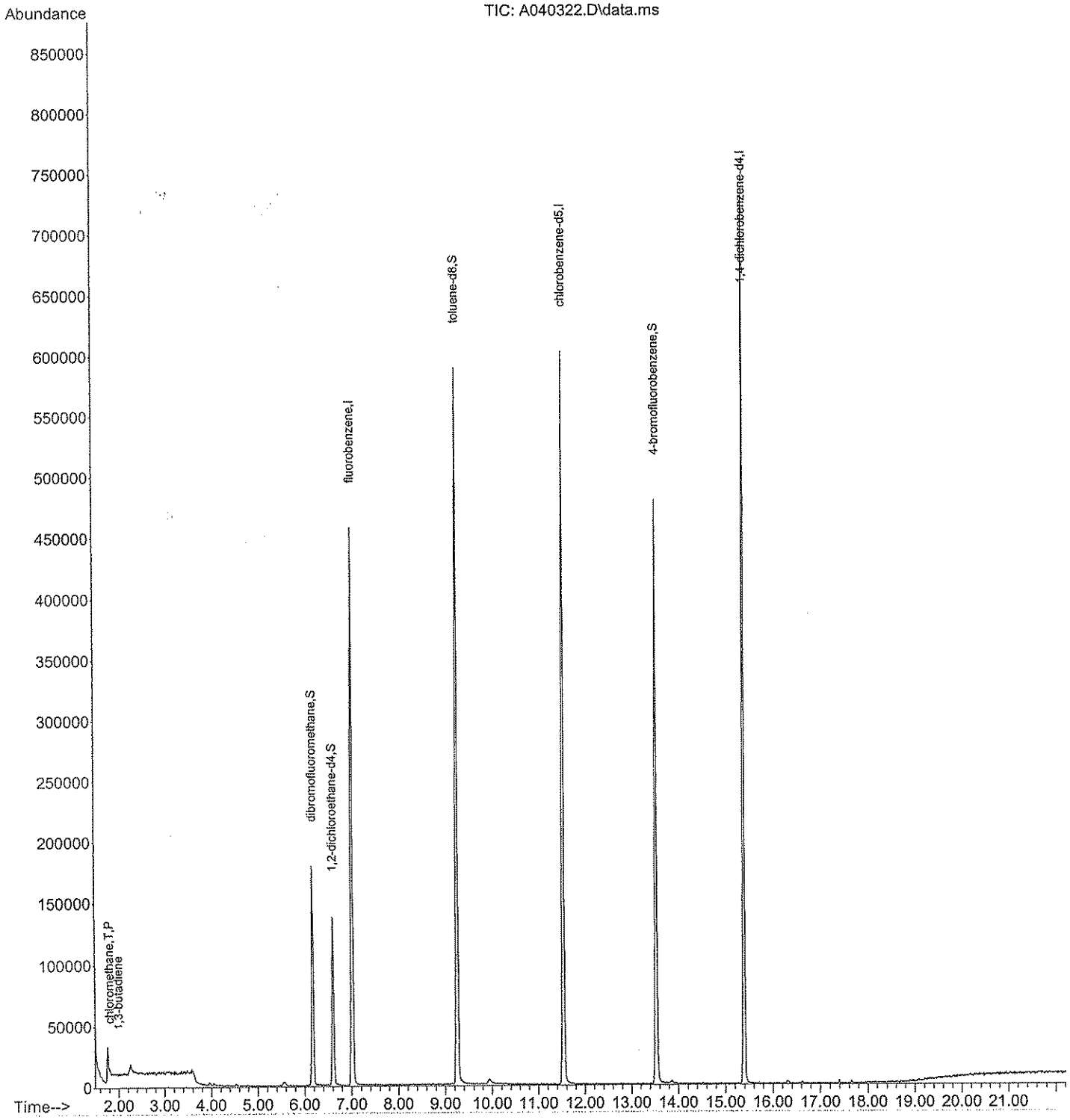
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/4/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040322.D
Acq On : 3 Apr 2008 9:50 pm
Sample : ,SAMP,ME0803A91-09A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 04 06:42:21 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040308\\
Data File : A040322.D
Acq On : 3 Apr 2008 9:50 pmm
Operator : BRR
Sample : ,SAMP,ME0803A91-09A,1,,
Misc : 8260+_w255
ALS Vial : 22 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

4/7/08/or

No Library Search Compounds Detected
**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040322.D
Acq On : 3 Apr 2008 9:50 pm
Operator : BR
Sample : ,SAMP,ME0803A91-09A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040322.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.757 | 38 | 44 | 50 | rBV | 29197 | 64927 | 4.18% | 0.836% |
| 2 | 6.166 | 758 | 769 | 786 | rBV | 178753 | 464580 | 29.90% | 5.984% |
| 3 | 6.597 | 828 | 840 | 855 | rBV | 137060 | 343790 | 22.13% | 4.428% |
| 4 | 7.011 | 894 | 908 | 937 | rBV | 457102 | 1143120 | 73.57% | 14.723% |
| 5 | 9.249 | 1264 | 1276 | 1290 | rBV | 588359 | 1483080 | 95.45% | 19.102% |
| 6 | 11.529 | 1639 | 1651 | 1671 | rBV | 601754 | 1527371 | 98.30% | 19.672% |
| 7 | 13.524 | 1962 | 1979 | 1998 | rBV | 478736 | 1183451 | 76.17% | 15.243% |
| 8 | 15.391 | 2273 | 2286 | 2307 | rBV | 729683 | 1553766 | 100.00% | 20.012% |

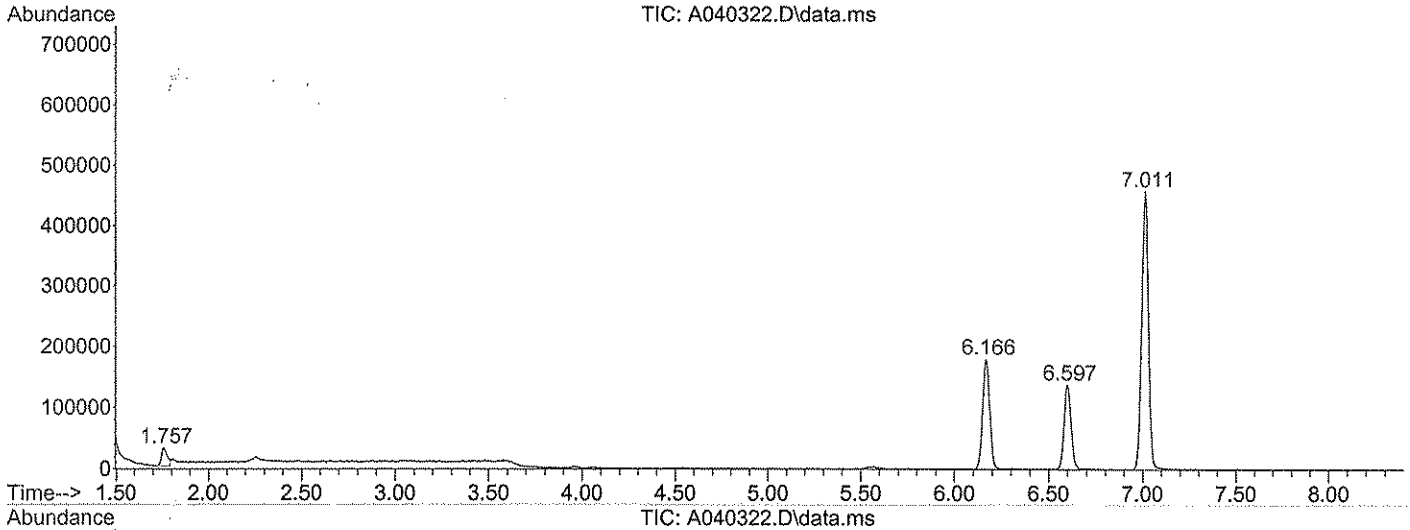
Sum of corrected areas: 7764085

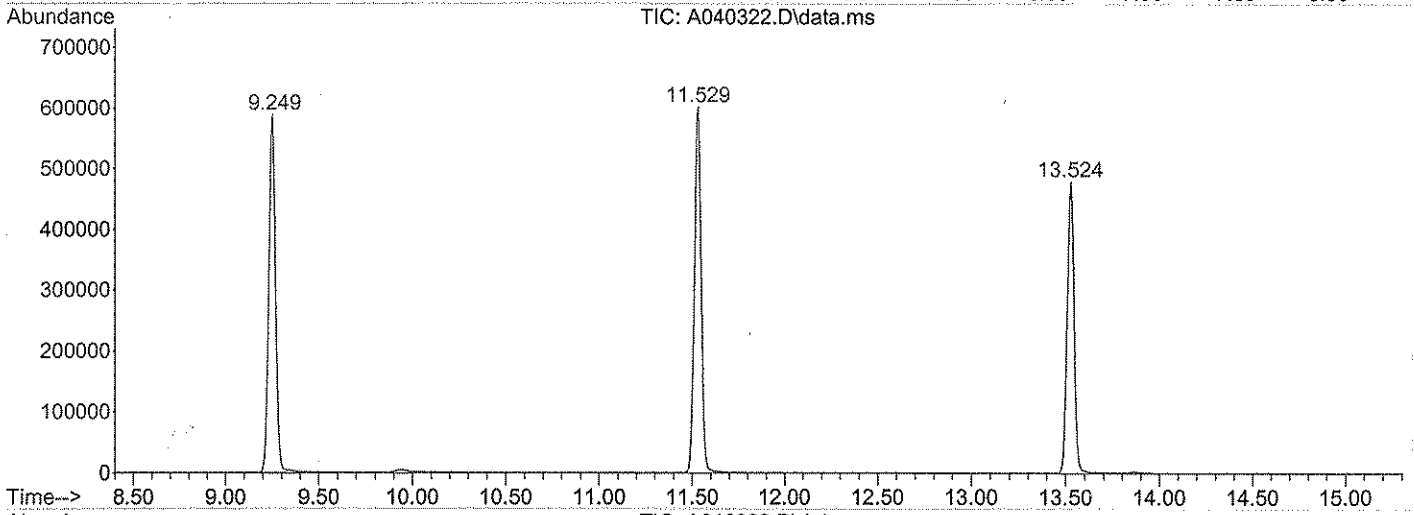
LSC Report - Integrated Chromatogram

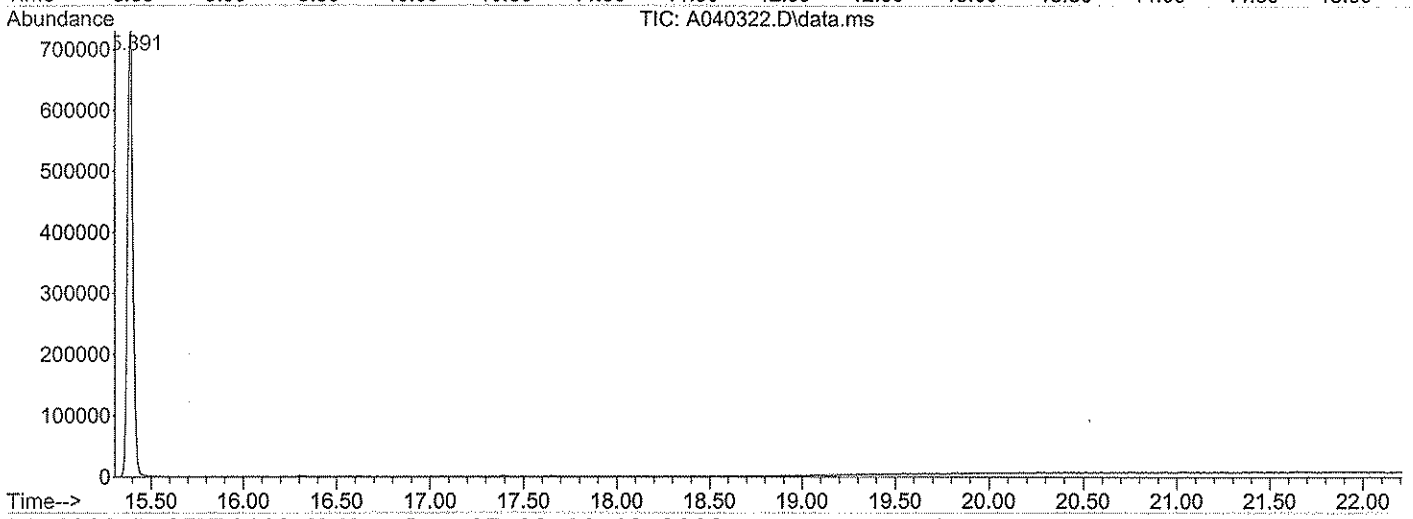
```
Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040322.D
Acq On    :  3 Apr 2008    9:50 pm
Operator  : BR
Sample    : ,SAMP,ME0803A91-09A,1,
Misc      : 8260+_w25
ALS Vial  : 22   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```




A040322.D 25ML0403.M Mon Apr 07 18:19:13 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040323.D
Acq On : 3 Apr 2008 10:29 pm
Sample : ,SAMP,ME0803A91-10A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 04 06:42:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 469071 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.529 | 117 | 437373 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.391 | 152 | 236816 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.165 | 113 | 134494 | 11.01 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 110.10% | | |
| 30) 1,2-dichloroethane-d4 | 6.597 | 65 | 135682 | 11.58 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 115.80% | | |
| 44) toluene-d8 | 9.248 | 98 | 499801 | 9.41 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 94.10% | | |
| 63) 4-bromofluorobenzene | 13.524 | 95 | 219203 | 9.80 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.00% | | |
| Target Compounds | | | | | | Qvalue |
| 3) chloromethane | 1.805 | 50 | 8027 | 0.52 | ug/L | 93 |
| FIQ 1,3-butadiene | 1.957 | 39 | 124 | 0.01 | ug/L # | 10 |

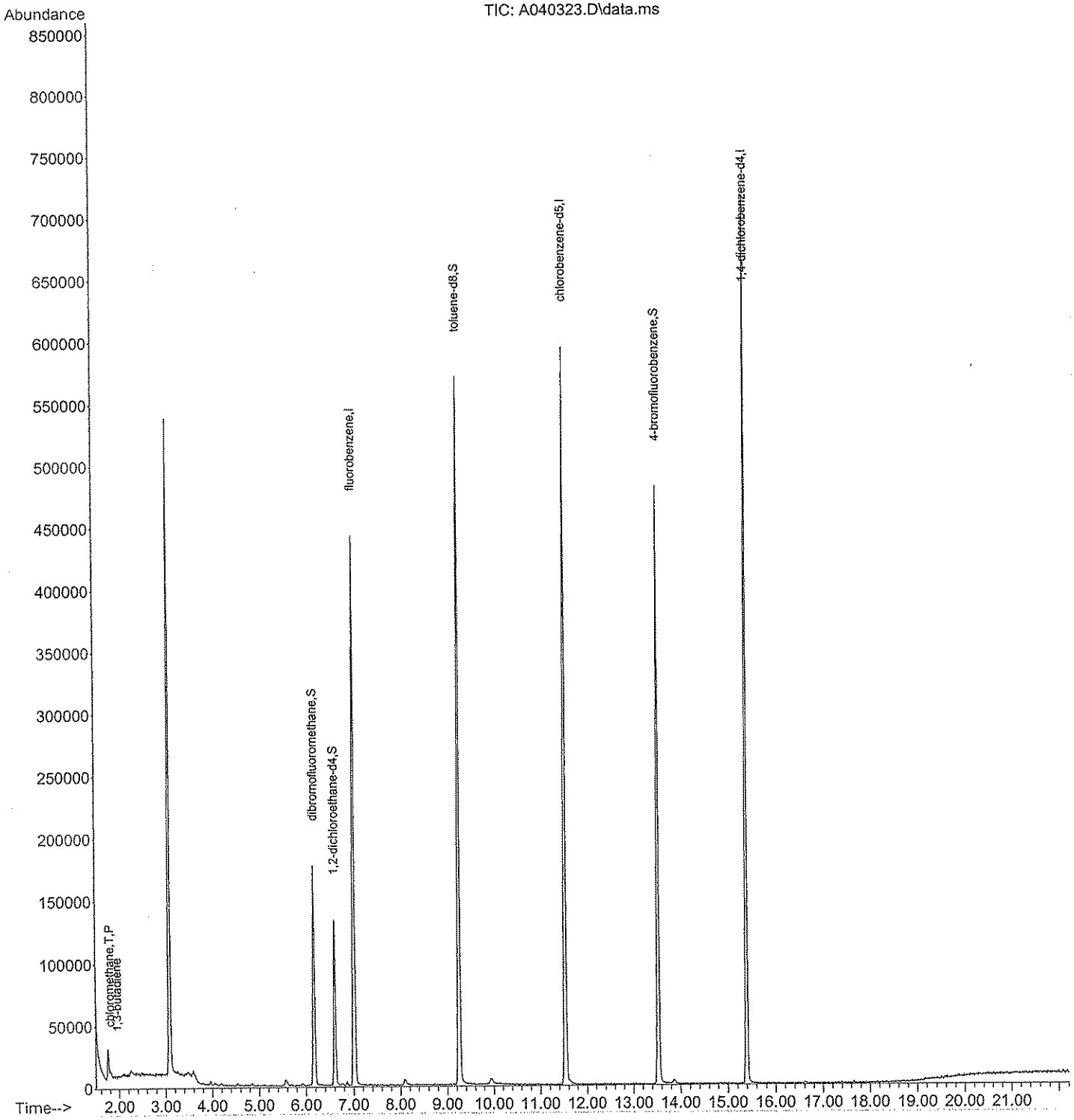
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/4/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040323.D
Acq On : 3 Apr 2008 10:29 pm
Sample : ,SAMP,ME0803A91-10A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 04 06:42:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040323.D
Acq On : 3 Apr 2008 10:29 pm
Operator : BR
Sample : ,SAMP,ME0803A91-10A,1,
Misc : 8260+_w25
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Ether | 3.088 | 10.3 | ug/L | 1143650 | 1 | 7.010 | 1113610 | 10.0 |

Raw Results on 4/08/4

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040323.D
Acq On : 3 Apr 2008 10:29 pm
Operator : BR
Sample : ,SAMP,ME0803A91-10A,1,
Misc : 8260+_w25
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040323.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.750 | 38 | 43 | 50 | rBV | 24844 | 55647 | 3.64% | 0.636% |
| 2 | 3.088 | 254 | 263 | 277 | rBV | 527795 | 1143646 | 74.91% | 13.081% |
| 3 | 6.165 | 758 | 769 | 785 | rBV | 176201 | 457038 | 29.94% | 5.228% |
| 4 | 6.597 | 831 | 840 | 858 | rBV | 132828 | 336530 | 22.04% | 3.849% |
| 5 | 7.010 | 896 | 908 | 924 | rBV | 442177 | 1113612 | 72.94% | 12.737% |
| 6 | 9.248 | 1265 | 1276 | 1305 | rBV | 569809 | 1454080 | 95.24% | 16.632% |
| 7 | 11.529 | 1638 | 1651 | 1682 | rBV | 593762 | 1499419 | 98.21% | 17.150% |
| 8 | 13.524 | 1968 | 1979 | 2001 | rBV | 481147 | 1156100 | 75.72% | 13.223% |
| 9 | 15.391 | 2276 | 2286 | 2308 | rBV | 716299 | 1526747 | 100.00% | 17.463% |

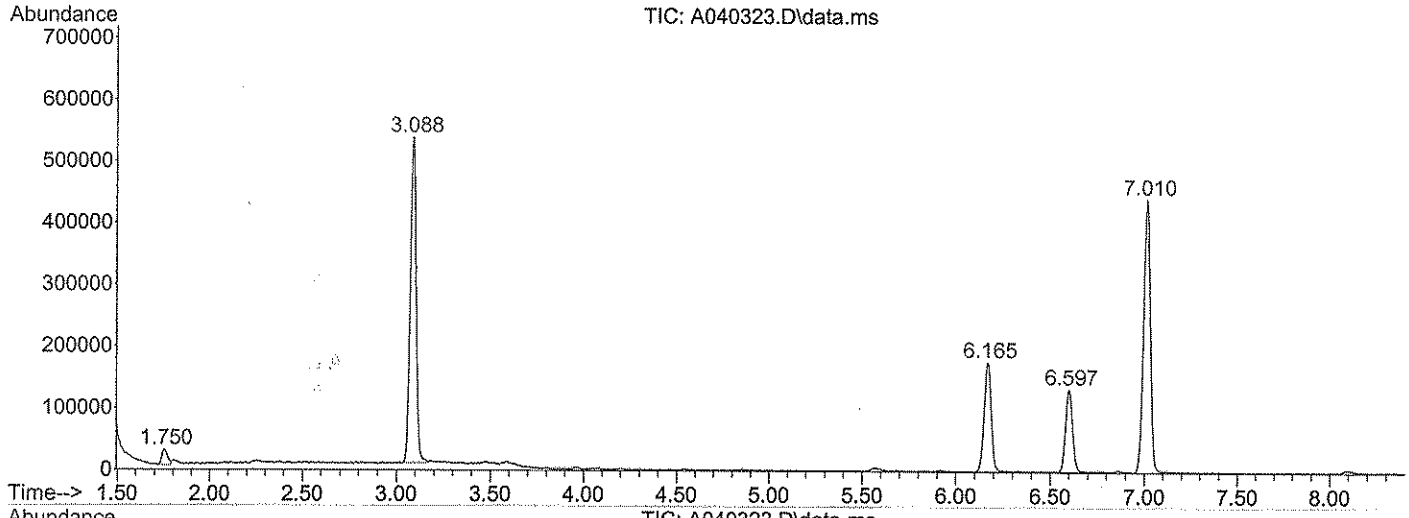
Sum of corrected areas: 8742819

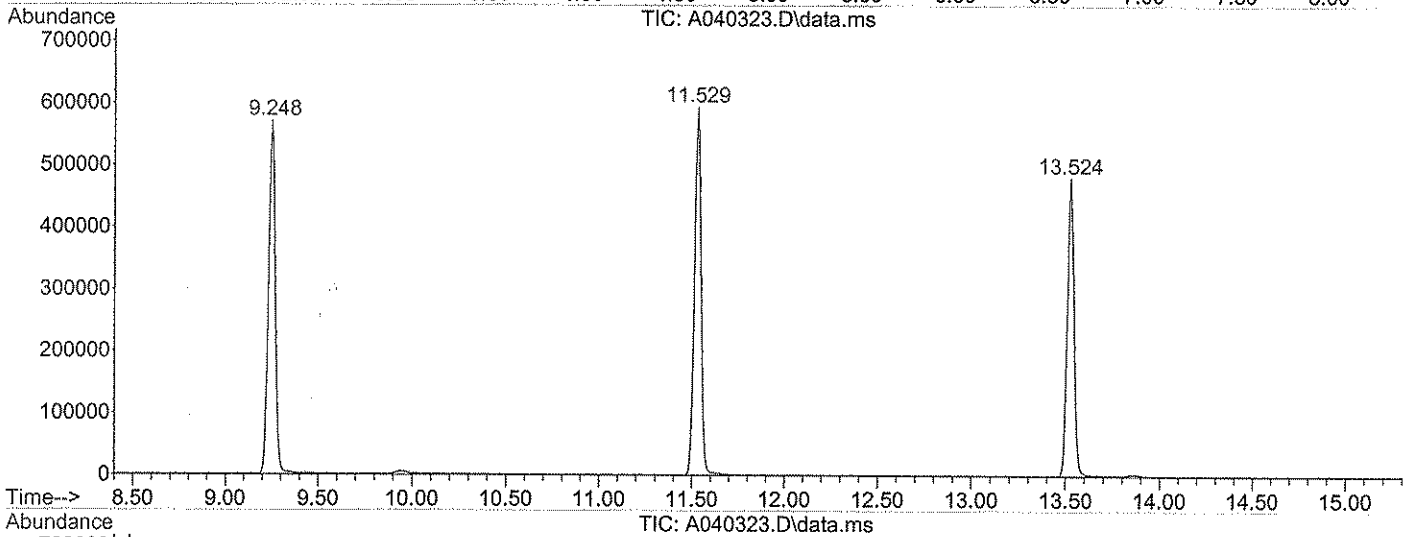
LSC Report - Integrated Chromatogram

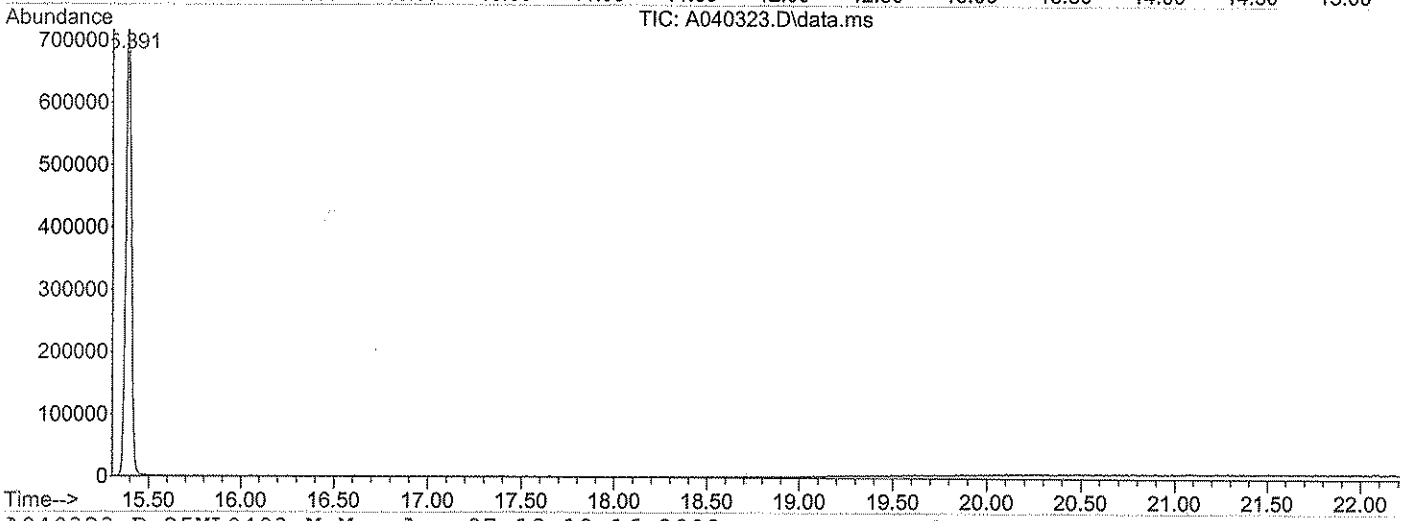
```
Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040323.D
Acq On    :  3 Apr 2008  10:29 pm
Operator  : BR
Sample    : ,SAMP,ME0803A91-10A,1,
Misc      : 8260+_w25
ALS Vial  : 23   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library  : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```




A040323.D 25ML0403.M Mon Apr 07 18:19:16 2008 voa1 Page: 2

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040323.D
Acq On : 3 Apr 2008 10:29 pm
Operator : BR
Sample : ,SAMP,ME0803A91-10A,1,
Misc : 8260+_w25
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

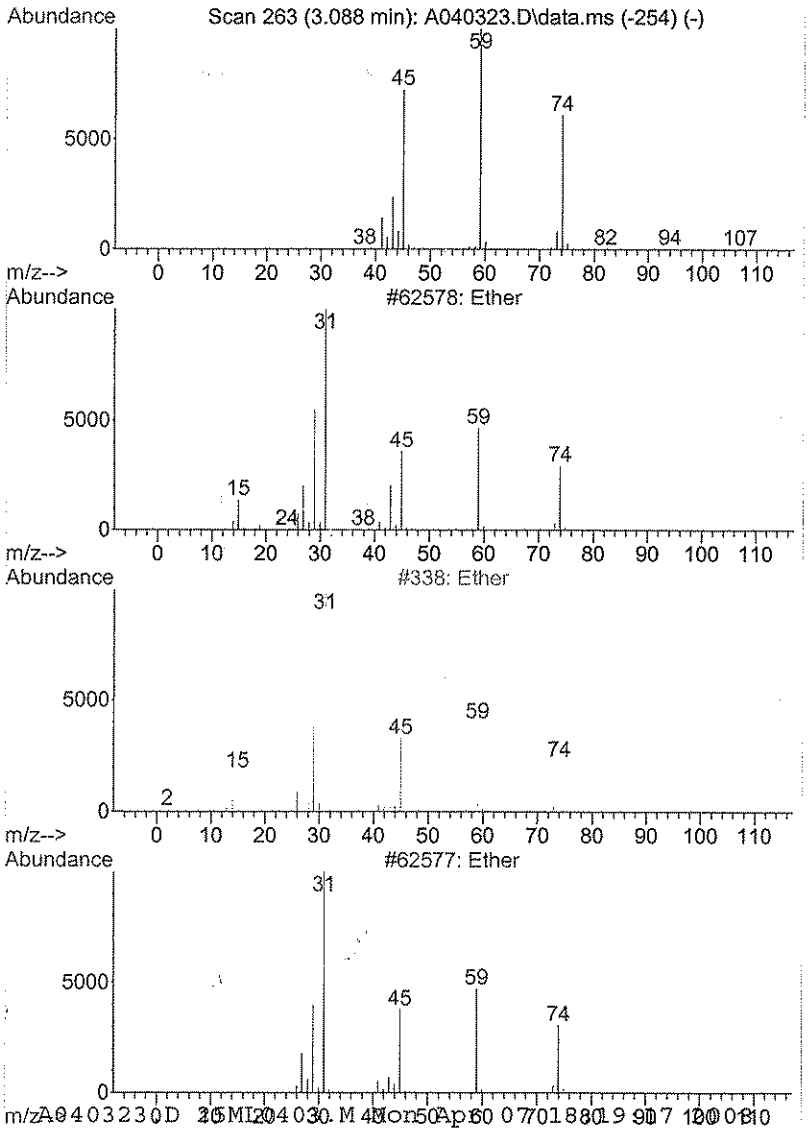
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

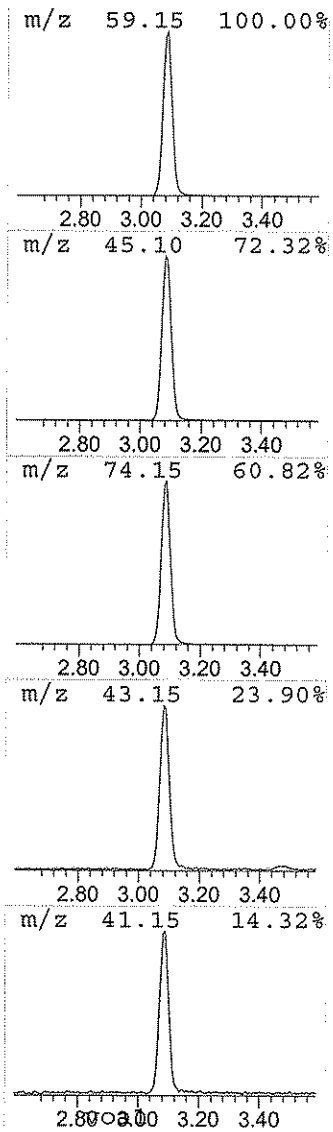
**********

Peak Number 1 Ether Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.088 | 10.27 ug/L | 1143650 | fluorobenzene | 7.010 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 64 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040324.D
Acq On : 3 Apr 2008 11:06 pm
Sample : ,SAMP,ME0803A91-11A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 04 06:42:27 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.002 | 96 | 454330 | 10.00 | ug/L | -0.01 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 418363 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 227266 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.157 | 113 | 127510 | 10.78 | ug/L | -0.01 |
| Spiked Amount 10.000 | | | Recovery = 107.80% | | | |
| 30) 1,2-dichloroethane-d4 | 6.589 | 65 | 124684 | 10.99 | ug/L | -0.01 |
| Spiked Amount 10.000 | | | Recovery = 109.90% | | | |
| 44) toluene-d8 | 9.240 | 98 | 480057 | 9.45 | ug/L | -0.01 |
| Spiked Amount 10.000 | | | Recovery = 94.50% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 210143 | 9.82 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.20% | | | |
| Target Compounds | | | | | | Qvalue |
| 3) chloromethane | 1.803 | 50 | 5930 | 0.40 | ug/L | 98 |
| 5) 1,3-butadiene | 1.985 | 39 | 267 | 0.02 | ug/L # | 10 |
| 11) acetone | 3.463 | 43 | 6038 | 3.71 | ug/L | 94 |

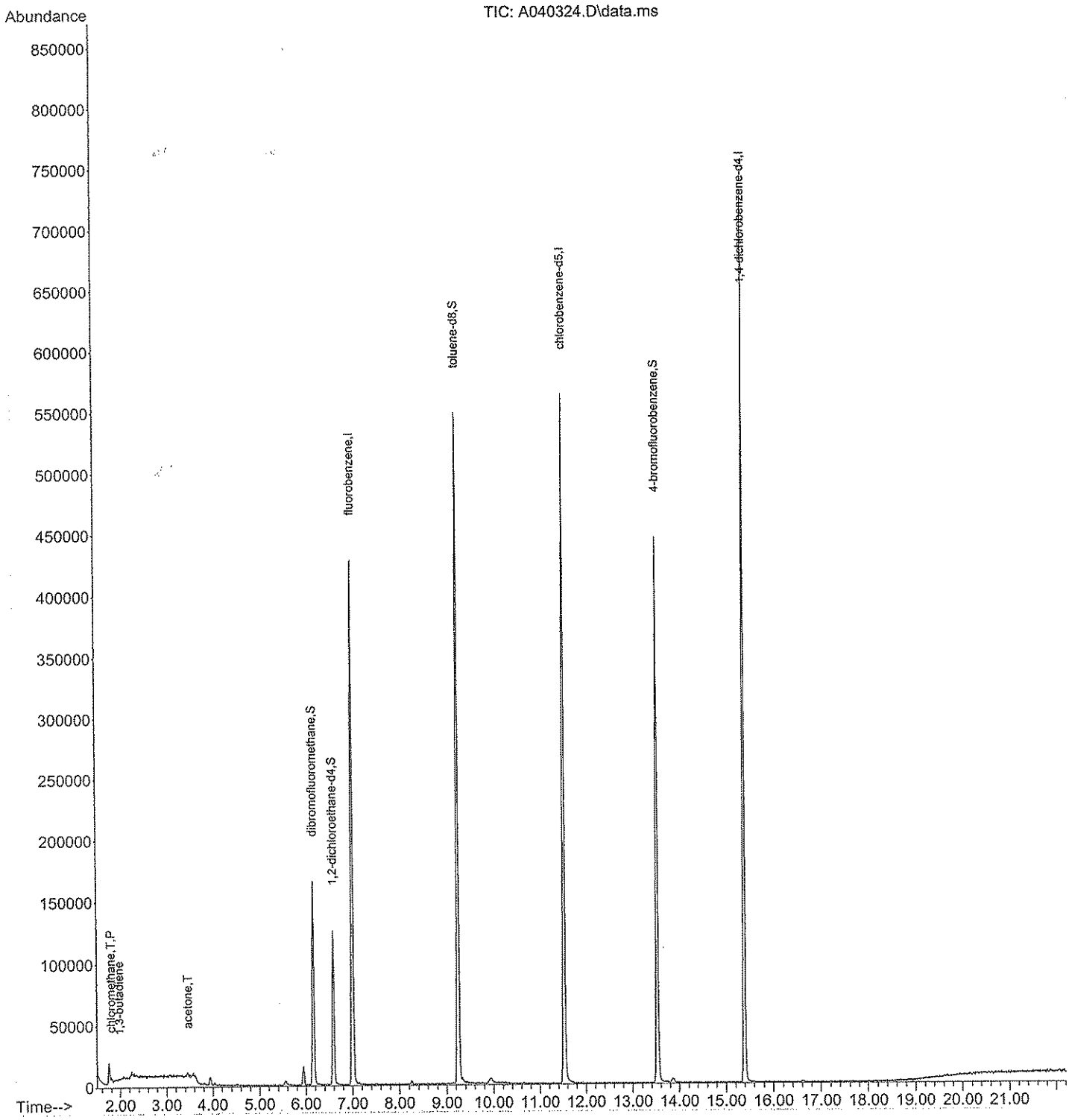
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/4/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040324.D
Acq On : 3 Apr 2008 11:06 pm
Sample : ,SAMP,ME0803A91-11A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 04 06:42:27 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040308\\
Data File : A040324.D
Acq On : 3 Apr 2008 11:06 pmm
Operator : BRR
Sample : ,SAMP,ME0803A91-11A,1,,
Misc : 8260+_w255
ALS Vial : 24 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

Raw Results 4/10/08

No Library Search Compounds Detected

**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040324.D
Acq On : 3 Apr 2008 11:06 pm
Operator : BR
Sample : ,SAMP,ME0803A91-11A,1,
Misc : 8260+_w25
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040324.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.151 | 757 | 767 | 782 | rBV | 165043 | 435131 | 29.46% | 5.982% |
| 2 | 6.589 | 828 | 839 | 857 | rBV | 125340 | 315942 | 21.39% | 4.344% |
| 3 | 7.002 | 895 | 907 | 926 | rBV | 428080 | 1082060 | 73.26% | 14.877% |
| 4 | 9.240 | 1265 | 1275 | 1288 | rBV | 547312 | 1400052 | 94.79% | 19.248% |
| 5 | 11.527 | 1635 | 1651 | 1682 | rBV | 562485 | 1448441 | 98.07% | 19.914% |
| 6 | 13.522 | 1968 | 1979 | 2001 | rBV | 445446 | 1115016 | 75.50% | 15.330% |
| 7 | 15.389 | 2277 | 2286 | 2312 | rBV | 724644 | 1476927 | 100.00% | 20.305% |

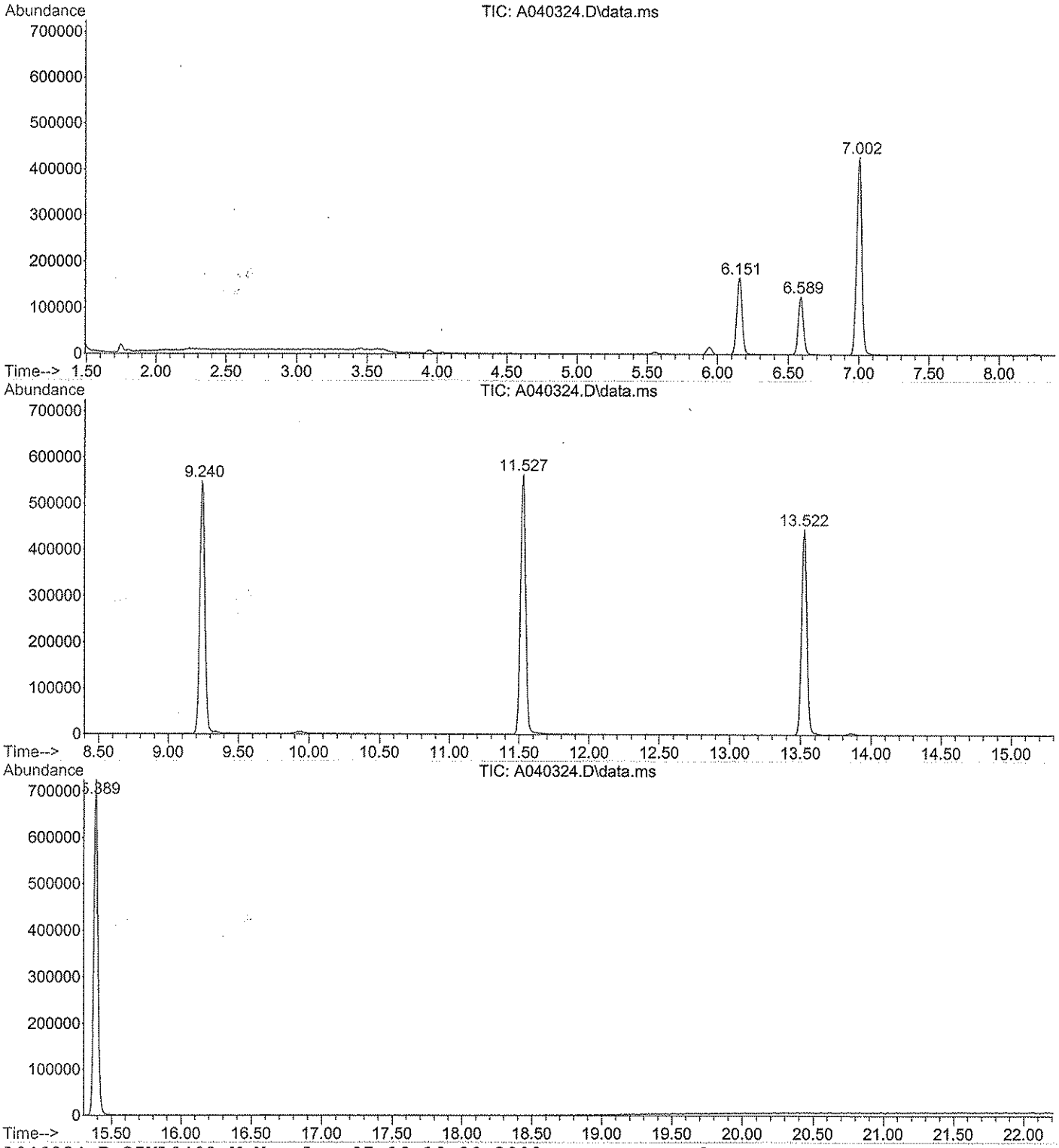
Sum of corrected areas: 7273569

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\A040308\
Data File : A040324.D
Acq On : 3 Apr 2008 11:06 pm
Operator : BR
Sample : ,SAMP,ME0803A91-11A,1,
Misc : 8260+_w25
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040324.D 25ML0403.M Mon Apr 07 18:19:20 2008 voal Page: 2

# INJECTION LOG(S)

# Injection Log

Directory: h:\a040208

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | a040201.d | 1. | ,tune,bfb tune,1, | BFB | 2 Apr 08 06:36 |
| 2 | 2 | a040202.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 2 Apr 08 06:57 |
| 3 | 3 | a040203.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 2 Apr 08 08:14 |
| 4 | 4 | a040204.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 2 Apr 08 09:20 |
| 5 | 5 | a040205.d | 1. | ,mblk,bk_w25 040208,1, | 624+_w25 | 2 Apr 08 10:07 |
| 6 | 6 | a040206.d | 1. | ,lcs,lcs_w25 10 ppb,1, | 624+_w25 | 2 Apr 08 10:42 |
| 7 | 7 | a040207.d | 1. | ,samp,me0803c18-01a,1, | 8260_w25 | 2 Apr 08 11:37 |
| 8 | 8 | a040208.d | 1. | ,samp,me0803a63-01a,5,ra, | 8260_w25 | 2 Apr 08 12:12 |
| 9 | 9 | a040209.d | 1. | ,samp,me0803a63-01a,50,ra, | 8260_w25 | 2 Apr 08 12:47 |
| 10 | 10 | a040210.d | 1. | ,samp,me0803a63-02a,5,ra, | 8260_w25 | 2 Apr 08 13:22 |
| 11 | 11 | a040211.d | 1. | ,samp,me0803a63-02a,50,ra, | 8260_w25 | 2 Apr 08 13:57 |
| 12 | 12 | a040212.d | 1. | ,samp,me0803a63-04a,10,ra, | 8260_w25 | 2 Apr 08 14:32 |
| 13 | 13 | a040213.d | 1. | ,samp,me0803a63-03a,1, | 8260+_w25 | 2 Apr 08 15:09 |
| 14 | 14 | a040214.d | 1. | ,MS,me0803a63-03aMS,1, | 8260+_w25 | 2 Apr 08 16:08 |
| 15 | 15 | a040215.d | 1. | ,MSD,me0803a63-03aMSD,1, | 8260+_w25 | 2 Apr 08 16:43 |
| 16 | 16 | a040216.d | 1. | ,tune,bfb tune,1, | BFB | 2 Apr 08 17:17 |
| 17 | 17 | a040217.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 2 Apr 08 17:43 |
| 18 | 18 | a040218.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 2 Apr 08 18:21 |
| 19 | 19 | a040219.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 2 Apr 08 19:07 |
| 20 | 20 | a040220.d | 1. | ,SAMP,ME0803A32-01A,1, | 624+_W25 | 2 Apr 08 19:55 |
| 21 | 21 | a040221.d | 1. | ,SAMP,ME0803A63-05A,1, | 8260_W25 | 2 Apr 08 20:31 |
| 22 | 22 | a040222.d | 1. | ,SAMP,ME0803A91-01A,1, | 8260+_W25 | 2 Apr 08 21:07 |
| 23 | 23 | a040223.d | 1. | ,SAMP,ME0803A91-02A,1, | 8260+_W25 | 2 Apr 08 21:43 |
| 24 | 24 | a040224.d | 1. | ,SAMP,ME0803A91-03A,1, | 8260+_W25 | 2 Apr 08 22:21 |
| 25 | 25 | a040225.d | 1. | ,SAMP,ME0803A91-04A,1, | 8260+_W25 | 2 Apr 08 22:57 |
| 26 | 26 | a040226.d | 1. | ,SAMP,ME0803A91-05A,1, | 8260+_W25 | 2 Apr 08 23:32 |
| 27 | 27 | a040227.d | 1. | ,SAMP,ME0803A91-06A,1, | 8260+_W25 | 3 Apr 08 00:07 |
| 28 | | a040228.d | 1. | | | |

# Injection Log

Directory: h:\a040308

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | a040301.d | 1. | ,tune,bfb tune,1, | BFB | 3 Apr 08 07:03 |
| 2 | | a040302.d | 1. | | | |
| 3 | 1 | a040303.d | 1. | ,ical,ical_w25 10 ppb,1, | 8260+_w25 | 3 Apr 08 09:08 |
| 4 | 2 | a040304.d | 1. | ,ical,ical_w25 8 ppb,1, | 8260+_w25 | 3 Apr 08 09:43 |
| 5 | 3 | a040305.d | 1. | ,ical,ical_w25 4 ppb,1, | 8260+_w25 | 3 Apr 08 10:18 |
| 6 | 4 | a040306.d | 1. | ,ical,ical_w25 2 ppb,1, | 8260+_w25 | 3 Apr 08 10:53 |
| 7 | 7 | a040307.d | 1. | ,ical,ical_w25-1 ppb,1, | 8260+_w25 | 3 Apr 08 11:44 |
| 8 | 8 | a040308.d | 1. | ,ical,ical_w25-20 ppb,1, | 8260+_w25 | 3 Apr 08 12:31 |
| 9 | 9 | a040309.d | 1. | ,ical,ical_w25-40 ppb,1, | 8260+_w25 | 3 Apr 08 13:18 |
| 10 | 10 | a040310.d | 1. | ,icv,icv_w25-10 ppb,1, | 8260+_w25 | 3 Apr 08 13:53 |
| 11 | 1 | a040311.d | 1. | ,tune,bfb tune,1, | BFB | 3 Apr 08 14:28 |
| 12 | 2 | a040312.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 3 Apr 08 15:34 |
| 13 | 2 | a040313.d | 1. | ,mblk,bk_w25-40308,1, | 8260+_w25 | 3 Apr 08 16:15 |
| 14 | 14 | a040314.d | 1. | ,mblk,bk_w25-40308,1, | 8260+_w25 | 3 Apr 08 16:51 |
| 15 | 15 | a040315.d | 1. | ,SAMP,ME0803A91-02A,1, | 8260+_w25 | 3 Apr 08 17:31 |
| 16 | 16 | a040316.d | 1. | ,SAMP,ME0803A91-03A,1, | 8260+_w25 | 3 Apr 08 18:06 |
| 17 | 17 | a040317.d | 1. | ,SAMP,ME0803A91-04A,1, | 8260+_w25 | 3 Apr 08 18:42 |
| 18 | 18 | a040318.d | 1. | ,SAMP,ME0803A91-05A,1, | 8260+_w25 | 3 Apr 08 19:18 |
| 19 | 19 | a040319.d | 1. | ,SAMP,ME0803A91-06A,1, | 8260+_w25 | 3 Apr 08 19:53 |
| 20 | 20 | a040320.d | 1. | ,SAMP,ME0803A91-07A,1, | 8260+_w25 | 3 Apr 08 20:30 |
| 21 | 21 | a040321.d | 1. | ,SAMP,ME0803A91-08A,1, | 8260+_w25 | 3 Apr 08 21:09 |
| 22 | 22 | a040322.d | 1. | ,SAMP,ME0803A91-09A,1, | 8260+_w25 | 3 Apr 08 21:50 |
| 23 | 23 | a040323.d | 1. | ,SAMP,ME0803A91-10A,1, | 8260+_w25 | 3 Apr 08 22:29 |
| 24 | 24 | a040324.d | 1. | ,SAMP,ME0803A91-11A,1, | 8260+_w25 | 3 Apr 08 23:06 |
| 25 | 25 | a040325.d | 1. | ,SAMP,ME0803B09-01A,1, | 8260_w25 | 3 Apr 08 23:42 |
| 26 | 26 | a040326.d | 1. | ,SAMP,ME0803B09-02A,1, | 8260_w25 | 4 Apr 08 00:17 |
| 27 | 27 | a040327.d | 1. | ,SAMP,ME0803B09-03A,1, | 8260_w25 | 4 Apr 08 00:52 |
| 28 | 28 | a040328.d | 1. | ,SAMP,ME0803B09-05A,1, | 8260_w25 | 4 Apr 08 01:27 |
| 29 | 29 | a040329.d | 1. | ,LCS,LCS_W25 10 PPB,1, | 8260+_w25 | 4 Apr 08 02:02 |
| 30 | 30 | a040330.d | 1. | RINSE1 | 8260_w25 | 4 Apr 08 02:37 |
| 31 | 31 | a040331.d | 1. | RINSE2 | 8260_w25 | 4 Apr 08 03:12 |
| 32 | 32 | a040332.d | 1. | RINSE3 | 8260_w25 | 4 Apr 08 03:47 |

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

MWH Americas, Inc.
175 West Jackson Blvd, Suite 1900
Chicago, IL 60604-2814
ATTN: Mr. Justin Finger

May 22, 2008

SUBJECT: ACS GW Semi Annual, Data Validation

Dear Mr. Finger,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on May 8, 2008. Attachment 1 is a summary of the samples that were reviewed for each analysis.

**LDC Project # 18716:**

| SDG # | Fraction |
|---|---|
| ME0803A55, ME0803A91, ME0803B85, ME0803C07 | Volatiles, Bis(2-chloroethyl)ether, Arsenic |

The data validation was performed under EPA Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan, April 2007
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

RTC PARCC

# LDC #18716 (MWH Americas, Inc.-Chicago IL / ACS GW Semi-Annual)

| LDC | SDG# | DATE REC'D | (3) DATE DUE | VOA (8260B) | | BCEE (8270C) | | As (6010B) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix: | Water/Soil | | | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S |
| A | ME0803A55 | 05/08/08 | 05/29/08 | 10 | 0 | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | ME0803A91 | 05/08/08 | 05/29/08 | 6 | 0 | 1 | 0 | 3 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | ME0803A91 | 05/08/08 | 05/29/08 | 5 | 0 | 1 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | ME0803B85 | 05/08/08 | 05/29/08 | 19 | 0 | 2 | 0 | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | ME0803C07 | 05/08/08 | 05/29/08 | 5 | 0 | 1 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | T/LR | | | 45 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-TB02-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A91-01
**Collection Date:** 03/26/08 07:45
**Date Received:** 03/27/08 10:34

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **MLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/02/08 21:07 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/02/08 21:07 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/02/08 21:07 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/02/08 21:07 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/02/08 21:07 | UJ |
| Chloroform | A | 1.4 | 0.9 | 5.0 | J | µg/L | 1 | 04/02/08 21:07 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/02/08 21:07 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/02/08 21:07 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/02/08 21:07 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/02/08 21:07 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/02/08 21:07 | UJ |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/02/08 21:07 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/02/08 21:07 | |
| *Surr: 4-Bromofluorobenzene* | S | 106 | 0 | 75.2-115 | | %REC | 1 | 04/02/08 21:07 | |

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5/20/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB02-31 | **Work Order / ID:** | ME0803A91-01 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 07:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 115 | 0 | 92.7-119 | | %REC | 1 | 04/02/08 21:07 |
| *Surr: 1,2-Dichloroethane-d4* | S | 129 | 0 | 88.2-132 | | %REC | 1 | 04/02/08 21:07 |
| *Surr: Toluene-d8* | S | 94.9 | 0 | 89.3-116 | | %REC | 1 | 04/02/08 21:07 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW42-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A91-02
**Collection Date:** 03/26/08 08:45
**Date Received:** 03/27/08 10:34

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** | |
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/03/08 17:31 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/03/08 17:31 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/03/08 17:31 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/03/08 17:31 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/03/08 17:31 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/03/08 17:31 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | UJ |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/03/08 17:31 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/03/08 17:31 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/03/08 17:31 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/03/08 17:31 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/03/08 17:31 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/03/08 17:31 | |
| *Surr: 4-Bromofluorobenzene* | S | 94.2 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 17:31 | |

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4/30/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW42-31 | **Work Order / ID:** | ME0803A91-02 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 08:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 99.4 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 17:31 |
| *Surr: 1,2-Dichloroethane-d4* | S | 101 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 17:31 |
| *Surr: Toluene-d8* | S | 96.6 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 17:31 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-DUP02-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A91-03
**Collection Date:** 03/26/08 09:00
**Date Received:** 03/27/08 10:34

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | | Prep Date/Time: **03/27/08 18:00** | | Analyst: **AVC** | |
| Arsenic | A | *3.7* | 2.5 | 10 | J | µg/L | 1 | 03/28/08 15:58 |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | | Analyst: **NLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/03/08 18:06 |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/03/08 18:06 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP02-31 | **Work Order / ID:** | ME0803A91-03 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 18:06 |
| *Surr: 4-Bromofluorobenzene* | S | 96.4 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 18:06 |
| *Surr: Dibromofluoromethane* | S | 105 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 18:06 |
| *Surr: 1,2-Dichloroethane-d4* | S | 104 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 18:06 |
| *Surr: Toluene-d8* | S | 95.5 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 18:06 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW43-31 | **Work Order / ID:** | ME0803A91-04 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 09:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | | Prep Date/Time: **03/27/08 18:00** | | Analyst: **AVC** | | |
| Arsenic | A | *ND* | 2.5 | 10 | | µg/L | 1 | 03/28/08 16:03 | |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | | Analyst: **NLT** | | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/03/08 18:42 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/03/08 18:42 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/03/08 18:42 | ↓ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 18:42 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/03/08 18:42 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/03/08 18:42 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/03/08 18:42 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 18:42 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/03/08 18:42 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/03/08 18:42 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/03/08 18:42 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | |
|---|---|
| **Client:** | MWH, Inc. |
| **Client Project:** | ACS Groundwater / Griffith, IN |
| **Client Sample ID:** | ACS-GW-MW43-31 |
| **Sample Description:** | |
| **Sample Matrix:** | Aqueous |

| | |
|---|---|
| **Work Order / ID:** | ME0803A91-04 |
| **Collection Date:** | 03/26/08 09:30 |
| **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/03/08 18:42 |
| *Surr: 4-Bromofluorobenzene* | S | 94.3 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 18:42 |
| *Surr: Dibromofluoromethane* | S | 104 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 18:42 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 18:42 |
| *Surr: Toluene-d8* | S | 94.2 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 18:42 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW45-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A91-05
**Collection Date:** 03/26/08 10:30
**Date Received:** 03/27/08 10:34

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/03/08 19:18 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/03/08 19:18 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/03/08 19:18 | ↓ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/03/08 19:18 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Chlorobenzene | A | 7.0 | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/03/08 19:18 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/03/08 19:18 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | UJ |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/03/08 19:18 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/03/08 19:18 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/03/08 19:18 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/03/08 19:18 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/03/08 19:18 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/03/08 19:18 | |
| *Surr: 4-Bromofluorobenzene* | S | 98.1 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 19:18 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW45-31 | **Work Order / ID:** | ME0803A91-05 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 102 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 19:18 |
| *Surr: 1,2-Dichloroethane-d4* | S | 105 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 19:18 |
| *Surr: Toluene-d8* | S | 93.5 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 19:18 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW15-31 | **Work Order / ID:** | ME0803A91-06 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 11:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | | Prep Date/Time: **03/27/08 18:00** | | Analyst: **AVC** | | |
| Arsenic | A | *32* | 2.5 | 10 | | µg/L | 1 | 03/28/08 16:19 | |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | | Analyst: **NLT** | | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/03/08 19:53 | UJ |
| Benzene | A | *1* | 0.8 | 5.0 | J | µg/L | 1 | 04/03/08 19:53 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/03/08 19:53 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/03/08 19:53 | ↓ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 19:53 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/03/08 19:53 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/03/08 19:53 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/03/08 19:53 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 19:53 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/03/08 19:53 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/03/08 19:53 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/03/08 19:53 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW15-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A91-06
**Collection Date:** 03/26/08 11:10
**Date Received:** 03/27/08 10:34

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/03/08 19:53 |
| *Surr: 4-Bromofluorobenzene* | S | 97.8 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 19:53 |
| *Surr: Dibromofluoromethane* | S | 103 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 19:53 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 19:53 |
| *Surr: Toluene-d8* | S | 95.2 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 19:53 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW19-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A91-07
**Collection Date:** 03/26/08 13:20
**Date Received:** 03/27/08 10:34

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANICS** | Method: **SW8270C** | | | Prep Date/Time: **04/02/08 06:22** | | Analyst: **BEM** | | |
| Bis(2-chloroethyl)ether | A | *6* | 0.92 | 10 | J | µg/L | 1 | 04/02/08 21:52 |
| *Surr: Nitrobenzene-d5* | S | 56.8 | 0 | 10-121 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: 2-Fluorobiphenyl* | S | 66.7 | 0 | 10-109 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: Terphenyl-d14* | S | 51.2 | 0 | 10-130 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: Phenol-d5* | S | 20.4 | 0 | 10-100 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: 2-Fluorophenol* | S | 30.3 | 0 | 10-84.7 | | %REC | 1 | 04/02/08 21:52 |
| *Surr: 2,4,6-Tribromophenol* | S | 70.5 | 0 | 10-120 | | %REC | 1 | 04/02/08 21:52 |
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | Analyst: **NLT** | | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/03/08 20:30 |
| Benzene | A | *6.5* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Chloroethane | A | *8.4* | 2.3 | 10 | J | µg/L | 1 | 04/03/08 20:30 |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW19-31 | **Work Order / ID:** | ME0803A91-07 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 13:20 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 20:30 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 20:30 |
| *Surr: 4-Bromofluorobenzene* | S | 98.9 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 20:30 |
| *Surr: Dibromofluoromethane* | S | 104 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 20:30 |
| *Surr: 1,2-Dichloroethane-d4* | S | 106 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 20:30 |
| *Surr: Toluene-d8* | S | 95.4 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 20:30 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW12-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A91-08
**Collection Date:** 03/26/08 14:10
**Date Received:** 03/27/08 10:34

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/03/08 21:09 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/03/08 21:09 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/03/08 21:09 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/03/08 21:09 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| Chlorobenzene | A | 2.9 | 0.8 | 5.0 | J | µg/L | 1 | 04/03/08 21:09 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/03/08 21:09 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/03/08 21:09 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | UJ |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/03/08 21:09 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/03/08 21:09 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/03/08 21:09 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/03/08 21:09 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/03/08 21:09 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/03/08 21:09 | |
| *Surr: 4-Bromofluorobenzene* | S | 97.9 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 21:09 | |

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4/30/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW12-31 | **Work Order / ID:** | ME0803A91-08 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 14:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 21:09 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 21:09 |
| *Surr: Toluene-d8* | S | 94.9 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 21:09 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW11-31 | **Work Order / ID:** | ME0803A91-09 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 15:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/03/08 21:50 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/03/08 21:50 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/03/08 21:50 | ↓ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/03/08 21:50 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/03/08 21:50 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/03/08 21:50 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | UJ |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/03/08 21:50 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/03/08 21:50 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/03/08 21:50 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/03/08 21:50 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/03/08 21:50 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/03/08 21:50 | |
| *Surr: 4-Bromofluorobenzene* | S | 99.3 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 21:50 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | |
|---|---|
| **Client:** | MWH, Inc. |
| **Client Project:** | ACS Groundwater / Griffith, IN |
| **Client Sample ID:** | ACS-GW-MW11-31 |
| **Sample Description:** | |
| **Sample Matrix:** | Aqueous |
| **Work Order / ID:** | ME0803A91-09 |
| **Collection Date:** | 03/26/08 15:45 |
| **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 21:50 |
| *Surr: 1,2-Dichloroethane-d4* | S | 114 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 21:50 |
| *Surr: Toluene-d8* | S | 95.5 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 21:50 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW23-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803A91-10
**Collection Date:** 03/26/08 16:35
**Date Received:** 03/27/08 10:34

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | | | Analyst: **NLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/03/08 22:29 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/03/08 22:29 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/03/08 22:29 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 22:29 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/03/08 22:29 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/03/08 22:29 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/03/08 22:29 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 22:29 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/03/08 22:29 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/03/08 22:29 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/03/08 22:29 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/03/08 22:29 | |
| *Surr: 4-Bromofluorobenzene* | S | 98.0 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 22:29 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW23-31 | **Work Order / ID:** | ME0803A91-10 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 16:35 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 110 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 22:29 |
| *Surr: 1,2-Dichloroethane-d4* | S | 116 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 22:29 |
| *Surr: Toluene-d8* | S | 94.1 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 22:29 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB02-31 | **Work Order / ID:** | ME0803A91-11 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 17:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | Prep Date/Time: **03/27/08 18:00** | | Analyst: **AVC** | | | |
| Arsenic | A | *ND* | 2.5 | 10 | | µg/L | 1 | 03/28/08 16:25 | |
| **SEMIVOLATILE ORGANICS** | Method: **SW8270C** | | | Prep Date/Time: **04/02/08 06:22** | | Analyst: **BEM** | | | |
| Bis(2-chloroethyl)ether | A | *ND* | 0.91 | 10 | | µg/L | 1 | 04/02/08 22:18 | |
| *Surr: Nitrobenzene-d5* | S | 49.3 | 0 | 10-121 | | %REC | 1 | 04/02/08 22:18 | |
| *Surr: 2-Fluorobiphenyl* | S | 60.1 | 0 | 10-109 | | %REC | 1 | 04/02/08 22:18 | |
| *Surr: Terphenyl-d14* | S | 67.2 | 0 | 10-130 | | %REC | 1 | 04/02/08 22:18 | |
| *Surr: Phenol-d5* | S | 16.8 | 0 | 10-100 | | %REC | 1 | 04/02/08 22:18 | |
| *Surr: 2-Fluorophenol* | S | 26.9 | 0 | 10-84.7 | | %REC | 1 | 04/02/08 22:18 | |
| *Surr: 2,4,6-Tribromophenol* | S | 69.0 | 0 | 10-120 | | %REC | 1 | 04/02/08 22:18 | |
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | Analyst: **NLT** | | | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/03/08 23:06 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/03/08 23:06 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/03/08 23:06 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 23:06 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/03/08 23:06 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/03/08 23:06 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/03/08 23:06 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/03/08 23:06 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/03/08 23:06 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB02-31 | **Work Order / ID:** | ME0803A91-11 |
| **Sample Description:** | | **Collection Date:** | 03/26/08 17:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/27/08 10:34 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/03/08 23:06 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/03/08 23:06 |
| *Surr: 4-Bromofluorobenzene* | S | 98.2 | 0 | 75.2-115 | | %REC | 1 | 04/03/08 23:06 |
| *Surr: Dibromofluoromethane* | S | 108 | 0 | 92.7-119 | | %REC | 1 | 04/03/08 23:06 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/03/08 23:06 |
| *Surr: Toluene-d8* | S | 94.5 | 0 | 89.3-116 | | %REC | 1 | 04/03/08 23:06 |

NJ

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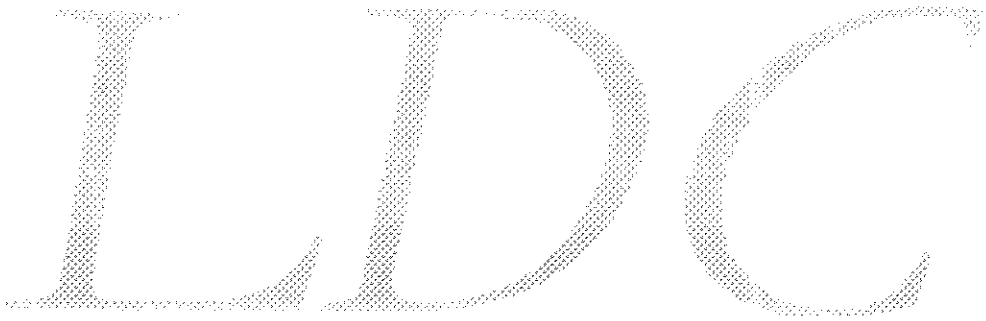
4/30/08

**ACS GW Semi Annual**
**Data Validation Reports**
**LDC# 18716**

ME0803A91



# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS GW Semi-Annual

**Collection Date:** March 26, 2008

**LDC Report Date:** May 21, 2008

**Matrix:** Water

**Parameters:** Volatiles

**Validation Level:** EPA Level III & IV

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** ME0803A91

**Sample Identification**

ACS-GW-TB02-31
ACS-GW-MW42-31**
ACS-GW-DUP02-31
ACS-GW-MW43-31
ACS-GW-MW45-31
ACS-GW-MW15-31**
ACS-GW-MW19-31**
ACS-GW-MW12-31**
ACS-GW-MW11-31**
ACS-GW-MW23-31
ACS-GW-EB02-31

**Indicates sample underwent EPA Level IV review

## Introduction

This data review covers 11 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

The review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination ($r^2$) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 3/31/08 | Acetone<br>2-Butanone | 0.022 (≥0.05)<br>0.007 (≥0.05) | ACS-GW-TB02-31<br>R110560-Blk | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A |
| 4/3/08 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.036 (≥0.05)<br>0.008 (≥0.05)<br>0.278 (≤0.3) | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31<br>R110661-Blk | J (all detects)<br>UJ (all non-detects) | P |

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/2/08 (A040204) | 1,1-Dichloroethene | 20.2 | R110560-Blk | None | P |
| 4/2/08 (A040219) | 1,1-Dichloroethene | 24.6 | ACS-GW-TB02-31 | None | P |

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/2/08 (A040204) | Chloromethane<br>Bromomethane<br>Acetone | 26.3<br>93.2<br>27.3 | R110560-Blk | J (all detects)<br>UJ (all non-detects) | P |
| 4/2/08 (A040219) | Chloromethane<br>Vinyl chloride<br>Bromomethane<br>Chloroethane<br>Acetone | 69.2<br>65.7<br>166.1<br>49.6<br>31.8 | ACS-GW-TB02-31 | J (all detects)<br>UJ (all non-detects) | P |
| 4/3/08 (A040312) | Chloromethane<br><br>Bromomethane | 77.2<br><br>88.7 | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31<br>R110661-Blk | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | P |

All of the continuing calibration RRF values were within validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/2/08<br>(A040204) | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.028 (≥0.05)<br>0.006 (≥0.05)<br>0.254 (≥0.3) | R110560-Blk | J (all detects)<br>UJ (all non-detects) | P |
| 4/2/08<br>(A040219) | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.029 (≥0.05)<br>0.007 (≥0.05)<br>0.255 (≥0.3) | ACS-GW-TB02-31 | J (all detects)<br>UJ (all non-detects) | P |
| 4/3/08<br>(A040312) | Bromomethane<br>Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.014 (≥0.05)<br>0.031 (≥0.05)<br>0.008 (≥0.05)<br>0.248 (≥0.3) | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31<br>R110661-Blk | J (all detects)<br>UJ (all non-detects) | P |

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/3/08<br>(A040310) | 1,1-Dichloroethene | 31.6 | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31<br>R110661-Blk | J (all detects)<br>UJ (all non-detects) | A |
| 3/31/08<br>(A033115) | Chloromethane<br><br>Bromomethane | 68.2<br><br>40.4 | ACS-GW-TB02-31<br>R0110560-BLK | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A |

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

| Method Blank ID | Analysis Date | Compound TIC (RT in minutes) | Concentration | Associated Samples |
|---|---|---|---|---|
| R110560-Blk | 4/2/08 | Acetone<br>Bromomethane | 2.46 ug/L<br>0.69 ug/L | ACS-GW-TB02-31 |
| R110661-Blk | 4/3/08 | Chloromethane | 0.61 ug/L | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31 |

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

Sample ACS-GW-TB02-31 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

| Trip Blank ID | Sampling Date | Compound | Concentration | Associated Samples |
|---|---|---|---|---|
| ACS-GW-TB02-31 | 3/26/08 | Chloroform | 1.4 ug/L | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31 |

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

Sample ACS-GW-EB02-31 was identified as an equipment blank. No volatile contaminants were found in this blank.

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

| LCS ID | Compound | %R (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| R110560 LCS | Chloromethane | 188 (34.7-130) | ACS-GW-TB02-31<br>R110560-Blk | .J (all detects) | P |
| R110661 LCS | Chloromethane | 163 (34.7-130) | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31<br>R110661-Blk | J (all detects) | P |

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

All internal standard areas and retention times were within QC limits.

## XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

## XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

## XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

## XIV. System Performance

The system performance was acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

## XV. Overall Assessment of Data

Data flags have been summarized at the end of the report if data has been qualified.

## XVI. Field Duplicates

Samples ACS-GW-DUP02-31 and ACS-GW-MW43-31 were identified as field duplicates. No volatiles were detected in any of the samples.

## ACS GW Semi-Annual
## Volatiles - Data Qualification Summary - SDG ME0803A91

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| ME0803A91 | ACS-GW-TB02-31 | Acetone<br><br>2-Butanone | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A | Initial calibration (%RRF) |
| ME0803A91 | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Initial calibration (%RRF) |
| ME0803A91 | ACS-GW-TB02-31 | 1,1-Dichloroethene | None | P | Continuing calibration (%D) |
| ME0803A91 | ACS-GW-TB02-31 | Chloromethane<br>Vinyl chloride<br>Bromomethane<br>Chloroethane<br>Acetone | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (%D) |
| ME0803A91 | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31 | Chloromethane<br><br>Bromomethane | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (%D) |
| ME0803A91 | ACS-GW-TB02-31 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (RRF) |
| ME0803A91 | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31 | Bromomethane<br>Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (RRF) |

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| ME0803A91 | ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31 | 1,1-Dichloroethene | J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (ICV %D) |
| ME0803A91 | ACS-GW-TB02-31 | Chloromethane<br><br>Bromomethane | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (ICV %D) |
| ME0803A91 | ACS-GW-TB02-31<br>ACS-GW-MW42-31**<br>ACS-GW-DUP02-31<br>ACS-GW-MW43-31<br>ACS-GW-MW45-31<br>ACS-GW-MW15-31**<br>ACS-GW-MW19-31**<br>ACS-GW-MW12-31**<br>ACS-GW-MW11-31**<br>ACS-GW-MW23-31<br>ACS-GW-EB02-31 | Chloromethane | J (all detects) | P | Laboratory control samples (%R) |

**ACS GW Semi-Annual**
**Volatiles - Laboratory Blank Data Qualification Summary - SDG ME0803A91**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Volatiles - Field Blank Data Qualification Summary - SDG ME0803A91**

No Sample Data Qualified in this SDG

LDC #: 18716B1
SDG #: ME0803A91
Laboratory: Microbac

# VALIDATION COMPLETENESS WORKSHEET
Level III/IV

Date: 5/15/08
Page: 1 of 1
Reviewer: JV6
2nd Reviewer: [signature]

**METHOD:** GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 3/26/08 |
| II. | GC/MS Instrument performance check | A | |
| III. | Initial calibration | SW | |
| IV. | Continuing calibration | SW | ICV ≤ 25 % |
| V. | Blanks | SW | |
| VI. | Surrogate spikes | A | |
| VII. | Matrix spike/Matrix spike duplicates | N | Client spec |
| VIII. | Laboratory control samples | SW | LCS |
| IX. | Regional Quality Assurance and Quality Control | N | |
| X. | Internal standards | A | |
| XI. | Target compound identification | A | Not reviewed for Level III validation. |
| XII. | Compound quantitation/CRQLs | A | Not reviewed for Level III validation. |
| XIII. | Tentatively identified compounds (TICs) | ~~SW~~ A | Not reviewed for Level III validation. |
| XIV. | System performance | A | Not reviewed for Level III validation. |
| XV. | Overall assessment of data | A | |
| XVI. | Field duplicates | ND | D = 3,4 |
| XVII. | Field blanks | SW | TB = 1 * EB = 11 |

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
* ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV validation

Water

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| + 1 | ACS-GW-TB02-31 | − 11 | ACS-GW-EB02-31 | 21 | R110560 Blk | 31 | |
| − 2 | ACS-GW-MW42-31** B | 12 | | 22 | R110661 Blk | 32 | |
| − 3 | ACS-GW-DUP02-31 D | 13 | | 23 | | 33 | |
| − 4 | ACS-GW-MW43-31 D | 14 | | 24 | | 34 | |
| + 5 | ACS-GW-MW45-31 | 15 | | 25 | | 35 | |
| + 6 | ACS-GW-MW15-31** | 16 | | 26 | | 36 | |
| + 7 | ACS-GW-MW19-31** | 17 | | 27 | | 37 | |
| + 8 | ACS-GW-MW12-31** | 18 | | 28 | | 38 | |
| − 9 | ACS-GW-MW11-31** | 19 | | 29 | | 39 | |
| − 10 | ACS-GW-MW23-31 | 20 | | 30 | | 40 | |

(no r)

LDC #: 18716 B1
SDG #: See Cover

# VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: MC
2nd Reviewer: [signature]

**Method:** Volatiles (EPA SW 846 Method 8260B)

| Validation Area | Yes | No | NA | Findings/Comments |
|---|---|---|---|---|
| I. Technical holding times | | | | |
| All technical holding times were met. | ✓ | | | |
| Cooler temperature criteria was met. | ✓ | | | |
| II. GC/MS Instrument performance check | | | | |
| Were the BFB performance results reviewed and found to be within the specified criteria? | ✓ | | | |
| Were all samples analyzed within the 12 hour clock criteria? | ✓ | | | |
| III. Initial calibration | | | | |
| Did the laboratory perform a 5 point calibration prior to sample analysis? | ✓ | | | |
| Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? | | ✓ | | |
| Was a curve fit used for evaluation? | | ✓ | | |
| Did the initial calibration meet the curve fit acceptance criteria of > 0.990? | | | ✓ | |
| Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05? | | ✓ | | |
| IV. Continuing calibration | | | | |
| Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? | ✓ | | | |
| Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? | | ✓ | | |
| Were all percent differences (%D) ≤ 25% and relative response factors (RRF) > 0.05? | | ✓ | | |
| V. Blanks | | | | |
| Was a method blank associated with every sample in this SDG? | ✓ | | | |
| Was a method blank analyzed at least once every 12 hours for each matrix and concentration? | ✓ | | | |
| Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. | | | | |
| VI. Surrogate spikes | | | | |
| Were all surrogate %R within QC limits? | ✓ | | | |
| If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria? | | | ✓ | |
| VII. Matrix spike/Matrix spike duplicates | | | | |
| Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | | ✓ | | |
| Was a MS/MSD analyzed every 20 samples of each matrix? | | ✓ | | |
| Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits? | | ✓ | | |
| VIII. Laboratory control samples | | | | |
| Was an LCS analyzed for this SDG? | ✓ | | | |

LDC #: 18716 B1
SDG #: See Cover

# VALIDATION FINDINGS CHECKLIST


Reviewer: JG
2nd Reviewer: [illegible]

| Validation Area | Yes | No | NA | Findings/Comments |
|---|---|---|---|---|
| Was an LCS analyzed per analytical batch? | ✓ | | | |
| Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits? | | ✓ | | |
| IX. Regional Quality Assurance and Quality Control | | | | |
| Were performance evaluation (PE) samples performed? | | ✓ | | |
| Were the performance evaluation (PE) samples within the acceptance limits? | | | ✓ | |
| X. Internal standards | | | | |
| Were internal standard area counts within -50% or +100% of the associated calibration standard? | ✓ | | | |
| Were retention times within ± 30 seconds of the associated calibration standard? | ✓ | | | |
| XI. Target compound identification | | | | |
| Were relative retention times (RRT's) within ± 0.06 RRT units of the standard? | ✓ | | | |
| Did compound spectra meet specified EPA "Functional Guidelines" criteria? | ✓ | | | |
| Were chromatogram peaks verified and accounted for? | ✓ | | | |
| XII. Compound quantitation/CRQLs | | | | |
| Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound? | ✓ | | | |
| Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation? | ✓ | | | |
| XIII. Tentatively identified compounds (TICs) | | | | |
| Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum? | | ✓ | | |
| Were relative intensities of the major ions within ± 20% between the sample and the reference spectra? | | ✓ | | |
| Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)? | | ✓ | | |
| XIV. System performance | | | | |
| System performance was found to be acceptable. | ✓ | | | |
| XV. Overall assessment of data | | | | |
| Overall assessment of data was found to be acceptable. | ✓ | | | |
| XVI. Field duplicates | | | | |
| Field duplicate pairs were identified in this SDG. | ✓ | | | |
| Target compounds were detected in the field duplicates. | | ✓ | | |
| XVII. Field blanks | | | | |
| Field blanks were identified in this SDG. | ✓ | | | |
| Target compounds were detected in the field blanks. | ✓ | | | |

# TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

| | | | | |
|---|---|---|---|---|
| A. Chloromethane* | U. 1,1,2-Trichloroethane | OO. 2,2-Dichloropropane | III. n-Butylbenzene | CCCC.1-Chlorohexane |
| B. Bromomethane | V. Benzene | PP. Bromochloromethane | JJJ. 1,2-Dichlorobenzene | DDDD. Isopropyl alcohol |
| C. Vinyl choride** | W. trans-1,3-Dichloropropene | QQ. 1,1-Dichloropropene | KKK. 1,2,4-Trichlorobenzene | EEEE. Acetonitrile |
| D. Chloroethane | X. Bromoform* | RR. Dibromomethane | LLL. Hexachlorobutadiene | FFFF. Acrolein |
| E. Methylene chloride | Y. 4-Methyl-2-pentanone | SS. 1,3-Dichloropropane | MMM. Naphthalene | GGGG. Acrylonitrile |
| F. Acetone | Z. 2-Hexanone | TT. 1,2-Dibromoethane | NNN. 1,2,3-Trichlorobenzene | HHHH. 1,4-Dioxane |
| G. Carbon disulfide | AA. Tetrachloroethene | UU. 1,1,1,2-Tetrachloroethane | OOO. 1,3,5-Trichlorobenzene | IIII. Isobutyl alcohol |
| H. 1,1-Dichloroethene** | BB. 1,1,2,2-Tetrachloroethane* | VV. Isopropylbenzene | PPP. trans-1,2-Dichloroethene | JJJJ. Methacrylonitrile |
| I. 1,1-Dichloroethane* | CC. Toluene** | WW. Bromobenzene | QQQ. cis-1,2-Dichloroethene | KKKK. Propionitrile |
| J. 1,2-Dichloroethene, total | DD. Chlorobenzene* | XX. 1,2,3-Trichloropropane | RRR. m,p-Xylenes | LLLL. Ethyl ether |
| K. Chloroform** | EE. Ethylbenzene** | YY. n-Propylbenzene | SSS. o-Xylene | MMMM. Benzyl chloride |
| L. 1,2-Dichloroethane | FF. Styrene | ZZ. 2-Chlorotoluene | TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane | NNNN. |
| M. 2-Butanone | GG. Xylenes, total | AAA. 1,3,5-Trimethylbenzene | UUU. 1,2-Dichlorotetrafluoroethane | OOOO. |
| N. 1,1,1-Trichloroethane | HH. Vinyl acetate | BBB. 4-Chlorotoluene | VVV. 4-Ethyltoluene | PPPP. |
| O. Carbon tetrachloride | II. 2-Chloroethylvinyl ether | CCC. tert-Butylbenzene | WWW. Ethanol | QQQQ. |
| P. Bromodichloromethane | JJ. Dichlorodifluoromethane | DDD. 1,2,4-Trimethylbenzene | XXX. Di-isopropyl ether | RRRR. |
| Q. 1,2-Dichloropropane** | KK. Trichlorofluoromethane | EEE. sec-Butylbenzene | YYY. tert-Butanol | SSSS. |
| R. cis-1,3-Dichloropropene | LL. Methyl-tert-butyl ether | FFF. 1,3-Dichlorobenzene | ZZZ. tert-Butyl alcohol | TTTT. |
| S. Trichloroethene | MM. 1,2-Dibromo-3-chloropropane | GGG. p-Isopropyltoluene | AAAA. Ethyl tert-butyl ether | UUUU. |
| T. Dibromochloromethane | NN. Methyl ethyl ketone | HHH. 1,4-Dichlorobenzene | BBBB. tert-Amyl methyl ether | VVVV. |

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 18716 B1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Initial Calibration

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- (Y) N N/A — Did the laboratory perform a 5 point calibration prior to sample analysis?
- (Y) N N/A — Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
- Y (N) N/A — Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?________
- Y N (N/A) — Did the initial calibration meet the acceptance criteria?
- Y (N) N/A — Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

| # | Date | Standard ID | Compound | Finding %RSD (Limit: ≤30.0%) | Finding RRF (Limit: ≥0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 3/31/08 | ICAL | F | | 0.022 | 1, R110560-Blk | J/UJ/A |
| | | | M | | 0.007 | ↓ | ↓ |
| | | | | | | | |
| | | | | | | | |
| | 4/03/08 | ICAL | F | | 0.036 | 2-11, R110661-Blk | J/UJ/P |
| | | | M | | 0.008 | | |
| | | | BB | | 0.278 (≥0.3) SPCC | ↓ | ↓ |
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LDC #: 18716B1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Continuing Calibration

Page: 1 of 2
Reviewer: JVG
2nd Reviewer: [signature]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

| # | Date | Standard ID | Compound | Finding %D (Limit: <25.0%) | Finding RRF (Limit: >0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 4/03/08 | a040310 (ICV) | H | 31.6 | | 2-11, R110661 Blk | J/UJ/A |
| | 4/02/08 | A040204 (CCV) | A | 26.3 | | R110560 Blk | J/UJ/P |
| | | | B (+) | 93.2 | | | |
| | | | F | 27.3 | | | |
| | | | F | | 0.028 | | |
| | | | M | | 0.006 | | |
| | | | H | 20.2 (≤20%)(CCC) | | | None/P |
| | | | BB | | 0.254 (≥0.3)(SPCC) | | J/UJ/P |
| | 4/02/08 | A040219 (CCV) | A (+) | 69.2 | | | J/UJ/P |
| | | | C (+) | 65.7 | | | |
| | | | B (+) | 166.1 | | | |
| | | | D | 49.6 | | | |
| | | | F | 31.8 | | | |
| | | | H | 24.6 (≤20%)(CCC) | | | None/P |
| | | | F | | 0.029 | | J/UJ/P |
| | | | M | | 0.007 | | |
| | | | BB | | 0.255 (≥0.3)(SPCC) | | |
| | 4/03/08 | A040312 (CCV) | A (+) | 77.2 | | 2-11, R110661 Blk | J/UJ/P |
| | | | B (-) | 88.7 | | | |
| | | | B | | 0.014 | | |

LDC #: 18716 B1
SDG #: See Cover

Page: 2 of 2
Reviewer: JVG
2nd Reviewer: [illegible]

# VALIDATION FINDINGS WORKSHEET
## Continuing Calibration

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y (N) N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

(margin note: ntd'd from p.1)

| # | Date | Standard ID | Compound | Finding %D (Limit: ≤25.0%) | Finding RRF (Limit: ≥0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 4/03/08 | A040312 | F | | 0.031 | 2-11, R110661 Blk | J/UJ/P |
| | | (CCV) | M | | 0.008 | ↓ | ↓ |
| | | | BB | | 0.248 (20.3) (SPCC) | ↓ | ↓ |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | 3/31/08 | A033115 | A | 68.2 | | 1, R110560-Blk | J/UJ/A |
| | | (ICV) | B | 40.4 | | ↓ | ↓ |
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LDC #: 18716 B1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Blanks

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

**Blank analysis date:** 4/02/08
**Conc. units:** ug/L Associated Samples: 1 (ND)

| Compound | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | R110560-BLK | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | 2.46 | | | | | | | | | |
| B | 0.69 | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| CRQL | | | | | | | | | | |

**Blank analysis date:** 4/03/08
**Conc. units:** ug/L Associated Samples: 2 – 11 (ND)

| Compound | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | R110661-BLK | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | | | | | | | | | | |
| A | 0.61 | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| CRQL | | | | | | | | | | |

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 18716 B1
SDG #: Su Cover

# VALIDATION FINDINGS WORKSHEET
## Field Blanks

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: 9

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y/N N/A Were target compounds detected in the field blanks?

**Blank units:** ug/L **Associated sample units:** ug/L
**Field blank type:** (circle one) Field Blank / Rinsate / Trip Blank / Other: Associated Samples: All except #1 (ND)

| Compound | Blank ID 1 | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Date | 3/26/08 | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | |
| Acetone | | | | | | | | | | | |
| Chloroform | 1.4 | | | | | | | | | | |
| | | | | | | | | | | | |
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| | | | | | | | | | | | |
| CRQL | | | | | | | | | | | |

**Blank units:** **Associated sample units:**
**Field blank type:** (circle one) Field Blank / Rinsate / Trip Blank / Other: Associated Samples:

| Compound | Blank ID | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Date | | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | |
| Acetone | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | |
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| | | | | | | | | | | | |
| CRQL | | | | | | | | | | | |

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 18716 B1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: JVC
2nd Reviewer: [signature]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

| # | Date | LCS/LCSD ID | Compound | LCS %R (Limits) | LCSD %R (Limits) | RPD (Limits) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|---|
| | | R110560 LCS | A | 188 (34.7-130) | ( ) | ( ) | 1, R110560 Blk | J (all) / P |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | R110661 LCS | A | 163 (34.7-130) | ( ) | ( ) | 2-11, R110661 Blk | J (all) / P |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
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| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |

LDC #: 18716 B1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Initial Calibration Calculation Verification


Reviewer: JVC
2nd Reviewer: R

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

$A_x$ = Area of compound,
$C_x$ = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

$A_{is}$ = Area of associated internal standard
$C_{is}$ = Concentration of internal standard

| # | Standard ID | Calibration Date | Compound (Reference Internal Standard) | Reported RRF ( 10 std) | Recalculated RRF ( 10 std) | Reported Average RRF (initial) | Recalculated Average RRF (initial) | Reported %RSD | Recalculated %RSD |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ICAL | 4/03/08 | C (1st internal standard) | 0.335 | 0.335 | 0.357 | 0.357 | 5.98 | 5.74 |
| | | | CC (2nd internal standard) | 0.827 | 0.827 | 0.871 | 0.871 | 5.58 | 5.60 |
| | | | BB (3rd internal standard) | 0.247 | 0.247 | 0.278 | 0.279 | 6.04 | 6.10 |
| 2 | | | (1st internal standard) | | | | | | |
| | | | (2nd internal standard) | | | | | | |
| | | | (3rd internal standard) | | | | | | |
| 3 | | | (1st internal standard) | | | | | | |
| | | | (2nd internal standard) | | | | | | |
| | | | (3rd internal standard) | | | | | | |
| 4 | | | (1st internal standard) | | | | | | |
| | | | (2nd internal standard) | | | | | | |
| | | | (3rd internal standard) | | | | | | |

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18716B1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Continuing Calibration Results Verification


Reviewer: JVG

2nd Reviewer: [signature]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
$A_x$ = Area of compound, $A_{is}$ = Area of associated internal standard
$C_x$ = Concentration of compound, $C_{is}$ = Concentration of internal standard

| # | Standard ID | Calibration Date | Compound (Reference internal Standard) | Average RRF (initial) | Reported RRF (CC) | Recalculated RRF (CC) | Reported %D | Recalculated %D |
|---|---|---|---|---|---|---|---|---|
| 1 | A040318 | 4/03/08 | C (1st internal standard) | 0.352 | 0.293 | 0.293 | 16.8 | 16.9 |
| | | | CC (2nd internal standard) | 0.871 | 0.794 | 0.794 | 8.8 | 8.9 |
| | | | BB (3rd internal standard) | 0.278 | 0.248 | 0.248 | 10.8 | 10.6 |
| 2 | | | (1st internal standard) | | | | | |
| | | | (2nd internal standard) | | | | | |
| | | | (3rd internal standard) | | | | | |
| 3 | | | (1st internal standard) | | | | | |
| | | | (2nd internal standard) | | | | | |
| | | | (3rd internal standard) | | | | | |
| 4 | | | (1st internal standard) | | | | | |
| | | | (2nd internal standard) | | | | | |
| | | | (3rd internal standard) | | | | | |

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18716B1
SDG #: Sci Cmar

# VALIDATION FINDINGS WORKSHEET
## Surrogate Results Verification

Page: 1 of 1
Reviewer: SVG
2nd reviewer:

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

**Sample ID:** #2

| | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|---|---|---|---|---|---|
| Toluene-d8 | 10 | 9.66 | 96.6 | 96.6 | 0 |
| Bromofluorobenzene | | 9.4 ✓ | 94.2 | 94.2 | |
| 1,2-Dichloroethane-d4 | | 10.14 | 101 | 101 | |
| Dibromofluoromethane | ✓ | 9.94 | 99.4 | 99.4 | ✓ |

**Sample ID:**

| | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|---|---|---|---|---|---|
| Toluene-d8 | | | | | |
| Bromofluorobenzene | | | | | |
| 1,2-Dichloroethane-d4 | | | | | |
| Dibromofluoromethane | | | | | |

**Sample ID:**

| | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|---|---|---|---|---|---|
| Toluene-d8 | | | | | |
| Bromofluorobenzene | | | | | |
| 1,2-Dichloroethane-d4 | | | | | |
| Dibromofluoromethane | | | | | |

**Sample ID:**

| | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|---|---|---|---|---|---|
| Toluene-d8 | | | | | |
| Bromofluorobenzene | | | | | |
| 1,2-Dichloroethane-d4 | | | | | |
| Dibromofluoromethane | | | | | |

**Sample ID:**

| | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|---|---|---|---|---|---|
| Toluene-d8 | | | | | |
| Bromofluorobenzene | | | | | |
| 1,2-Dichloroethane-d4 | | | | | |
| Dibromofluoromethane | | | | | |

LDC #: 18716 B1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA  Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD)  LCS = Laboraotry control sample percent recovery  LCSD = Laboratory control sample duplicate percent recovery

LCS ID: R110661 LCS

| Compound | Spike Added (µg/L) | | Spiked Sample Concentration (µg/L) | | LCS Percent Recovery | | LCSD Percent Recovery | | LCS/LCSD RPD | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | Reported | Recalc | Reported | Recalc | Reported | Recalculated |
| 1,1-Dichloroethene | 10 | NA | 8.85 | NA | 88.5 | 88.5 | | | | |
| Trichloroethene | | | 9.71 | | 97.1 | 97.1 | | | | |
| Benzene | | | 9.61 | | 96.1 | 96.1 | | | | |
| Toluene | | | 8.96 | | 89.6 | 89.6 | | | | |
| Chlorobenzene | | | 9.14 | | 91.4 | 91.4 | | | | |
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Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18716 B1
SDG #: See cover

# VALIDATION FINDINGS WORKSHEET
## Sample Calculation Verification


Reviewer: SVG
2nd reviewer: [signature]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

$A_x$ = Area of the characteristic ion (EICP) for the compound to be measured

$A_{is}$ = Area of the characteristic ion (EICP) for the specific internal standard

$I_s$ = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

$V_o$ = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #6 . V

Conc. = $\frac{(58948)(10)(\quad)}{(516693)(1.120)(\quad)(\quad)}$

= 1.07 ug/L

| # | Sample ID | Compound | Reported Concentration ( ) | Calculated Concentration ( ) | Qualification |
|---|---|---|---|---|---|
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# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS GW Semi-Annual

**Collection Date:** March 26, 2008

**LDC Report Date:** May 19, 2008

**Matrix:** Water

**Parameters:** Bis(2-chloroethyl) ether

**Validation Level:** EPA Level III & IV

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** MW0803A91

**Sample Identification**

ACS-GW-MW19-31**
ACS-GW-EB02-31

**Indicates sample underwent EPA Level IV review

## Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Bis(2-chloroethyl) ether.

The review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds and system monitoring compounds were greater than or equal to 0.05 as required.

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No bis(2-chloroethyl) ether was found in the method blanks.

Sample ACS-GW-EB02-31 was identified as an equipment blank. No bis(2-chloroethyl) ether was found in this blank.

**VI. Surrogate Spikes**

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

**VII. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

**VIII. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

**IX. Regional Quality Assurance and Quality Control**

Not applicable.

**X. Internal Standards**

All internal standard areas and retention times were within QC limits.

**XI. Target Compound Identifications**

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

**XII. Compound Quantitation and CRQLs**

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

**XIII. Tentatively Identified Compounds (TICs)**

Tentatively identified compounds were not reported by the laboratory.

**XIV. System Performance**

The system performance was acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

## XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

## XVI. Field Duplicates

No field duplicates were identified in this SDG.

**ACS GW Semi-Annual**
**Bis(2-chloroethyl) ether - Data Qualification Summary - SDG MW0803A91**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Bis(2-chloroethyl) ether - Laboratory Blank Data Qualification Summary - SDG MW0803A91**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Bis(2-chloroethyl) ether - Field Blank Data Qualification Summary - SDG MW0803A91**

No Sample Data Qualified in this SDG

LDC #: 18716B2
SDG #: ME0803A91
Laboratory: Microbac

# VALIDATION COMPLETENESS WORKSHEET
Level III/IV

Date: 5/15/08
Page: 1 of 1
Reviewer: SVG
2nd Reviewer:

**METHOD:** GC/MS Bis(2-chloroethyl)ether (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 3/26/08 |
| II. | GC/MS Instrument performance check | A | |
| III. | Initial calibration | A | %RSD ≤ 30% |
| IV. | Continuing calibration | A | CCV ≤ 25% |
| V. | Blanks | A | |
| VI. | Surrogate spikes | A | |
| VII. | Matrix spike/Matrix spike duplicates | ~~N~~ A | ~~Client Spec~~ ACS-GW-MW06-31 (from ME0803C07) |
| VIII. | Laboratory control samples | A | LCS |
| IX. | Regional Quality Assurance and Quality Control | N | |
| X. | Internal standards | A | |
| XI. | Target compound identification | A | Not reviewed for Level III validation. |
| XII. | Compound quantitation/CRQLs | A | Not reviewed for Level III validation. |
| XIII. | Tentatively identified compounds (TICs) | N | Not reviewed for Level III validation. |
| XIV. | System performance | A | Not reviewed for Level III validation. |
| XV. | Overall assessment of data | A | |
| XVI. | Field duplicates | N | |
| XVII. | Field blanks | ND | EB = 2 |

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV validation

water

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | ACS-GW-MW19-31** | 11 | | 21 | | 31 | |
| 2 | ACS-GW-EB02-31 | 12 | | 22 | | 32 | |
| 3 | BK-1-040208 | 13 | | 23 | | 33 | |
| 4 | | 14 | | 24 | | 34 | |
| 5 | | 15 | | 25 | | 35 | |
| 6 | | 16 | | 26 | | 36 | |
| 7 | | 17 | | 27 | | 37 | |
| 8 | | 18 | | 28 | | 38 | |
| 9 | | 19 | | 29 | | 39 | |
| 10 | | 20 | | 30 | | 40 | |

(no ICV)

LDC #: 18716 BY
SDG #: See Cover

# VALIDATION FINDINGS CHECKLIST


Reviewer: NC
2nd Reviewer: [signature]

**Method:** Semivolatiles (EPA SW 846 Method 8270C)

| Validation Area | Yes | No | NA | Findings/Comments |
|---|---|---|---|---|
| I. Technical holding times | | | | |
| All technical holding times were met. | ✓ | | | |
| Cooler temperature criteria was met. | ✓ | | | |
| II. GC/MS instrument performance check | | | | |
| Were the DFTPP performance results reviewed and found to be within the specified criteria? | ✓ | | | |
| Were all samples analyzed within the 12 hour clock criteria? | ✓ | | | |
| III. Initial calibration | | | | |
| Did the laboratory perform a 5 point calibration prior to sample analysis? | ✓ | | | |
| Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? | ✓ | | | |
| Was a curve fit used for evaluation? | | ✓ | | |
| Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990? | | | ✓ | |
| Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05? | ✓ | | | |
| IV. Continuing calibration | | | | |
| Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? | ✓ | | | |
| Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? | ✓ | | | |
| Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? | ✓ | | | |
| V. Blanks | | | | |
| Was a method blank associated with every sample in this SDG? | ✓ | | | |
| Was a method blank analyzed for each matrix and concentration? | ✓ | | | |
| Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. | | ✓ | | |
| VI. Surrogate spikes | | | | |
| Were all surrogate %R within QC limits? | ✓ | | | |
| If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? | | | ✓ | |
| If any %R was less than 10 percent, was a reanalysis performed to confirm %R? | | | ✓ | |
| VII. Matrix spike/Matrix spike duplicates | | | | |
| Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | ✓ | | | |
| Was a MS/MSD analyzed every 20 samples of each matrix? | ✓ | | | |
| Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits? | ✓ | | | |
| VIII. Laboratory control samples | | | | |
| Was an LCS analyzed for this SDG? | ✓ | | | |

LDC #: 18716 B7
SDG #: See Cover

# VALIDATION FINDINGS CHECKLIST


Reviewer: JV
2nd Reviewer: [illegible]

| Validation Area | Yes | No | NA | Findings/Comments |
|---|---|---|---|---|
| Was an LCS analyzed per extraction batch? | ✓ | | | |
| Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits? | ✓ | | | |
| IX. Regional Quality Assurance and Quality Control | | | | |
| Were performance evaluation (PE) samples performed? | | ✓ | | |
| Were the performance evaluation (PE) samples within the acceptance limits? | | | ✓ | |
| XI. Internal standards | | | | |
| Were internal standard area counts within -50% or +100% of the associated calibration standard? | ✓ | | | |
| Were retention times within + 30 seconds from the associated calibration standard? | ✓ | | | |
| XII. Target compound identification | | | | |
| Were relative retention times (RRT's) within + 0.06 RRT units of the standard? | ✓ | | | |
| Did compound spectra meet specified EPA "Functional Guidelines" criteria? | ✓ | | | |
| Were chromatogram peaks verified and accounted for? | ✓ | | | |
| XIII. Compound quantitation/CRQLs | | | | |
| Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound? | ✓ | | | |
| Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation? | ✓ | | | |
| XIV. Tentatively identified compounds (TICs) | | | | |
| Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum? | | ✓ | | |
| Were relative intensities of the major ions within ± 20% between the sample and the reference spectra? | | ✓ | | |
| Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)? | | ✓ | | |
| XV. System performance | | | | |
| System performance was found to be acceptable. | ✓ | | | |
| XVI. Overall assessment of data | | | | |
| Overall assessment of data was found to be acceptable. | ✓ | | | |
| XVII. Field duplicates | | | | |
| Field duplicate pairs were identified in this SDG. | | ✓ | | |
| Target compounds were detected in the field duplicates. | | | ✓ | |
| XVIII. Field blanks | | | | |
| Field blanks were identified in this SDG. | | ✓ | | |
| Target compounds were detected in the field blanks. | | | ✓ | |

# VALIDATION FINDINGS WORKSHEET

## METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

| | | | | |
|---|---|---|---|---|
| A. Phenol** | P. Bis(2-chloroethoxy)methane | EE. 2,6-Dinitrotoluene | TT. Pentachlorophenol** | III. Benzo(a)pyrene** |
| B. Bis (2-chloroethyl) ether | Q. 2,4-Dichlorophenol** | FF. 3-Nitroaniline | UU. Phenanthrene | JJJ. Indeno(1,2,3-cd)pyrene |
| C. 2-Chlorophenol | R. 1,2,4-Trichlorobenzene | GG. Acenaphthene** | VV. Anthracene | KKK. Dibenz(a,h)anthracene |
| D. 1,3-Dichlorobenzene | S. Naphthalene | HH. 2,4-Dinitrophenol* | WW. Carbazole | LLL. Benzo(g,h,i)perylene |
| E. 1,4-Dichlorobenzene** | T. 4-Chloroaniline | II. 4-Nitrophenol* | XX. Di-n-butylphthalate | MMM. Bis(2-Chloroisopropyl)ether |
| F. 1,2-Dichlorobenzene | U. Hexachlorobutadiene** | JJ. Dibenzofuran | YY. Fluoranthene** | NNN. Aniline |
| G. 2-Methylphenol | V. 4-Chloro-3-methylphenol** | KK. 2,4-Dinitrotoluene | ZZ. Pyrene | OOO. N-Nitrosodimethylamine |
| H. 2,2'-Oxybis(1-chloropropane) | W. 2-Methylnaphthalene | LL. Diethylphthalate | AAA. Butylbenzylphthalate | PPP. Benzoic Acid |
| I. 4-Methylphenol | X. Hexachlorocyclopentadiene* | MM. 4-Chlorophenyl-phenyl ether | BBB. 3,3'-Dichlorobenzidine | QQQ. Benzyl alcohol |
| J. N-Nitroso-di-n-propylamine* | Y. 2,4,6-Trichlorophenol** | NN. Fluorene | CCC. Benzo(a)anthracene | RRR. Pyridine |
| K. Hexachloroethane | Z. 2,4,5-Trichlorophenol | OO. 4-Nitroaniline | DDD. Chrysene | SSS. Benzidine |
| L. Nitrobenzene | AA. 2-Chloronaphthalene | PP. 4,6-Dinitro-2-methylphenol | EEE. Bis(2-ethylhexyl)phthalate | TTT. |
| M. Isophorone | BB. 2-Nitroaniline | QQ. N-Nitrosodiphenylamine (1)** | FFF. Di-n-octylphthalate** | UUU |
| N. 2-Nitrophenol** | CC. Dimethylphthalate | RR. 4-Bromophenyl-phenylether | GGG. Benzo(b)fluoranthene | VVV. |
| O. 2,4-Dimethylphenol | DD. Acenaphthylene | SS. Hexachlorobenzene | HHH. Benzo(k)fluoranthene | WWW. |

Notes: * = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 18716 BY
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Initial Calibration Calculation Verification


Reviewer: JVC
2nd Reviewer: [illegible]

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

$A_x$ = Area of compound,
$C_x$ = Concentration of compound,
S = Standard deviation of the RRFs,

$A_{is}$ = Area of associated internal standard
$C_{is}$ = Concentration of internal standard
X = Mean of the RRFs

| # | Standard ID | Calibration Date | Compound (Reference Internal Standard) | Reported RRF ( 40 std) | Recalculated RRF ( 80 std) | Reported Average RRF (initial) | Recalculated Average RRF (initial) | Reported %RSD | Recalculated %RSD |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ICAL | 3/28/08 | ~~Phenol~~ Bis(2-chloroethyl)ether (1st internal standard) | 1.157 | 1.157 | 1.298 | 1.298 | 11.53 | 11.57 |
| | | | Naphthalene (2nd internal standard) | | | | | | |
| | | | Fluorene (3rd internal standard) | | | | | | |
| | | | Pentachlorophenol (4th internal standard) | | | | | | |
| | | | Bis(2-ethylhexyl)phthalate (5th internal standard) | | | | | | |
| | | | Benzo(a)pyrene (6th internal standard) | | | | | | |
| 2 | | | Phenol (1st internal standard) | | | | | | |
| | | | Naphthalene (2nd internal standard) | | | | | | |
| | | | Fluorene (3rd internal standard) | | | | | | |
| | | | Pentachlorophenol (4th internal standard) | | | | | | |
| | | | Bis(2-ethylhexyl)phthalate (5th internal standard) | | | | | | |
| | | | Benzo(a)pyrene (6th internal standard) | | | | | | |
| 3 | | | Phenol (1st internal standard) | | | | | | |
| | | | Naphthalene (2nd internal standard) | | | | | | |
| | | | Fluorene (3rd internal standard) | | | | | | |
| | | | Pentachlorophenol (4th internal standard) | | | | | | |
| | | | Bis(2-ethylhexyl)phthalate (5th internal standard) | | | | | | |
| | | | Benzo(a)pyrene (6th internal standard) | | | | | | |

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18716 B2
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Continuing Calibration Results Verification


Reviewer: JVC
2nd Reviewer: [illegible]

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
$A_x$ = Area of compound, $A_{is}$ = Area of associated internal standard
$C_x$ = Concentration of compound, $C_{is}$ = Concentration of internal standard

| # | Standard ID | Calibration Date | Compound (Reference Internal Standard) | Average RRF (initial) | Reported RRF (CC) | Recalculated RRF (CC) | Reported %D | Recalculated %D |
|---|---|---|---|---|---|---|---|---|
| 1 | D040207 | 4/07/08 | Bis(2-chloroethyl)ether | 1.298 | 1.432 | 1.432 | 10.3 | 10.3 |
| | | | ~~Phenol~~ (1st internal standard) | | | | | |
| | | | Naphthalene (2nd internal standard) | | | | | |
| | | | Fluorene (3rd internal standard) | | | | | |
| | | | Pentachlorophenol (4th internal standard) | | | | | |
| | | | Bis(2-ethylhexyl)phthalate (5th internal standard) | | | | | |
| | | | ~~Benzo(a)pyrene (6th internal standard)~~ | | | | | |
| 2 | | | Phenol (1st internal standard) | | | | | |
| | | | Naphthalene (2nd internal standard) | | | | | |
| | | | Fluorene (3rd internal standard) | | | | | |
| | | | Pentachlorophenol (4th internal standard) | | | | | |
| | | | Bis(2-ethylhexyl)phthalate (5th internal standard) | | | | | |
| | | | ~~Benzo(a)pyrene (6th internal standard)~~ | | | | | |
| 3 | | | Phenol (1st internal standard) | | | | | |
| | | | Naphthalene (2nd internal standard) | | | | | |
| | | | Fluorene (3rd internal standard) | | | | | |
| | | | Pentachlorophenol (4th internal standard) | | | | | |
| | | | Bis(2-ethylhexyl)phthalate (5th internal standard) | | | | | |
| | | | Benzo(a)pyrene (6th internal standard) | | | | | |

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18716 BV
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Surrogate Results Verification

Page: 1 of 1
Reviewer: JVC
2nd reviewer:

**METHOD:** GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

**Sample ID:** #1

| | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|---|---|---|---|---|---|
| Nitrobenzene-d5 | 100 | 56.8 | 56.8 | 56.8 | 0 |
| 2-Fluorobiphenyl | ↓ | 66.69 | 66.7 | 66.7 | |
| Terphenyl-d14 | ↓ | 51.18 | 51.2 | 51.2 | |
| Phenol-d5 | 150 | 30.59 ~~45.38~~ | 20.4 | 20.4 | |
| 2-Fluorophenol | ↓ | 45.38 | 30.3 | 30.3 | |
| 2,4,6-Tribromophenol | ↓ | 105.73 | 70.5 | 70.5 | ↓ |
| 2-Chlorophenol-d4 | | | | | |
| 1,2-Dichlorobenzene-d4 | | | | | |

**Sample ID:**

| | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | | | |
| 2-Fluorobiphenyl | | | | | |
| Terphenyl-d14 | | | | | |
| Phenol-d5 | | | | | |
| 2-Fluorophenol | | | | | |
| 2,4,6-Tribromophenol | | | | | |
| 2-Chlorophenol-d4 | | | | | |
| 1,2-Dichlorobenzene-d4 | | | | | |

**Sample ID:**

| | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | | | |
| 2-Fluorobiphenyl | | | | | |
| Terphenyl-d14 | | | | | |
| Phenol-d5 | | | | | |
| 2-Fluorophenol | | | | | |
| 2,4,6-Tribromophenol | | | | | |
| 2-Chlorophenol-d4 | | | | | |
| 1,2-Dichlorobenzene-d4 | | | | | |

LDC #: 18716 Br
SDG #: See cover

# VALIDATION FINDINGS WORKSHEET
## Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification


Reviewer: JVC
2nd Reviewer: R

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA  Where: SSC = Spike concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD)  LCS = Laboratory control sample percent recovery  LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS-1_040208

| Compound | Spike Added (ug/L) | | Spike Concentration (ug/L) | | LCS Percent Recovery | | LCSD Percent Recovery | | LCS/LCSD RPD | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | Reported | Recalc | Reported | Recalc | Reported | Recalculated |
| Phenol | | | | | | | | | | |
| N-Nitroso-di-n-propylamine | | | | | | | | | | |
| 4-Chloro-3-methylphenol | | | | | | | | | | |
| Acenaphthene | 100 | NA | 69.2 | NA | 69.2 | 69.2 | | | | |
| Pentachlorophenol | | | | | | | | | | |
| Pyrene | 100 | NA | 73.17 | NA | 73.2 | 73.2 | | | | |
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Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18716 B7
SDG #: Bay Corner

# VALIDATION FINDINGS WORKSHEET
## Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer:

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MS - MSD | * 2/(MS + MSD)

MS = Matrix spike percent recovery; MSD = Matrix spike duplicate percent recovery

MS/MSD samples: ACS-GW-MW06-31 MS MSD

| Compound | Spike Added (ug/L) | | Sample Concentration (ug/L) | Spiked Sample Concentration (ug/L) | | Matrix Spike Percent Recovery | | Matrix Spike Duplicate Percent Recovery | | MS/MSD RPD | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MS | MSD | ------ | MS | MSD | Reported | Recalc | Reported | Recalc | Reported | Recalculated |
| Phenol | | | | | | | | | | | |
| N-Nitroso-di-n-propylamine | | | | | | | | | | | |
| 4-Chloro-3-methylphenol | | | | | | | | | | | |
| Acenaphthene | 212.8 | 208.3 | 0 | 124.8 | 136.6 | 58.7 | 58.6 | 65.6 | 65.6 | 9.0 ✓ | 9.03 |
| Pentachlorophenol | | | ↓ | | | | | | | | |
| Pyrene | 212.8 | 208.3 | ↓ | 145.5 | 158.6 | 68.4 | 68.4 | 76.1 | 76.1 | 8.60 | 8.6 ✓ |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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| | | | | | | | | | | | |

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18716 B2
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: [signature]

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

$A_x$ = Area of the characteristic ion (EICP) for the compound to be measured

$A_{is}$ = Area of the characteristic ion (EICP) for the specific internal standard

$I_s$ = Amount of internal standard added in nanograms (ng)

$V_o$ = Volume or weight of sample extract in milliliters (ml) or grams (g).

$V_i$ = Volume of extract injected in microliters (ul)

$V_t$ = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1 . Bis(2-chloro ethyl) ether

Conc. = $\frac{(22334)(40)(1\,ml)(\cancel{\phantom{000}})(1000)}{(117343)(1.298)(990\,ml)(\quad)(\quad)}$

= 5.92

≈ 6 ng/L

| # | Sample ID | Compound | Reported Concentration ( ) | Calculated Concentration ( ) | Qualification |
|---|---|---|---|---|---|
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RECALC.wpd

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS GW Semi-Annual

**Collection Date:** March 26, 2008

**LDC Report Date:** May 14, 2008

**Matrix:** Water

**Parameters:** Arsenic

**Validation Level:** EPA Level III & IV

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** ME0803A91

**Sample Identification**

ACS-GW-DUP02-31
ACS-GW-MW43-31
ACS-GW-MW15-31**
ACS-GW-EB02-31
ACS-GW-MW43-31MS
ACS-GW-MW43-31MSD

**Indicates sample underwent EPA Level IV review

## Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Arsenic.

This review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

## III. Blanks

Method blanks were reviewed for each matrix as applicable. No arsenic was found in the initial, continuing and preparation blanks.

Sample ACS-GW-EB02-31 was identified as an equipment blank. No arsenic was found in this blank.

## IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

## V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

## VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

## VIII. Internal Standards

ICP-MS was not utilized in this SDG.

## IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

## X. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

## XI. Sample Result Verification

Raw data were not reviewed for this SDG.

## XII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

## XIII. Field Duplicates

Samples ACS-GW-DUP02-31 and ACS-GW-MW43-31 were identified as field duplicates. No arsenic was detected in any of the samples with the following exceptions:

| Analyte | Concentration (ug/L) | | RPD |
|---|---|---|---|
| | ACS-GW-DUP02-31 | ACS-GW-MW43-31 | |
| Arsenic | 3.7 | 2.5U | 200 |

**ACS GW Semi-Annual**
**Arsenic - Data Qualification Summary - SDG ME0803A91**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Arsenic - Laboratory Blank Data Qualification Summary - SDG ME0803A91**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Arsenic - Field Blank Data Qualification Summary - SDG ME0803A91**

No Sample Data Qualified in this SDG

LDC #: 18716B4
SDG #: ME0803A91
Laboratory: Microbac

# VALIDATION COMPLETENESS WORKSHEET
Level III/IV

Date: 5/14/08
Page: 1 of 1
Reviewer: MY
2nd Reviewer: [illegible]

**METHOD:** Arsenic (EPA SW 846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 3/26/08 |
| II. | Calibration | A | |
| III. | Blanks | A SW | |
| IV. | ICP Interference Check Sample (ICS) Analysis | A | |
| V. | Matrix Spike Analysis | A | 3 MS/MSD |
| VI. | Duplicate Sample Analysis | N | |
| VII. | Laboratory Control Samples (LCS) | A | LCS |
| VIII. | Internal Standard (ICP-MS) | N | 3 Not utilized |
| IX. | Furnace Atomic Absorption QC | N | |
| X. | ICP Serial Dilution | N | Not performed |
| XI. | Sample Result Verification | A | Not reviewed for Level III validation. |
| XII. | Overall Assessment of Data | A | |
| XIII. | Field Duplicates | SW | (1, 2) |
| XIV. | Field Blanks | ND | EB = 2 |

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV validation

As

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | ACS-GW-DUP02-31 | 11 | | 21 | | 31 | |
| 2 | ACS-GW-MW43-31 | 12 | | 22 | | 32 | |
| 3 | ACS-GW-MW15-31** | 13 | | 23 | | 33 | |
| 4 | ACS-GW-EB02-31 | 14 | | 24 | | 34 | |
| 5 | ACS-GW-MW43-31MS | 15 | | 25 | | 35 | |
| 6 | ACS-GW-MW43-31MSD | 16 | | 26 | | 36 | |
| 7 | PB | 17 | | 27 | | 37 | |
| 8 | | 18 | | 28 | | 38 | |
| 9 | | 19 | | 29 | | 39 | |
| 10 | | 20 | | 30 | | 40 | |

Notes:

LDC #: 18716B4
SDG #: see cover

**VALIDATION FINDINGS CHECKLIST**


Reviewer: MH
2nd Reviewer: 4

**Method:** Metals (EPA SW 846 Method 6010/7000/6020)

| Validation Area | Yes | No | NA | Findings/Comments |
|---|---|---|---|---|
| I. Technical holding times | | | | |
| All technical holding times were met. | ✓ | | | |
| Cooler temperature criteria was met. | ✓ | | | |
| II. Calibration | | | | |
| Were all instruments calibrated daily, each set-up time? | ✓ | | | |
| Were the proper number of standards used? | ✓ | | | |
| Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury and 85-115% for cyanide) QC limits? | ✓ | | | |
| Were all initial calibration correlation coefficients > 0.995? (Level IV only) | ✓ | | | |
| III. Blanks | | | | |
| Was a method blank associated with every sample in this SDG? | ✓ | | | |
| Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. | | ✓ | | |
| IV. ICP Interference Check Sample | | | | |
| Were ICP interference check samples performed daily? | ✓ | | | |
| Were the AB solution percent recoveries (%R) with the 80-120% QC limits? | ✓ | | | |
| IV. Matrix spike/Matrix spike duplicates | | | | |
| Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water. | ✓ | | | |
| Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken. | ✓ | | | |
| Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were < 5X the RL. | ✓ | | | |
| V. Laboratory control samples | | | | |
| Was an LCS anaylzed for this SDG? | ✓ | | | |
| Was an LCS analyzed per extraction batch? | ✓ | | | |
| Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils? | ✓ | | | |
| VI. Furnace Atomic Absorption QC | | | | |
| If MSA was performed, was the correlation coefficients > 0.995? | | | ✓ | |
| Do all applicable analysies have duplicate injections? (Level IV only) | | | ✓ | |
| For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only) | | | ✓ | |
| Were analytical spike recoveries within the 85-115% QC limits? | | | ✓ | |

LDC #: 18716B4
SDG #: see Cover

**VALIDATION FINDINGS CHECKLIST**


Reviewer: MM
2nd Reviewer: g

| Validation Area | Yes | No | NA | Findings/Comments |
|---|---|---|---|---|
| VII. ICP Serial Dilution | | | | |
| Was an ICP serial dilution analyzed if analyte concentrations were > 50X the IDL? | | ✓ | | |
| Were all percent differences (%Ds) < 10%? | | | ✓ | |
| Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data. | | | ✓ | |
| VIII. Internal Standards (EPA SW 846 Method 6020) | | | | |
| Were all the percent recoveries (%R) within the 30-120% of the intensity of the internal standard in the associated initial calibration? | | | ✓ | |
| If the %Rs were outside the criteria, was a reanalysis performed? | | | ✓ | |
| IX. Regional Quality Assurance and Quality Control | | | | |
| Were performance evaluation (PE) samples performed? | | | ✓ | |
| Were the performance evaluation (PE) samples within the acceptance limits? | | | ✓ | |
| X. Sample Result Verification | | | | |
| Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation? | ✓ | | | |
| XI. Overall assessment of data | | | | |
| Overall assessment of data was found to be acceptable. | ✓ | | | |
| XII. Field duplicates | | | | |
| Field duplicate pairs were identified in this SDG. | ✓ | | | |
| Target analytes were detected in the field duplicates. | ✓ | | | |
| XIII. Field blanks | | | | |
| Field blanks were identified in this SDG. | ✓ | | | |
| Target analytes were detected in the field blanks. | | ✓ | | |

LDC#: 18716B4
SDG#: See Cover

# VALIDATION FINDINGS WORKSHEET
## Field Duplicates


Reviewer:
2nd Reviewer:

**METHOD**: Metals (EPA Method 6010B)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

| Compound | Concentration (ug/L) | | RPD | |
|---|---|---|---|---|
| | 1 | 2 | | |
| Arsenic | 3.7 | 2.5U | 200 | |

V:\FIELD DUPLICATES\FD_inorganic\18716B4.wpd

LDC #: 189163 4
SDG #: See cover

# VALIDATION FINDINGS WORKSHEET
## Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: MM
2nd Reviewer: R

**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

| Standard ID | Type of Analysis | Element | Found (ug/L) | True (ug/L) | Recalculated %R | Reported %R | Acceptable (Y/N) |
|---|---|---|---|---|---|---|---|
| ICV | ICP (Initial calibration) | Ag | 1.035 | 1 | 104 | 1.4 | Y |
| | GFAA (Initial calibration) | | | | | | |
| | CVAA (Initial calibration) | | | | | | |
| CCV | ICP (Continuing calibration) | Ag | 5.086 | 5 | 102 | 102 | Y |
| | GFAA (Continuing calibration) | | | | | | |
| | CVAA (Continuing calibration) | | | | | | |
| | ICP/MS (Initial calibration) | | | | | | |
| | ICP/MS (Continuing calibation) | | | | | | |

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18716B4
SDG #: Jacobs

# VALIDATION FINDINGS WORKSHEET
## Level IV Recalculation Worksheet


Reviewer: MM
2nd Reviewer: [signature]

**METHOD:** Trace Metals (EPA SW 846 Method 6010/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

| Sample ID | Type of Analysis | Element | Found / S / I (units) | True / D / SDR (units) | Recalculated %R / RPD / %D | Reported %R / RPD / %D | Acceptable (Y/N) |
|---|---|---|---|---|---|---|---|
| ICSAB | ICP interference check | Ag | 1.053 | 1 | 105 | 105 | Y |
| LCS | Laboratory control sample | | 2.029 | 2 | 101 | 101 | |
| 5 | Matrix spike | | (SSR-SR) 2.044 | 2 | 102 | 102 | |
| 5/6 | Duplicate | | 2.092 | 2.044 | 2.32 | 2.32 | |
| MA | ICP serial dilution | | | | | | |

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18716B4
SDG #: See cover

# VALIDATION FINDINGS WORKSHEET
## Sample Calculation Verification

Page: 1 of 1
Reviewer: MM
2nd reviewer: [signature]

**METHOD:** Trace Metals (EPA SW 846 Method 6010/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for 3 were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)(\%S)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor
%S = Decimal percent solids

Recalculation:
From row 1 to 5
#3 As = 0.0320 mg/L
= 32.0 ug/L

| Sample ID | Analyte | Reported Concentration ( ug/L ) | Calculated Concentration ( ug/L ) | Acceptable (Y/N) |
|---|---|---|---|---|
| 3 | As | 32 | 32 | Y |
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RECALC.4S2

Microbac

# LEVEL IV
# QA/QC DATA PACKAGE

| | |
|---|---|
| **CLIENT:** | MWH, Inc. |
| **PROJECT:** | ACS Groundwater / Griffith, IN |
| **LAB WORKORDER:** | ME0803B85 |
| **DATE PACKAGE ISSUED:** | 04/15/08 |

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**CLIENT:** **MWH, Inc.**

**PROJECT:** **ACS Groundwater / Griffith, IN**

**LAB WORKORDER:** **ME0803B85**

**CHAIN-OF-CUSTODY:** **82595 / 82596**


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# Case Narrative
# SVOA Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803B85

Two groundwater samples were received on 03/31/08 for analysis and reporting in accordance with our Level IV protocol. The samples were received in acceptable physical condition. The samples were analyzed for Semi-volatile Organic Analytes using SW-846 Method 3510/8270C.

The samples were collected on 03/29/08. The samples were extracted on 04/02/08 then analyzed on 04/04/08. All samples were prepared and analyzed within the prescribed maximum allowable holding times without exception.

The required instrument calibration was performed and the acceptance criteria met. The grand mean average approach was used to assess linearity.

Prior to analysis, the resultant mass spectra for DFTPP met all method criteria, and all samples were analyzed within 12-hour analytical sequences.

Prior to analysis, a CCV standard was analyzed and the acceptance criteria met for all CCCs and SPCCs.

The batch quality control tests were performed and the acceptance criteria met without exception.

Three acid surrogate compounds and three base/neutral surrogate compounds are spiked into each sample to evaluate the extraction and analysis efficiency. One surrogate per fraction (acid versus base/neutral) is allowed to be outside of the acceptance criteria. All environmental samples yielded acceptable surrogate recovery.

Internal standards are spiked into each CCV standard and environmental sample. All internal standard responses met the criteria established for the CCVs. The internal standard responses in the environmental samples were evaluated and deemed adequate.

Matrix evaluation was performed on a sample submitted in another delivery group. The accuracy and precision criteria were met as noted.

This Case Narrative was prepared by Allyl McCarron, QC Assistant.

# Case Narrative
# VOA Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803B85

Nineteen groundwater samples were received on 03/31/08 for analysis and reporting in accordance with our Level IV protocol. The samples were received in acceptable physical condition with the exception of sample ACS-GW-MW39-31 which had one vial that contained head space. The samples were analyzed for Volatile Organic Analytes using SW-846 Method 8260B. To achieve lower reporting limits these samples were analyzed using a 25-ml sample size.

The samples were collected on 03/28/08 and 03/29/09. The samples were analyzed on 04/04/08, 04/05/08, 04/06/08 and 04/08/08. All samples were analyzed within the prescribed maximum allowable holding time without exception.

The required instrument calibration was performed and the acceptance criteria met with the following listed exception. The grand mean average approach was used to assess linearity.

- 1,1,2,2-Tetrachloroethane failed to meet the minimum average response criteria. This criterion is based on a 5-ml sample size. These standards were analyzed using a 25-ml purge volume. This data is typical for a 25-ml purge and considered acceptable.

Prior to analysis, the resultant mass spectra for BFB met all method criteria, and all samples were analyzed within 12-hour analytical sequences.

Prior to analysis, a CCV standard was analyzed and the acceptance criteria met for all CCCs and SPCCs with the following exceptions.

- 1,1,2,2-Tetrachloroethane failed to meet the minimum response criteria in A040402, A040502 and A040802. This criterion is based on a 5-ml sample size. These standards were analyzed using a 25-ml purge volume. This data is typical for a 25-ml purge and considered acceptable.

The batch quality control tests were performed and the acceptance criteria met with the following exception.

- The Laboratory Control Sample (SeqNo 1764954) failed for Chloromethane with a high bias. This is considered insignificant as the sample concentrations associated with this LCS were below the reporting limit.

Surrogate compounds are spiked into each sample to evaluate analysis efficiency. All environmental samples yielded acceptable surrogate recovery.

# Case Narrative
# VOA Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803B85

Internal standards are spiked into each CCV standard and environmental sample. All internal standard responses met the criteria established for the CCVs. The internal standard responses in the environmental samples were evaluated and deemed adequate.

Matrix evaluation was performed on the sample ACS-GW-DUP03-31. The accuracy and precision criteria were met without exception. No MS/MSD was reported for the analytical run on 04/07/08 due to instrument computer failure.

This Case Narrative was prepared by Allyl McCarron, QC Assistant.

April 10, 2008

Justin Finger
MWH, Inc.
175 West Jackson Boulevard, Suite 1900
Chicago, IL 60604

Work Order No.: ME0803B85

RE: ACS Groundwater / Griffith, IN

Dear Justin Finger:

Microbac Laboratories, Inc. received 19 samples on 3/31/2008 10:45:00 AM for the analyses presented in the following report.

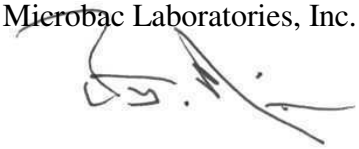
The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,
Microbac Laboratories, Inc.



Ronald J. Misiunas
Client Services Manager

Enclosures

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# WORK ORDER SAMPLE SUMMARY

**Date:** *Thursday, April 10, 2008*

**CLIENT:** MWH, Inc.
**Project:** ACS Groundwater / Griffith, IN
**Lab Order:** ME0803B85

| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---|---|---|---|---|
| ME0803B85-01A | ACS-GW-TB03-31 | | 3/28/2008 7:30:00 AM | 3/31/2008 |
| ME0803B85-02A | ACS-GW-MW54R-31 | | 3/28/2008 9:00:00 AM | 3/31/2008 |
| ME0803B85-03A | ACS-GW-MW55-31 | | 3/28/2008 9:30:00 AM | 3/31/2008 |
| ME0803B85-04A | ACS-GW-MW56-31 | | 3/28/2008 10:15:00 AM | 3/31/2008 |
| ME0803B85-05A | ACS-GW-MW33-31 | | 3/28/2008 11:15:00 AM | 3/31/2008 |
| ME0803B85-06A | ACS-GW-MW51-31 | | 3/28/2008 11:25:00 AM | 3/31/2008 |
| ME0803B85-07A | ACS-GW-DUP03-31 | | 3/28/2008 12:00:00 PM | 3/31/2008 |
| ME0803B85-08A | ACS-GW-MW30-31 | | 3/28/2008 1:15:00 PM | 3/31/2008 |
| ME0803B85-09A | ACS-GW-MW10C-31 | | 3/28/2008 1:30:00 PM | 3/31/2008 |
| ME0803B85-10A | ACS-GW-MW13-31 | | 3/28/2008 2:30:00 PM | 3/31/2008 |
| ME0803B85-11A | ACS-GW-MW53-31 | | 3/28/2008 3:20:00 PM | 3/31/2008 |
| ME0803B85-12A | ACS-GW-MW52-31 | | 3/28/2008 2:45:00 PM | 3/31/2008 |
| ME0803B85-13A | ACS-GW-EB03-31 | | 3/28/2008 3:40:00 PM | 3/31/2008 |
| ME0803B85-14A | ACS-GW-DUP04-31 | | 3/29/2008 8:00:00 AM | 3/31/2008 |
| ME0803B85-14B | ACS-GW-DUP04-31 | | 3/29/2008 8:00:00 AM | 3/31/2008 |
| ME0803B85-15A | ACS-GW-MW29-31 | | 3/29/2008 9:50:00 AM | 3/31/2008 |
| ME0803B85-16A | ACS-GW-MW14-31 | | 3/29/2008 10:10:00 AM | 3/31/2008 |
| ME0803B85-17A | ACS-GW-MW09R-31 | | 3/29/2008 10:50:00 AM | 3/31/2008 |
| ME0803B85-17B | ACS-GW-MW09R-31 | | 3/29/2008 10:50:00 AM | 3/31/2008 |
| ME0803B85-18A | ACS-GW-MW37-31 | | 3/29/2008 11:55:00 AM | 3/31/2008 |
| ME0803B85-19A | ACS-GW-MW39-31 | | 3/29/2008 1:55:00 PM | 3/31/2008 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB03-31 | **Work Order / ID:** | ME0803B85-01 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 07:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/04/08 21:34 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| Chloroform | A | ***0.97*** | 0.9 | 5.0 | J | µg/L | 1 | 04/04/08 21:34 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/04/08 21:34 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/04/08 21:34 |
| *Surr: 4-Bromofluorobenzene* | S | 94.8 | 0 | 75.2-115 | | %REC | 1 | 04/04/08 21:34 |

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB03-31 | **Work Order / ID:** | ME0803B85-01 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 07:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/04/08 21:34 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/04/08 21:34 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/04/08 21:34 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW54R-31 | **Work Order / ID:** | ME0803B85-02 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/04/08 22:09 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/04/08 22:09 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/04/08 22:09 |
| *Surr: 4-Bromofluorobenzene* | S | 95.9 | 0 | 75.2-115 | | %REC | 1 | 04/04/08 22:09 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW54R-31 | **Work Order / ID:** | ME0803B85-02 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/04/08 22:09 |
| *Surr: 1,2-Dichloroethane-d4* | S | 112 | 0 | 88.2-132 | | %REC | 1 | 04/04/08 22:09 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/04/08 22:09 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW55-31 | **Work Order / ID:** | ME0803B85-03 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 09:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/04/08 22:44 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/04/08 22:44 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/04/08 22:44 |
| *Surr: 4-Bromofluorobenzene* | S | 96.6 | 0 | 75.2-115 | | %REC | 1 | 04/04/08 22:44 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW55-31 | **Work Order / ID:** | ME0803B85-03 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 09:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 102 | 0 | 92.7-119 | | %REC | 1 | 04/04/08 22:44 |
| *Surr: 1,2-Dichloroethane-d4* | S | 111 | 0 | 88.2-132 | | %REC | 1 | 04/04/08 22:44 |
| *Surr: Toluene-d8* | S | 112 | 0 | 89.3-116 | | %REC | 1 | 04/04/08 22:44 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW56-31 | **Work Order / ID:** | ME0803B85-04 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 10:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/04/08 23:19 |
| Benzene | A | ***240*** | 20 | 120 | | µg/L | 25 | 04/05/08 10:24 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/04/08 23:19 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/04/08 23:19 |
| *Surr: 4-Bromofluorobenzene* | S | 94.2 | 0 | 75.2-115 | | %REC | 1 | 04/04/08 23:19 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW56-31 | **Work Order / ID:** | ME0803B85-04 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 10:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 97.4 | 0 | 92.7-119 | | %REC | 25 | 04/05/08 10:24 |
| *Surr: 1,2-Dichloroethane-d4* | S | 106 | 0 | 88.2-132 | | %REC | 1 | 04/04/08 23:19 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/04/08 23:19 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW33-31 | **Work Order / ID:** | ME0803B85-05 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 11:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **BRR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 09:14 |
| Benzene | A | ***2.8*** | 0.8 | 5.0 | J | µg/L | 1 | 04/05/08 09:14 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| cis-1,2-Dichloroethene | A | ***1.3*** | 0.8 | 5.0 | J | µg/L | 1 | 04/05/08 09:14 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| Trichloroethene | A | ***3.9*** | 0.9 | 5.0 | J | µg/L | 1 | 04/05/08 09:14 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 09:14 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 09:14 |
| *Surr: 4-Bromofluorobenzene* | S | 99.0 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 09:14 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW33-31 | **Work Order / ID:** | ME0803B85-05 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 11:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 99.1 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 09:14 |
| *Surr: 1,2-Dichloroethane-d4* | S | 106 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 09:14 |
| *Surr: Toluene-d8* | S | 116 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 09:14 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW51-31 | **Work Order / ID:** | ME0803B85-06 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 11:25 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **BRR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 09:49 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 09:49 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 09:49 |
| *Surr: 4-Bromofluorobenzene* | S | 95.5 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 09:49 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW51-31 | **Work Order / ID:** | ME0803B85-06 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 11:25 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 105 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 09:49 |
| *Surr: 1,2-Dichloroethane-d4* | S | 112 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 09:49 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 09:49 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP03-31 | **Work Order / ID:** | ME0803B85-07 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 12:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 01:04 |
| Benzene | A | ***350*** | 20 | 120 | | µg/L | 25 | 04/05/08 10:59 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Chloroethane | A | ***240*** | 58 | 250 | J | µg/L | 25 | 04/05/08 10:59 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 01:04 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 01:04 |
| *Surr: 4-Bromofluorobenzene* | S | 96.2 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 01:04 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP03-31 | **Work Order / ID:** | ME0803B85-07 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 12:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 95.3 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 01:04 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 01:04 |
| *Surr: Toluene-d8* | S | 116 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 01:04 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW30-31 | **Work Order / ID:** | ME0803B85-08 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 13:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 01:39 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 01:39 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 01:39 |
| *Surr: 4-Bromofluorobenzene* | S | 96.8 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 01:39 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW30-31 | **Work Order / ID:** | ME0803B85-08 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 13:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 99.0 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 01:39 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 01:39 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 01:39 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW10C-31 | **Work Order / ID:** | ME0803B85-09 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 13:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 12:44 |
| Benzene | A | ***330*** | 20 | 120 | | µg/L | 25 | 04/08/08 09:30 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Chloroethane | A | ***230*** | 58 | 250 | J | µg/L | 25 | 04/08/08 09:30 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 12:44 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 12:44 |
| *Surr: 4-Bromofluorobenzene* | S | 95.7 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 12:44 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW10C-31 | **Work Order / ID:** | ME0803B85-09 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 13:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 95.1 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 12:44 |
| *Surr: 1,2-Dichloroethane-d4* | S | 106 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 12:44 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 12:44 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW13-31 | **Work Order / ID:** | ME0803B85-10 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 14:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 13:19 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 13:19 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 13:19 |
| *Surr: 4-Bromofluorobenzene* | S | 97.7 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 13:19 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW13-31 | **Work Order / ID:** | ME0803B85-10 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 14:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 99.6 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 13:19 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 13:19 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 13:19 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW53-31 | **Work Order / ID:** | ME0803B85-11 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 15:20 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/08/08 14:30 |
| Benzene | A | ***3.2*** | 0.8 | 5.0 | J | µg/L | 1 | 04/08/08 14:30 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/08/08 14:30 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/08/08 14:30 |
| *Surr: 4-Bromofluorobenzene* | S | 96.8 | 0 | 75.2-115 | | %REC | 1 | 04/08/08 14:30 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW53-31 | **Work Order / ID:** | ME0803B85-11 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 15:20 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 105 | 0 | 92.7-119 | | %REC | 1 | 04/08/08 14:30 |
| *Surr: 1,2-Dichloroethane-d4* | S | 120 | 0 | 88.2-132 | | %REC | 1 | 04/08/08 14:30 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/08/08 14:30 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW52-31 | **Work Order / ID:** | ME0803B85-12 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 14:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **BRR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 15:02 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 15:02 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 15:02 |
| *Surr: 4-Bromofluorobenzene* | S | 96.5 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 15:02 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW52-31 | **Work Order / ID:** | ME0803B85-12 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 14:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 98.6 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 15:02 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 15:02 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 15:02 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB03-31 | **Work Order / ID:** | ME0803B85-13 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 15:40 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 15:37 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 15:37 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 15:37 |
| *Surr: 4-Bromofluorobenzene* | S | 98.1 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 15:37 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB03-31 | **Work Order / ID:** | ME0803B85-13 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 15:40 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 15:37 |
| *Surr: 1,2-Dichloroethane-d4* | S | 109 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 15:37 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 15:37 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP04-31 | **Work Order / ID:** | ME0803B85-14 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANICS** | Method: **SW8270C** | | | | Prep Date/Time: **04/02/08 06:22** | Analyst: **BEM** | | |
| Bis(2-chloroethyl)ether | A | ***4.2*** | 0.93 | 10 | J | µg/L | 1 | 04/04/08 03:21 |
| *Surr: Nitrobenzene-d5* | S | 49.8 | 0 | 10-121 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: 2-Fluorobiphenyl* | S | 64.4 | 0 | 10-109 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: Terphenyl-d14* | S | 64.6 | 0 | 10-130 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: Phenol-d5* | S | 19.6 | 0 | 10-100 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: 2-Fluorophenol* | S | 26.6 | 0 | 10-84.7 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: 2,4,6-Tribromophenol* | S | 76.2 | 0 | 10-120 | | %REC | 1 | 04/04/08 03:21 |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | Analyst: **BRR** | | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 16:12 |
| Benzene | A | ***4.9*** | 0.8 | 5.0 | J | µg/L | 1 | 04/05/08 16:12 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP04-31 | **Work Order / ID:** | ME0803B85-14 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| *Surr: 4-Bromofluorobenzene* | S | 96.2 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 16:12 |
| *Surr: Dibromofluoromethane* | S | 95.9 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 16:12 |
| *Surr: 1,2-Dichloroethane-d4* | S | 105 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 16:12 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 16:12 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW29-31 | **Work Order / ID:** | ME0803B85-15 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 09:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **BRR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/05/08 16:47 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Chloroethane | A | ***39*** | 12 | 50 | J | µg/L | 5 | 04/08/08 10:59 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/05/08 16:47 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/05/08 16:47 |
| *Surr: 4-Bromofluorobenzene* | S | 96.3 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 16:47 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW29-31 | **Work Order / ID:** | ME0803B85-15 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 09:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 16:47 |
| *Surr: 1,2-Dichloroethane-d4* | S | 113 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 16:47 |
| *Surr: Toluene-d8* | S | 112 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 16:47 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW14-31 | **Work Order / ID:** | ME0803B85-16 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 10:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **MLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/06/08 18:13 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| Trichloroethene | A | ***1.3*** | 0.9 | 5.0 | J | µg/L | 1 | 04/06/08 18:13 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/06/08 18:13 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/06/08 18:13 |
| *Surr: 4-Bromofluorobenzene* | S | 95.2 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 18:13 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW14-31 | **Work Order / ID:** | ME0803B85-16 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 10:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 97.8 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 18:13 |
| *Surr: 1,2-Dichloroethane-d4* | S | 101 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 18:13 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 18:13 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW09R-31 | **Work Order / ID:** | ME0803B85-17 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 10:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANICS** | Method: **SW8270C** | | | | Prep Date/Time: **04/02/08 06:22** | Analyst: **BEM** | | |
| Bis(2-chloroethyl)ether | A | ***4.7*** | 0.92 | 10 | J | µg/L | 1 | 04/04/08 03:47 |
| *Surr: Nitrobenzene-d5* | S | 51.9 | 0 | 10-121 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: 2-Fluorobiphenyl* | S | 70.6 | 0 | 10-109 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: Terphenyl-d14* | S | 62.4 | 0 | 10-130 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: Phenol-d5* | S | 20.9 | 0 | 10-100 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: 2-Fluorophenol* | S | 29.3 | 0 | 10-84.7 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: 2,4,6-Tribromophenol* | S | 75.3 | 0 | 10-120 | | %REC | 1 | 04/04/08 03:47 |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | Analyst: **MLT** | | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/06/08 18:48 |
| Benzene | A | ***4.4*** | 0.8 | 5.0 | J | µg/L | 1 | 04/06/08 18:48 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW09R-31 | **Work Order / ID:** | ME0803B85-17 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 10:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| *Surr: 4-Bromofluorobenzene* | S | 97.0 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 18:48 |
| *Surr: Dibromofluoromethane* | S | 97.0 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 18:48 |
| *Surr: 1,2-Dichloroethane-d4* | S | 101 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 18:48 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 18:48 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW37-31 | **Work Order / ID:** | ME0803B85-18 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 11:55 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/06/08 19:23 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/06/08 19:23 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/06/08 19:23 |
| *Surr: 4-Bromofluorobenzene* | S | 96.3 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 19:23 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW37-31 | **Work Order / ID:** | ME0803B85-18 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 11:55 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 19:23 |
| *Surr: 1,2-Dichloroethane-d4* | S | 111 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 19:23 |
| *Surr: Toluene-d8* | S | 112 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 19:23 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW39-31 | **Work Order / ID:** | ME0803B85-19 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 13:55 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/06/08 19:58 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/06/08 19:58 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/06/08 19:58 |
| *Surr: 4-Bromofluorobenzene* | S | 97.0 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 19:58 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW39-31 | **Work Order / ID:** | ME0803B85-19 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 13:55 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 102 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 19:58 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 19:58 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 19:58 |

**FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NA | = | Not Analyzed | N/A | = | Not Applicable | | | |
| mg/L | = | Milligrams per Liter (ppm) | ug/L | = | Micrograms per Liter (ppb) | cfu | = | Colony Forming Unit |
| mg/Kg | = | Milligrams per Kilogram (ppm) | ug/Kg | = | Micrograms per Kilogram (ppb) | ng/L | = | Nanograms per Liter (ppt) |

| | | |
|---|---|---|
| U | = | Undetected |
| J | = | Analyte concentration detected between RL and MDL (Metals / Organics) |
| B | = | Detected in the associated Method Blank at a concentration above the routine PQL/RL |
| b | = | Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL |
| D | = | Surrogate recoveries are not calculated due to sample dilution |
| ND | = | Not Detected at the Reporting Limit (or the Method Detection Limit, if listed) |
| E | = | Value above quantitation range |
| H | = | Analyte was prepared and/or analyzed outside of the analytical method holding time |
| I | = | Matrix Interference |
| R | = | RPD outside accepted recovery limits |
| S | = | Spike recovery outside recovery limits |
| Surr | = | Surrogate |

DF = Dilution Factor RL = Reporting Limit ST = Sample Type MDL = Method Detection Limit

**SAMPLE TYPES**

| | | |
|---|---|---|
| A | = | Analyte |
| I | = | Internal Standard |
| S | = | Surrogate |
| T | = | Tentatively Identified Compound (TIC, concentration estimated) |

**QC SAMPLE IDENTIFICATIONS**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MBLK | = | Method Blank | ICSA | = | Interference Check Standard "A" | OPR | = | Ongoing Precision and Recovery Standard |
| DUP | = | Method Duplicate | ICSAB | = | Interference Check Standard "AB" | | | |
| LCS | = | Laboratory Control Sample | LCSD | = | Laboratory Control Sample Duplicate | | | |
| MS | = | Matrix Spike | MSD | = | Matrix Spike Duplicate | | | |
| ICB | = | Initial Calibration Blank | CCB | = | Continuing Calibration Blank | | | |
| ICV | = | Initial Calibration Verification | CCV | = | Continuing Calibration Verification | | | |
| PDS | = | Post Digestion Spike | SD | = | Serial Dilution | | | |

**CERTIFICATIONS**

*Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.*

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

**MICROBAC LOCATIONS, SERVICE CENTERS (SC) AND SATELLITE OFFICES (Sat)**

**Baltimore Division** - Baltimore, MD
**Camp Hill Division** - Camp Hill, PA
**Camp Hill Division (SC)** - Pittston, PA
**Chicagoland Division** - Merrillville, IN
**Chicagoland Division (SC)** - Indianapolis, IN
**Corona Division** - Corona, CA
**Erie Division** - Erie, PA
**Fayetteville Division** - Fayetteville, NC
**Hauser Division** - Boulder, CO
**Kentucky Division** - Louisville, KY
**Kentucky Division (Sat)** - Evansville, IN
**Kentucky Division (Sat)** - Lexington, KY
**Kentucky Division (Sat)** - Paducah, KY
**Knoxville Division** - Maryville, TN
**Massachusetts Division** - Marlborough, MA
**Microbac Corporate Office** - Wexford, PA
**Microbac NY - Cortland Office** - Cortland, NY
**Microbac NY - Waverly Office** - Waverly, NY
**New Castle Division** - New Castle, PA
**Pittsburgh Division** - Warrendale, PA
**Richmond Division** - Richmond, VA
**South Carolina Division** - New Ellenton, SC
**South Jersey Division** - Turnersville, NJ
**Southern Headquarters** - Poquoson, VA
**Southern Testing Division** - Wilson, NC
**Southern Testing Division (Sat)** - Greensboro, NC
**Venice Division** - Venice, FL

# COOLER INSPECTION

**Date:** Thursday, April 10, 2008

Client Name: ***MWH, Inc.***

Work Order Number ***ME0803B85***

Checklist completed by SPM | 3/31/2008 12:02:19 PM

Date / Time Received: ***3/31/2008 10:45:00 AM***

Received by: SPM

Reviewed by RJM | 4/1/2008 4:48:40 PM

Carrier name: Microbac

| | | | |
|---|---|---|---|
| After-Hour Arrival? | Yes ☐ | No ☑ | |
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on shippping container/cooler? | Yes ☐ | No ☐ | Not Present ☑ |
| Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☑ |
| Chain of custody present? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient client identification? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient sample collector information? | Yes ☑ | No ☐ | |
| Chain of custody included a sample description? | Yes ☑ | No ☐ | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate matrix? | Yes ☑ | No ☐ | |
| Chain of custody included date of collection? | Yes ☑ | No ☐ | |
| Chain of custody included time of collection? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate number of containers? | Yes ☑ | No ☐ | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | |
| Sample containers intact? | Yes ☑ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | |
| All samples received within holding time? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate preservatives (if preserved)? | Yes ☑ | No ☐ | |
| Samples properly preserved? | Yes ☑ | No ☐ | |

If No, adjusted by? _____ Date/Time _____

| | | | |
|---|---|---|---|
| Chain of custody included the requested analyses? | Yes ☑ | No ☐ | |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | |
| Samples received on ice? | Yes ☑ | No ☐ | |

| Container/Temp Blank temperatures | Cooler | Temp |
|---|---|---|
| | 1 | 1 ºC |

VOA vials for aqueous samples have zero headspace? No VOA vials submitted ☐ Yes ☐ No ☑

**ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.**

General Comments:Sample MW39 has 1 vial with head space.

| Sample ID | Client Sample ID | Comments |
|---|---|---|
| ME0803B85-01A | ACS-GW-TB03-31 | |
| ME0803B85-02A | ACS-GW-MW54R-31 | |
| ME0803B85-03A | ACS-GW-MW55-31 | |
| ME0803B85-04A | ACS-GW-MW56-31 | |
| ME0803B85-05A | ACS-GW-MW33-31 | |
| ME0803B85-06A | ACS-GW-MW51-31 | |
| ME0803B85-07A | ACS-GW-DUP03-31 | |
| ME0803B85-08A | ACS-GW-MW30-31 | |
| ME0803B85-09A | ACS-GW-MW10C-31 | |
| ME0803B85-10A | ACS-GW-MW13-31 | |
| ME0803B85-11A | ACS-GW-MW53-31 | |
| ME0803B85-12A | ACS-GW-MW52-31 | |
| ME0803B85-13A | ACS-GW-EB03-31 | |
| ME0803B85-14A | ACS-GW-DUP04-31 | |

| Sample ID | Client Sample ID | Comments |
|---|---|---|
| ME0803B85-14B | ACS-GW-DUP04-31 | |
| ME0803B85-15A | ACS-GW-MW29-31 | |
| ME0803B85-16A | ACS-GW-MW14-31 | |
| ME0803B85-17A | ACS-GW-MW09R-31 | |
| ME0803B85-17B | ACS-GW-MW09R-31 | |
| ME0803B85-18A | ACS-GW-MW37-31 | |
| ME0803B85-19A | ACS-GW-MW39-31 | |

ME0803B85 MONT. WATSON-IL-CHICAG 4/7/2008
ACS Groundwater / Griffith, IN RJM
Justin Finger

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Microbac®

Samples Submitted to:
[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

# Chain of Custody Record

Number 82595

Instructions on back

| | | | |
|---|---|---|---|
| Client Name: MWH | Project: ACS GROUNDWATER | Turnaround Time | Report Type |
| Address: 175 W. JACKSON BLVD SUITE 1900 | Location: GRIFFITH, IN | [X] Routine (7 working days) | [ ] Results Only [ ] Level II |
| City, State, Zip: CHICAGO, IL 60604 | PO #: 4050577.03010501 | [ ] RUSH* (notify lab) | [ ] Level III [ ] Level III CLP-like |
| Contact: JUSTIN FINGER | Compliance Monitoring? [ ] Yes(1) [ ] No | (needed by) | [ ] Level IV [ ] Level IV CLP-like |
| Telephone #: (312) 831-3447 | (1)Agency/Program | | [ ] EDD |

Sampled by (PRINT): JUSTIN FINGER/AMANDA BUTLER Sampler Signature: [signature] Sampler Phone #: (312) 831-3447

Send Report via: [X] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (address): JUSTIN.E.FINGER@MWHGLOBAL.COM

* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** **Preservative Types:** (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

| Client Sample ID | Matrix* | Grab | Composite | Filtered | Date Collected | Time Collected | No. of Containers | Requested Analyses → Preservative Types ** ↓ | VOCs + TICs | | | | | | | | For Lab Use Only ME0803B85 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACS-GW-TB03-31 | GW | X | | | 3/28/08 | 0730 | 1 | 5 | X | | | | | | | | 1A |
| ACS-GW-MW54R-31 | GW | X | | | 3/28/08 | 0900 | 3 | 3 | X | | | | | | | | 2A |
| ACS-GW-MW55-31 | GW | X | | | 3/28/08 | 0930 | 3 | 3 | X | | | | | | | | 3A |
| ACS-GW-MW56-31 | GW | X | | | 3/28/08 | 1015 | 3 | 3 | X | | | | | | | | 4A |
| ACS-GW-MW33-31 | GW | X | | | 3/28/08 | 1115 | 3 | 3 | X | | | | | | | | 5A |
| ACS-GW-MW51-31 | GW | X | | | 3/28/08 | 1125 | 3 | 3 | X | | | | | | | | 6A |
| ACS-GW-DUP03-31 | GW | X | | | 3/28/08 | 1200 | 3 | 3 | X | | | | | | | | 7A |
| ACS-GW-MW30-31 | GW | X | | | 3/28/08 | 1315 | 3 | 3 | X | | | | | | | | 8A |
| ACS-GW-MW10C-31 | GW | X | | | 3/28/08 | 1330 | 3 | 3 | X | | | | | | | | 9A |
| ACS-GW-MW13-31 | GW | X | | | 3/28/08 | 1430 | 3 | 3 | X | | | | | | | | 10A |
| ACS-GW-MW53-31 | GW | X | | | 3/28/08 | 1520 | 3 | 3 | X | | | | | | | | 11A |

**Possible Hazard Identification** [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive **Sample Disposition** [ ] Dispose as appropriate [ ] Return [ ] Archive

| Comments | Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
|---|---|---|---|---|
| | [signature] | 3/3/08 0800 | [signature] | 3/31/08 0800 |
| | Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
| | Relinquished By (signature) | Date/Time | Received for Lab By (signature) | Date/Time |
| Sample temperature upon receipt in degrees C = 1° | | | Scott McCard | 3/31/08 1045 |

rev. 11/04/04

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Samples Submitted to: [ ] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664 [ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

# Chain of Custody Record

**Number** 82596

*Instructions on back*

| | | | |
|---|---|---|---|
| Client Name SEE PAGE 1 | Project | Turnaround Time | Report Type |
| Address | Location | [ ] Routine (7 working days) | [ ] Results Only [ ] Level II |
| City, State, Zip | PO # | [ ] RUSH* (notify lab) | [ ] Level III [ ] Level III CLP-like |
| Contact | Compliance Monitoring? [ ] Yes(1) [ ] No | (needed by) | [ ] Level IV [ ] Level IV CLP-like |
| Telephone # | (1)Agency/Program | | [ ] EDD |

Sampled by (PRINT) _____ Sampler Signature _____ Sampler Phone # _____

Send Report via [ ] Mail [ ] Telephone [ ] Fax (fax #) _____ [ ] e-mail (address) _____

* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** **Preservative Types:** (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

| Client Sample ID | Matrix* | Grab | Composite | Filtered | Date Collected | Time Collected | No. of Containers | Requested Analyses → Preservative Types ** ↓ | VOCs + TICs | BIS (2-CHLOROETHYL) ETHER | | | | | | | For Lab Use Only ME0803B85 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACS-GW-MW52-31 | GW | X | | | 3/28/08 | 1445 | 3 | 3 | X | | | | | | | | 12A |
| ACS-GW-EB03-31 | GW | X | | | 3/28/08 | 1540 | 3 | 3 | X | | | | | | | | 13A |
| ACS-GW-DUP04-31 | GW | X | | | 3/29/08 | 0800 | 5 | 3, U | X | X | | | | | | | 14A-B |
| ACS-GW-MW29-31 | GW | X | | | 3/29/08 | 0950 | 3 | 3 | X | | | | | | | | 15A |
| ACS-GW-MW14-31 | GW | X | | | 3/29/08 | 1010 | 3 | 3 | X | | | | | | | | 16A |
| ACS-GW-MW09R-31 | GW | X | | | 3/29/08 | 1050 | 5 | 3, U | X | X | | | | | | | 17A-B |
| ACS-GW-MW37-31 | GW | X | | | 3/29/08 | 1155 | 3 | 3 | X | | | | | | | | 18A |
| ACS-GW-MW39-31 | GW | X | | | 3/29/08 | 1355 | 3 | 3 | X | | | | | | | | 19A |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

**Possible Hazard Identification** [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive **Sample Disposition** [ ] Dispose as appropriate [ ] Return [ ] Archive

| Comments | Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
|---|---|---|---|---|
| | [signature] | 3/31/08 0800 | [signature] | 3/31/08 0800 |
| | Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
| Sample temperature upon receipt in degrees C = 1° | Relinquished By (signature) | Date/Time | Received for Lab By (signature) Scot McCard | Date/Time 3/31/08 10:45 |

rev. 11/04/04

Page 2 of 2

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60802**

Sample ID: **bk-1-040208** SampType: **mblk** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080402A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/2/2008 5:30:00 PM** SeqNo: **1764064**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | 10 | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 10 | | | | | | | | | |
| 4-Chloro-3-methylphenol | ND | 20 | | | | | | | | | |
| 2-Chlorophenol | ND | 10 | | | | | | | | | |
| 1,4-Dichlorobenzene | 1.31 | 10 | | | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 10 | | | | | | | | | |
| 4-Nitrophenol | ND | 50 | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 10 | | | | | | | | | |
| Pentachlorophenol | ND | 50 | | | | | | | | | |
| Phenol | ND | 10 | | | | | | | | | |
| Pyrene | ND | 10 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 10 | | | | | | | | | |
| Surr: Nitrobenzene-d5 | 46.49 | 0 | 100 | 0 | 46.5 | 10 | 121 | 0 | 0 | | |
| Surr: 2-Fluorobiphenyl | 55.87 | 0 | 100 | 0 | 55.9 | 10 | 109 | 0 | 0 | | |
| Surr: Terphenyl-d14 | 64.22 | 0 | 100 | 0 | 64.2 | 10 | 130 | 0 | 0 | | |
| Surr: Phenol-d5 | 25.16 | 0 | 150 | 0 | 16.8 | 10 | 100 | 0 | 0 | | |
| Surr: 2-Fluorophenol | 39.19 | 0 | 150 | 0 | 26.1 | 10 | 84.7 | 0 | 0 | | |
| Surr: 2,4,6-Tribromophenol | 82.92 | 0 | 150 | 0 | 55.3 | 10 | 120 | 0 | 0 | | |

Sample ID: **lcs-1-040208** SampType: **lcs** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080402A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/2/2008 6:23:00 PM** SeqNo: **1764066**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 69.2 | 10 | 100 | 0 | 69.2 | 28.6 | 88.6 | 0 | 0 | | |
| 4-Chloro-3-methylphenol | 65.38 | 20 | 100 | 0 | 65.4 | 27.2 | 97.7 | 0 | 0 | | |
| 2-Chlorophenol | 52.39 | 10 | 100 | 0 | 52.4 | 31.3 | 81.3 | 0 | 0 | | |
| 1,4-Dichlorobenzene | 52.69 | 10 | 100 | 0 | 52.7 | 20.6 | 82 | 0 | 0 | | b |
| 2,4-Dinitrotoluene | 83.76 | 10 | 100 | 0 | 83.8 | 23.5 | 95.4 | 0 | 0 | | |
| 4-Nitrophenol | 26.9 | 50 | 100 | 0 | 26.9 | 5 | 56.2 | 0 | 0 | | J |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60802**

Sample ID: **lcs-1-040208** SampType: **lcs** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080402A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/2/2008 6:23:00 PM** SeqNo: **1764066**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N-Nitrosodi-n-propylamine | 61.86 | 10 | 100 | 0 | 61.9 | 15.9 | 119 | 0 | 0 | | |
| Pentachlorophenol | 80.17 | 50 | 100 | 0 | 80.2 | 5 | 114 | 0 | 0 | | |
| Phenol | 20.48 | 10 | 100 | 0 | 20.5 | 5 | 46.7 | 0 | 0 | | |
| Pyrene | 73.17 | 10 | 100 | 0 | 73.2 | 25.3 | 103 | 0 | 0 | | |
| 1,2,4-Trichlorobenzene | 54.2 | 10 | 100 | 0 | 54.2 | 19.7 | 80.9 | 0 | 0 | | |
| Surr: Nitrobenzene-d5 | 55.79 | 0 | 100 | 0 | 55.8 | 10 | 121 | 0 | 0 | | |
| Surr: 2-Fluorobiphenyl | 65.69 | 0 | 100 | 0 | 65.7 | 10 | 109 | 0 | 0 | | |
| Surr: Terphenyl-d14 | 74.69 | 0 | 100 | 0 | 74.7 | 10 | 130 | 0 | 0 | | |
| Surr: Phenol-d5 | 29.44 | 0 | 150 | 0 | 19.6 | 10 | 100 | 0 | 0 | | |
| Surr: 2-Fluorophenol | 43.65 | 0 | 150 | 0 | 29.1 | 10 | 84.7 | 0 | 0 | | |
| Surr: 2,4,6-Tribromophenol | 104.8 | 0 | 150 | 0 | 69.9 | 10 | 120 | 0 | 0 | | |

Sample ID: **me0803c07-02bms** SampType: **ms** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080403A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/4/2008 4:38:00 AM** SeqNo: **1765824**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 124.8 | 21 | 212.8 | 0 | 58.7 | 14.5 | 96.6 | 0 | 0 | | |
| 4-Chloro-3-methylphenol | 127 | 43 | 212.8 | 0 | 59.7 | 9.03 | 111 | 0 | 0 | | |
| 2-Chlorophenol | 80.77 | 21 | 212.8 | 0 | 38 | 5 | 106 | 0 | 0 | | |
| 1,4-Dichlorobenzene | 82.3 | 21 | 212.8 | 0 | 38.7 | 12.1 | 93.1 | 0 | 0 | | |
| 2,4-Dinitrotoluene | 141.8 | 21 | 212.8 | 0 | 66.7 | 18.7 | 96.2 | 0 | 0 | | |
| 4-Nitrophenol | 100.2 | 21 | 212.8 | 0 | 47.1 | 5 | 95.2 | 0 | 0 | | |
| N-Nitrosodi-n-propylamine | 96.32 | 21 | 212.8 | 0 | 45.3 | 6.65 | 116 | 0 | 0 | | |
| Pentachlorophenol | 156 | 110 | 212.8 | 0 | 73.3 | 5 | 135 | 0 | 0 | | |
| Phenol | 53.11 | 21 | 212.8 | 0 | 25 | 5 | 70.4 | 0 | 0 | | |
| Pyrene | 145.5 | 21 | 212.8 | 0 | 68.4 | 14.3 | 107 | 0 | 0 | | |
| 1,2,4-Trichlorobenzene | 85.51 | 21 | 212.8 | 0 | 40.2 | 6.56 | 93.1 | 0 | 0 | | |
| Surr: Nitrobenzene-d5 | 87.72 | 0 | 212.8 | 0 | 41.2 | 10 | 121 | 0 | 0 | | |
| Surr: 2-Fluorobiphenyl | 116.7 | 0 | 212.8 | 0 | 54.9 | 10 | 109 | 0 | 0 | | |
| Surr: Terphenyl-d14 | 139.6 | 0 | 212.8 | 0 | 65.6 | 10 | 130 | 0 | 0 | | |
| Surr: Phenol-d5 | 80 | 0 | 319.1 | 0 | 25.1 | 10 | 100 | 0 | 0 | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60802**

Sample ID: **me0803c07-02bms** SampType: **ms** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080403A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/4/2008 4:38:00 AM** SeqNo: **1765824**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: 2-Fluorophenol | 91.34 | 0 | 319.1 | 0 | 28.6 | 10 | 84.7 | 0 | 0 | | |
| Surr: 2,4,6-Tribromophenol | 209.6 | 0 | 319.1 | 0 | 65.7 | 10 | 120 | 0 | 0 | | |

Sample ID: **me0803c07-02bmsd** SampType: **msd** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080403A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/4/2008 5:03:00 AM** SeqNo: **1765825**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 136.6 | 21 | 208.3 | 0 | 65.6 | 14.5 | 96.6 | 124.8 | 9.02 | 41.3 | |
| 4-Chloro-3-methylphenol | 141.2 | 42 | 208.3 | 0 | 67.8 | 9.03 | 111 | 127 | 10.6 | 43.6 | |
| 2-Chlorophenol | 89.96 | 21 | 208.3 | 0 | 43.2 | 5 | 106 | 80.77 | 10.8 | 44.3 | |
| 1,4-Dichlorobenzene | 89.25 | 21 | 208.3 | 0 | 42.8 | 12.1 | 93.1 | 82.3 | 8.11 | 39.7 | |
| 2,4-Dinitrotoluene | 147.2 | 21 | 208.3 | 0 | 70.7 | 18.7 | 96.2 | 141.8 | 3.72 | 36.5 | |
| 4-Nitrophenol | 92.33 | 21 | 208.3 | 0 | 44.3 | 5 | 95.2 | 100.2 | 8.16 | 16.6 | |
| N-Nitrosodi-n-propylamine | 104.9 | 21 | 208.3 | 0 | 50.4 | 6.65 | 116 | 96.32 | 8.54 | 42.7 | |
| Pentachlorophenol | 158.8 | 100 | 208.3 | 0 | 76.2 | 5 | 135 | 156 | 1.80 | 29.2 | |
| Phenol | 56.71 | 21 | 208.3 | 0 | 27.2 | 5 | 70.4 | 53.11 | 6.56 | 55 | |
| Pyrene | 158.6 | 21 | 208.3 | 0 | 76.1 | 14.3 | 107 | 145.5 | 8.60 | 37.7 | |
| 1,2,4-Trichlorobenzene | 99.77 | 21 | 208.3 | 0 | 47.9 | 6.56 | 93.1 | 85.51 | 15.4 | 44.8 | |
| Surr: Nitrobenzene-d5 | 94.02 | 0 | 208.3 | 0 | 45.1 | 10 | 121 | 0 | 0 | 0 | |
| Surr: 2-Fluorobiphenyl | 128.6 | 0 | 208.3 | 0 | 61.7 | 10 | 109 | 0 | 0 | 0 | |
| Surr: Terphenyl-d14 | 146.4 | 0 | 208.3 | 0 | 70.3 | 10 | 130 | 0 | 0 | 0 | |
| Surr: Phenol-d5 | 84.17 | 0 | 312.5 | 0 | 26.9 | 10 | 100 | 0 | 0 | 0 | |
| Surr: 2-Fluorophenol | 92.15 | 0 | 312.5 | 0 | 29.5 | 10 | 84.7 | 0 | 0 | 0 | |
| Surr: 2,4,6-Tribromophenol | 227.2 | 0 | 312.5 | 0 | 72.7 | 10 | 120 | 0 | 0 | 0 | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110647**

Sample ID: **bk_w25-40408** SampType: **mblk** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080404A**
Client ID: **ZZZZZ** Batch ID: **R110647** TestNo: **SW8260B** Analysis Date: **4/4/2008 7:40:00 AM** SeqNo: **1764953**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | 5.0 | | | | | | | | | |
| Benzene | ND | 1.0 | | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | | |
| Bromomethane | ND | 2.0 | | | | | | | | | |
| 2-Butanone | ND | 2.0 | | | | | | | | | |
| Carbon Disulfide | ND | 2.0 | | | | | | | | | |
| Carbon tetrachloride | ND | 1.0 | | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | | |
| Chloromethane | ND | 2.0 | | | | | | | | | |
| Dibromochloromethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | | |
| 2-Hexanone | ND | 2.0 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 1.0 | | | | | | | | | |
| Methylene chloride | ND | 2.0 | | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | | | | | | | | | |
| Tetrachloroethene | ND | 1.0 | | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110647**

Sample ID: **bk_w25-40408** SampType: **mblk** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080404A**
Client ID: **ZZZZZ** Batch ID: **R110647** TestNo: **SW8260B** Analysis Date: **4/4/2008 7:40:00 AM** SeqNo: **1764953**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | | |
| Trichloroethene | ND | 1.0 | | | | | | | | | |
| Vinyl chloride | ND | 2.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| Total Xylenes | ND | 1.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 9.71 | 0 | 10 | 0 | 97.1 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.55 | 0 | 10 | 0 | 106 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.59 | 0 | 10 | 0 | 106 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 9.34 | 0 | 10 | 0 | 93.4 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **LCS_w25-10 PPB** SampType: **LCS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080404A**
Client ID: **ZZZZZ** Batch ID: **R110647** TestNo: **SW8260B** Analysis Date: **4/4/2008 8:16:00 AM** SeqNo: **1764954**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 10.49 | 1.0 | 10 | 0 | 105 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 10.54 | 1.0 | 10 | 0 | 105 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 9.45 | 1.0 | 10 | 0 | 94.5 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 10.95 | 1.0 | 10 | 0 | 110 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 9.25 | 1.0 | 10 | 0 | 92.5 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 11.28 | 1.0 | 10 | 0 | 113 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 16.89 | 2.0 | 10 | 0 | 169 | 22.5 | 147 | 0 | 0 | | S |
| Dibromochloromethane | 9.36 | 1.0 | 10 | 0 | 93.6 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 10.97 | 1.0 | 10 | 0 | 110 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 11.04 | 1.0 | 10 | 0 | 110 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 10.12 | 1.0 | 10 | 0 | 101 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 10.48 | 1.0 | 10 | 0 | 105 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 10.01 | 1.0 | 10 | 0 | 100 | 74.4 | 126 | 0 | 0 | | |

**Qualifiers:**
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J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110647**

Sample ID: **LCS_w25-10 PPB** SampType: **LCS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080404A**
Client ID: **ZZZZZ** Batch ID: **R110647** TestNo: **SW8260B** Analysis Date: **4/4/2008 8:16:00 AM** SeqNo: **1764954**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | 9.66 | 1.0 | 10 | 0 | 96.6 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 8.95 | 1.0 | 10 | 0 | 89.5 | 69.1 | 126 | 0 | 0 | | |
| Ethylbenzene | 9.41 | 1.0 | 10 | 0 | 94.1 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 10.23 | 2.0 | 10 | 0 | 102 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 8.68 | 1.0 | 10 | 0 | 86.8 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 8.93 | 1.0 | 10 | 0 | 89.3 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 9.16 | 1.0 | 10 | 0 | 91.6 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 11.03 | 1.0 | 10 | 0 | 110 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 9.02 | 1.0 | 10 | 0 | 90.2 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 10.11 | 1.0 | 10 | 0 | 101 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 10.47 | 2.0 | 10 | 0 | 105 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.92 | 0 | 10 | 0 | 109 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.8 | 0 | 10 | 0 | 108 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.8 | 0 | 10 | 0 | 108 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 9.29 | 0 | 10 | 0 | 92.9 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **ME0803A25-05AMS** SampType: **MS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080404A**
Client ID: **ZZZZZ** Batch ID: **R110647** TestNo: **SW8260B** Analysis Date: **4/4/2008 5:04:00 PM** SeqNo: **1767008**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 229.5 | 25 | 250 | 0 | 91.8 | 60.6 | 130 | 0 | 0 | | |
| Bromodichloromethane | 233.2 | 25 | 250 | 0 | 93.3 | 65.8 | 126 | 0 | 0 | | |
| Bromoform | 295.8 | 25 | 250 | 0 | 118 | 40.5 | 146 | 0 | 0 | | |
| Bromomethane | 86.25 | 50 | 250 | 0 | 34.5 | 0 | 243 | 0 | 0 | | |
| Carbon tetrachloride | 246 | 25 | 250 | 0 | 98.4 | 47.2 | 149 | 0 | 0 | | |
| Chlorobenzene | 285.8 | 25 | 250 | 0 | 114 | 75.6 | 127 | 0 | 0 | | |
| Chloroethane | 542 | 50 | 250 | 319.5 | 89 | 0 | 357 | 0 | 0 | | |
| Chloroform | 246.8 | 25 | 250 | 0 | 98.7 | 71.2 | 120 | 0 | 0 | | |
| Chloromethane | 340.2 | 50 | 250 | 0 | 136 | 10.8 | 155 | 0 | 0 | | |
| Dibromochloromethane | 292 | 25 | 250 | 0 | 117 | 60.1 | 136 | 0 | 0 | | |
| 1,1-Dichloroethane | 240.2 | 25 | 250 | 0 | 96.1 | 68 | 119 | 0 | 0 | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110647**

Sample ID: **ME0803A25-05AMS** SampType: **MS** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080404A**
Client ID: **ZZZZZ** Batch ID: **R110647** TestNo: **SW8260B** Analysis Date: **4/4/2008 5:04:00 PM** SeqNo: **1767008**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | 247 | 25 | 250 | 0 | 98.8 | 67.7 | 133 | 0 | 0 | | |
| 1,1-Dichloroethene | 243.5 | 25 | 250 | 0 | 97.4 | 50.1 | 125 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 232.3 | 25 | 250 | 0 | 92.9 | 56.9 | 132 | 0 | 0 | | |
| 1,2-Dichloropropane | 221.2 | 25 | 250 | 0 | 88.5 | 71.4 | 125 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 301.8 | 25 | 250 | 0 | 121 | 69.9 | 130 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 270.5 | 25 | 250 | 0 | 108 | 66.9 | 134 | 0 | 0 | | |
| Ethylbenzene | 295.8 | 25 | 250 | 0 | 118 | 60.6 | 144 | 0 | 0 | | |
| Methylene chloride | 211 | 50 | 250 | 0 | 84.4 | 55.4 | 130 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 280.5 | 25 | 250 | 0 | 112 | 46.8 | 168 | 0 | 0 | | |
| Tetrachloroethene | 279 | 25 | 250 | 0 | 112 | 60.1 | 144 | 0 | 0 | | |
| Toluene | 287.8 | 25 | 250 | 0 | 115 | 69.7 | 130 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 243.8 | 25 | 250 | 0 | 97.5 | 63 | 136 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 284.8 | 25 | 250 | 0 | 114 | 40.6 | 165 | 0 | 0 | | |
| Trichloroethene | 220.8 | 25 | 250 | 0 | 88.3 | 48.6 | 139 | 0 | 0 | | |
| Vinyl chloride | 239.5 | 50 | 250 | 0 | 95.8 | 33 | 151 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 265.5 | 0 | 250 | 0 | 106 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 245.2 | 0 | 250 | 0 | 98.1 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 264 | 0 | 250 | 0 | 106 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 289.2 | 0 | 250 | 0 | 116 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **ME0803A25-05AMS** SampType: **MSD** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080404A**
Client ID: **ZZZZZ** Batch ID: **R110647** TestNo: **SW8260B** Analysis Date: **4/4/2008 5:39:00 PM** SeqNo: **1767009**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 206.8 | 25 | 250 | 0 | 82.7 | 60.6 | 130 | 229.5 | 10.4 | 23.7 | |
| Bromodichloromethane | 210.8 | 25 | 250 | 0 | 84.3 | 65.8 | 126 | 233.2 | 10.1 | 28.4 | |
| Bromoform | 277.5 | 25 | 250 | 0 | 111 | 40.5 | 146 | 295.8 | 6.37 | 28.8 | |
| Bromomethane | 119.8 | 50 | 250 | 0 | 47.9 | 0 | 243 | 86.25 | 32.5 | 52.8 | |
| Carbon tetrachloride | 217.5 | 25 | 250 | 0 | 87 | 47.2 | 149 | 246 | 12.3 | 31.1 | |
| Chlorobenzene | 260.5 | 25 | 250 | 0 | 104 | 75.6 | 127 | 285.8 | 9.24 | 23 | |
| Chloroethane | 553 | 50 | 250 | 319.5 | 93.4 | 0 | 357 | 542 | 2.01 | 29.3 | |

**Qualifiers:**
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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110647**

Sample ID: **ME0803A25-05AMS** SampType: **MSD** TestCode: **8260+_w25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080404A**
Client ID: **ZZZZZ** Batch ID: **R110647** TestNo: **SW8260B** Analysis Date: **4/4/2008 5:39:00 PM** SeqNo: **1767009**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloroform | 219.2 | 25 | 250 | 0 | 87.7 | 71.2 | 120 | 246.8 | 11.8 | 25 | |
| Chloromethane | 351.8 | 50 | 250 | 0 | 141 | 10.8 | 155 | 340.2 | 3.32 | 90.9 | |
| Dibromochloromethane | 267.8 | 25 | 250 | 0 | 107 | 60.1 | 136 | 292 | 8.66 | 27.1 | |
| 1,1-Dichloroethane | 218.8 | 25 | 250 | 0 | 87.5 | 68 | 119 | 240.2 | 9.37 | 14.2 | |
| 1,2-Dichloroethane | 220.2 | 25 | 250 | 0 | 88.1 | 67.7 | 133 | 247 | 11.4 | 23.3 | |
| 1,1-Dichloroethene | 215.2 | 25 | 250 | 0 | 86.1 | 50.1 | 125 | 243.5 | 12.3 | 31 | |
| trans-1,2-Dichloroethene | 213.3 | 25 | 250 | 0 | 85.3 | 56.9 | 132 | 232.3 | 8.53 | 66.1 | |
| 1,2-Dichloropropane | 201 | 25 | 250 | 0 | 80.4 | 71.4 | 125 | 221.2 | 9.59 | 26 | |
| trans-1,3-Dichloropropene | 272 | 25 | 250 | 0 | 109 | 69.9 | 130 | 301.8 | 10.4 | 27.9 | |
| cis-1,3-Dichloropropene | 245.5 | 25 | 250 | 0 | 98.2 | 66.9 | 134 | 270.5 | 9.69 | 28.7 | |
| Ethylbenzene | 270 | 25 | 250 | 0 | 108 | 60.6 | 144 | 295.8 | 9.10 | 25.2 | |
| Methylene chloride | 195.8 | 50 | 250 | 0 | 78.3 | 55.4 | 130 | 211 | 7.50 | 28.7 | |
| 1,1,2,2-Tetrachloroethane | 269.5 | 25 | 250 | 0 | 108 | 46.8 | 168 | 280.5 | 4.00 | 22.3 | |
| Tetrachloroethene | 258.2 | 25 | 250 | 0 | 103 | 60.1 | 144 | 279 | 7.72 | 29.7 | |
| Toluene | 261.8 | 25 | 250 | 0 | 105 | 69.7 | 130 | 287.8 | 9.46 | 25.4 | |
| 1,1,1-Trichloroethane | 216.8 | 25 | 250 | 0 | 86.7 | 63 | 136 | 243.8 | 11.7 | 29 | |
| 1,1,2-Trichloroethane | 256.2 | 25 | 250 | 0 | 103 | 40.6 | 165 | 284.8 | 10.5 | 25.9 | |
| Trichloroethene | 200.2 | 25 | 250 | 0 | 80.1 | 48.6 | 139 | 220.8 | 9.74 | 26.9 | |
| Vinyl chloride | 256 | 50 | 250 | 0 | 102 | 33 | 151 | 239.5 | 6.66 | 31.2 | |
| Surr: 4-Bromofluorobenzene | 259.5 | 0 | 250 | 0 | 104 | 75.2 | 115 | 0 | 0 | 0 | |
| Surr: Dibromofluoromethane | 251.2 | 0 | 250 | 0 | 100 | 92.7 | 119 | 0 | 0 | 0 | |
| Surr: 1,2-Dichloroethane-d4 | 264.2 | 0 | 250 | 0 | 106 | 88.2 | 132 | 0 | 0 | 0 | |
| Surr: Toluene-d8 | 292 | 0 | 250 | 0 | 117 | 89.3 | 116 | 0 | 0 | 0 | S |

**Qualifiers:**
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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110701**

Sample ID: **MB_W25 4/5** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080405A**
Client ID: **ZZZZZ** Batch ID: **R110701** TestNo: **SW8260B** Analysis Date: **4/5/2008 7:16:00 AM** SeqNo: **1765954**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | 5.0 | | | | | | | | | |
| Benzene | ND | 1.0 | | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | | |
| Bromomethane | ND | 2.0 | | | | | | | | | |
| 2-Butanone | ND | 2.0 | | | | | | | | | |
| Carbon Disulfide | ND | 2.0 | | | | | | | | | |
| Carbon tetrachloride | ND | 1.0 | | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | | |
| Chloromethane | ND | 2.0 | | | | | | | | | |
| Dibromochloromethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | | |
| 2-Hexanone | ND | 2.0 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 1.0 | | | | | | | | | |
| Methylene chloride | ND | 2.0 | | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | | | | | | | | | |
| Tetrachloroethene | ND | 1.0 | | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | | |

**Qualifiers:**
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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110701**

Sample ID: **MB_W25 4/5** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080405A**
Client ID: **ZZZZZ** Batch ID: **R110701** TestNo: **SW8260B** Analysis Date: **4/5/2008 7:16:00 AM** SeqNo: **1765954**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | 1.0 | | | | | | | | | |
| Vinyl chloride | ND | 2.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| Total Xylenes | ND | 1.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 9.47 | 0 | 10 | 0 | 94.7 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.83 | 0 | 10 | 0 | 98.3 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.5 | 0 | 10 | 0 | 105 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.46 | 0 | 10 | 0 | 115 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080405A**
Client ID: **ZZZZZ** Batch ID: **R110701** TestNo: **SW8260B** Analysis Date: **4/5/2008 7:51:00 AM** SeqNo: **1767197**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8.55 | 1.0 | 10 | 0 | 85.5 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 8.64 | 1.0 | 10 | 0 | 86.4 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 10.73 | 1.0 | 10 | 0 | 107 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 9.16 | 1.0 | 10 | 0 | 91.6 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 10.73 | 1.0 | 10 | 0 | 107 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 9.25 | 1.0 | 10 | 0 | 92.5 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 10.9 | 2.0 | 10 | 0 | 109 | 22.5 | 147 | 0 | 0 | | |
| Dibromochloromethane | 10.78 | 1.0 | 10 | 0 | 108 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 8.9 | 1.0 | 10 | 0 | 89 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 9.12 | 1.0 | 10 | 0 | 91.2 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 8.86 | 1.0 | 10 | 0 | 88.6 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 8.71 | 1.0 | 10 | 0 | 87.1 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 8.32 | 1.0 | 10 | 0 | 83.2 | 74.4 | 126 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 11.19 | 1.0 | 10 | 0 | 112 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 10.25 | 1.0 | 10 | 0 | 103 | 69.1 | 126 | 0 | 0 | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110701**

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080405A**
Client ID: **ZZZZZ** Batch ID: **R110701** TestNo: **SW8260B** Analysis Date: **4/5/2008 7:51:00 AM** SeqNo: **1767197**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 11.08 | 1.0 | 10 | 0 | 111 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 7.8 | 2.0 | 10 | 0 | 78 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 10.32 | 1.0 | 10 | 0 | 103 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 10.64 | 1.0 | 10 | 0 | 106 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 10.75 | 1.0 | 10 | 0 | 108 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 9.23 | 1.0 | 10 | 0 | 92.3 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 10.33 | 1.0 | 10 | 0 | 103 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 8.34 | 1.0 | 10 | 0 | 83.4 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 7.69 | 2.0 | 10 | 0 | 76.9 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.51 | 0 | 10 | 0 | 105 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.99 | 0 | 10 | 0 | 99.9 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.67 | 0 | 10 | 0 | 107 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.53 | 0 | 10 | 0 | 115 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **ME0803B85-07AMS** SampType: **MS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080405A**
Client ID: **ACS-GW-DUP03-31** Batch ID: **R110701** TestNo: **SW8260B** Analysis Date: **4/5/2008 11:34:00 AM** SeqNo: **1767202**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 551 | 25 | 250 | 353.8 | 78.9 | 60.6 | 130 | 0 | 0 | | |
| Bromodichloromethane | 224.2 | 25 | 250 | 0 | 89.7 | 65.8 | 126 | 0 | 0 | | |
| Bromoform | 272 | 25 | 250 | 0 | 109 | 40.5 | 146 | 0 | 0 | | |
| Bromomethane | 118.2 | 50 | 250 | 0 | 47.3 | 0 | 243 | 0 | 0 | | |
| Carbon tetrachloride | 233.2 | 25 | 250 | 0 | 93.3 | 47.2 | 149 | 0 | 0 | | |
| Chlorobenzene | 262.8 | 25 | 250 | 0 | 105 | 75.6 | 127 | 0 | 0 | | |
| Chloroethane | 450.8 | 50 | 250 | 240 | 84.3 | 0 | 357 | 0 | 0 | | |
| Chloroform | 244.5 | 25 | 250 | 0 | 97.8 | 71.2 | 120 | 0 | 0 | | |
| Chloromethane | 275.5 | 50 | 250 | 0 | 110 | 10.8 | 155 | 0 | 0 | | |
| Dibromochloromethane | 275.8 | 25 | 250 | 0 | 110 | 60.1 | 136 | 0 | 0 | | |
| 1,1-Dichloroethane | 234.3 | 25 | 250 | 0 | 93.7 | 68 | 119 | 0 | 0 | | |
| 1,2-Dichloroethane | 239.2 | 25 | 250 | 0 | 95.7 | 67.7 | 133 | 0 | 0 | | |
| 1,1-Dichloroethene | 229 | 25 | 250 | 0 | 91.6 | 50.1 | 125 | 0 | 0 | | |

**Qualifiers:**
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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110701**

Sample ID: **ME0803B85-07AMS** SampType: **MS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080405A**
Client ID: **ACS-GW-DUP03-31** Batch ID: **R110701** TestNo: **SW8260B** Analysis Date: **4/5/2008 11:34:00 AM** SeqNo: **1767202**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 229.8 | 25 | 250 | 0 | 91.9 | 56.9 | 132 | 0 | 0 | | |
| 1,2-Dichloropropane | 212.8 | 25 | 250 | 0 | 85.1 | 71.4 | 125 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 293.2 | 25 | 250 | 0 | 117 | 69.9 | 130 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 262.5 | 25 | 250 | 0 | 105 | 66.9 | 134 | 0 | 0 | | |
| Ethylbenzene | 267.8 | 25 | 250 | 0 | 107 | 60.6 | 144 | 0 | 0 | | |
| Methylene chloride | 202.8 | 50 | 250 | 0 | 81.1 | 55.4 | 130 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 266.2 | 25 | 250 | 0 | 106 | 46.8 | 168 | 0 | 0 | | |
| Tetrachloroethene | 261.2 | 25 | 250 | 0 | 104 | 60.1 | 144 | 0 | 0 | | |
| Toluene | 269.2 | 25 | 250 | 0 | 108 | 69.7 | 130 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 236 | 25 | 250 | 0 | 94.4 | 63 | 136 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 264.2 | 25 | 250 | 0 | 106 | 40.6 | 165 | 0 | 0 | | |
| Trichloroethene | 210.8 | 25 | 250 | 0 | 84.3 | 48.6 | 139 | 0 | 0 | | |
| Vinyl chloride | 188.2 | 50 | 250 | 0 | 75.3 | 33 | 151 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 264.5 | 0 | 250 | 0 | 106 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 254.8 | 0 | 250 | 0 | 102 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 279.2 | 0 | 250 | 0 | 112 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 288 | 0 | 250 | 0 | 115 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **ME0803B85-07AMS** SampType: **MSD** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080405A**
Client ID: **ACS-GW-DUP03-31** Batch ID: **R110701** TestNo: **SW8260B** Analysis Date: **4/5/2008 12:09:00 PM** SeqNo: **1767203**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 553 | 25 | 250 | 353.8 | 79.7 | 60.6 | 130 | 551 | 0.362 | 23.7 | |
| Bromodichloromethane | 221 | 25 | 250 | 0 | 88.4 | 65.8 | 126 | 224.2 | 1.46 | 28.4 | |
| Bromoform | 269 | 25 | 250 | 0 | 108 | 40.5 | 146 | 272 | 1.11 | 28.8 | |
| Bromomethane | 156.8 | 50 | 250 | 0 | 62.7 | 0 | 243 | 118.2 | 28.0 | 52.8 | |
| Carbon tetrachloride | 231.8 | 25 | 250 | 0 | 92.7 | 47.2 | 149 | 233.2 | 0.645 | 31.1 | |
| Chlorobenzene | 264.5 | 25 | 250 | 0 | 106 | 75.6 | 127 | 262.8 | 0.664 | 23 | |
| Chloroethane | 459 | 50 | 250 | 240 | 87.6 | 0 | 357 | 450.8 | 1.81 | 29.3 | |
| Chloroform | 245 | 25 | 250 | 0 | 98 | 71.2 | 120 | 244.5 | 0.204 | 25 | |
| Chloromethane | 285.5 | 50 | 250 | 0 | 114 | 10.8 | 155 | 275.5 | 3.57 | 90.9 | |

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110701**

Sample ID: **ME0803B85-07AMS** SampType: **MSD** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080405A**

Client ID: **ACS-GW-DUP03-31** Batch ID: **R110701** TestNo: **SW8260B** Analysis Date: **4/5/2008 12:09:00 PM** SeqNo: **1767203**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dibromochloromethane | 276.2 | 25 | 250 | 0 | 110 | 60.1 | 136 | 275.8 | 0.181 | 27.1 | |
| 1,1-Dichloroethane | 236.3 | 25 | 250 | 0 | 94.5 | 68 | 119 | 234.3 | 0.850 | 14.2 | |
| 1,2-Dichloroethane | 241.8 | 25 | 250 | 0 | 96.7 | 67.7 | 133 | 239.2 | 1.04 | 23.3 | |
| 1,1-Dichloroethene | 230.5 | 25 | 250 | 0 | 92.2 | 50.1 | 125 | 229 | 0.653 | 31 | |
| trans-1,2-Dichloroethene | 236.8 | 25 | 250 | 0 | 94.7 | 56.9 | 132 | 229.8 | 3.00 | 66.1 | |
| 1,2-Dichloropropane | 214 | 25 | 250 | 0 | 85.6 | 71.4 | 125 | 212.8 | 0.586 | 26 | |
| trans-1,3-Dichloropropene | 291.8 | 25 | 250 | 0 | 117 | 69.9 | 130 | 293.2 | 0.513 | 27.9 | |
| cis-1,3-Dichloropropene | 264.5 | 25 | 250 | 0 | 106 | 66.9 | 134 | 262.5 | 0.759 | 28.7 | |
| Ethylbenzene | 270.8 | 25 | 250 | 0 | 108 | 60.6 | 144 | 267.8 | 1.11 | 25.2 | |
| Methylene chloride | 205.2 | 50 | 250 | 0 | 82.1 | 55.4 | 130 | 202.8 | 1.23 | 28.7 | |
| 1,1,2,2-Tetrachloroethane | 271.5 | 25 | 250 | 0 | 109 | 46.8 | 168 | 266.2 | 1.95 | 22.3 | |
| Tetrachloroethene | 263.8 | 25 | 250 | 0 | 106 | 60.1 | 144 | 261.2 | 0.952 | 29.7 | |
| Toluene | 269 | 25 | 250 | 0 | 108 | 69.7 | 130 | 269.2 | 0.0929 | 25.4 | |
| 1,1,1-Trichloroethane | 236.8 | 25 | 250 | 0 | 94.7 | 63 | 136 | 236 | 0.317 | 29 | |
| 1,1,2-Trichloroethane | 269.5 | 25 | 250 | 0 | 108 | 40.6 | 165 | 264.2 | 1.97 | 25.9 | |
| Trichloroethene | 211.8 | 25 | 250 | 0 | 84.7 | 48.6 | 139 | 210.8 | 0.473 | 26.9 | |
| Vinyl chloride | 198 | 50 | 250 | 0 | 79.2 | 33 | 151 | 188.2 | 5.05 | 31.2 | |
| Surr: 4-Bromofluorobenzene | 254.2 | 0 | 250 | 0 | 102 | 75.2 | 115 | 0 | 0 | 0 | |
| Surr: Dibromofluoromethane | 255 | 0 | 250 | 0 | 102 | 92.7 | 119 | 0 | 0 | 0 | |
| Surr: 1,2-Dichloroethane-d4 | 272.5 | 0 | 250 | 0 | 109 | 88.2 | 132 | 0 | 0 | 0 | |
| Surr: Toluene-d8 | 289 | 0 | 250 | 0 | 116 | 89.3 | 116 | 0 | 0 | 0 | |

**Qualifiers:**

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110762**

Sample ID: **MB_W25 4/6** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080407B**
Client ID: **ZZZZZ** Batch ID: **R110762** TestNo: **SW8260B** Analysis Date: **4/6/2008 4:41:00 PM** SeqNo: **1767401**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | 5.0 | | | | | | | | | |
| Benzene | ND | 1.0 | | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | | |
| Bromomethane | ND | 2.0 | | | | | | | | | |
| 2-Butanone | ND | 2.0 | | | | | | | | | |
| Carbon Disulfide | ND | 2.0 | | | | | | | | | |
| Carbon tetrachloride | ND | 1.0 | | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | | |
| Chloromethane | ND | 2.0 | | | | | | | | | |
| Dibromochloromethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | | |
| 2-Hexanone | ND | 2.0 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 1.0 | | | | | | | | | |
| Methylene chloride | ND | 2.0 | | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | | | | | | | | | |
| Tetrachloroethene | ND | 1.0 | | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | | |

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110762**

Sample ID: **MB_W25 4/6** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080407B**
Client ID: **ZZZZZ** Batch ID: **R110762** TestNo: **SW8260B** Analysis Date: **4/6/2008 4:41:00 PM** SeqNo: **1767401**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | 1.0 | | | | | | | | | |
| Vinyl chloride | ND | 2.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.33 | 1.0 | | | | | | | | | J |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| Total Xylenes | ND | 1.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 9.67 | 0 | 10 | 0 | 96.7 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.83 | 0 | 10 | 0 | 98.3 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.48 | 0 | 10 | 0 | 105 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.46 | 0 | 10 | 0 | 115 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080407B**
Client ID: **ZZZZZ** Batch ID: **R110762** TestNo: **SW8260B** Analysis Date: **4/6/2008 5:16:00 PM** SeqNo: **1767402**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 9.12 | 1.0 | 10 | 0 | 91.2 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 9.38 | 1.0 | 10 | 0 | 93.8 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 11.74 | 1.0 | 10 | 0 | 117 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 9.77 | 1.0 | 10 | 0 | 97.7 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 11.38 | 1.0 | 10 | 0 | 114 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 9.93 | 1.0 | 10 | 0 | 99.3 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 9.74 | 2.0 | 10 | 0 | 97.4 | 22.5 | 147 | 0 | 0 | | |
| Dibromochloromethane | 11.82 | 1.0 | 10 | 0 | 118 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 9.57 | 1.0 | 10 | 0 | 95.7 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 9.78 | 1.0 | 10 | 0 | 97.8 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 9.18 | 1.0 | 10 | 0 | 91.8 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 9.15 | 1.0 | 10 | 0 | 91.5 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 9 | 1.0 | 10 | 0 | 90 | 74.4 | 126 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 12.55 | 1.0 | 10 | 0 | 126 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 11.18 | 1.0 | 10 | 0 | 112 | 69.1 | 126 | 0 | 0 | | |

**Qualifiers:**
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S - Spike Recovery outside accepted recovery limits
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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110762**

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080407B**
Client ID: **ZZZZZ** Batch ID: **R110762** TestNo: **SW8260B** Analysis Date: **4/6/2008 5:16:00 PM** SeqNo: **1767402**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 11.55 | 1.0 | 10 | 0 | 116 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 8.19 | 2.0 | 10 | 0 | 81.9 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 11.22 | 1.0 | 10 | 0 | 112 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 11.15 | 1.0 | 10 | 0 | 112 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 11.25 | 1.0 | 10 | 0 | 112 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 9.73 | 1.0 | 10 | 0 | 97.3 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 10.66 | 1.0 | 10 | 0 | 107 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 8.78 | 1.0 | 10 | 0 | 87.8 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 7.36 | 2.0 | 10 | 0 | 73.6 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.42 | 0 | 10 | 0 | 104 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.02 | 0 | 10 | 0 | 100 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.52 | 0 | 10 | 0 | 105 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.49 | 0 | 10 | 0 | 115 | 89.3 | 116 | 0 | 0 | | |



**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **MB_W25 4/8** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 8:11:00 AM** SeqNo: **1767434**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | 5.0 | | | | | | | | | |
| Benzene | ND | 1.0 | | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | | |
| Bromomethane | ND | 2.0 | | | | | | | | | |
| 2-Butanone | ND | 2.0 | | | | | | | | | |
| Carbon Disulfide | ND | 2.0 | | | | | | | | | |
| Carbon tetrachloride | ND | 1.0 | | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | | |
| Chloromethane | ND | 2.0 | | | | | | | | | |
| Dibromochloromethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | | |
| 2-Hexanone | ND | 2.0 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 1.0 | | | | | | | | | |
| Methylene chloride | ND | 2.0 | | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | | | | | | | | | |
| Tetrachloroethene | ND | 1.0 | | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | | |

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **MB_W25 4/8** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 8:11:00 AM** SeqNo: **1767434**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | 1.0 | | | | | | | | | |
| Vinyl chloride | ND | 2.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.47 | 1.0 | | | | | | | | | J |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| Total Xylenes | ND | 1.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 9.47 | 0 | 10 | 0 | 94.7 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.83 | 0 | 10 | 0 | 98.3 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.39 | 0 | 10 | 0 | 104 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.43 | 0 | 10 | 0 | 114 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 8:46:00 AM** SeqNo: **1767435**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8.08 | 1.0 | 10 | 0 | 80.8 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 8.43 | 1.0 | 10 | 0 | 84.3 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 10.52 | 1.0 | 10 | 0 | 105 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 8.8 | 1.0 | 10 | 0 | 88 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 10.04 | 1.0 | 10 | 0 | 100 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 8.97 | 1.0 | 10 | 0 | 89.7 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 13.26 | 2.0 | 10 | 0 | 133 | 22.5 | 147 | 0 | 0 | | |
| Dibromochloromethane | 10.41 | 1.0 | 10 | 0 | 104 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 8.56 | 1.0 | 10 | 0 | 85.6 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 8.72 | 1.0 | 10 | 0 | 87.2 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 8.34 | 1.0 | 10 | 0 | 83.4 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 8.21 | 1.0 | 10 | 0 | 82.1 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 7.96 | 1.0 | 10 | 0 | 79.6 | 74.4 | 126 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 11.06 | 1.0 | 10 | 0 | 111 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 9.94 | 1.0 | 10 | 0 | 99.4 | 69.1 | 126 | 0 | 0 | | |

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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 8:46:00 AM** SeqNo: **1767435**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 10.29 | 1.0 | 10 | 0 | 103 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 7.83 | 2.0 | 10 | 0 | 78.3 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 9.93 | 1.0 | 10 | 0 | 99.3 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 10.3 | 1.0 | 10 | 0 | 103 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 10.03 | 1.0 | 10 | 0 | 100 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 8.81 | 1.0 | 10 | 0 | 88.1 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 9.82 | 1.0 | 10 | 0 | 98.2 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 8.11 | 1.0 | 10 | 0 | 81.1 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 9.55 | 2.0 | 10 | 0 | 95.5 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.17 | 0 | 10 | 0 | 102 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.92 | 0 | 10 | 0 | 99.2 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.58 | 0 | 10 | 0 | 106 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.4 | 0 | 10 | 0 | 114 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **me0803c07-02AMS** SampType: **MS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 3:51:00 PM** SeqNo: **1767567**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8.62 | 1.0 | 10 | 0 | 86.2 | 60.6 | 130 | 0 | 0 | | |
| Bromodichloromethane | 9.01 | 1.0 | 10 | 0 | 90.1 | 65.8 | 126 | 0 | 0 | | |
| Bromoform | 10.93 | 1.0 | 10 | 0 | 109 | 40.5 | 146 | 0 | 0 | | |
| Bromomethane | 9.94 | 2.0 | 10 | 0 | 99.4 | 0 | 243 | 0 | 0 | | |
| Carbon tetrachloride | 9.68 | 1.0 | 10 | 0 | 96.8 | 47.2 | 149 | 0 | 0 | | |
| Chlorobenzene | 10.34 | 1.0 | 10 | 0 | 103 | 75.6 | 127 | 0 | 0 | | |
| Chloroethane | 14.33 | 2.0 | 10 | 3.08 | 112 | 0 | 357 | 0 | 0 | | |
| Chloroform | 9.32 | 1.0 | 10 | 0 | 93.2 | 71.2 | 120 | 0 | 0 | | |
| Chloromethane | 14.4 | 2.0 | 10 | 0 | 144 | 10.8 | 155 | 0 | 0 | | |
| Dibromochloromethane | 10.78 | 1.0 | 10 | 0 | 108 | 60.1 | 136 | 0 | 0 | | |
| 1,1-Dichloroethane | 9.1 | 1.0 | 10 | 0 | 91 | 68 | 119 | 0 | 0 | | |
| 1,2-Dichloroethane | 9.52 | 1.0 | 10 | 0 | 95.2 | 67.7 | 133 | 0 | 0 | | |
| 1,1-Dichloroethene | 9.12 | 1.0 | 10 | 0 | 91.2 | 50.1 | 125 | 0 | 0 | | |

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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **me0803c07-02AMS** SampType: **MS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 3:51:00 PM** SeqNo: **1767567**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 8.58 | 1.0 | 10 | 0 | 85.8 | 56.9 | 132 | 0 | 0 | | |
| 1,2-Dichloropropane | 8.06 | 1.0 | 10 | 0 | 80.6 | 71.4 | 125 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 11.22 | 1.0 | 10 | 0 | 112 | 69.9 | 130 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 10.02 | 1.0 | 10 | 0 | 100 | 66.9 | 134 | 0 | 0 | | |
| Ethylbenzene | 10.73 | 1.0 | 10 | 0 | 107 | 60.6 | 144 | 0 | 0 | | |
| Methylene chloride | 7.76 | 2.0 | 10 | 0 | 77.6 | 55.4 | 130 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 10.2 | 1.0 | 10 | 0 | 102 | 46.8 | 168 | 0 | 0 | | |
| Tetrachloroethene | 10.22 | 1.0 | 10 | 0 | 102 | 60.1 | 144 | 0 | 0 | | |
| Toluene | 10.18 | 1.0 | 10 | 0 | 102 | 69.7 | 130 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 9.4 | 1.0 | 10 | 0 | 94 | 63 | 136 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 10.02 | 1.0 | 10 | 0 | 100 | 40.6 | 165 | 0 | 0 | | |
| Trichloroethene | 8.27 | 1.0 | 10 | 0 | 82.7 | 48.6 | 139 | 0 | 0 | | |
| Vinyl chloride | 10.36 | 2.0 | 10 | 0 | 104 | 33 | 151 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.67 | 0 | 10 | 0 | 107 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.32 | 0 | 10 | 0 | 103 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 11.51 | 0 | 10 | 0 | 115 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.37 | 0 | 10 | 0 | 114 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **me0803c07-02AMSD** SampType: **MSD** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 4:26:00 PM** SeqNo: **1767568**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8.38 | 1.0 | 10 | 0 | 83.8 | 60.6 | 130 | 8.62 | 2.82 | 23.7 | |
| Bromodichloromethane | 8.8 | 1.0 | 10 | 0 | 88 | 65.8 | 126 | 9.01 | 2.36 | 28.4 | |
| Bromoform | 10.74 | 1.0 | 10 | 0 | 107 | 40.5 | 146 | 10.93 | 1.75 | 28.8 | |
| Bromomethane | 11.65 | 2.0 | 10 | 0 | 116 | 0 | 243 | 9.94 | 15.8 | 52.8 | |
| Carbon tetrachloride | 9.47 | 1.0 | 10 | 0 | 94.7 | 47.2 | 149 | 9.68 | 2.19 | 31.1 | |
| Chlorobenzene | 10.4 | 1.0 | 10 | 0 | 104 | 75.6 | 127 | 10.34 | 0.579 | 23 | |
| Chloroethane | 14.89 | 2.0 | 10 | 3.08 | 118 | 0 | 357 | 14.33 | 3.83 | 29.3 | |
| Chloroform | 9.31 | 1.0 | 10 | 0 | 93.1 | 71.2 | 120 | 9.32 | 0.107 | 25 | |
| Chloromethane | 15.19 | 2.0 | 10 | 0 | 152 | 10.8 | 155 | 14.4 | 5.34 | 90.9 | |

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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803B85
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **me0803c07-02AMSD** SampType: **MSD** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 4:26:00 PM** SeqNo: **1767568**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dibromochloromethane | 10.61 | 1.0 | 10 | 0 | 106 | 60.1 | 136 | 10.78 | 1.59 | 27.1 | |
| 1,1-Dichloroethane | 9.25 | 1.0 | 10 | 0 | 92.5 | 68 | 119 | 9.1 | 1.63 | 14.2 | |
| 1,2-Dichloroethane | 9.4 | 1.0 | 10 | 0 | 94 | 67.7 | 133 | 9.52 | 1.27 | 23.3 | |
| 1,1-Dichloroethene | 9.16 | 1.0 | 10 | 0 | 91.6 | 50.1 | 125 | 9.12 | 0.438 | 31 | |
| trans-1,2-Dichloroethene | 8.49 | 1.0 | 10 | 0 | 84.9 | 56.9 | 132 | 8.58 | 1.05 | 66.1 | |
| 1,2-Dichloropropane | 8.1 | 1.0 | 10 | 0 | 81 | 71.4 | 125 | 8.06 | 0.495 | 26 | |
| trans-1,3-Dichloropropene | 11.19 | 1.0 | 10 | 0 | 112 | 69.9 | 130 | 11.22 | 0.268 | 27.9 | |
| cis-1,3-Dichloropropene | 9.9 | 1.0 | 10 | 0 | 99 | 66.9 | 134 | 10.02 | 1.20 | 28.7 | |
| Ethylbenzene | 10.73 | 1.0 | 10 | 0 | 107 | 60.6 | 144 | 10.73 | 0 | 25.2 | |
| Methylene chloride | 8.17 | 2.0 | 10 | 0 | 81.7 | 55.4 | 130 | 7.76 | 5.15 | 28.7 | |
| 1,1,2,2-Tetrachloroethane | 10.24 | 1.0 | 10 | 0 | 102 | 46.8 | 168 | 10.2 | 0.391 | 22.3 | |
| Tetrachloroethene | 10.45 | 1.0 | 10 | 0 | 104 | 60.1 | 144 | 10.22 | 2.23 | 29.7 | |
| Toluene | 10.29 | 1.0 | 10 | 0 | 103 | 69.7 | 130 | 10.18 | 1.07 | 25.4 | |
| 1,1,1-Trichloroethane | 9.48 | 1.0 | 10 | 0 | 94.8 | 63 | 136 | 9.4 | 0.847 | 29 | |
| 1,1,2-Trichloroethane | 9.88 | 1.0 | 10 | 0 | 98.8 | 40.6 | 165 | 10.02 | 1.41 | 25.9 | |
| Trichloroethene | 8.42 | 1.0 | 10 | 0 | 84.2 | 48.6 | 139 | 8.27 | 1.80 | 26.9 | |
| Vinyl chloride | 10.97 | 2.0 | 10 | 0 | 110 | 33 | 151 | 10.36 | 5.72 | 31.2 | |
| Surr: 4-Bromofluorobenzene | 10.72 | 0 | 10 | 0 | 107 | 75.2 | 115 | 0 | 0 | 0 | |
| Surr: Dibromofluoromethane | 10.34 | 0 | 10 | 0 | 103 | 92.7 | 119 | 0 | 0 | 0 | |
| Surr: 1,2-Dichloroethane-d4 | 11.44 | 0 | 10 | 0 | 114 | 88.2 | 132 | 0 | 0 | 0 | |
| Surr: Toluene-d8 | 11.39 | 0 | 10 | 0 | 114 | 89.3 | 116 | 0 | 0 | 0 | |

**Qualifiers:**
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b - Analyte detected below reporting limit in the Method Blank

# SVOA GC/MS
# RAW DATA

# METHOD BLANK RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040204.D Vial: 26
Acq On : 2 Apr 2008 5:30 pm Operator: mills
Sample : ,mblk,bk-1-040208,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008 Quant Results File: SVOA0328.RES

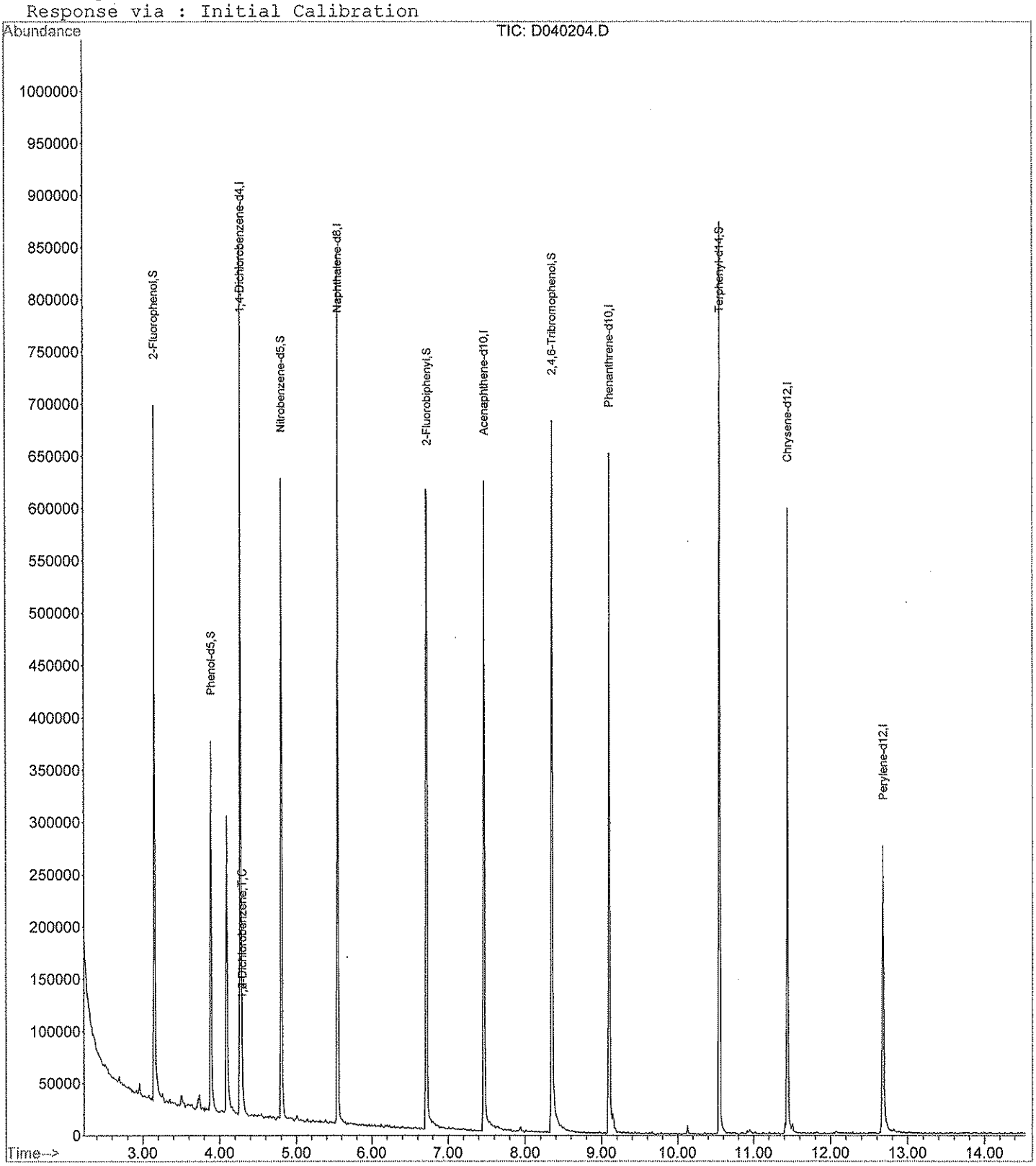
Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 118091 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 353494 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 151733 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 223731 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 194492 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 151890 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 143493 | 39.19 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 121806 | 25.16 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 197516 | 46.49 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 265658 | 55.87 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 104206 | 82.92 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 273133 | 64.22 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 10) 1,3-Dichlorobenzene | 4.29 | 146 | 5395 | 1.31 | ug/ml# | 92 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 5395 | 1.31 | ug/ml# | 91 |
| 12) 1,2-Dichlorobenzene | 4.29 | 146 | 5395 | 1.39 | ug/ml | 91 |

(#) = qualifier out of range (m) = manual integration
D040204.D SVOA0328.M Wed Apr 02 21:05:50 2008 SVOA 4 Page 1

Data File : C:\HPCHEM\1\DATA\D040208\D040204.D Vial: 26
Acq On : 2 Apr 2008 5:30 pm Operator: mills
Sample : ,mblk,bk-1-040208,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# LABORATORY CONTROL SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040206.D Vial: 28
Acq On : 2 Apr 2008 6:23 pm Operator: mills
Sample : ,lcs,lcs-1-040208,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 104343 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 320001 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 150619 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 208187 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 172264 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 162068 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 141228 | 43.65 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 125970 | 29.44 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 214570 | 55.79 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 310083 | 65.69 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 122565 | 104.81 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 281364 | 74.69 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 6) Phenol | 3.90 | 94 | 83118 | 20.48 | ug/ml | 92 |
| 7) Aniline | 4.07 | 93 | 3492 | 0.78 | ug/ml# | 1 |
| 8) bis(2-Chloroethyl)ether | 4.07 | 93 | 3492 | 1.03 | ug/ml# | 1 |
| 9) 2-Chlorophenol | 4.07 | 128 | 170141 | 52.39 | ug/ml | 98 |
| 10) 1,3-Dichlorobenzene | 4.29 | 146 | 192016 | 52.60 | ug/ml | 96 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 192016 | 52.69 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.29 | 146 | 192016 | 55.85 | ug/ml | 98 |
| 13) Benzyl alcohol | 4.29 | 108 | 1888 | 0.96 | ug/ml# | 16 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 341909 | 52.53 | ug/ml | 97 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 146657 | 61.86 | ug/ml | 97 |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 154107 | 54.20 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.13 | 107 | 174321 | 65.38 | ug/ml | 89 |
| 35) 2-Methylnaphthalene | 6.13 | 142 | 140516 | 29.31 | ug/ml# | 19 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 270581 | 47.29 | ug/ml | 97 |
| 44) Dimethyl phthalate | 7.17 | 163 | 411727 | 72.31 | ug/ml | 100 |
| 47) Acenaphthene | 7.51 | 153 | 269988 | 69.20 | ug/ml | 99 |
| 50) 4-Nitrophenol | 7.60 | 109 | 28159 | 26.90 | ug/ml | 95 |
| 51) 2,4-Dinitrotoluene | 7.69 | 165 | 136433 | 83.76 | ug/ml | 84 |
| 53) 4-Chlorophenyl phenylether | 8.09 | 204 | 158756 | 88.91 | ug/ml | 98 |
| 54) Diethyl phthalate | 7.96 | 149 | 456841 | 78.56 | ug/ml | 98 |
| 58) n-Nitrosodiphenylamine | 8.08 | 169 | 16379 | 3.01 | ug/ml# | 63 |
| 63) Pentachlorophenol | 8.90 | 266 | 78030 | 80.17 | ug/ml | 99 |
| 68) Fluoranthene | 10.42 | 202 | 442078 | 76.15 | ug/ml# | 81 |
| 71) Pyrene | 10.42 | 202 | 456554 | 73.17 | ug/ml | 96 |
| 75) 3,3'-Dichlorobenzidine | 11.41 | 252 | 139844 | 79.04 | ug/ml | 93 |
| 77) bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 407710 | 78.29 | ug/ml | 96 |
| 80) Benzo[b]fluoranthene | 12.36 | 252 | 339552 | 50.42 | ug/ml# | 94 |
| 81) Benzo[k]fluoranthene | 12.36 | 252 | 339552 | 74.83 | ug/ml | 98 |
| 83) Indeno[1,2,3cd]pyrene | 13.88 | 276 | 246535 | 64.50 | ug/ml | 89 |
| 84) Dibenz[a,h]anthracene | 13.89 | 278 | 196889 | 92.88 | ug/ml | 93 |
| 85) Benzo[g,h,i]perylene | 14.23 | 276 | 194335 | 61.27 | ug/ml | 99 |

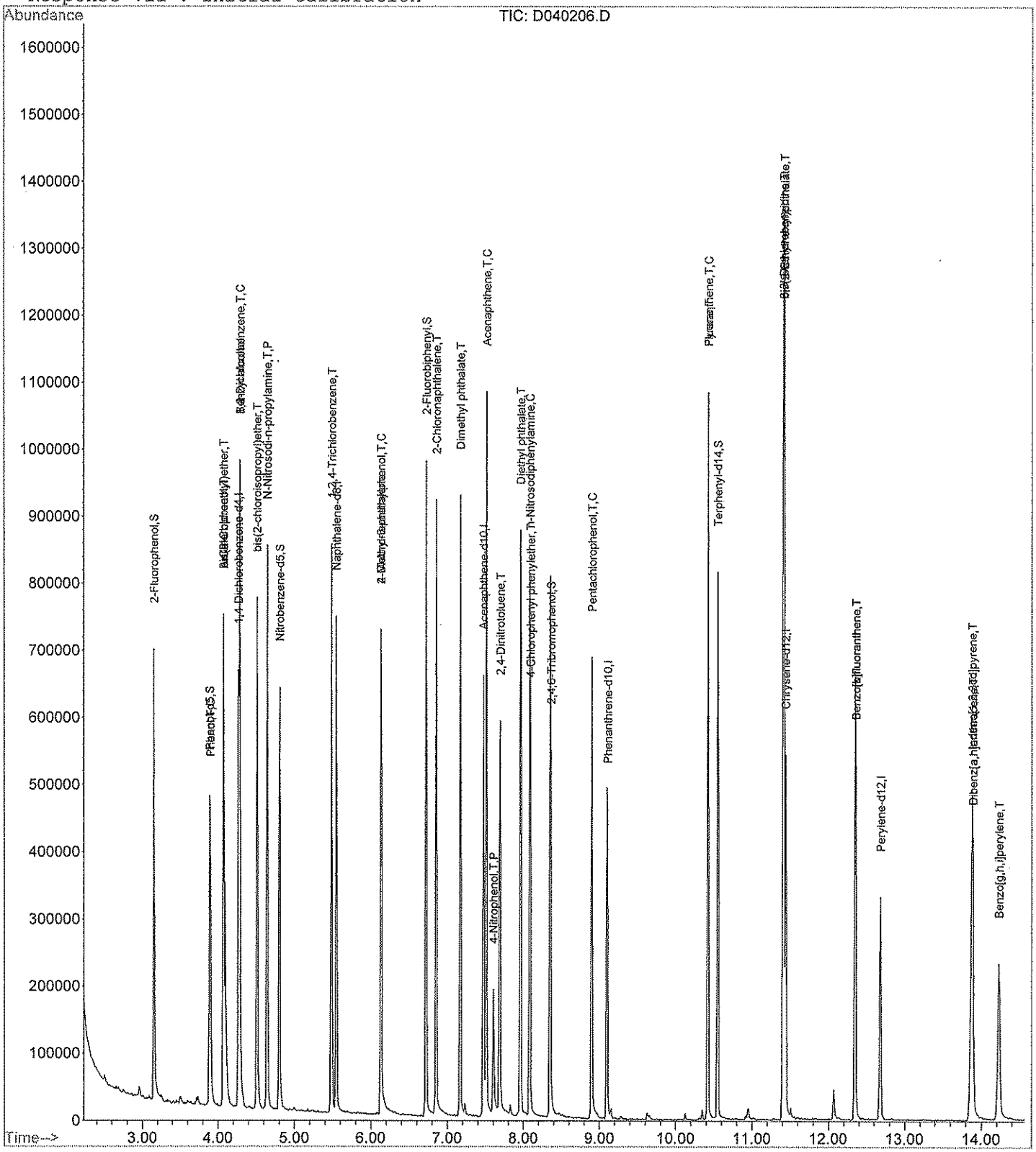
4/2/08

(#) = qualifier out of range (m) = manual integration
D040206.D SVOA0328.M Wed Apr 02 21:05:55 2008 SVOA 4

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D040208\D040206.D Vial: 28
Acq On : 2 Apr 2008 6:23 pm Operator: mills
Sample : ,lcs,lcs-1-040208,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# MATRIX SPIKE/MATRIX SPIKE DUPLICATE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040340.D Vial: 16
Acq On : 4 Apr 2008 4:12 am Operator: mills
Sample : ,samp,me0803c07-02b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 101707 | 40.00 ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 303173 | 40.00 ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 146540 | 40.00 ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 186252 | 40.00 ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.43 | 240 | 149848 | 40.00 ug/ml | -0.01 |
| 78) Perylene-d12 | 12.66 | 264 | 119085 | 40.00 ug/ml | -0.02 |
| **System Monitoring Compounds** | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 102824 | 32.61 ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 94773 | 22.73 ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 147824 | 40.57 ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 238215 | 51.87 ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 105256 | 100.60 ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 203035 | 61.96 ug/ml | 0.00 |
| **Target Compounds** | | | | | Qvalue |
| ~~14)~~ bis(2-chloroisopropyl)ethe | 4.64 | 45 | 18070 | 2.85 ug/ml# | 74 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 22857 | 12.38 ug/ml# | 16 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.35 | 169 | 3532 | 0.72 ug/ml# | 29 |

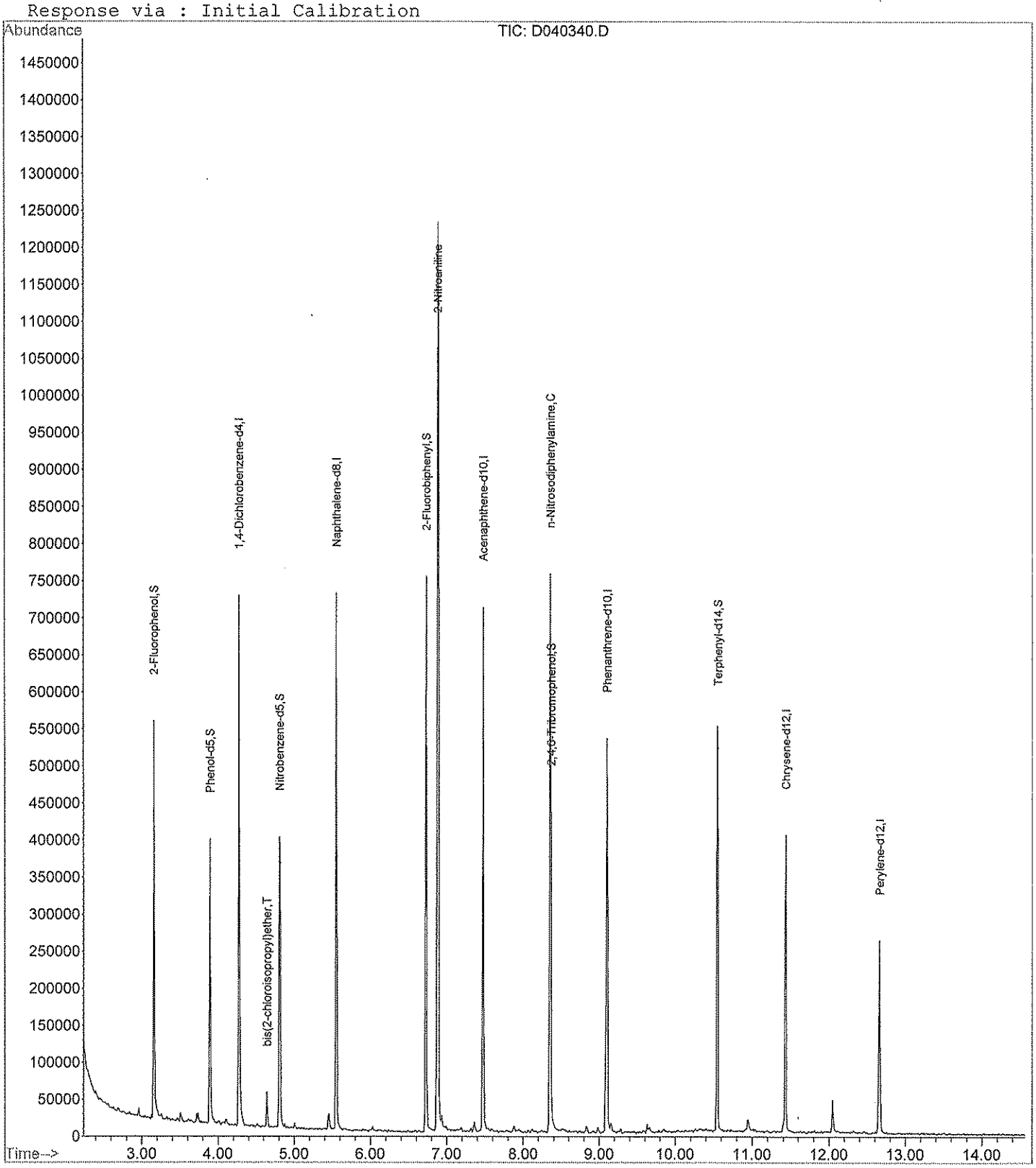
4-4-08

(#) = qualifier out of range (m) = manual integration
D040340.D SVOA0328.M Fri Apr 04 14:59:05 2008 SVOA 4

Page 1

Data File : C:\HPCHEM\1\DATA\D040308\D040340.D Vial: 16
Acq On : 4 Apr 2008 4:12 am Operator: mills
Sample : ,samp,me0803c07-02b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040341.D Vial: 17
Acq On : 4 Apr 2008 4:38 am Operator: mills
Sample : ,ms,me0803c07-02bms,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

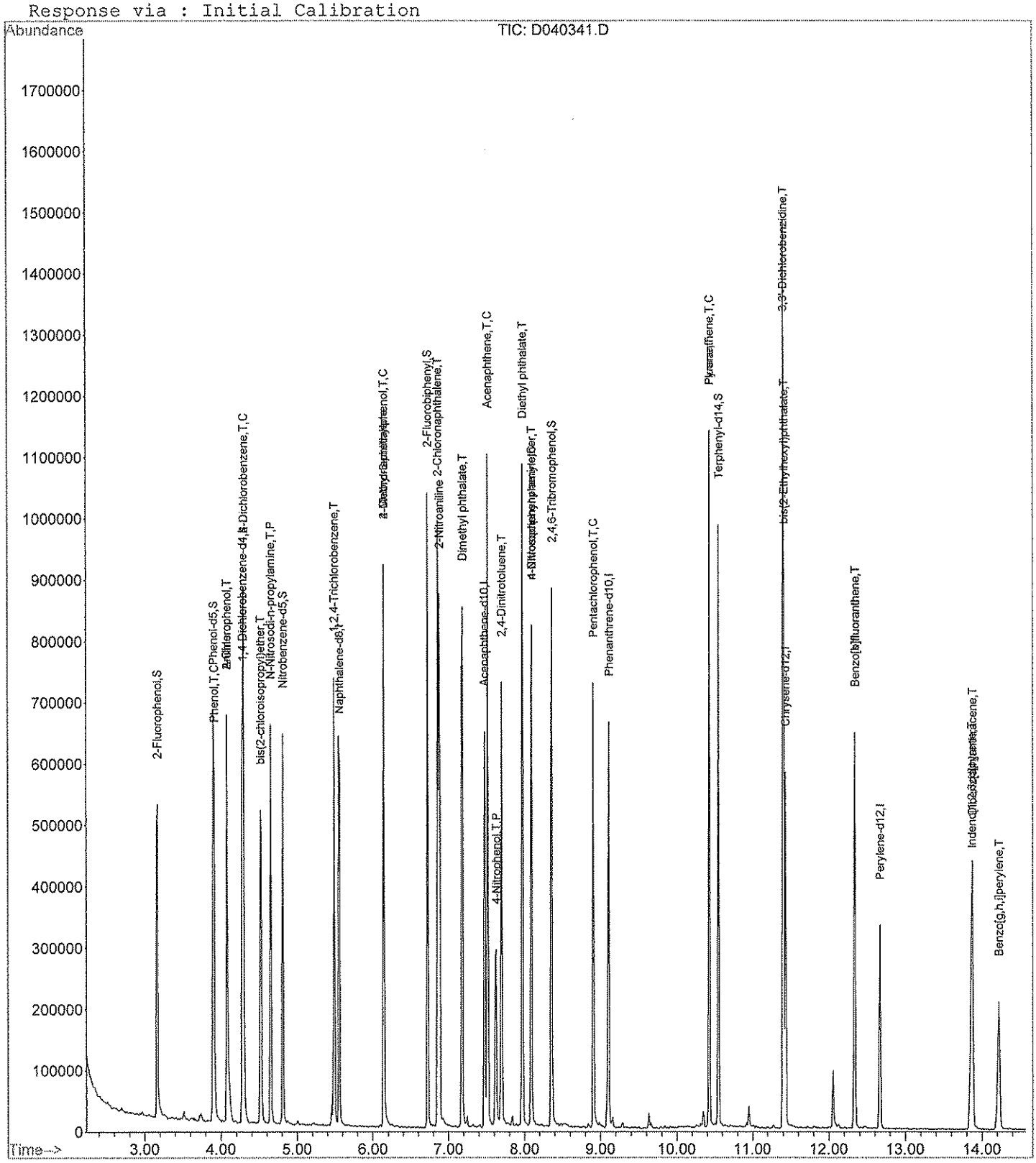
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 113309 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 350856 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 171925 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 228824 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.43 | 240 | 180385 | 40.00 | ug/ml | -0.02 |
| 78) Perylene-d12 | 12.67 | 264 | 142848 | 40.00 | ug/ml | -0.02 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 150805 | 42.93 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 174681 | 37.60 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 173860 | 41.23 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 295609 | 54.86 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 126646 | 98.53 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 258758 | 65.60 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 6) Phenol | 3.91 | 94 | 110027 | 24.96 | ug/ml | 88 |
| ~~7)~~ Aniline | 4.08 | 93 | 2820 | 0.58 | ug/ml# | 1 |
| 9) 2-Chlorophenol | 4.08 | 128 | 133860 | 37.96 | ug/ml | 94 |
| ~~10)~~ 1,3-Dichlorobenzene | 4.29 | 146 | 153079 | 38.62 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 153079 | 38.68 | ug/ml | 100 |
| ~~12)~~ 1,2-Dichlorobenzene | 4.29 | 146 | 153079 | 41.00 | ug/ml | 99 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 245628 | 34.75 | ug/ml | 98 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 116545 | 45.27 | ug/ml | 92 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 125287 | 40.19 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.14 | 107 | 174502 | 59.69 | ug/ml | 89 |
| ~~35)~~ 2-Methylnaphthalene | 6.14 | 142 | 143392 | 27.28 | ug/ml# | 20 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 257923 | 39.49 | ug/ml | 97 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 14093 | 6.51 | ug/ml# | 11 |
| 44) Dimethyl phthalate | 7.19 | 163 | 438782 | 67.51 | ug/ml | 98 |
| 47) Acenaphthene | 7.51 | 153 | 261275 | 58.67 | ug/ml | 99 |
| 50) 4-Nitrophenol | 7.63 | 109 | 56279 | 47.09 | ug/ml# | 73 |
| 51) 2,4-Dinitrotoluene | 7.70 | 165 | 123942 | 66.66 | ug/ml | 97 |
| 53) 4-Chlorophenyl phenylether | 8.10 | 204 | 160436 | 78.72 | ug/ml | 95 |
| 54) Diethyl phthalate | 7.97 | 149 | 480734 | 72.43 | ug/ml | 100 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.10 | 169 | 16174 | 2.70 | ug/ml# | 59 |
| 63) Pentachlorophenol | 8.90 | 266 | 78416 | 73.30 | ug/ml | 98 |
| ~~68)~~ Fluoranthene | 10.43 | 202 | 439772 | 68.92 | ug/ml# | 86 |
| 71) Pyrene | 10.43 | 202 | 446901 | 68.40 | ug/ml | 100 |
| 75) 3,3'-Dichlorobenzidine | 11.40 | 252 | 101764 | 54.93 | ug/ml# | 93 |
| 77) bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 407623 | 74.75 | ug/ml | 95 |
| ~~80)~~ Benzo[b]fluoranthene | 12.34 | 252 | 285509 | 48.10 | ug/ml | 97 |
| 81) Benzo[k]fluoranthene | 12.34 | 252 | 285509 | 71.38 | ug/ml | 97 |
| 83) Indeno[1,2,3cd]pyrene | 13.87 | 276 | 201244 | 59.73 | ug/ml | 95 |
| 84) Dibenz[a,h]anthracene | 13.88 | 278 | 162739 | 87.10 | ug/ml | 98 |
| 85) Benzo[g,h,i]perylene | 14.22 | 276 | 165605 | 59.24 | ug/ml | 91 |

4/4/08

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

Data File : C:\HPCHEM\1\DATA\D040308\D040341.D Vial: 17
Acq On : 4 Apr 2008 4:38 am Operator: mills
Sample : ,ms,me0803c07-02bms,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040342.D Vial: 18
Acq On : 4 Apr 2008 5:03 am Operator: mills
Sample : ,msd,me0803c07-02bmsd,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

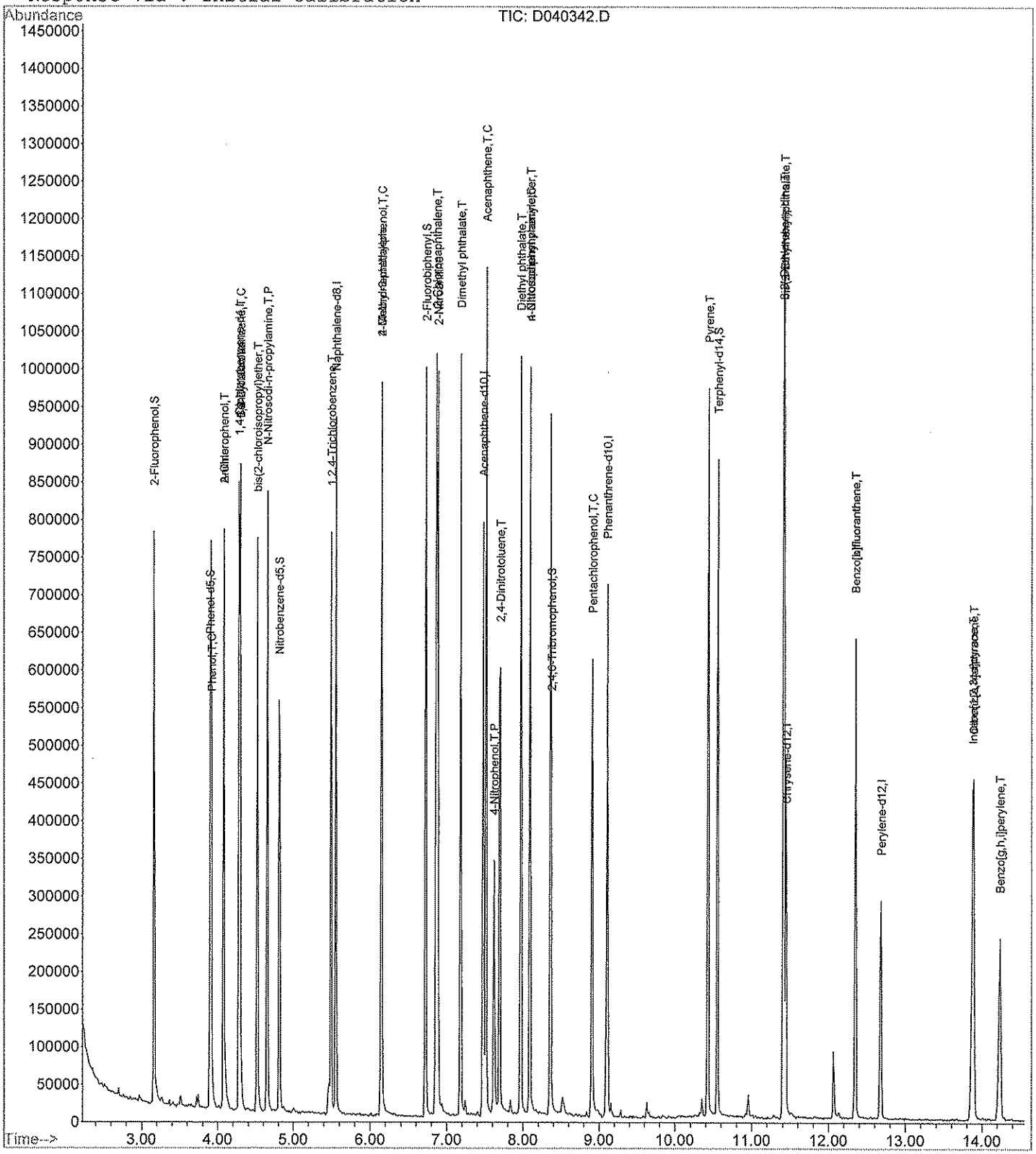
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120613 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 358599 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 175228 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 220294 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 171757 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 147870 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 165399 | 44.23 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 199804 | 40.40 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 194503 | 45.13 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 338971 | 61.73 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.37 | 330 | 134947 | 109.05 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.56 | 244 | 263889 | 70.26 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 6) Phenol | 3.92 | 94 | 127717 | 27.22 | ug/ml | 95 |
| ~~7)~~ Aniline | 4.08 | 93 | 3011 | 0.58 | ug/ml# | 1 |
| 9) 2-Chlorophenol | 4.08 | 128 | 162089 | 43.18 | ug/ml | 96 |
| ~~10)~~ 1,3-Dichlorobenzene | 4.30 | 146 | 180462 | 42.77 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.30 | 146 | 180462 | 42.84 | ug/ml | 99 |
| ~~12)~~ 1,2-Dichlorobenzene | 4.30 | 146 | 180462 | 45.41 | ug/ml | 99 |
| ~~13)~~ Benzyl alcohol | 4.30 | 108 | 2270 | 0.99 | ug/ml# | 12 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 282493 | 37.55 | ug/ml | 99 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 138013 | 50.36 | ug/ml | 94 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 152610 | 47.89 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.15 | 107 | 202486 | 67.76 | ug/ml | 94 |
| ~~35)~~ 2-Methylnaphthalene | 6.15 | 142 | 157393 | 29.29 | ug/ml# | 18 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 294388 | 44.22 | ug/ml | 96 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 14208 | 6.44 | ug/ml# | 16 |
| 44) Dimethyl phthalate | 7.18 | 163 | 426633 | 64.41 | ug/ml | 99 |
| 47) Acenaphthene | 7.52 | 153 | 297674 | 65.58 | ug/ml | 99 |
| 50) 4-Nitrophenol | 7.62 | 109 | 53986 | 44.32 | ug/ml | 87 |
| 51) 2,4-Dinitrotoluene | 7.70 | 165 | 133901 | 70.66 | ug/ml | 86 |
| 53) 4-Chlorophenyl phenylether | 8.09 | 204 | 158494 | 76.30 | ug/ml | 87 |
| 54) Diethyl phthalate | 7.97 | 149 | 484853 | 71.67 | ug/ml | 99 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.09 | 169 | 15855 | 2.75 | ug/ml# | 60 |
| 63) Pentachlorophenol | 8.91 | 266 | 78504 | 76.22 | ug/ml | 97 |
| 71) Pyrene | 10.43 | 202 | 473632 | 76.13 | ug/ml | 89 |
| 75) 3,3'-Dichlorobenzidine | 11.41 | 252 | 94216 | 53.41 | ug/ml | 95 |
| 77) bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 377229 | 72.65 | ug/ml | 96 |
| ~~80)~~ Benzo[b]fluoranthene | 12.35 | 252 | 274001 | 44.60 | ug/ml | 96 |
| 81) Benzo[k]fluoranthene | 12.35 | 252 | 274615 | 66.33 | ug/ml# | 94 |
| 83) Indeno[1,2,3cd]pyrene | 13.88 | 276 | 223966 | 64.22 | ug/ml | 92 |
| 84) Dibenz[a,h]anthracene | 13.89 | 278 | 178219 | 92.15 | ug/ml | 99 |
| 85) Benzo[g,h,i]perylene | 14.24 | 276 | 191078 | 66.03 | ug/ml | 92 |

4-4-08

(#) = qualifier out of range (m) = manual integration
D040342.D SVOA0328.M Fri Apr 04 14:59:10 2008 SVOA 4

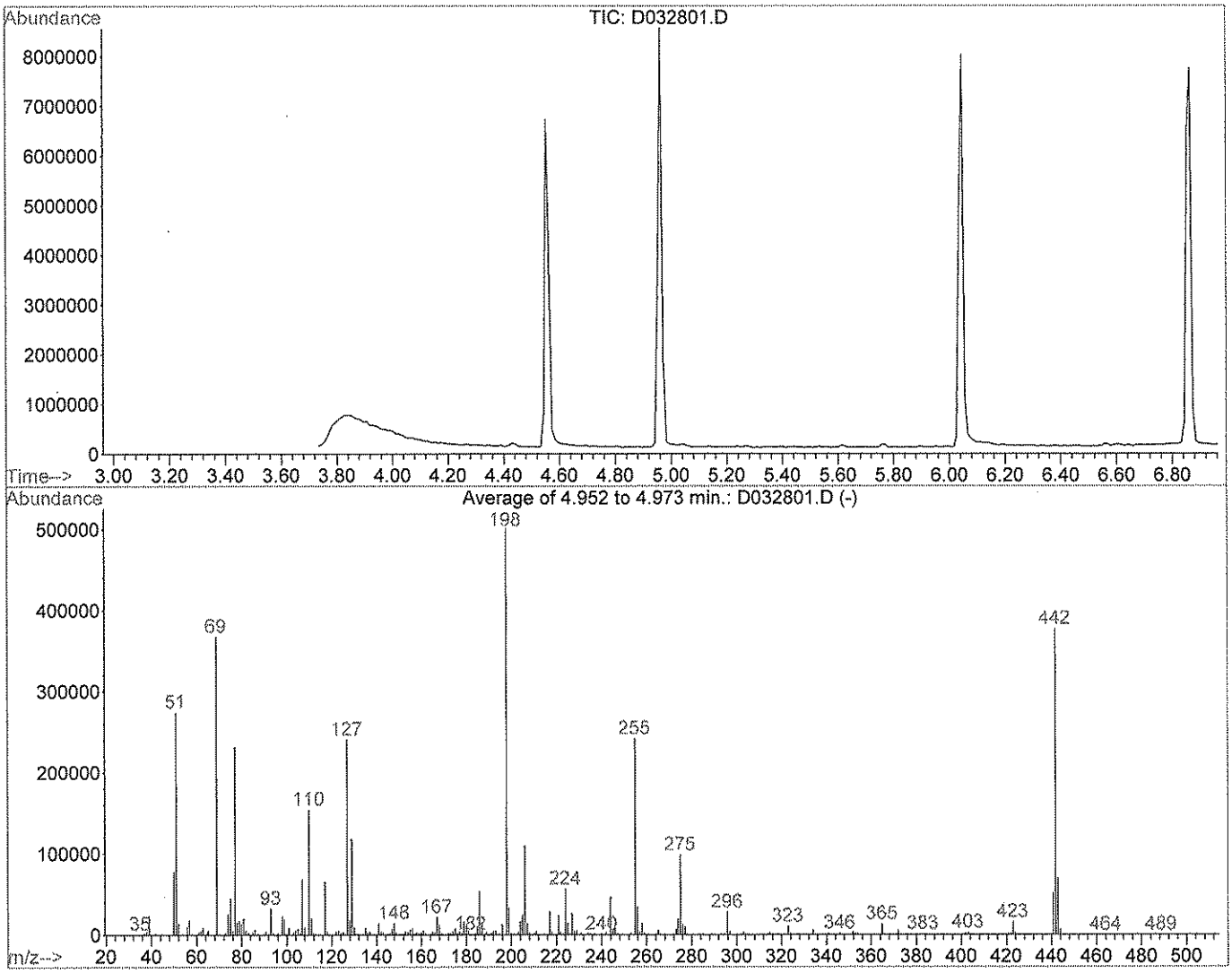
Data File : C:\HPCHEM\1\DATA\D040308\D040342.D Vial: 18
Acq On : 4 Apr 2008 5:03 am Operator: mills
Sample : ,msd,me0803c07-02bmsd,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# TUNING RAW DATA

Data File : C:\HPCHEM\1\DATA\D032708\D032801.D Vial: 1
Acq On : 28 Mar 2008 4:26 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP




AutoFind: Scans 120, 121, 122; Background Corrected with Scan 116

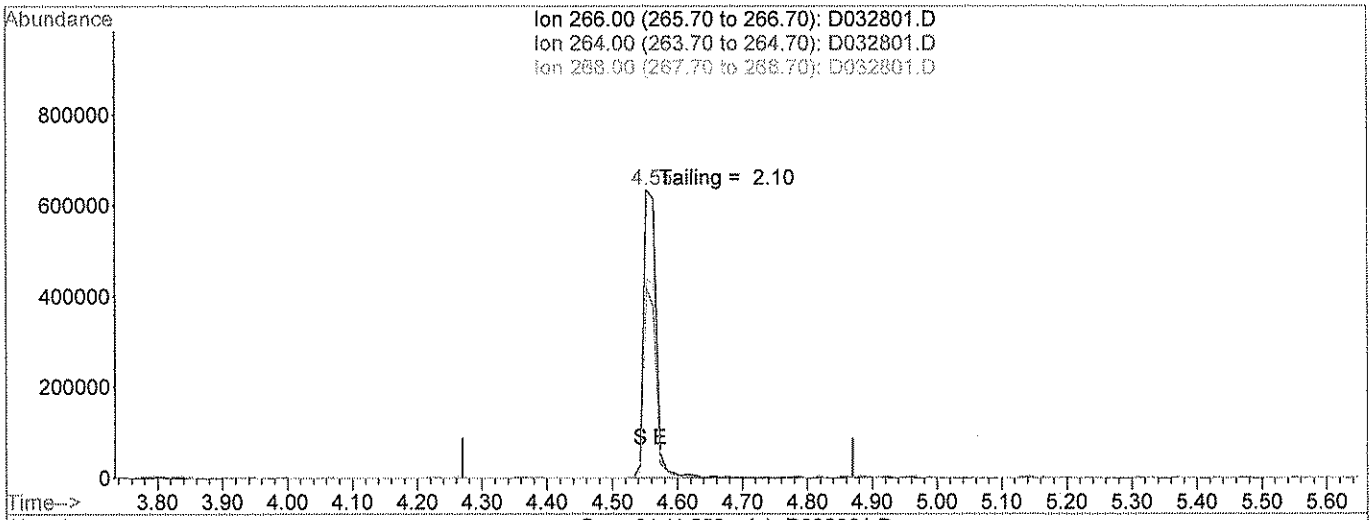
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 30 | 60 | 54.8 | 274221 | PASS |
| 68 | 69 | 0.00 | 2 | 0.0 | 0 | PASS |
| 70 | 69 | 0.00 | 2 | 0.3 | 1166 | PASS |
| 127 | 198 | 40 | 60 | 48.1 | 240719 | PASS |
| 197 | 198 | 0.00 | 1 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 500629 | PASS |
| 199 | 198 | 5 | 9 | 6.7 | 33653 | PASS |
| 275 | 198 | 10 | 30 | 19.6 | 98369 | PASS |
| 365 | 198 | 1 | 100 | 2.6 | 13217 | PASS |
| 441 | 443 | 0.01 | 100 | 73.5 | 51334 | PASS |
| 442 | 198 | 40 | 250 | 75.4 | 377253 | PASS |
| 443 | 442 | 17 | 23 | 18.5 | 69817 | PASS |

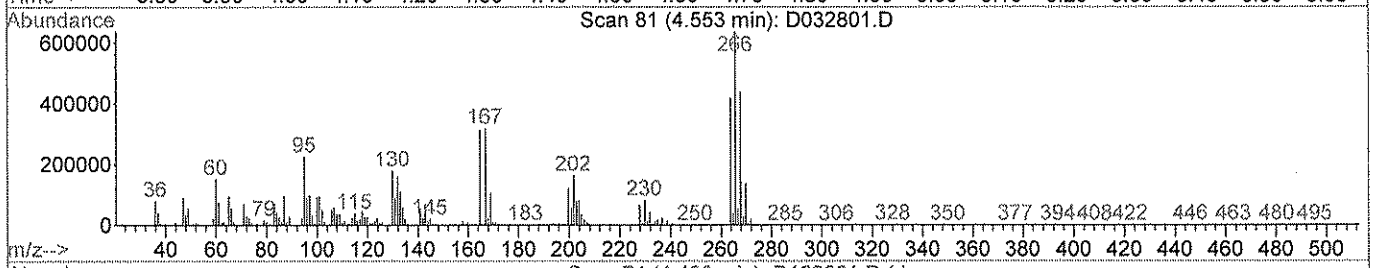
D032801.D DFTPP.M Fri Mar 28 21:14:11 2008 SVOA 4

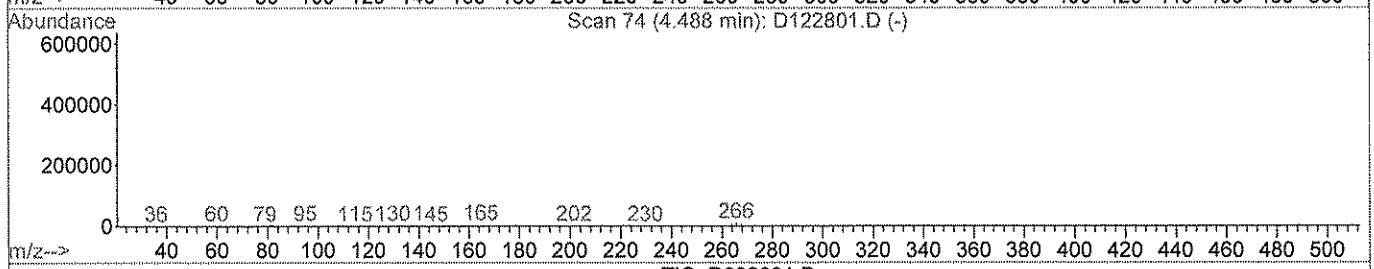
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D032708\D032801.D Vial: 1
Acq On : 28 Mar 2008 4:26 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 28 21:14 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Mar 28 21:14:17 2008
Response via : Single Level Calibration




TIC: D032801.D

(1) PENTACHLOROPHENOL

4.55min 63.86

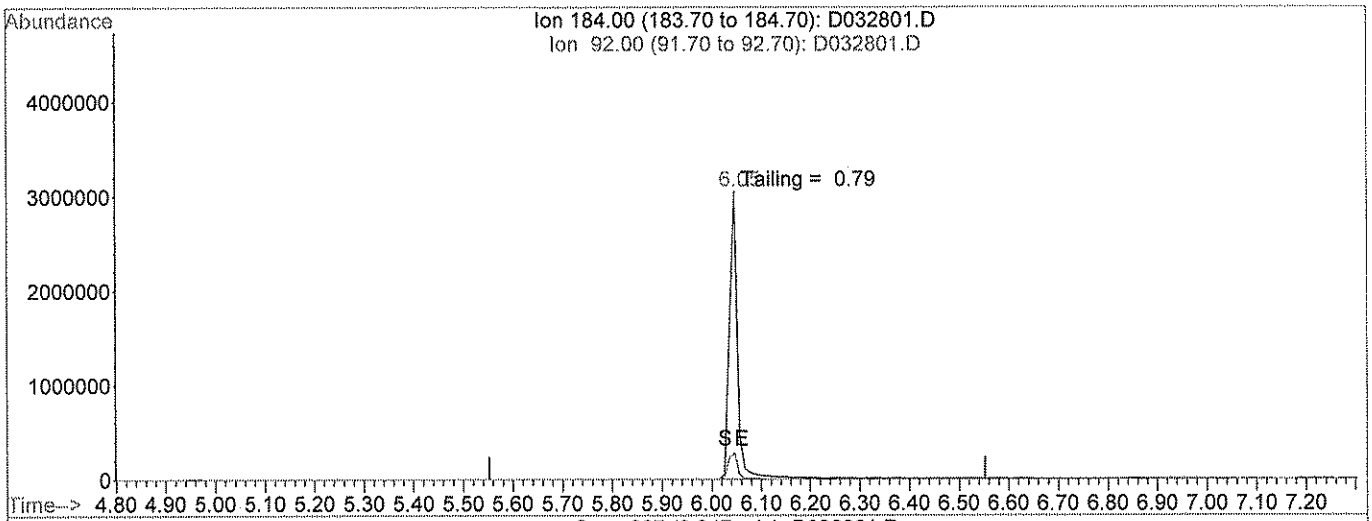
response 848211

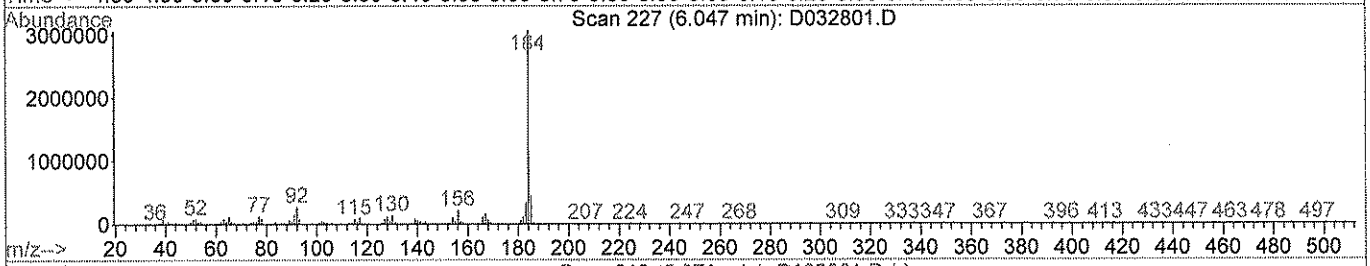
| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 63.53 |
| 268.00 | 64.60 | 69.59 |
| 0.00 | 0.00 | 0.00 |

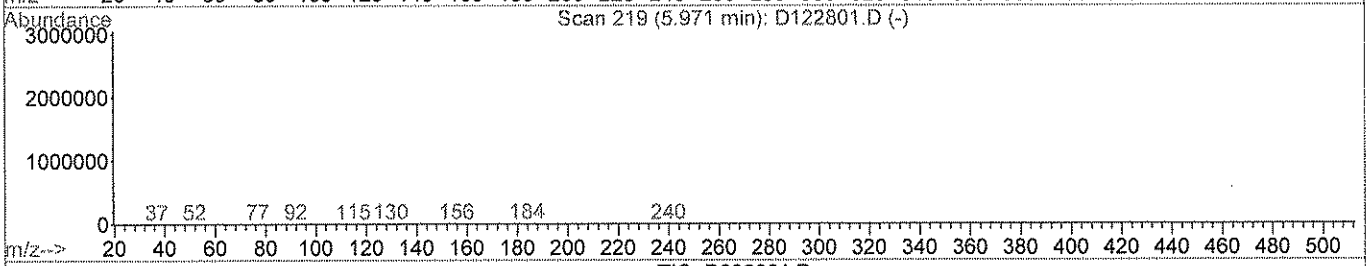
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D032708\D032801.D Vial: 1
Acq On : 28 Mar 2008 4:26 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 28 21:14 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Mar 28 21:14:17 2008
Response via : Single Level Calibration




TIC: D032801.D

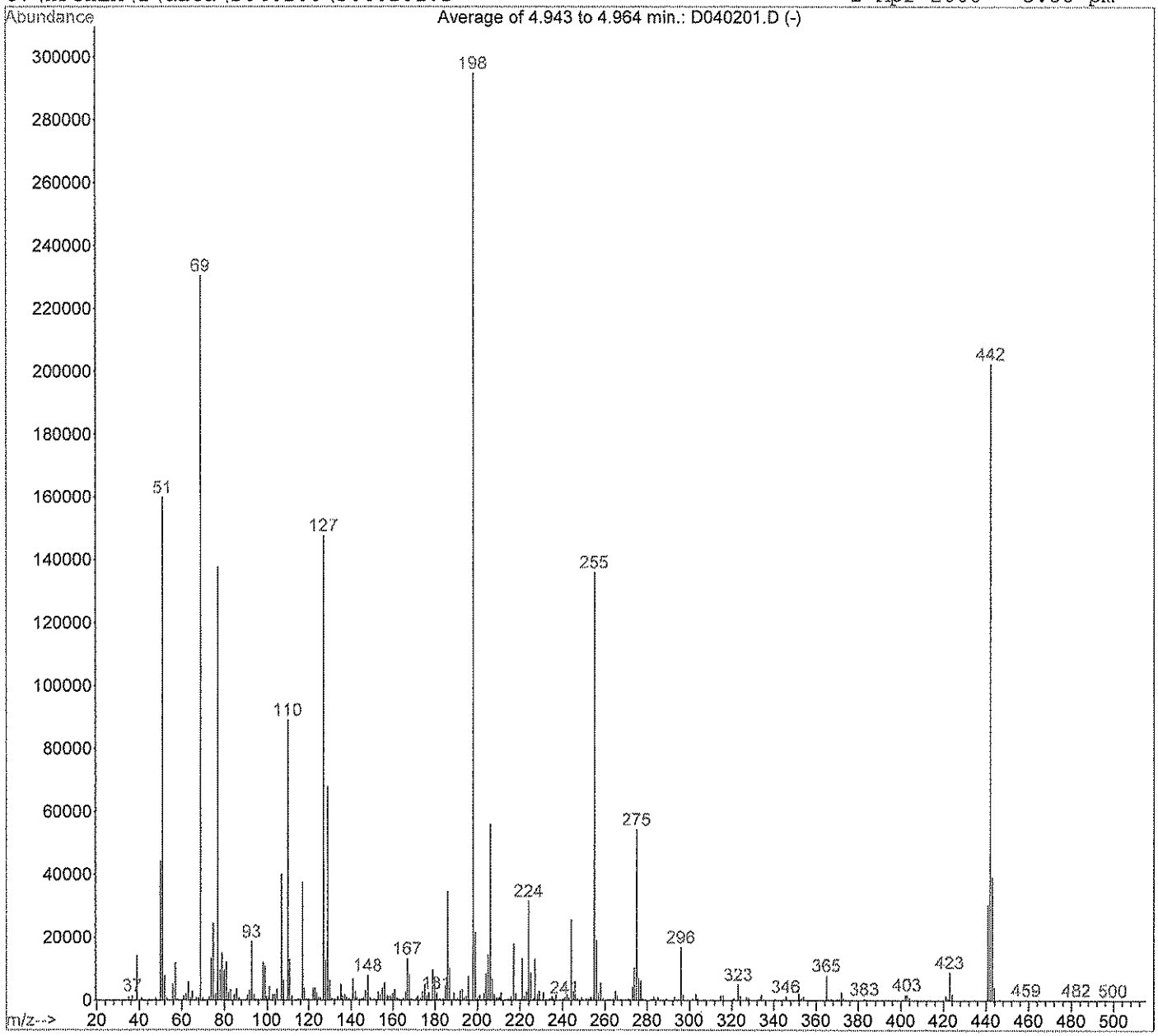
(3) BENZIDINE

6.05min 62.82

response 3500067

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100 | 100 |
| 92.00 | 12.20 | 10.74 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

C:\HPCHEM\1\data\D040208\D040201.D 2 Apr 2008 3:55 pm



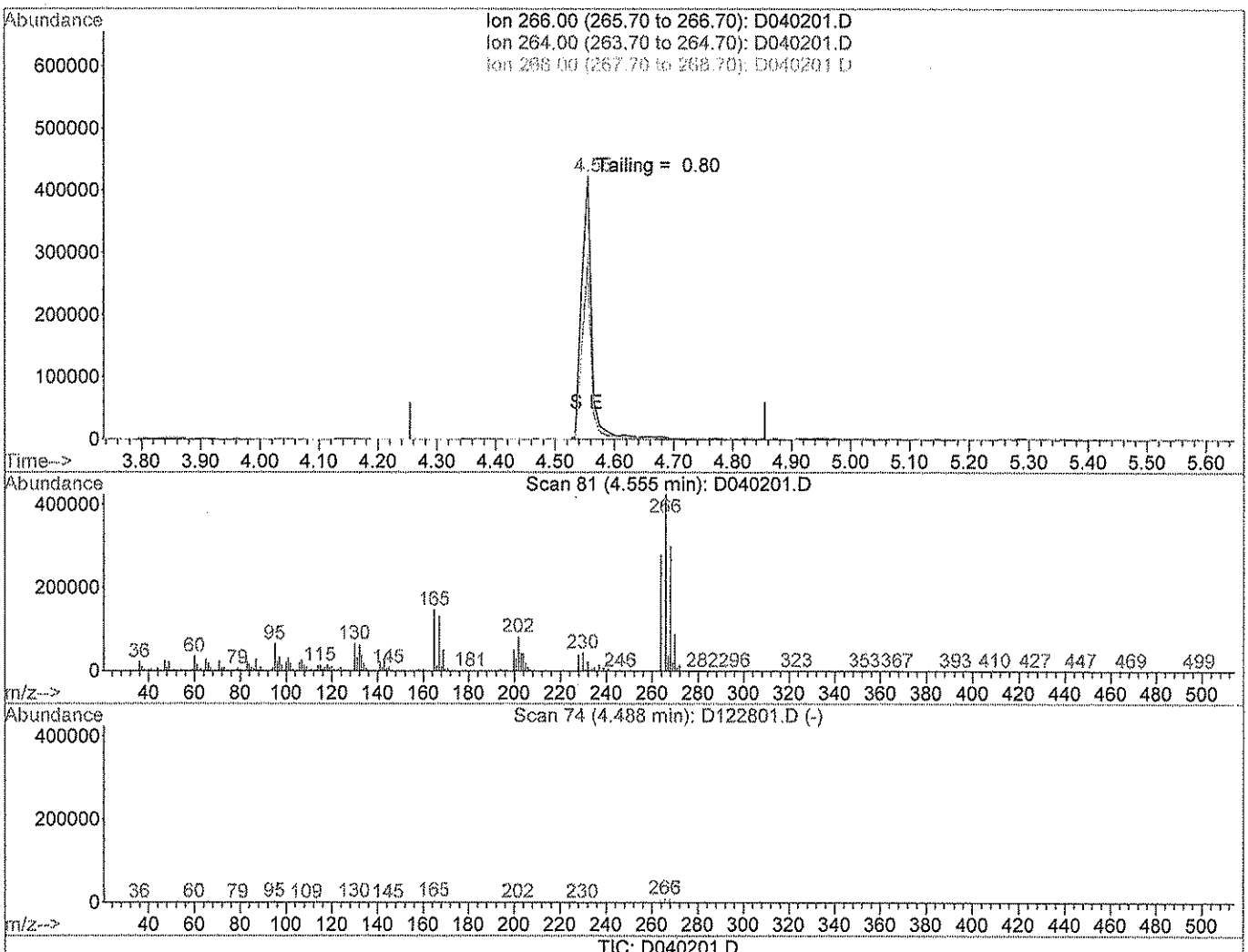

Peak Apex is scan: 120
Average of 3 scans: 119,120,121 minus background scan 115

| Target Mass | Comparison Mass | Lower Limit,% | Upper Limit,% | Relative Abundance,% | Result Pass/Fail |
|---|---|---|---|---|---|
| 51 | 198 | 30 | 60 | 54.2 | PASS |
| 68 | 69 | 0 | 2 | 0.5 | PASS |
| 69 | 198 | 0 | 100 | 78.2 | PASS |
| 70 | 69 | 0 | 2 | 0.3 | PASS |
| 127 | 198 | 40 | 60 | 50.1 | PASS |
| 197 | 198 | 0 | 1 | 0.1 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | PASS |
| 199 | 198 | 5 | 9 | 7.4 | PASS |
| 275 | 198 | 10 | 30 | 18.4 | PASS |
| 365 | 198 | 1 | 100 | 2.7 | PASS |
| 441 | 443 | >0 | 100 | 77.4 | PASS |
| 442 | 198 | 40 | 100 | 68.7 | PASS |
| 443 | 442 | 17 | 23 | 19.4 | PASS |

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040208\D040201.D Vial: 1
Acq On : 2 Apr 2008 3:55 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 17:03 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 02 16:03:03 2008
Response via : Single Level Calibration




TIC: D040201.D

(1) PENTACHLOROPHENOL

4.55min 50.00

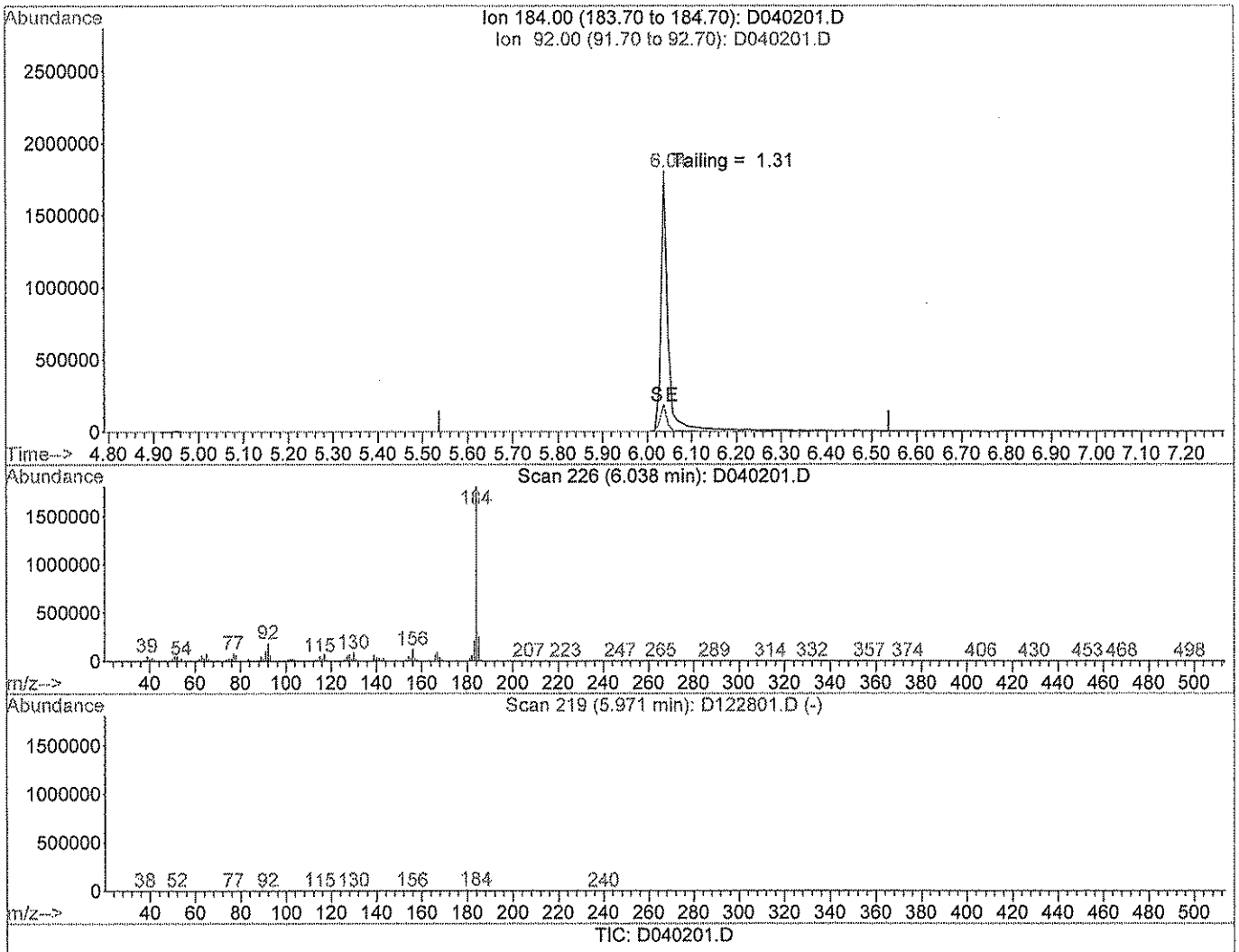
response 493439

| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 62.81 |
| 268.00 | 64.60 | 67.75 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040208\D040201.D Vial: 1
Acq On : 2 Apr 2008 3:55 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 17:03 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 02 16:03:03 2008
Response via : Single Level Calibration




TIC: D040201.D

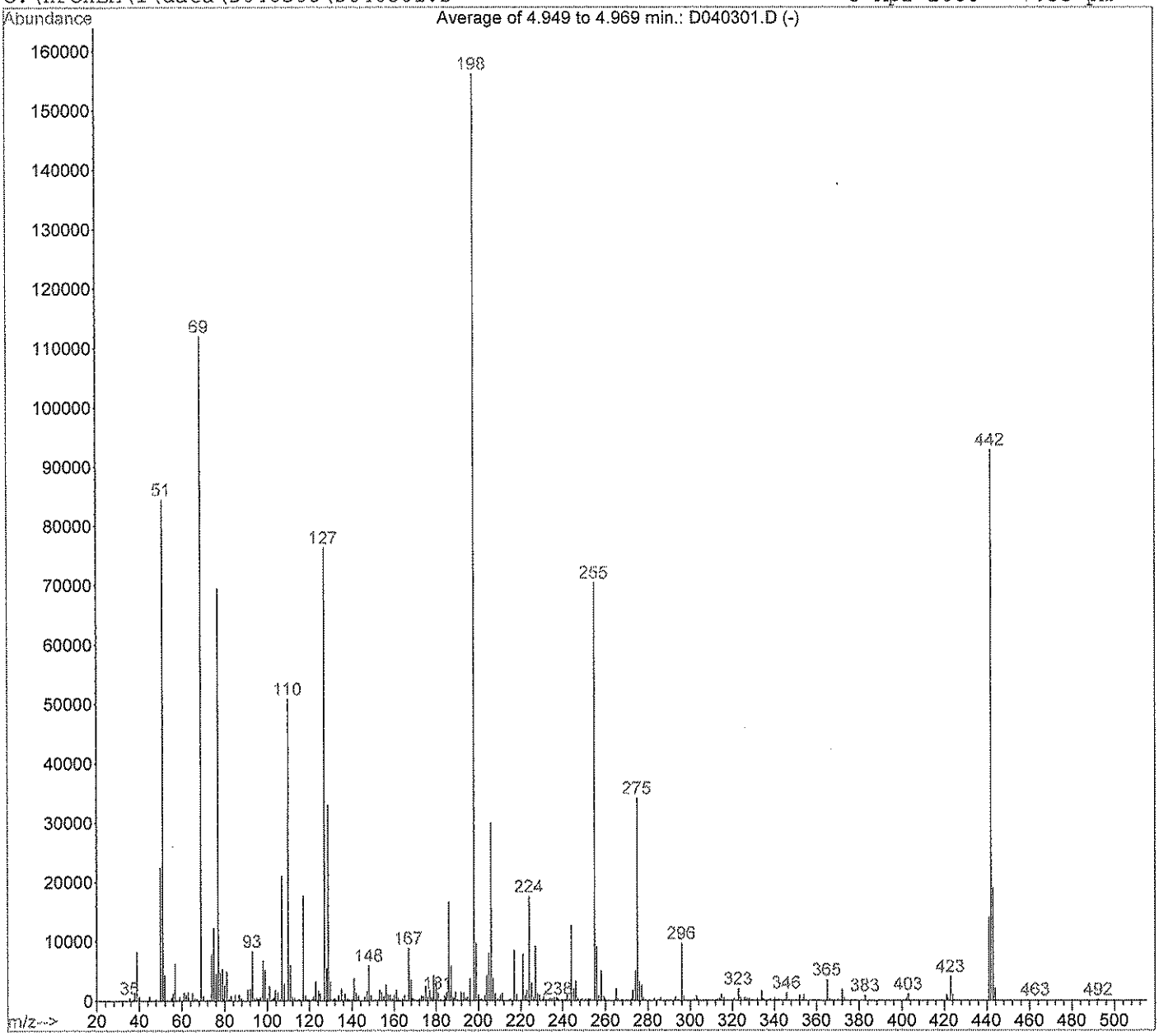
(3) BENZIDINE

6.04min 50.00

response 2030670

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100 | 100 |
| 92.00 | 12.20 | 10.50 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

C:\HPCHEM\1\data\D040308\D040301.D 3 Apr 2008 7:35 pm



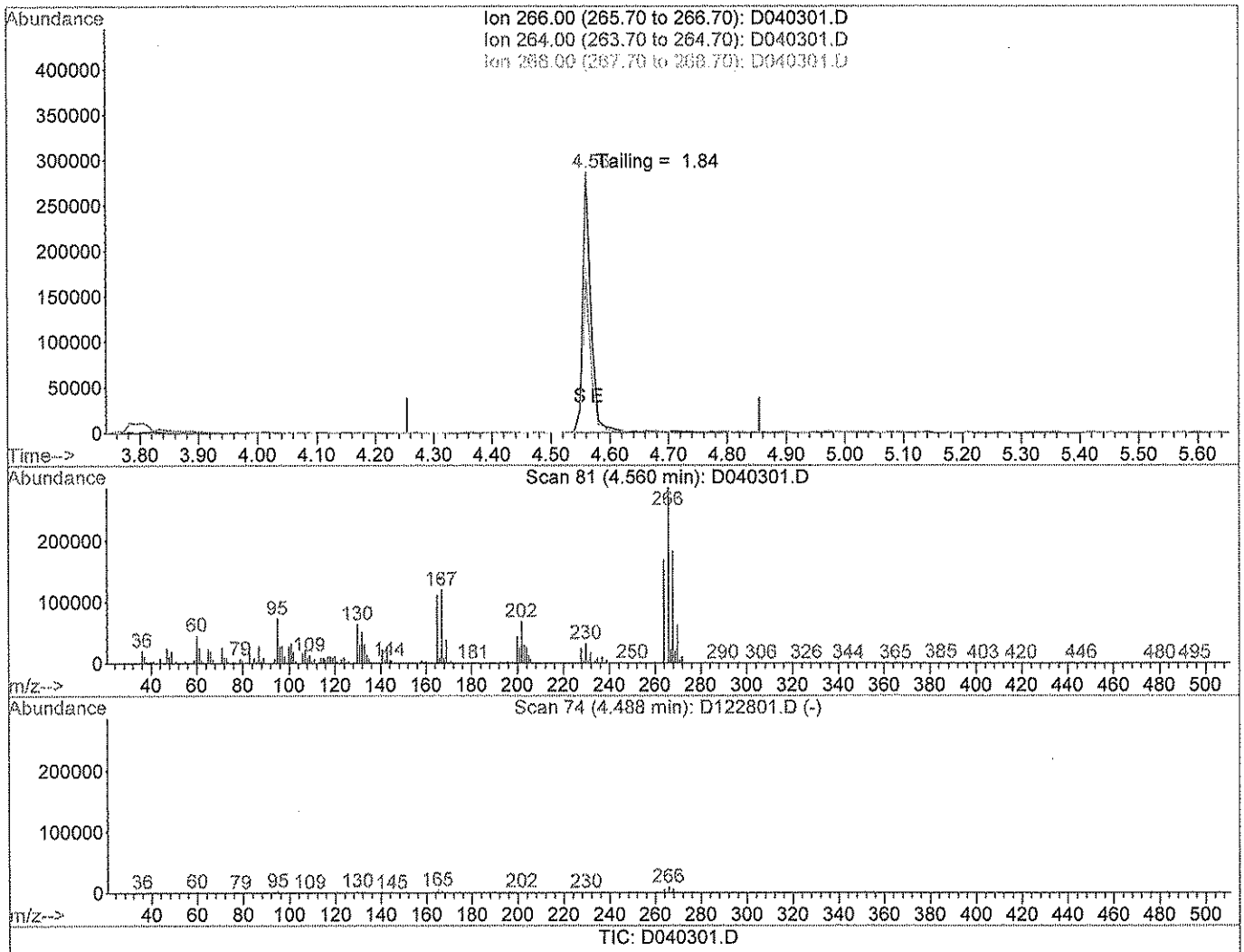

Peak Apex is scan: 120
Average of 3 scans: 119,120,121 minus background scan 113

| Target Mass | Comparison Mass | Lower Limit,% | Upper Limit,% | Relative Abundance,% | Result Pass/Fail |
|---|---|---|---|---|---|
| 51 | 198 | 30 | 60 | 54.1 | PASS |
| 68 | 69 | 0 | 2 | 0.1 | PASS |
| 69 | 198 | 0 | 100 | 71.7 | PASS |
| 70 | 69 | 0 | 2 | 0.7 | PASS |
| 127 | 198 | 40 | 60 | 48.9 | PASS |
| 197 | 198 | 0 | 1 | 0.0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | PASS |
| 199 | 198 | 5 | 9 | 6.3 | PASS |
| 275 | 198 | 10 | 30 | 21.8 | PASS |
| 365 | 198 | 1 | 100 | 2.2 | PASS |
| 441 | 443 | >0 | 100 | 74.0 | PASS |
| 442 | 198 | 40 | 100 | 59.5 | PASS |
| 443 | 442 | 17 | 23 | 20.4 | PASS |

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040308\D040301.D Vial: 1
Acq On : 3 Apr 2008 7:35 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 3 19:51 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Thu Apr 03 19:51:44 2008
Response via : Single Level Calibration




TIC: D040301.D

(1) PENTACHLOROPHENOL

4.56min 27.98

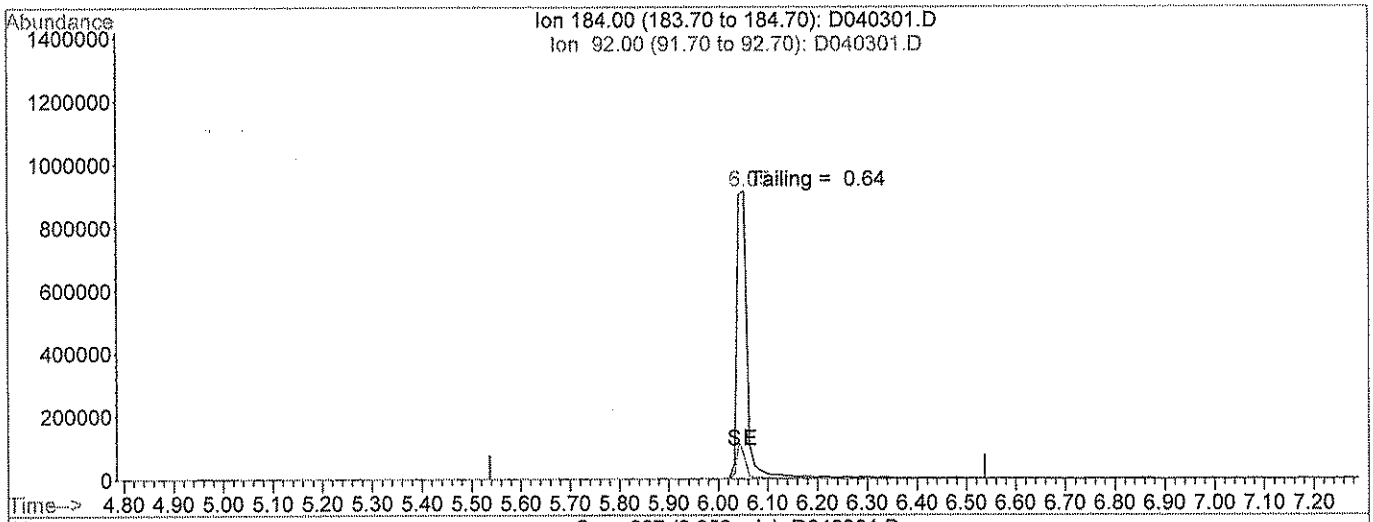
response 276148

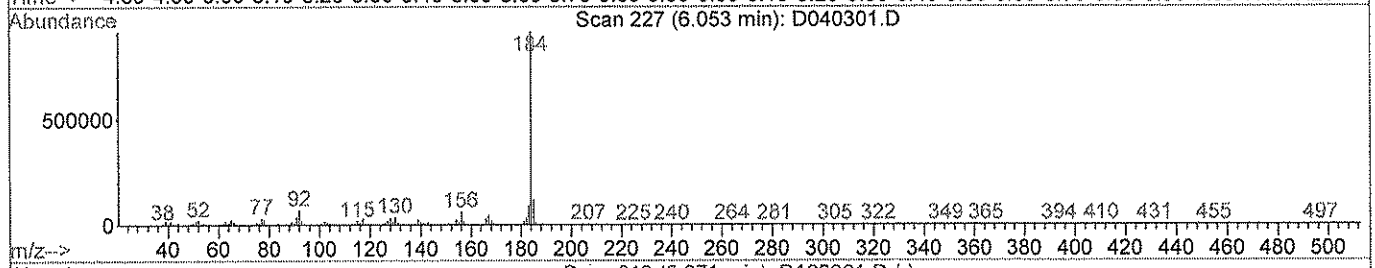
| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 59.04 |
| 268.00 | 64.60 | 64.13 |
| 0.00 | 0.00 | 0.00 |

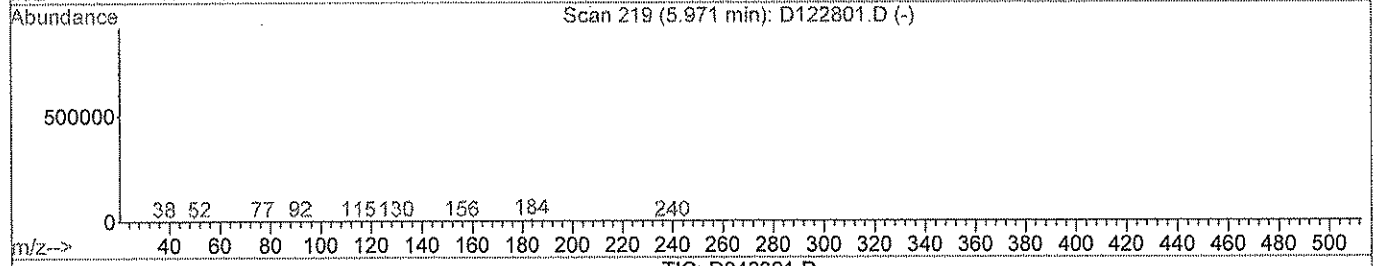
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040308\D040301.D Vial: 1
Acq On : 3 Apr 2008 7:35 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 3 19:51 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Thu Apr 03 19:51:44 2008
Response via : Single Level Calibration




TIC: D040301.D

(3) BENZIDINE

6.05min 32.60

response 1323935

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100 | 100 |
| 92.00 | 12.20 | 10.63 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# INITIAL CALIBRATION RAW DATA

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration

Avg =10%

Calibration Files
1.0 =D032802.D 5.0 =D032803.D 10 =D032804.D
20 =D032805.D 50 =D032806.D 80 =D032807.D

100 = D032808 120 = D032808

| | | Compound | 1.0 | 5.0 | 10 | 20 | 50 | 80 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | 1,4-Dichlorobenzene-d | ISTD | | | | | | | |
| 2) | | Pyridine | | | 1.426 | 1.521 | 1.450 | 1.318 | 1.414 | 4.90 |
| 3) | | n-Nitrosodimethylam | | | 0.941 | 0.810 | 0.936 | 0.889 | 0.894 | 5.28 |
| 4) | S | 2-Fluorophenol | | | 1.246 | 1.207 | 1.295 | 1.223 | 1.240 | 2.68 |
| 5) | S | Phenol-d5 | | | 1.566 | 1.550 | 1.684 | 1.663 | 1.640 | 3.92 |
| 6) | T,C | Phenol | | | 1.434 | 1.463 | 1.581 | 1.549 | 1.556 | 6.04 |
| 7) | | Aniline | | | 1.727 | 1.679 | 1.744 | 1.785 | 1.707 | 4.32 |
| 8) | T | bis(2-Chloroethyl)e | | | 1.239 | 1.158 | 1.341 | 1.157 | 1.298 | 11.53 |
| 9) | T | 2-Chlorophenol | | | 1.325 | 1.275 | 1.343 | 1.209 | 1.245 | 6.58 |
| 10) | T | 1,3-Dichlorobenzene | | | 1.533 | 1.510 | 1.467 | 1.325 | 1.399 | 8.56 |
| 11) | T,C | 1,4-Dichlorobenzene | | | 1.547 | 1.500 | 1.502 | 1.317 | 1.397 | 9.57 |
| 12) | T | 1,2-Dichlorobenzene | | | 1.479 | 1.455 | 1.431 | 1.251 | 1.318 | 11.89 |
| 13) | | Benzyl alcohol | | | 0.720 | 0.747 | 0.807 | 0.770 | 0.757 | 3.84 |
| 14) | T | bis(2-chloroisoprop | | | 2.567 | 2.451 | 2.564 | 2.436 | 2.495 | 2.36 |
| 15) | | 2-Methylphenol | | | 1.065 | 1.049 | 1.134 | 1.078 | 1.092 | 3.00 |
| 16) | T | Hexachloroethane | | | 0.775 | 0.735 | 0.767 | 0.702 | 0.723 | 5.93 |
| 17) | T,P | N-Nitrosodi-n-propy | | | 0.986 | 0.914 | 0.954 | 0.876 | 0.909 | 5.77 |
| 18) | | 3/4-Methylphenol | | | 1.067 | 1.060 | 1.144 | 1.116 | 1.102 | 2.97 |
| 19) | I | Naphthalene-d8 | ISTD | | | | | | | |
| 20) | S | Nitrobenzene-d5 | 0.429 | 0.532 | 0.513 | 0.496 | 0.498 | 0.470 | 0.481 | 7.21 |
| 21) | T | Nitrobenzene | | | 0.492 | 0.452 | 0.458 | 0.422 | 0.440 | 7.62 |
| 22) | | Acetophenone | | | 0.599 | 0.586 | 0.597 | 0.555 | 0.568 | 5.56 |
| 23) | T | Isophorone | | | 0.876 | 0.814 | 0.833 | 0.816 | 0.827 | 3.05 |
| 24) | T,C | 2-Nitrophenol | | | 0.237 | 0.238 | 0.244 | 0.239 | 0.242 | 1.78 |
| 25) | T | 2,4-Dimethylphenol | | | 0.401 | 0.391 | 0.427 | 0.417 | 0.408 | 3.04 |
| 26) | T | bis(2-Chloroethoxy) | | | 0.491 | 0.482 | 0.515 | 0.501 | 0.492 | 3.28 |
| 27) | T,C | 2,4-Dichlorophenol | | | 0.355 | 0.332 | 0.363 | 0.344 | 0.345 | 3.39 |
| 28) | | Benzoic acid | | | 0.139 | 0.178 | 0.224 | 0.233 | 0.203 | 18.41 |
| 29) | T | 1,2,4-Trichlorobenz | | | 0.384 | 0.372 | 0.374 | 0.345 | 0.355 | 7.16 |
| 30) | T | Naphthalene | 0.942 | 1.019 | 1.032 | 0.953 | 0.965 | 0.892 | 0.937 | 7.59 |
| 31) | | 2,6-Dichlorophenol | | | 0.336 | 0.333 | 0.340 | 0.293 | 0.313 | 8.32 |
| 32) | | 4-Chloroaniline | | | 0.437 | 0.422 | 0.419 | 0.383 | 0.404 | 6.87 |
| 33) | T,C | Hexachlorobutadiene | | | 0.256 | 0.237 | 0.229 | 0.204 | 0.217 | 13.18 |
| 34) | T,C | 4-Chloro-3-methylph | | | 0.336 | 0.322 | 0.339 | 0.342 | 0.333 | 2.67 |
| 35) | | 2-Methylnaphthalene | | | 0.688 | 0.619 | 0.625 | 0.580 | 0.599 | 9.47 |
| 36) | I | Acenaphthene-d10 | ISTD | | | | | | | |
| 37) | P | Hexachlorocyclopent | | | 0.392 | 0.387 | 0.291 | 0.261 | 0.316 | 18.50 |
| 38) | | 2,4,5-Trichlorophen | | | 0.417 | 0.485 | 0.510 | 0.469 | 0.457 | 8.00 |
| 39) | T,C | 2,4,6-Trichlorophen | | | 0.456 | 0.431 | 0.461 | 0.444 | 0.455 | 3.65 |
| 40) | S | 2-Fluorobiphenyl | 1.175 | 1.392 | 1.406 | 1.348 | 1.328 | 1.162 | 1.254 | 10.18 |
| 41) | T | 2-Chloronaphthalene | | | 1.548 | 1.634 | 1.643 | 1.566 | 1.520 | 9.21 |
| 42) | | 2-Nitroaniline | | | 0.483 | 0.502 | 0.532 | 0.501 | 0.504 | 3.55 |
| 43) | T | Acenaphthylene | 1.658 | 2.042 | 1.940 | 1.889 | 1.893 | 1.650 | 1.791 | 9.33 |
| 44) | T | Dimethyl phthalate | | | 1.556 | 1.546 | 1.550 | 1.480 | 1.512 | 2.80 |
| 45) | T | 2,6-Dinitrotoluene | | | 0.324 | 0.357 | 0.391 | 0.358 | 0.359 | 6.52 |
| 46) | | 3-Nitroaniline | | | 0.401 | 0.378 | 0.401 | 0.389 | 0.392 | 2.19 |
| 47) | T,C | Acenaphthene | 0.998 | 1.173 | 1.160 | 1.103 | 1.088 | 0.939 | 1.036 | 10.50 |
| 48) | T,P | 2,4-Dinitrophenol | | | 0.156 | 0.174 | 0.230 | 0.238 | 0.219 | 20.05 |
| 49) | | Dibenzofuran | | | 1.680 | 1.606 | 1.497 | 1.319 | 1.457 | 11.04 |
| 50) | T,P | 4-Nitrophenol | | | 0.237 | 0.293 | 0.324 | 0.295 | 0.278 | 11.43 |

A10 b/l/w

D032808

(#) = Out of Range ### Number of calibration levels exceeded format ###

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration

Calibration Files
1.0 =D032802.D 5.0 =D032803.D 10 =D032804.D
20 =D032805.D 50 =D032806.D 80 =D032807.D

| | | Compound | 1.0 | 5.0 | 10 | 20 | 50 | 80 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 51) | T | 2,4-Dinitrotoluene | | | 0.439 | 0.459 | 0.436 | 0.416 | 0.433 | 4.02 |
| 52) | T | Fluorene | 1.121 | 1.152 | 1.241 | 1.151 | 1.047 | 0.845 | 1.014 | 18.38 |
| 53) | T | 4-Chlorophenyl phen | | | 0.571 | 0.560 | 0.530 | 0.435 | 0.474 | 19.17 |
| 54) | T | Diethyl phthalate | | | 1.772 | 1.645 | 1.559 | 1.474 | 1.544 | 9.41 |
| 55) | | 4-Nitroaniline | | | 0.397 | 0.381 | 0.375 | 0.383 | 0.380 | 2.67 |
| 56) | I | Phenanthrene-d10 | ---------- | | ISTD | ---------- | | | | |
| 57) | T | 4,6-Dinitro-2-methy | | | 0.176 | 0.183 | 0.210 | 0.217 | 0.202 | 8.99 |
| 58) | C | n-Nitrosodiphenylam | | | 1.105 | 1.175 | 1.173 | 1.015 | 1.047 | 11.83 |
| 59) | | 1,2-diphenyl-Hydraz | | | 1.155 | 1.145 | 1.172 | 1.018 | 1.065 | 9.82 |
| 60) | S | 2,4,6-Tribromopheno | | | 0.228 | 0.249 | 0.248 | 0.219 | 0.225 | 9.50 |
| 61) | T | 4-Bromophenyl pheny | | | 0.269 | 0.280 | 0.269 | 0.237 | 0.246 | 12.79 |
| 62) | T | Hexachlorobenzene | | | 0.364 | 0.372 | 0.365 | 0.309 | 0.328 | 13.54 |
| 63) | T,C | Pentachlorophenol | | | 0.207 | 0.214 | 0.211 | 0.180 | 0.187 | 14.77 |
| 64) | T | Phenanthrene | 1.113 | 1.227 | 1.223 | 1.202 | 1.295 | 1.130 | 1.147 | 9.74 |
| 65) | T | Anthracene | 1.140 | 1.286 | 1.239 | 1.209 | 1.331 | 1.194 | 1.177 | 10.18 |
| 66) | | Carbazole | | | 1.131 | 1.248 | 1.867 | 1.705 | 1.339 | 26.79 |
| 67) | T | Di-n-butyl phthalat | | | 2.104 | 2.107 | 2.035 | 1.785 | 1.851 | 14.68 |
| 68) | T,C | Fluoranthene | 0.919 | 1.243 | 1.215 | 1.243 | 1.246 | 1.143 | 1.115 | 13.04 |
| 69) | I | Chrysene-d12 | ---------- | | ISTD | ---------- | | | | |
| 70) | | Benzidine | | | 0.485 | 0.471 | 0.314 | 0.357 | 0.420 | 16.74 |
| 71) | T | Pyrene | 1.196 | 1.551 | 1.577 | 1.441 | 1.566 | 1.454 | 1.449 | 9.04 |
| 72) | S | Terphenyl-d14 | 0.788 | 0.950 | 0.999 | 0.944 | 0.911 | 0.835 | 0.875 | 10.28 |
| 73) | T | Butyl benzyl phthal | | | 1.173 | 1.087 | 1.137 | 1.017 | 1.048 | 9.74 |
| 74) | T | Benzo[a]anthracene | 0.998 | 1.173 | 1.180 | 1.163 | 1.128 | 1.157 | 1.113 | 6.62 |
| 75) | T | 3,3'-Dichlorobenzid | | | 0.449 | 0.476 | 0.482 | 0.409 | 0.411 | 17.97 |
| 76) | T | Chrysene | 1.135 | 1.165 | 1.228 | 1.066 | 1.067 | 1.050 | 1.076 | 9.20 |
| 77) | T | bis(2-Ethylhexyl)ph | | | 1.566 | 1.465 | 1.397 | 1.069 | 1.209 | 25.27 |
| 78) | I | Perylene-d12 | ---------- | | ISTD | ---------- | | | | |
| 79) | T,C | Di-n-octyl phthalat | | | 2.972 | 3.012 | 2.906 | 2.985 | 3.107 | 7.58 |
| 80) | T | Benzo[b]fluoranthen | 1.535 | 1.889 | 1.556 | 1.924 | 1.752 | 1.353 | 1.662 | 11.62 |
| 81) | T | Benzo[k]fluoranthen | 1.413 | 1.844 | 1.251 | 0.825 | 0.716 | 1.082 | 1.120 | 33.48 |
| 82) | T,C | Benzo[a]pyrene | 1.227 | 1.815 | 1.426 | 1.318 | 1.211 | 1.129 | 1.305 | 17.51 |
| 83) | T | Indeno[1,2,3cd]pyre | 0.954 | 1.264 | 1.061 | 1.032 | 0.954 | 0.782 | 0.943 | 19.05 |
| 84) | T | Dibenz[a,h]anthrace | 0.640 | 0.910 | 0.454 | 0.492 | 0.479 | 0.402 | 0.523 | 33.40 |
| 85) | T | Benzo[g,h,i]perylen | 0.867 | 1.074 | 0.856 | 0.879 | 0.799 | 0.621 | 0.783 | 22.28 |

3/28/08

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032808\D032802.D Vial: 2
Acq On : 28 Mar 2008 4:44 pm Operator: mills
Sample : ,ical,pna ical 1.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:05 2008 Quant Results File: SVOA0328.RES

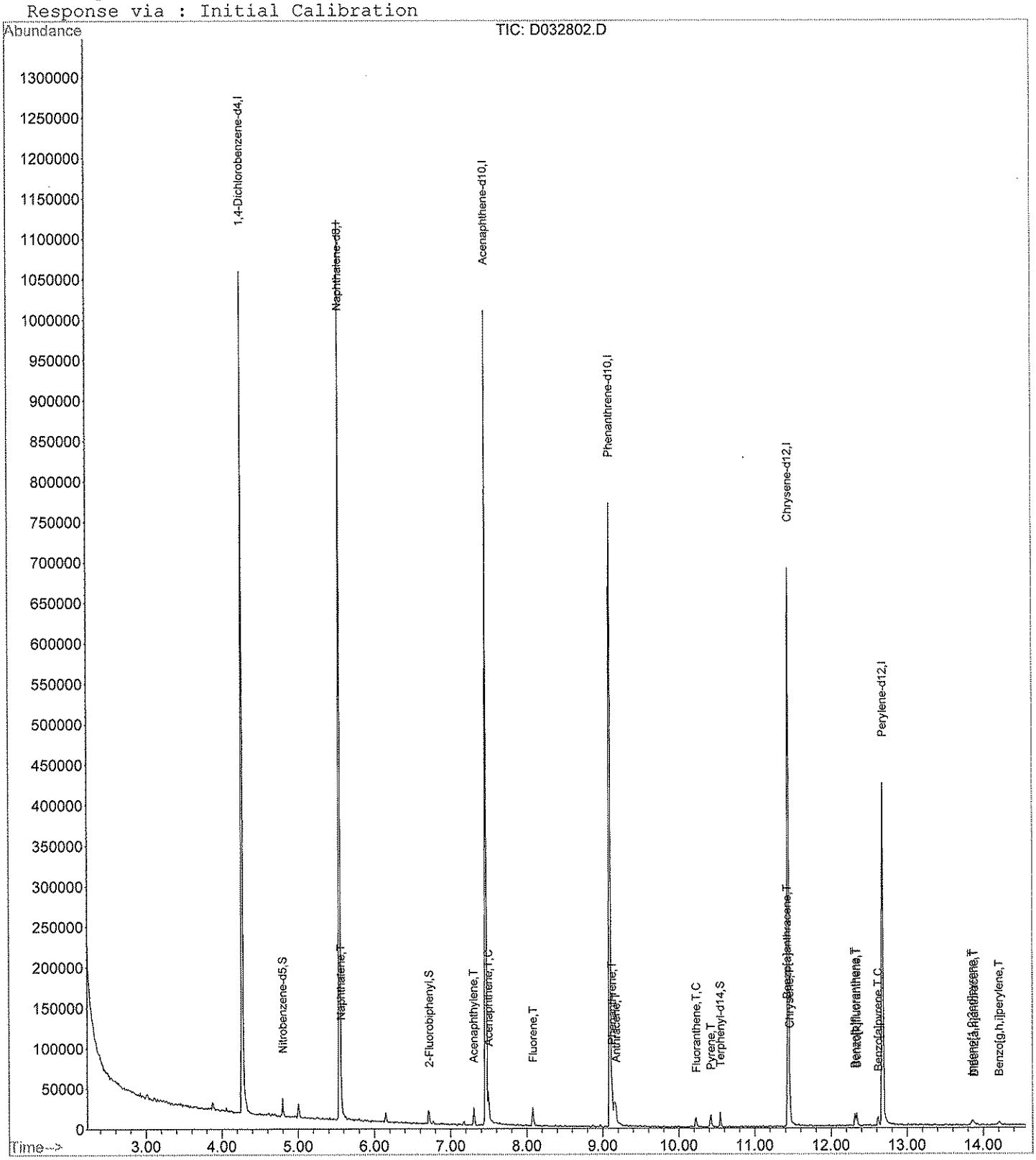
Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:03:39 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 175134 | 40.00 | ug/ml | -0.01 |
| 19) Naphthalene-d8 | 5.54 | 136 | 524133 | 40.00 | ug/ml | -0.01 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 252469 | 40.00 | ug/ml | -0.01 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 328748 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 291217 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 191401 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 0.00 | 112 | 0 | 0.00 | ug/ml | |
| 5) Phenol-d5 | 0.00 | 99 | 0 | 0.00 | ug/ml | |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 5623 | 0.89 | ug/ml | -0.01 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 7414 | 0.94 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 0.00 | 330 | 0 | 0.00 | ug/ml | |
| 72) Terphenyl-d14 | 10.55 | 244 | 5737 | 0.90 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 30) Naphthalene | 5.57 | 128 | 12338 | 1.02 | ug/ml | 99 |
| 43) Acenaphthylene | 7.30 | 152 | 10465 | 0.94 | ug/ml | 97 |
| 47) Acenaphthene | 7.50 | 153 | 6301 | 0.98 | ug/ml | 97 |
| 52) Fluorene | 8.08 | 166 | 7073 | 1.15 | ug/ml | 86 |
| 64) Phenanthrene | 9.12 | 178 | 9150 | 0.98 | ug/ml | 90 |
| 65) Anthracene | 9.18 | 178 | 9373 | 0.98 | ug/ml | 97 |
| 68) Fluoranthene | 10.23 | 202 | 7555 | 0.82 | ug/ml# | 86 |
| 71) Pyrene | 10.42 | 202 | 8705 | 0.81 | ug/ml# | 77 |
| 74) Benzo[a]anthracene | 11.43 | 228 | 7269 | 0.89 | ug/ml | 96 |
| 76) Chrysene | 11.46 | 228 | 8266 | 1.08 | ug/ml | 93 |
| 80) Benzo[b]fluoranthene | 12.32 | 252 | 7344 | 0.93 | ug/ml | 94 |
| 81) Benzo[k]fluoranthene | 12.34 | 252 | 6759m | 1.49 | ug/ml | |
| 82) Benzo[a]pyrene | 12.62 | 252 | 5872 | 1.00 | ug/ml# | 91 |
| 83) Indeno[1,2,3cd]pyrene | 13.85 | 276 | 4567 | 1.04 | ug/ml# | 84 |
| 84) Dibenz[a,h]anthracene | 13.88 | 278 | 3061 | 1.43 | ug/ml | 86 |
| 85) Benzo[g,h,i]perylene | 14.21 | 276 | 4151 | 1.16 | ug/ml# | 80 |

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

Data File : C:\HPCHEM\1\DATA\D032808\D032802.D Vial: 2
Acq On : 28 Mar 2008 4:44 pm Operator: mills
Sample : ,ical,pna ical 1.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:05 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032803.D Vial: 3
Acq On : 28 Mar 2008 5:10 pm Operator: mills
Sample : ,ical,pna ical 5.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:10 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:06:04 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

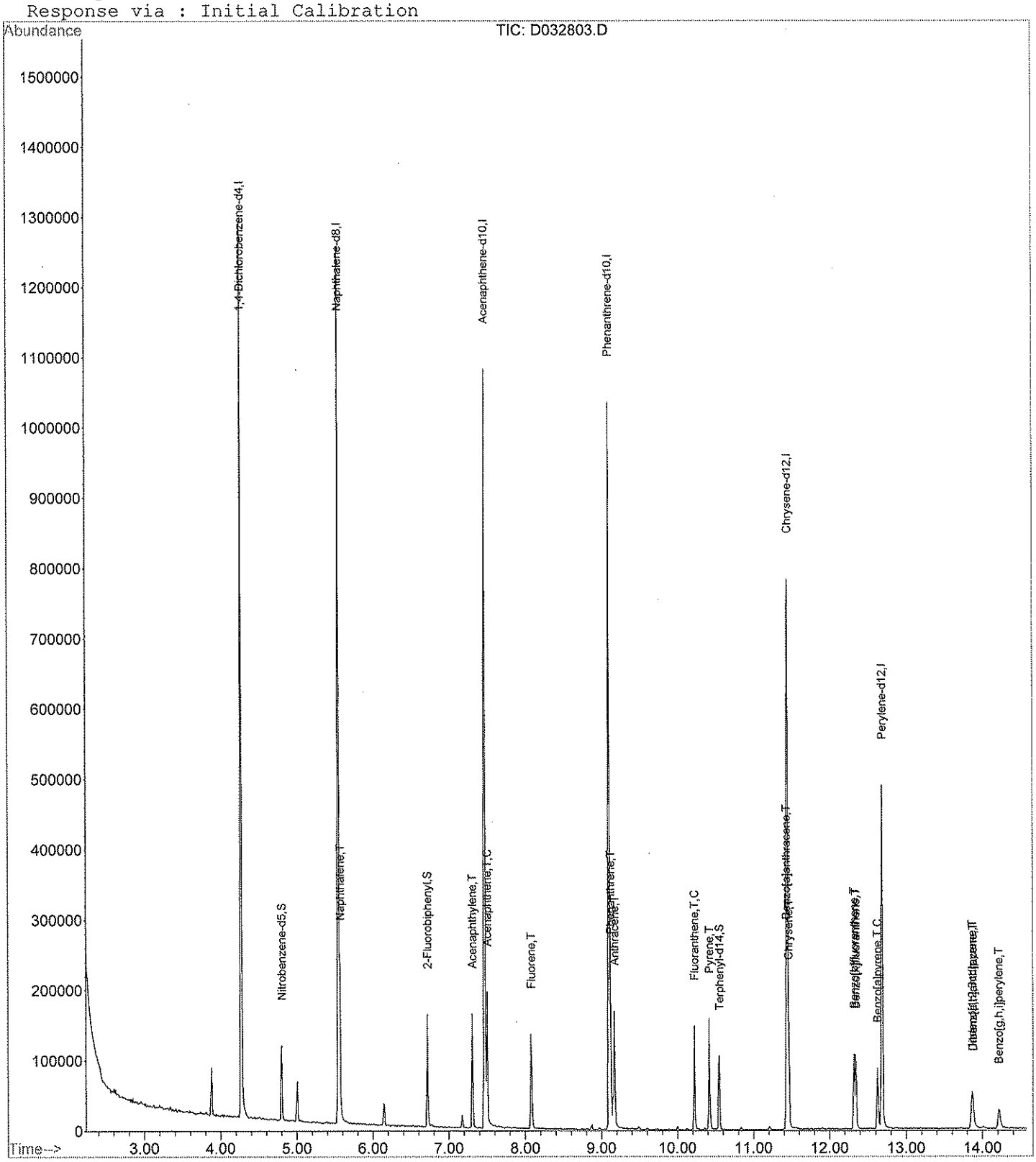
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 185657 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 573855 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 275992 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 382222 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 326457 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.69 | 264 | 203454 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 0.00 | 112 | 0 | 0.00 | ug/ml | |
| 5) Phenol-d5 | 0.00 | 99 | 0 | 0.00 | ug/ml | |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 38138 | 5.61 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 48025 | 5.64 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 0.00 | 330 | 0 | 0.00 | ug/ml | |
| 72) Terphenyl-d14 | 10.55 | 244 | 38773 | 5.50 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 30) Naphthalene | 5.57 | 128 | 73061 | 5.50 | ug/ml | 98 |
| 43) Acenaphthylene | 7.31 | 152 | 70434 | 5.82 | ug/ml | 99 |
| 47) Acenaphthene | 7.50 | 153 | 40466 | 5.77 | ug/ml | 96 |
| 52) Fluorene | 8.08 | 166 | 39736 | 5.79 | ug/ml | 93 |
| 64) Phenanthrene | 9.12 | 178 | 58610 | 5.40 | ug/ml | 98 |
| 65) Anthracene | 9.17 | 178 | 61434 | 5.54 | ug/ml | 98 |
| 68) Fluoranthene | 10.22 | 202 | 59370 | 5.66 | ug/ml | 91 |
| 71) Pyrene | 10.42 | 202 | 63297 | 5.41 | ug/ml | 89 |
| 74) Benzo[a]anthracene | 11.43 | 228 | 47874 | 5.31 | ug/ml | 99 |
| 76) Chrysene | 11.46 | 228 | 47530 | 5.48 | ug/ml | 96 |
| 80) Benzo[b]fluoranthene | 12.32 | 252 | 48036 | 5.80 | ug/ml | 95 |
| 81) Benzo[k]fluoranthene | 12.34 | 252 | 46904 | 9.07 | ug/ml | 96 |
| 82) Benzo[a]pyrene | 12.63 | 252 | 46163 | 7.37 | ug/ml | 97 |
| 83) Indeno[1,2,3cd]pyrene | 13.87 | 276 | 32152 | 6.85 | ug/ml | 91 |
| 84) Dibenz[a,h]anthracene | 13.88 | 278 | 23136m3 | 9.49 | ug/ml | |
| 85) Benzo[g,h,i]perylene | 14.21 | 276 | 27301 | 7.01 | ug/ml | 98 |

(#) = qualifier out of range (m) = manual integration
D032803.D SVOA0328.M Fri Mar 28 21:13:21 2008 SVOA 4 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D032708\D032803.D Vial: 3
Acq On : 28 Mar 2008 5:10 pm Operator: mills
Sample : ,ical,pna ical 5.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:10 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032804.D Vial: 4
Acq On : 28 Mar 2008 5:35 pm Operator: mills
Sample : ,ical,svoa ical 10ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:57 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:56:11 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 126914 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 379233 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 192057 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 260746 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 220183 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.70 | 264 | 187656 | 40.00 | ug/ml | 0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 39526 | 9.62 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 49698 | 9.30 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 48623 | 10.31 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 67523 | 10.59 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 14895 | 9.22 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 55011 | 10.97 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.39 | 79 | 45247 | 9.84 | ug/ml | 94 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 29871 | 10.06 | ug/ml | 95 |
| 6) Phenol | 3.90 | 94 | 45486 | 9.07 | ug/ml | 81 |
| 7) Aniline | 3.97 | 93 | 54788 | 9.90 | ug/ml | 98 |
| 8) bis(2-Chloroethyl)ether | 4.01 | 93 | 39321 | 9.24 | ug/ml | 99 |
| 9) 2-Chlorophenol | 4.07 | 128 | 42054 | 9.87 | ug/ml | 89 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 48645 | 10.45 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 49081 | 10.30 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 46919 | 10.34 | ug/ml | 97 |
| 13) Benzyl alcohol | 4.38 | 108 | 22841 | 8.93 | ug/ml | 86 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 81459 | 10.01 | ug/ml | 97 |
| 15) 2-Methylphenol | 4.47 | 108 | 33800 | 9.39 | ug/ml | 98 |
| 16) Hexachloroethane | 4.76 | 117 | 24583 | 10.10 | ug/ml | 82 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 31291 | 10.33 | ug/ml | 94 |
| 18) 3/4-Methylphenol | 4.62 | 108 | 33846 | 9.32 | ug/ml | 95 |
| 21) Nitrobenzene | 4.82 | 77 | 46629 | 10.75 | ug/ml | 90 |
| 22) Acetophenone | 4.65 | 105 | 56819 | 10.04 | ug/ml | 88 |
| 23) Isophorone | 5.07 | 82 | 83015 | 10.52 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.15 | 139 | 22481 | 9.73 | ug/ml | 97 |
| 25) 2,4-Dimethylphenol | 5.17 | 107 | 38009 | 9.40 | ug/ml | 97 |
| 26) bis(2-Chloroethoxy)methane | 5.28 | 93 | 46585 | 9.53 | ug/ml | 96 |
| 27) 2,4-Dichlorophenol | 5.38 | 162 | 33655 | 9.79 | ug/ml | 96 |
| 28) Benzoic acid | 5.23 | 122 | 13148m2 | 6.18 | ug/ml | |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 36452 | 10.28 | ug/ml | 95 |
| 30) Naphthalene | 5.57 | 128 | 97813 | 10.69 | ug/ml | 98 |
| 31) 2,6-Dichlorophenol | 5.63 | 162 | 31859 | 9.87 | ug/ml | 80 |
| 32) 4-Chloroaniline | 5.62 | 127 | 41410 | 10.42 | ug/ml | 98 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 24276 | 11.16 | ug/ml | 93 |
| 34) 4-Chloro-3-methylphenol | 6.13 | 107 | 31855 | 9.91 | ug/ml | 98 |
| 35) 2-Methylnaphthalene | 6.31 | 142 | 65239 | 11.01 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 18831 | 13.50 | ug/ml | 98 |
| 38) 2,4,5-Trichlorophenol | 6.65 | 196 | 20026 | 8.18 | ug/ml | 95 |
| 39) 2,4,6-Trichlorophenol | 6.62 | 196 | 21871 | 9.88 | ug/ml | 99 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 74341 | 9.43 | ug/ml | 99 |
| 42) 2-Nitroaniline | 6.96 | 65 | 23204 | 9.08 | ug/ml | 96 |

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

D032804.D SVOA0328.M Fri Mar 28 21:13:22 2008 SVOA 4 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032804.D Vial: 4
Acq On : 28 Mar 2008 5:35 pm Operator: mills
Sample : ,ical,svoa ical 10ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:57 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:56:11 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

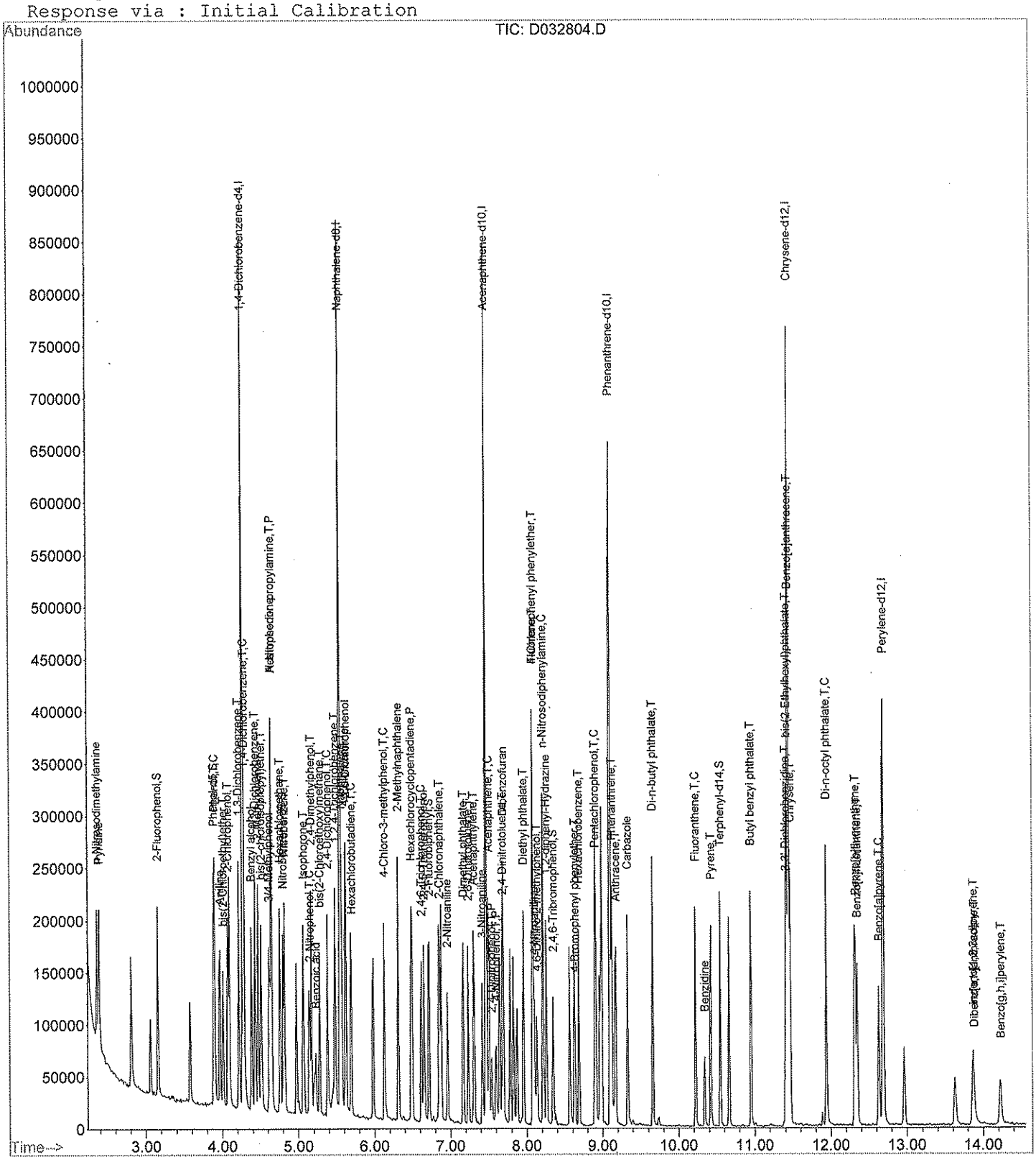
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.31 | 152 | 93152 | 10.25 | ug/ml | 98 |
| 44) | Dimethyl phthalate | 7.17 | 163 | 74688 | 10.04 | ug/ml | 98 |
| 45) | 2,6-Dinitrotoluene | 7.23 | 165 | 15560 | 8.28 | ug/ml# | 57 |
| 46) | 3-Nitroaniline | 7.42 | 138 | 19257 | 10.01 | ug/ml | 95 |
| 47) | Acenaphthene | 7.50 | 153 | 55688 | 10.66 | ug/ml | 97 |
| 48) | 2,4-Dinitrophenol | 7.54 | 184 | 7495 | 6.78 | ug/ml | 93 |
| 49) | Dibenzofuran | 7.69 | 168 | 80640 | 11.22 | ug/ml | 83 |
| 50) | 4-Nitrophenol | 7.60 | 109 | 11396 | 7.33 | ug/ml# | 77 |
| 51) | 2,4-Dinitrotoluene | 7.68 | 165 | 21075 | 10.07 | ug/ml | 81 |
| 52) | Fluorene | 8.08 | 166 | 59569 | 11.85 | ug/ml | 99 |
| 53) | 4-Chlorophenyl phenylether | 8.08 | 204 | 27395 | 10.76 | ug/ml | 88 |
| 54) | Diethyl phthalate | 7.96 | 149 | 85070 | 11.37 | ug/ml | 95 |
| 55) | 4-Nitroaniline | 8.10 | 138 | 19077 | 10.61 | ug/ml | 92 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.13 | 198 | 11445 | 8.36 | ug/ml | 95 |
| 58) | n-Nitrosodiphenylamine | 8.22 | 169 | 72054 | 9.42 | ug/ml | 94 |
| 59) | 1,2-diphenyl-Hydrazine | 8.26 | 77 | 75280 | 9.85 | ug/ml# | 87 |
| 61) | 4-Bromophenyl phenylether | 8.63 | 248 | 17520 | 9.99 | ug/ml | 99 |
| 62) | Hexachlorobenzene | 8.69 | 284 | 23729 | 9.99 | ug/ml# | 81 |
| 63) | Pentachlorophenol | 8.90 | 266 | 13499 | 9.83 | ug/ml | 99 |
| 64) | Phenanthrene | 9.13 | 178 | 79729 | 9.45 | ug/ml | 97 |
| 65) | Anthracene | 9.18 | 178 | 80736 | 9.30 | ug/ml | 100 |
| 66) | Carbazole | 9.33 | 167 | 73738 | 6.06 | ug/ml | 97 |
| 67) | Di-n-butyl phthalate | 9.66 | 149 | 137153 | 10.34 | ug/ml | 99 |
| 68) | Fluoranthene | 10.22 | 202 | 79183 | 9.75 | ug/ml | 93 |
| 70) | Benzidine | 10.34 | 184 | 26699 | 15.43 | ug/ml# | 96 |
| 71) | Pyrene | 10.42 | 202 | 86790m2 | 10.07 | ug/ml | |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 64548 | 10.31 | ug/ml# | 79 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 64976 | 10.46 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.41 | 252 | 24727 | 9.32 | ug/ml | 91 |
| 76) | Chrysene | 11.47 | 228 | 67595 | 11.51 | ug/ml | 97 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 86201 | 11.21 | ug/ml | 98 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 139416 | 10.23 | ug/ml | 100 |
| 80) | Benzo[b]fluoranthene | 12.33 | 252 | 72995 | 8.88 | ug/ml | 95 |
| 81) | Benzo[k]fluoranthene | 12.35 | 252 | 58668 | 17.47 | ug/ml | 97 |
| 82) | Benzo[a]pyrene | 12.63 | 252 | 66916 | 11.77 | ug/ml | 95 |
| 83) | Indeno[1,2,3cd]pyrene | 13.87 | 276 | 49791 | 11.12 | ug/ml | 91 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 21317 | 9.48 | ug/ml | 98 |
| 85) | Benzo[g,h,i]perylene | 14.23 | 276 | 40178 | 10.72 | ug/ml | 92 |

3-28-08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032804.D Vial: 4
Acq On : 28 Mar 2008 5:35 pm Operator: mills
Sample : ,ical,svoa ical 10ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:57 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032805.D Vial: 5
Acq On : 28 Mar 2008 6:02 pm Operator: mills
Sample : ,ical,svoa ical 20ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:58 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:57:31 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 126599 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 389056 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 187609 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 239823 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 205821 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.69 | 264 | 165565 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 76421 | 19.01 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 98122 | 19.08 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 96434 | 19.63 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 126492 | 19.72 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 29909 | 20.94 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 97172 | 19.77 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.38 | 79 | 96263 | 21.15 | ug/ml | 99 |
| 3) n-Nitrosodimethylamine | 2.36 | 74 | 51277 | 17.26 | ug/ml | 91 |
| 6) Phenol | 3.90 | 94 | 92613 | 19.41 | ug/ml | 88 |
| 7) Aniline | 3.96 | 93 | 106258 | 19.35 | ug/ml | 90 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 73313 | 17.96 | ug/ml | 97 |
| 9) 2-Chlorophenol | 4.08 | 128 | 80724 | 19.12 | ug/ml | 88 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 95585 | 20.13 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 94951 | 19.68 | ug/ml | 97 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 92119 | 20.01 | ug/ml | 97 |
| 13) Benzyl alcohol | 4.38 | 108 | 47282 | 19.57 | ug/ml | 84 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 155158 | 19.11 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.48 | 108 | 66391 | 19.08 | ug/ml | 96 |
| 16) Hexachloroethane | 4.76 | 117 | 46519 | 19.06 | ug/ml | 96 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 57880 | 18.85 | ug/ml | 94 |
| 18) 3/4-Methylphenol | 4.63 | 108 | 67089 | 19.17 | ug/ml | 98 |
| 21) Nitrobenzene | 4.82 | 77 | 87882 | 19.03 | ug/ml | 94 |
| 22) Acetophenone | 4.65 | 105 | 113948 | 19.58 | ug/ml | 94 |
| 23) Isophorone | 5.07 | 82 | 158400 | 19.07 | ug/ml | 99 |
| 24) 2-Nitrophenol | 5.14 | 139 | 46362 | 19.83 | ug/ml | 84 |
| 25) 2,4-Dimethylphenol | 5.17 | 107 | 76130 | 18.92 | ug/ml | 99 |
| 26) bis(2-Chloroethoxy)methane | 5.28 | 93 | 93780 | 19.16 | ug/ml | 98 |
| 27) 2,4-Dichlorophenol | 5.39 | 162 | 64644 | 18.52 | ug/ml | 94 |
| 28) Benzoic acid | 5.25 | 122 | 34536 | 19.56 | ug/ml | 92 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 72413 | 19.63 | ug/ml | 99 |
| 30) Naphthalene | 5.57 | 128 | 185369 | 19.09 | ug/ml | 100 |
| 31) 2,6-Dichlorophenol | 5.63 | 162 | 64794 | 19.70 | ug/ml | 90 |
| 32) 4-Chloroaniline | 5.62 | 127 | 82163 | 19.74 | ug/ml | 100 |
| 33) Hexachlorobutadiene | 5.69 | 225 | 46072 | 19.51 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.13 | 107 | 62708 | 19.10 | ug/ml | 97 |
| 35) 2-Methylnaphthalene | 6.32 | 142 | 120346 | 18.84 | ug/ml | 100 |
| 37) Hexachlorocyclopentadiene | 6.48 | 237 | 36335 | 22.69 | ug/ml | 95 |
| 38) 2,4,5-Trichlorophenol | 6.65 | 196 | 45469 | 20.92 | ug/ml | 95 |
| 39) 2,4,6-Trichlorophenol | 6.62 | 196 | 40439 | 18.82 | ug/ml | 95 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 153232 | 20.48 | ug/ml | 96 |
| 42) 2-Nitroaniline | 6.96 | 65 | 47115 | 19.79 | ug/ml | 93 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032805.D Vial: 5
Acq On : 28 Mar 2008 6:02 pm Operator: mills
Sample : ,ical,svoa ical 20ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:58 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:57:31 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

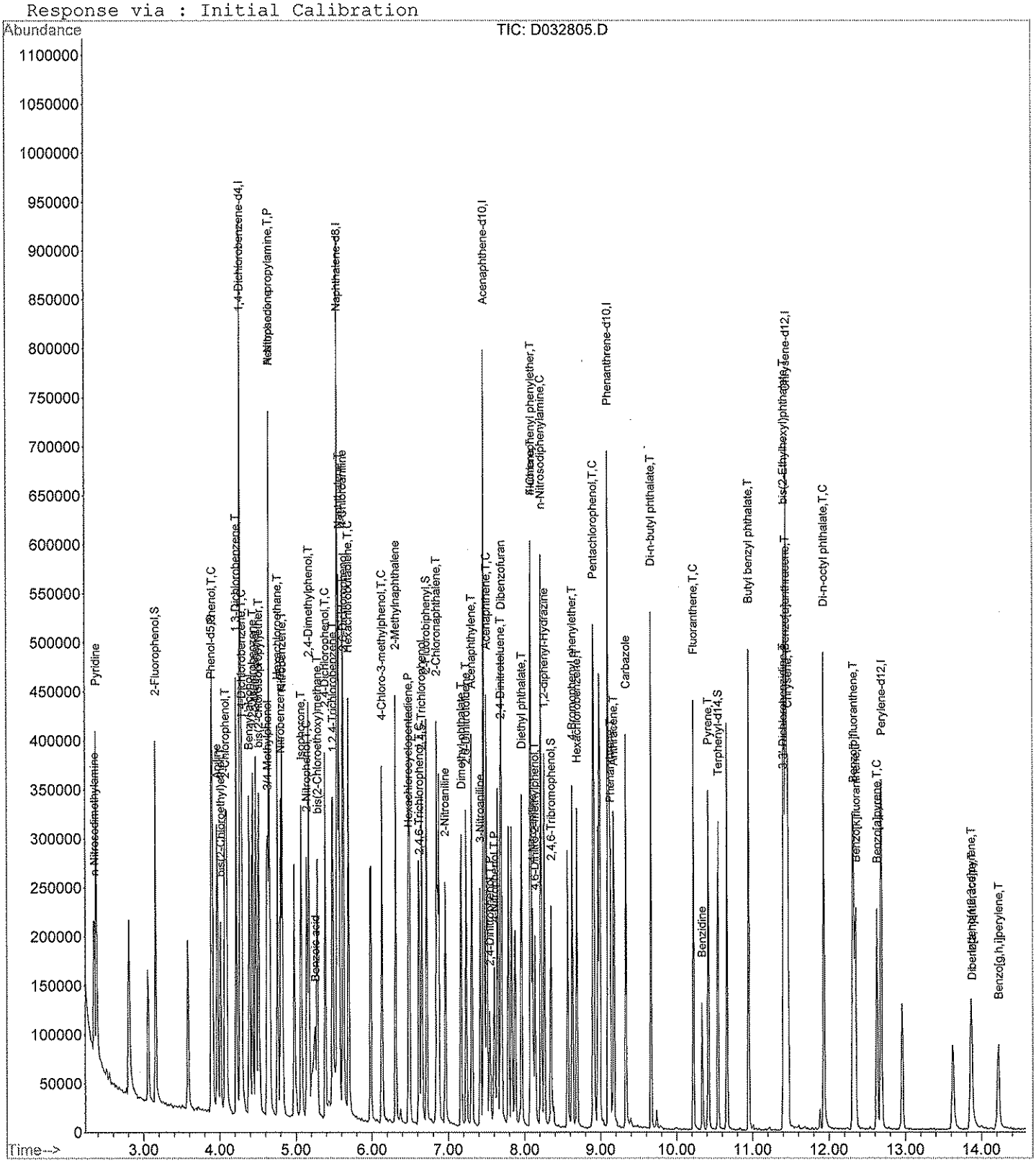
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.31 | 152 | 177182 | 19.71 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.18 | 163 | 144998 | 19.91 | ug/ml | 98 |
| 45) | 2,6-Dinitrotoluene | 7.24 | 165 | 33451 | 19.94 | ug/ml# | 68 |
| 46) | 3-Nitroaniline | 7.42 | 138 | 35458 | 18.86 | ug/ml | 95 |
| 47) | Acenaphthene | 7.50 | 153 | 103498 | 19.63 | ug/ml | 97 |
| 48) | 2,4-Dinitrophenol | 7.54 | 184 | 16344 | 18.04 | ug/ml | 86 |
| 49) | Dibenzofuran | 7.70 | 168 | 150685 | 20.23 | ug/ml | 87 |
| 50) | 4-Nitrophenol | 7.61 | 109 | 27469 | 20.87 | ug/ml | 84 |
| 51) | 2,4-Dinitrotoluene | 7.69 | 165 | 43069 | 21.00 | ug/ml | 89 |
| 52) | Fluorene | 8.09 | 166 | 108006 | 20.13 | ug/ml | 94 |
| 53) | 4-Chlorophenyl phenylether | 8.09 | 204 | 52523 | 20.34 | ug/ml | 95 |
| 54) | Diethyl phthalate | 7.96 | 149 | 154267 | 19.75 | ug/ml | 97 |
| 55) | 4-Nitroaniline | 8.11 | 138 | 35780 | 19.77 | ug/ml | 91 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.14 | 198 | 21918 | 18.96 | ug/ml | 84 |
| 58) | n-Nitrosodiphenylamine | 8.22 | 169 | 140912 | 20.63 | ug/ml | 98 |
| 59) | 1,2-diphenyl-Hydrazine | 8.26 | 77 | 137350 | 19.69 | ug/ml | 92 |
| 61) | 4-Bromophenyl phenylether | 8.63 | 248 | 33619 | 20.85 | ug/ml# | 78 |
| 62) | Hexachlorobenzene | 8.69 | 284 | 44647 | 20.44 | ug/ml# | 83 |
| 63) | Pentachlorophenol | 8.90 | 266 | 25674 | 20.50 | ug/ml | 95 |
| 64) | Phenanthrene | 9.13 | 178 | 144185 | 19.10 | ug/ml | 98 |
| 65) | Anthracene | 9.17 | 178 | 144993 | 18.82 | ug/ml | 98 |
| 66) | Carbazole | 9.33 | 167 | 149693 | 16.65 | ug/ml | 99 |
| 67) | Di-n-butyl phthalate | 9.66 | 149 | 252703 | 20.36 | ug/ml | 99 |
| 68) | Fluoranthene | 10.22 | 202 | 149033 | 20.21 | ug/ml | 88 |
| 70) | Benzidine | 10.34 | 184 | 48518 | 23.59 | ug/ml | 99 |
| 71) | Pyrene | 10.42 | 202 | 148335 | 18.34 | ug/ml | 97 |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 111862 | 18.83 | ug/ml | 89 |
| 74) | Benzo[a]anthracene | 11.43 | 228 | 119692 | 20.15 | ug/ml | 98 |
| 75) | 3,3'-Dichlorobenzidine | 11.40 | 252 | 48974 | 20.45 | ug/ml | 97 |
| 76) | Chrysene | 11.46 | 228 | 109753 | 18.59 | ug/ml | 96 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 150803 | 19.78 | ug/ml | 97 |
| 79) | Di-n-octyl phthalate | 11.93 | 149 | 249371 | 20.50 | ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.32 | 252 | 159283 | 23.27 | ug/ml | 97 |
| 81) | Benzo[k]fluoranthene | 12.35 | 252 | 68304m2 | 16.79 | ug/ml | |
| 82) | Benzo[a]pyrene | 12.63 | 252 | 109126 | 19.99 | ug/ml | 97 |
| 83) | Indeno[1,2,3cd]pyrene | 13.87 | 276 | 85406 | 20.47 | ug/ml | 96 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 40745 | 21.09 | ug/ml | 93 |
| 85) | Benzo[g,h,i]perylene | 14.22 | 276 | 72770 | 21.24 | ug/ml | 96 |

4/3-2008

(#) = qualifier out of range (m) = manual integration
D032805.D SVOA0328.M Fri Mar 28 21:13:25 2008 SVOA 4 Page 2

Data File : C:\HPCHEM\1\DATA\D032708\D032805.D Vial: 5
Acq On : 28 Mar 2008 6:02 pm Operator: mills
Sample : ,ical,svoa ical 20ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:58 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032806.D Vial: 6
Acq On : 28 Mar 2008 6:27 pm Operator: mills
Sample : ,ical,svoa ical 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:55 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:55:01 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 116985 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 367424 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 184189 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 228920 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 181640 | 40.00 | ug/ml | -0.03 |
| 78) Perylene-d12 | 12.68 | 264 | 158702 | 40.00 | ug/ml | -0.03 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 189346 | 48.52 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 246214 | 49.63 | ug/ml | -0.02 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 228496 | 46.85 | ug/ml | -0.02 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 305829 | 52.04 | ug/ml | -0.02 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 70938 | 52.16 | ug/ml | -0.02 |
| 72) Terphenyl-d14 | 10.55 | 244 | 206795 | 40.66 | ug/ml | -0.02 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.37 | 79 | 211984 | 44.02 | ug/ml | 94 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 136901 | 45.94 | ug/ml | 94 |
| 6) Phenol | 3.91 | 94 | 231175 | 48.27 | ug/ml | 90 |
| 7) Aniline | 3.97 | 93 | 255023 | 46.29 | ug/ml | 96 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 196073 | 49.27 | ug/ml | 95 |
| 9) 2-Chlorophenol | 4.08 | 128 | 196361 | 50.57 | ug/ml | 89 |
| 10) 1,3-Dichlorobenzene | 4.23 | 146 | 214571 | 50.87 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 219700 | 52.71 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 209206 | 51.47 | ug/ml | 96 |
| 13) Benzyl alcohol | 4.40 | 108 | 117940 | 49.36 | ug/ml | 98 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 374889 | 44.59 | ug/ml | 100 |
| 15) 2-Methylphenol | 4.48 | 108 | 165817 | 49.80 | ug/ml | 99 |
| 16) Hexachloroethane | 4.77 | 117 | 112199 | 51.42 | ug/ml | 88 |
| 17) N-Nitrosodi-n-propylamine | 4.67 | 70 | 139543 | 50.28 | ug/ml | 97 |
| 18) 3/4-Methylphenol | 4.63 | 108 | 167358 | 49.40 | ug/ml | 99 |
| 21) Nitrobenzene | 4.83 | 77 | 210223 | 49.16 | ug/ml | 92 |
| 22) Acetophenone | 4.66 | 105 | 274287 | 53.20 | ug/ml | 97 |
| 23) Isophorone | 5.07 | 82 | 382380 | 46.32 | ug/ml | 95 |
| 24) 2-Nitrophenol | 5.15 | 139 | 111944 | 50.11 | ug/ml | 81 |
| 25) 2,4-Dimethylphenol | 5.18 | 107 | 195945 | 51.59 | ug/ml | 96 |
| 26) bis(2-Chloroethoxy)methane | 5.29 | 93 | 236688 | 51.80 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.39 | 162 | 166556 | 53.27 | ug/ml | 98 |
| 28) Benzoic acid | 5.31 | 122 | 103018 | 49.56 | ug/ml | 93 |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 171765 | 54.00 | ug/ml | 98 |
| 30) Naphthalene | 5.58 | 128 | 443415 | 49.24 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 156352 | 54.25 | ug/ml | 77 |
| 32) 4-Chloroaniline | 5.63 | 127 | 192526 | 52.06 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 105362 | 54.39 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.14 | 107 | 155777 | 49.86 | ug/ml | 95 |
| 35) 2-Methylnaphthalene | 6.32 | 142 | 287081 | 51.61 | ug/ml | 98 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 66899 | 47.58 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.66 | 196 | 117371 | 54.71 | ug/ml | 98 |
| 39) 2,4,6-Trichlorophenol | 6.63 | 196 | 106134 | 52.10 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 378211 | 58.15 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.98 | 65 | 122514 | 47.98 | ug/ml | 81 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032806.D Vial: 6
Acq On : 28 Mar 2008 6:27 pm Operator: mills
Sample : ,ical,svoa ical 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:55 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:55:01 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

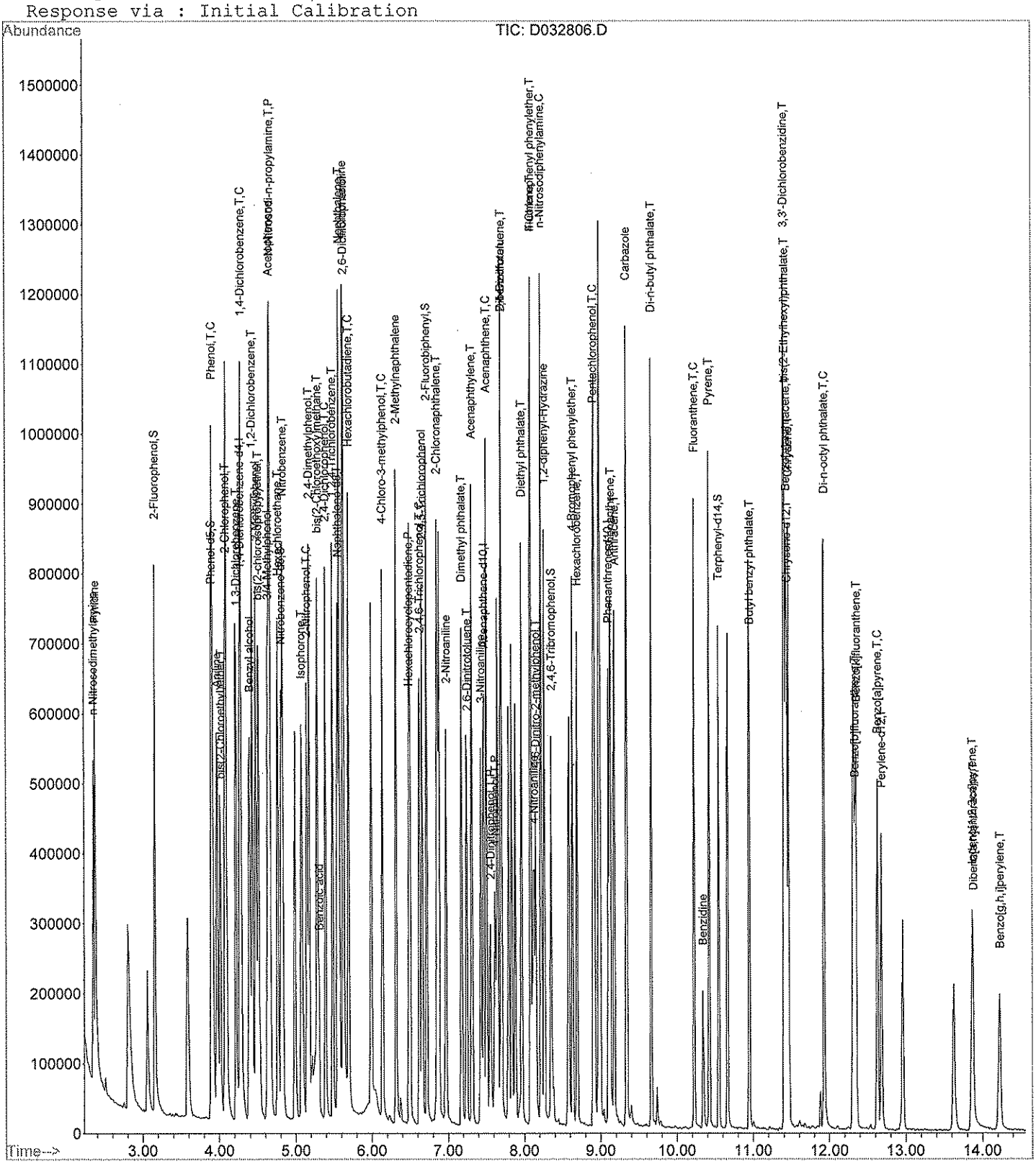
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.31 | 152 | 435904 | 50.46 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.18 | 163 | 356832 | 50.71 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.25 | 165 | 90125 | 51.98 | ug/ml | 93 |
| 46) | 3-Nitroaniline | 7.44 | 138 | 92258 | 47.69 | ug/ml | 97 |
| 47) | Acenaphthene | 7.51 | 153 | 250503 | 50.25 | ug/ml | 95 |
| 48) | 2,4-Dinitrophenol | 7.56 | 184 | 53028 | 56.86 | ug/ml | 96 |
| 49) | Dibenzofuran | 7.70 | 168 | 344669 | 49.90 | ug/ml | 96 |
| 50) | 4-Nitrophenol | 7.62 | 109 | 74578 | 63.61 | ug/ml | 86 |
| 51) | 2,4-Dinitrotoluene | 7.70 | 165 | 100317 | 51.77 | ug/ml | 96 |
| 52) | Fluorene | 8.09 | 166 | 241001 | 50.50 | ug/ml | 98 |
| 53) | 4-Chlorophenyl phenylether | 8.09 | 204 | 122107 | 53.19 | ug/ml | 94 |
| 54) | Diethyl phthalate | 7.97 | 149 | 358890 | 49.65 | ug/ml | 97 |
| 55) | 4-Nitroaniline | 8.13 | 138 | 86238 | 46.22 | ug/ml | 94 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.15 | 198 | 60097 | 55.70 | ug/ml | 94 |
| 58) | n-Nitrosodiphenylamine | 8.22 | 169 | 335626 | 53.32 | ug/ml | 99 |
| 59) | 1,2-diphenyl-Hydrazine | 8.27 | 77 | 335368 | 49.21 | ug/ml | 93 |
| 61) | 4-Bromophenyl phenylether | 8.63 | 248 | 77002 | 49.57 | ug/ml | 87 |
| 62) | Hexachlorobenzene | 8.70 | 284 | 104308 | 50.63 | ug/ml# | 80 |
| 63) | Pentachlorophenol | 8.91 | 266 | 60303 | 53.14 | ug/ml | 97 |
| 64) | Phenanthrene | 9.13 | 178 | 370535 | 55.58 | ug/ml | 99 |
| 65) | Anthracene | 9.19 | 178 | 380958 | 54.56 | ug/ml | 98 |
| 66) | Carbazole | 9.34 | 167 | 534331 | 70.05 | ug/ml | 95 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 582408 | 53.17 | ug/ml | 100 |
| 68) | Fluoranthene | 10.23 | 202 | 356449 | 58.81 | ug/ml | 94 |
| 70) | Benzidine | 10.34 | 184 | 71377 | 33.03 | ug/ml | 98 |
| 71) | Pyrene | 10.42 | 202 | 355665 | 43.86 | ug/ml | 91 |
| 73) | Butyl benzyl phthalate | 10.96 | 149 | 258133 | 43.54 | ug/ml | 95 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 256150 | 52.67 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.41 | 252 | 109380 | 51.16 | ug/ml | 95 |
| 76) | Chrysene | 11.47 | 228 | 242332 | 53.34 | ug/ml | 96 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 317262 | 50.49 | ug/ml | 99 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 576393 | 37.16 | ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.34 | 252 | 347587 | 42.51 | ug/ml | 97 |
| 81) | Benzo[k]fluoranthene | 12.36 | 252 | 141976 | 24.03 | ug/ml | 96 |
| 82) | Benzo[a]pyrene | 12.63 | 252 | 240332 | 38.90 | ug/ml | 99 |
| 83) | Indeno[1,2,3cd]pyrene | 13.87 | 276 | 189344 | 38.23 | ug/ml | 96 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 95083 | 36.40 | ug/ml | 96 |
| 85) | Benzo[g,h,i]perylene | 14.23 | 276 | 158536 | 41.18 | ug/ml | 96 |

3/28/08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032806.D Vial: 6
Acq On : 28 Mar 2008 6:27 pm Operator: mills
Sample : ,ical,svoa ical 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:55 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032807.D Vial: 7
Acq On : 28 Mar 2008 6:53 pm Operator: mills
Sample : ,ical,svoa ical 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:58:37 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 127517 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 396088 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 205312 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 261355 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 190697 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 148032 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 311886 | 78.31 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.91 | 99 | 424068 | 83.14 | ug/ml | 0.02 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 372683 | 74.97 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 477064 | 68.29 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 114708 | 72.56 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 318417 | 70.20 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.38 | 79 | 336216 | 71.97 | ug/ml | 96 |
| 3) n-Nitrosodimethylamine | 2.36 | 74 | 226819 | 79.42 | ug/ml | 97 |
| 6) Phenol | 3.93 | 94 | 394999m | 83.02 | ug/ml | |
| 7) Aniline | 3.98 | 93 | 455349 | 83.21 | ug/ml | 98 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 295194 | 74.31 | ug/ml | 98 |
| 9) 2-Chlorophenol | 4.09 | 128 | 308219 | 73.55 | ug/ml | 96 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 337809 | 70.48 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 335972 | 69.50 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 318982 | 68.77 | ug/ml | 97 |
| 13) Benzyl alcohol | 4.42 | 108 | 196456 | 81.32 | ug/ml | 98 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 621346 | 77.12 | ug/ml | 99 |
| 15) 2-Methylphenol | 4.49 | 108 | 274969 | 79.67 | ug/ml | 97 |
| 16) Hexachloroethane | 4.76 | 117 | 179040 | 74.00 | ug/ml | 90 |
| 17) N-Nitrosodi-n-propylamine | 4.68 | 70 | 223361 | 73.63 | ug/ml | 97 |
| 18) 3/4-Methylphenol | 4.65 | 108 | 284702 | 81.91 | ug/ml | 96 |
| 21) Nitrobenzene | 4.84 | 77 | 334669 | 72.35 | ug/ml | 96 |
| 22) Acetophenone | 4.67 | 105 | 439432 | 74.70 | ug/ml | 99 |
| 23) Isophorone | 5.10 | 82 | 646412 | 77.64 | ug/ml | 100 |
| 24) 2-Nitrophenol | 5.15 | 139 | 189652 | 79.89 | ug/ml | 88 |
| 25) 2,4-Dimethylphenol | 5.19 | 107 | 330055 | 82.04 | ug/ml | 99 |
| 26) bis(2-Chloroethoxy)methane | 5.30 | 93 | 396655 | 80.72 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.41 | 162 | 272264 | 78.56 | ug/ml | 97 |
| 28) Benzoic acid | 5.35 | 122 | 184654 | 103.50 | ug/ml | 93 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 273597 | 73.31 | ug/ml | 99 |
| 30) Naphthalene | 5.58 | 128 | 706369 | 72.54 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 232452 | 69.76 | ug/ml# | 64 |
| 32) 4-Chloroaniline | 5.64 | 127 | 303191 | 71.86 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 161984 | 67.94 | ug/ml | 97 |
| 34) 4-Chloro-3-methylphenol | 6.15 | 107 | 270993 | 82.30 | ug/ml | 94 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 459327 | 72.03 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 107247 | 58.58 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.67 | 196 | 192504 | 79.71 | ug/ml | 98 |
| 39) 2,4,6-Trichlorophenol | 6.64 | 196 | 182340 | 79.08 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 643189 | 77.92 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.98 | 65 | 205621 | 79.19 | ug/ml | 92 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032807.D Vial: 7
Acq On : 28 Mar 2008 6:53 pm Operator: mills
Sample : ,ical,svoa ical 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:58:37 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

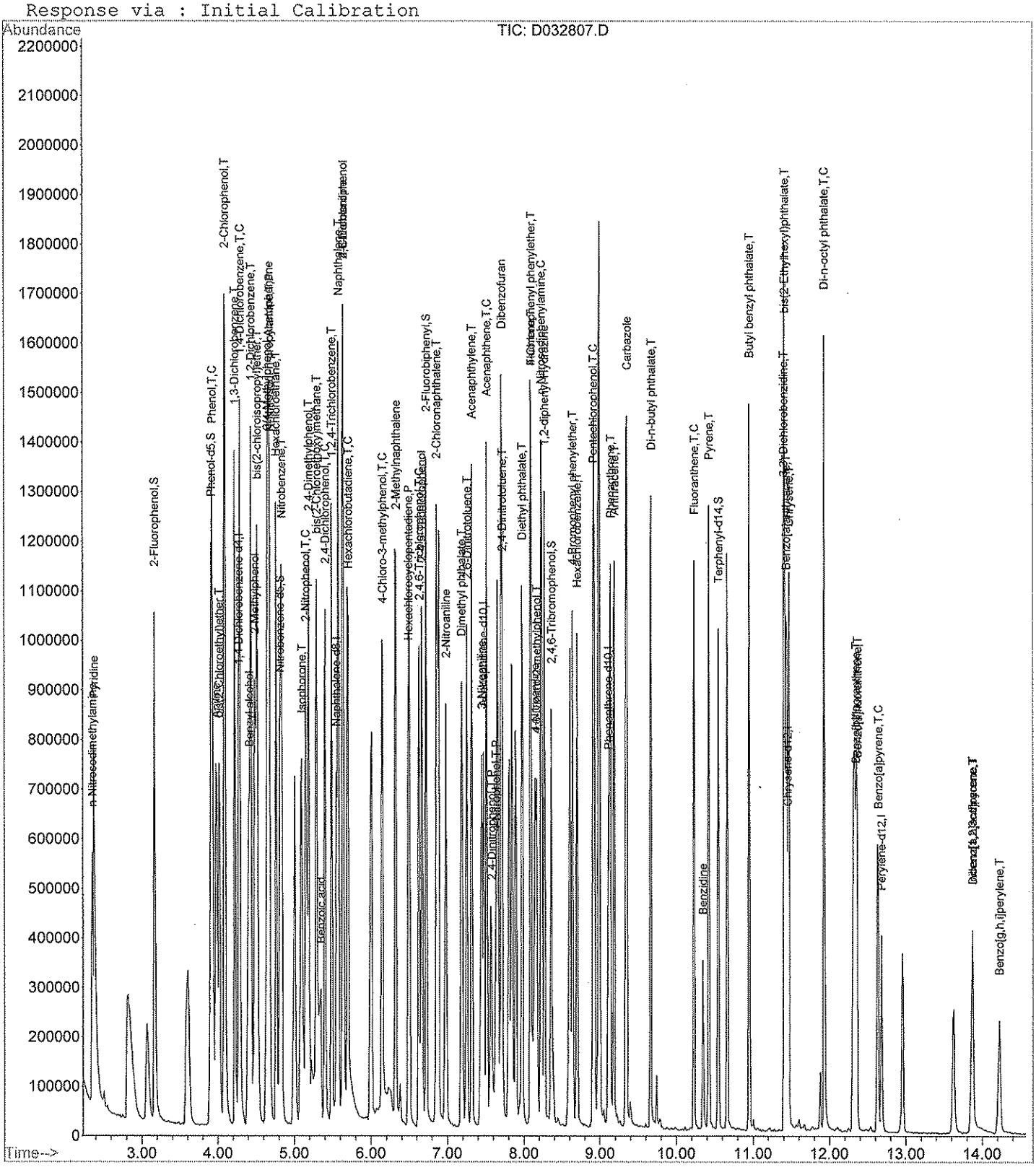
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.32 | 152 | 677338 | 69.18 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.19 | 163 | 607877 | 76.39 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.26 | 165 | 147009 | 80.14 | ug/ml | 81 |
| 46) | 3-Nitroaniline | 7.45 | 138 | 159763 | 79.15 | ug/ml | 98 |
| 47) | Acenaphthene | 7.52 | 153 | 385611 | 67.25 | ug/ml | 98 |
| 48) | 2,4-Dinitrophenol | 7.58 | 184 | 97531 | 101.68 | ug/ml | 99 |
| 49) | Dibenzofuran | 7.71 | 168 | 541747 | 66.20 | ug/ml | 95 |
| 50) | 4-Nitrophenol | 7.64 | 109 | 121113 | 82.88 | ug/ml | 87 |
| 51) | 2,4-Dinitrotoluene | 7.72 | 165 | 170877 | 74.88 | ug/ml | 74 |
| 52) | Fluorene | 8.10 | 166 | 346798 | 58.94 | ug/ml | 97 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 178821 | 62.93 | ug/ml | 93 |
| 54) | Diethyl phthalate | 7.98 | 149 | 605453 | 71.13 | ug/ml | 98 |
| 55) | 4-Nitroaniline | 8.15 | 138 | 157450 | 79.79 | ug/ml | 93 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.17 | 198 | 113400 | 91.61 | ug/ml | 89 |
| 58) | n-Nitrosodiphenylamine | 8.23 | 169 | 530491 | 70.53 | ug/ml | 99 |
| 59) | 1,2-diphenyl-Hydrazine | 8.27 | 77 | 532206 | 70.37 | ug/ml | 96 |
| 61) | 4-Bromophenyl phenylether | 8.64 | 248 | 123626 | 69.37 | ug/ml | 95 |
| 62) | Hexachlorobenzene | 8.70 | 284 | 161310 | 67.28 | ug/ml# | 80 |
| 63) | Pentachlorophenol | 8.92 | 266 | 94303 | 68.52 | ug/ml | 97 |
| 64) | Phenanthrene | 9.14 | 178 | 590797 | 72.91 | ug/ml | 99 |
| 65) | Anthracene | 9.19 | 178 | 624118 | 75.83 | ug/ml | 99 |
| 66) | Carbazole | 9.36 | 167 | 891237 | 96.36 | ug/ml | 98 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 932889 | 68.57 | ug/ml | 99 |
| 68) | Fluoranthene | 10.24 | 202 | 597410 | 74.07 | ug/ml | 91 |
| 70) | Benzidine | 10.35 | 184 | 136272 | 67.48 | ug/ml | 98 |
| 71) | Pyrene | 10.43 | 202 | 554512 | 76.11 | ug/ml | 95 |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 387935 | 71.87 | ug/ml | 95 |
| 74) | Benzo[a]anthracene | 11.43 | 228 | 441110 | 79.96 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.40 | 252 | 156042 | 69.80 | ug/ml | 99 |
| 76) | Chrysene | 11.47 | 228 | 400316 | 74.93 | ug/ml | 98 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 407695 | 57.93 | ug/ml | 96 |
| 79) | Di-n-octyl phthalate | 11.93 | 149 | 883777 | 80.59 | ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.34 | 252 | 400657m2 | 62.07 | ug/ml | |
| 81) | Benzo[k]fluoranthene | 12.36 | 252 | 320296 | 93.02 | ug/ml | 96 |
| 82) | Benzo[a]pyrene | 12.64 | 252 | 334133 | 68.47 | ug/ml | 96 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 231378 | 61.55 | ug/ml | 93 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 118967 | 67.63 | ug/ml | 92 |
| 85) | Benzo[g,h,i]perylene | 14.22 | 276 | 183730 | 58.76 | ug/ml | 98 |

3/28/08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032807.D Vial: 7
Acq On : 28 Mar 2008 6:53 pm Operator: mills
Sample : ,ical,svoa ical 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032808.D Vial: 8
Acq On : 28 Mar 2008 7:18 pm Operator: mills
Sample : ,ical,svoa ical 100ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:01 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:59:59 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 123662 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 388869 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 207240 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.12 | 188 | 284987 | 40.00 | ug/ml | 0.01 |
| 69) Chrysene-d12 | 11.46 | 240 | 201044 | 40.00 | ug/ml | 0.01 |
| 78) Perylene-d12 | 12.69 | 264 | 131752 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.18 | 112 | 374716 | 97.53 | ug/ml | 0.01 |
| 5) Phenol-d5 | 3.92 | 99 | 521395 | 104.38 | ug/ml | 0.02 |
| 20) Nitrobenzene-d5 | 4.82 | 82 | 449436 | 93.56 | ug/ml | 0.01 |
| 40) 2-Fluorobiphenyl | 6.74 | 172 | 577496 | 85.01 | ug/ml | 0.01 |
| 60) 2,4,6-Tribromophenol | 8.37 | 330 | 142536 | 84.66 | ug/ml | 0.01 |
| 72) Terphenyl-d14 | 10.56 | 244 | 417262 | 90.01 | ug/ml | 0.01 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.39 | 79 | 424440 | 96.09 | ug/ml | 98 |
| 3) n-Nitrosodimethylamine | 2.36 | 74 | 274490 | 99.28 | ug/ml | 92 |
| 6) Phenol | 3.93 | 94 | 516447m | 110.88 | ug/ml | |
| 7) Aniline | 3.98 | 93 | 536165 | 100.03 | ug/ml | 100 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 414532m | 109.55 | ug/ml | |
| 9) 2-Chlorophenol | 4.09 | 128 | 362867 | 91.13 | ug/ml | 94 |
| 10) 1,3-Dichlorobenzene | 4.23 | 146 | 407746 | 90.41 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 390355 | 86.09 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 364237 | 83.92 | ug/ml | 98 |
| 13) Benzyl alcohol | 4.42 | 108 | 233309 | 99.18 | ug/ml | 86 |
| 14) bis(2-chloroisopropyl)ethe | 4.53 | 45 | 757663 | 97.85 | ug/ml | 99 |
| 15) 2-Methylphenol | 4.50 | 108 | 343750 | 102.81 | ug/ml | 98 |
| 16) Hexachloroethane | 4.76 | 117 | 208783 | 90.68 | ug/ml | 97 |
| 17) N-Nitrosodi-n-propylamine | 4.69 | 70 | 266785 | 92.52 | ug/ml | 98 |
| 18) 3/4-Methylphenol | 4.66 | 108 | 346236 | 102.11 | ug/ml | 98 |
| 21) Nitrobenzene | 4.84 | 77 | 393373 | 88.75 | ug/ml | 97 |
| 22) Acetophenone | 4.68 | 105 | 532703 | 93.79 | ug/ml | 99 |
| 23) Isophorone | 5.11 | 82 | 795755 | 98.07 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.16 | 139 | 240916 | 103.41 | ug/ml | 92 |
| 25) 2,4-Dimethylphenol | 5.20 | 107 | 394960 | 99.36 | ug/ml | 99 |
| 26) bis(2-Chloroethoxy)methane | 5.29 | 93 | 482085 | 99.70 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.42 | 162 | 329141 | 97.17 | ug/ml | 99 |
| 28) Benzoic acid | 5.36 | 122 | 220475 | 117.26 | ug/ml | 93 |
| 29) 1,2,4-Trichlorobenzene | 5.50 | 180 | 328628 | 91.60 | ug/ml | 97 |
| 30) Naphthalene | 5.58 | 128 | 843940 | 90.39 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 280051 | 88.43 | ug/ml | 99 |
| 32) 4-Chloroaniline | 5.65 | 127 | 386992 | 95.86 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 183766 | 81.58 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.15 | 107 | 328997 | 101.05 | ug/ml | 92 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 538622 | 88.23 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 149991 | 86.98 | ug/ml | 100 |
| 38) 2,4,5-Trichlorophenol | 6.67 | 196 | 226350 | 92.93 | ug/ml | 97 |
| 39) 2,4,6-Trichlorophenol | 6.63 | 196 | 237604 | 102.39 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.87 | 162 | 657260 | 79.40 | ug/ml | 99 |
| 42) 2-Nitroaniline | 6.99 | 65 | 253329 | 96.90 | ug/ml | 97 |

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

Mar 3-28-08

3/31/08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032808.D Vial: 8
Acq On : 28 Mar 2008 7:18 pm Operator: mills
Sample : ,ical,svoa ical 100ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:01 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:59:59 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

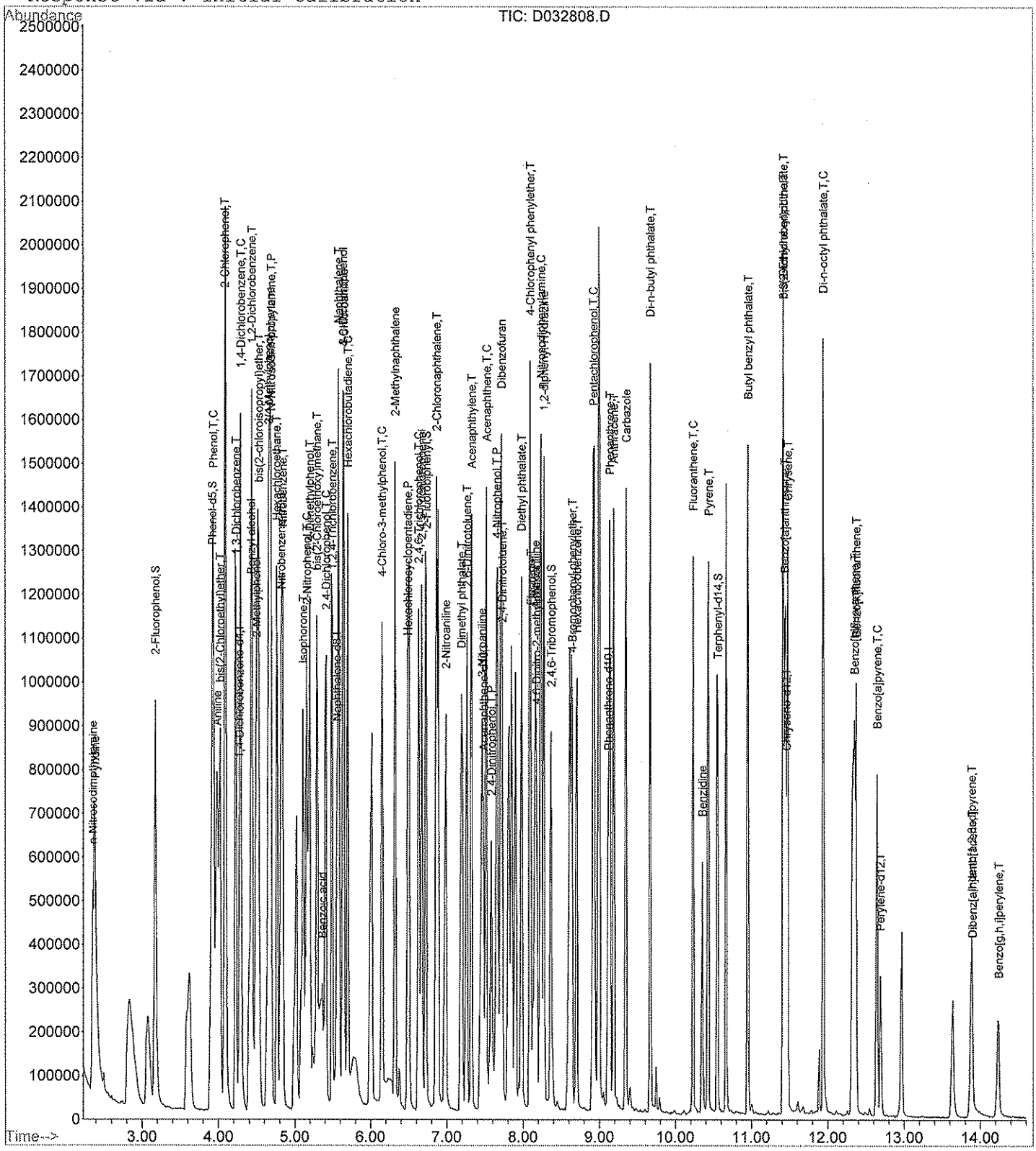
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.33 | 152 | 847015 | 88.71 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.20 | 163 | 759242 | 95.60 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.27 | 165 | 180286 | 97.33 | ug/ml | 96 |
| 46) | 3-Nitroaniline | 7.46 | 138 | 203445 | 100.12 | ug/ml | 98 |
| 47) | Acenaphthene | 7.52 | 153 | 462659 | 83.26 | ug/ml | 100 |
| 48) | 2,4-Dinitrophenol | 7.58 | 184 | 131718 | 127.41 | ug/ml | 92 |
| 49) | Dibenzofuran | 7.72 | 168 | 683989 | 86.54 | ug/ml | 97 |
| 50) | 4-Nitrophenol | 7.66 | 109 | 138182 | 92.85 | ug/ml | 92 |
| 51) | 2,4-Dinitrotoluene | 7.73 | 165 | 212793 | 93.88 | ug/ml | 98 |
| 52) | Fluorene | 8.11 | 166 | 421861 | 76.04 | ug/ml | 97 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 197861 | 72.87 | ug/ml | 89 |
| 54) | Diethyl phthalate | 7.98 | 149 | 744637 | 89.14 | ug/ml | 99 |
| 55) | 4-Nitroaniline | 8.17 | 138 | 191585 | 96.25 | ug/ml | 94 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.18 | 198 | 151337 | 108.19 | ug/ml | 94 |
| 58) | n-Nitrosodiphenylamine | 8.24 | 169 | 652326 | 81.96 | ug/ml | 99 |
| 59) | 1,2-diphenyl-Hydrazine | 8.28 | 77 | 667238 | 83.42 | ug/ml | 95 |
| 61) | 4-Bromophenyl phenylether | 8.65 | 248 | 151213 | 80.49 | ug/ml | 92 |
| 62) | Hexachlorobenzene | 8.71 | 284 | 193245 | 76.97 | ug/ml | 91 |
| 63) | Pentachlorophenol | 8.92 | 266 | 111811 | 77.28 | ug/ml | 99 |
| 64) | Phenanthrene | 9.14 | 178 | 728133 | 84.28 | ug/ml | 99 |
| 65) | Anthracene | 9.19 | 178 | 733887 | 82.85 | ug/ml | 99 |
| 66) | Carbazole | 9.35 | 167 | 729780 | 68.84 | ug/ml | 99 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 1063297 | 74.33 | ug/ml | 99 |
| 68) | Fluoranthene | 10.23 | 202 | 684788 | 79.33 | ug/ml | 93 |
| 70) | Benzidine | 10.36 | 184 | 237709 | 116.19 | ug/ml | 97 |
| 71) | Pyrene | 10.44 | 202 | 742002 | 97.79 | ug/ml | 94 |
| 73) | Butyl benzyl phthalate | 10.96 | 149 | 488902 | 88.16 | ug/ml | 95 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 551993 | 94.92 | ug/ml | 98 |
| 75) | 3,3'-Dichlorobenzidine | 11.42 | 252 | 177484 | 77.78 | ug/ml | 94 |
| 76) | Chrysene | 11.48 | 228 | 472679 | 85.27 | ug/ml | 99 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 452318 | 65.48 | ug/ml | 98 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 1067094 | 109.13 | ug/ml | 100 |
| 80) | Benzo[b]fluoranthene | 12.35 | 252 | 563935m | 103.99 | ug/ml | |
| 81) | Benzo[k]fluoranthene | 12.37 | 252 | 267924m | 84.01 | ug/ml | |
| 82) | Benzo[a]pyrene | 12.65 | 252 | 379624 | 90.67 | ug/ml | 94 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 245840 | 77.97 | ug/ml | 96 |
| 84) | Dibenz[a,h]anthracene | 13.89 | 278 | 131976 | 87.69 | ug/ml | 89 |
| 85) | Benzo[g,h,i]perylene | 14.24 | 276 | 194818 | 74.98 | ug/ml | 87 |

3/28/08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032808.D Vial: 8
Acq On : 28 Mar 2008 7:18 pm Operator: mills
Sample : ,ical,svoa ical 100ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:01 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032809.D Vial: 9
Acq On : 28 Mar 2008 7:44 pm Operator: mills
Sample : ,ical,svoa ical 120ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:03 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:01:32 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120417 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 384868 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 195601 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 265326 | 40.00 | ug/ml | 0.01 |
| 69) Chrysene-d12 | 11.46 | 240 | 192043 | 40.00 | ug/ml | 0.01 |
| 78) Perylene-d12 | 12.69 | 264 | 110503 | 40.00 | ug/ml | 0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 454577 | 122.11 | ug/ml | 0.01 |
| 5) Phenol-d5 | 3.93 | 99 | 610846 | 124.49 | ug/ml | 0.03 |
| 20) Nitrobenzene-d5 | 4.83 | 82 | 515661 | 109.87 | ug/ml | 0.02 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 646772 | 103.99 | ug/ml | 0.01 |
| 60) 2,4,6-Tribromophenol | 8.38 | 330 | 161439 | 106.25 | ug/ml | 0.02 |
| 72) Terphenyl-d14 | 10.56 | 244 | 426396 | 98.26 | ug/ml | 0.01 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.38 | 79 | 504023 | 118.11 | ug/ml | 96 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 324668 | 120.77 | ug/ml | 89 |
| 6) Phenol | 3.94 | 94 | 591811m? | 127.71 | ug/ml | |
| 7) Aniline | 3.99 | 93 | 568550 | 108.93 | ug/ml | 99 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 561466m? | 149.53 | ug/ml | |
| 9) 2-Chlorophenol | 4.09 | 128 | 413274 | 108.51 | ug/ml | 95 |
| 10) 1,3-Dichlorobenzene | 4.23 | 146 | 448582 | 104.14 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 4.30 | 146 | 452526 | 105.42 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 402646 | 98.44 | ug/ml | 99 |
| 13) Benzyl alcohol | 4.43 | 108 | 269642 | 117.91 | ug/ml | 75 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 903429 | 120.34 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.50 | 108 | 402085 | 122.80 | ug/ml | 98 |
| 16) Hexachloroethane | 4.77 | 117 | 246295 | 111.94 | ug/ml | 87 |
| 17) N-Nitrosodi-n-propylamine | 4.70 | 70 | 310393 | 112.23 | ug/ml | 98 |
| 18) 3/4-Methylphenol | 4.67 | 108 | 399503 | 120.48 | ug/ml | 96 |
| 21) Nitrobenzene | 4.85 | 77 | 473189 | 110.35 | ug/ml | 93 |
| 22) Acetophenone | 4.69 | 105 | 600906 | 108.24 | ug/ml | 95 |
| 23) Isophorone | 5.12 | 82 | 930688 | 116.34 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.17 | 139 | 283484 | 122.11 | ug/ml | 91 |
| 25) 2,4-Dimethylphenol | 5.21 | 107 | 466209 | 118.65 | ug/ml | 100 |
| 26) bis(2-Chloroethoxy)methane | 5.30 | 93 | 540506 | 113.01 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.41 | 162 | 388925 | 116.68 | ug/ml | 96 |
| 28) Benzoic acid | 5.38 | 122 | 254605 | 132.25 | ug/ml | 98 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 367751 | 105.34 | ug/ml | 97 |
| 30) Naphthalene | 5.59 | 128 | 955560 | 105.43 | ug/ml | 100 |
| 31) 2,6-Dichlorophenol | 5.65 | 162 | 330916 | 108.08 | ug/ml | 97 |
| 32) 4-Chloroaniline | 5.65 | 127 | 418649 | 105.65 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 212798 | 99.11 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.16 | 107 | 371543 | 115.06 | ug/ml | 93 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 612453 | 103.82 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 160519 | 101.26 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.68 | 196 | 249652m? | 110.16 | ug/ml | |
| 39) 2,4,6-Trichlorophenol | 6.64 | 196 | 281796 | 128.05 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.87 | 162 | 855429 | 114.19 | ug/ml | 98 |
| 42) 2-Nitroaniline | 7.00 | 65 | 302692 | 123.44 | ug/ml | 96 |

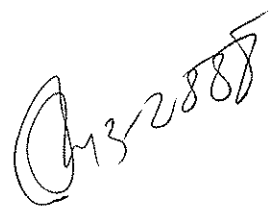
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032809.D Vial: 9
Acq On : 28 Mar 2008 7:44 pm Operator: mills
Sample : ,ical,svoa ical 120ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:03 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:01:32 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

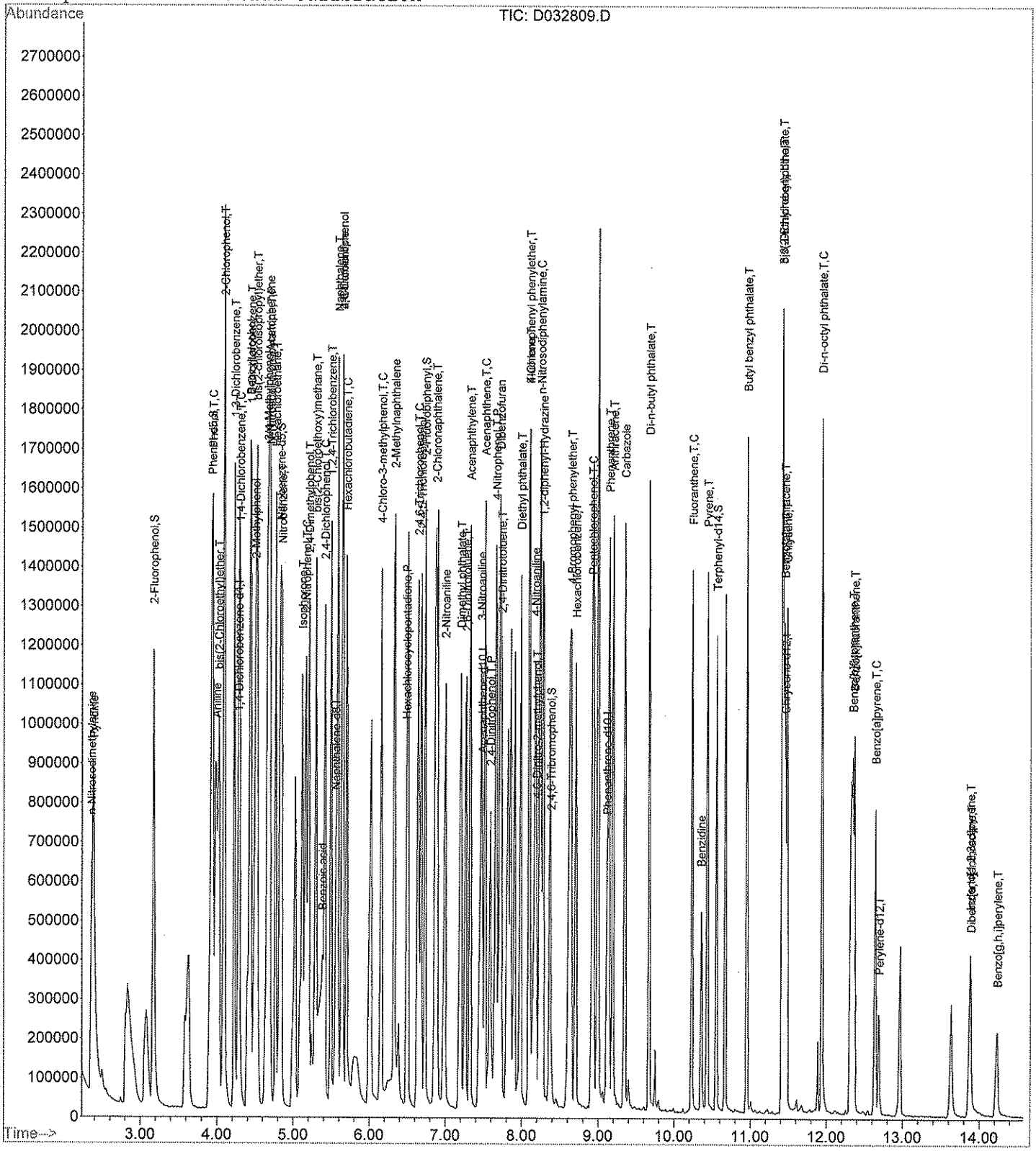
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.32 | 152 | 951888 | 108.06 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.20 | 163 | 865784 | 116.53 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.27 | 165 | 221575 | 127.42 | ug/ml | 88 |
| 46) | 3-Nitroaniline | 7.47 | 138 | 228521 | 119.12 | ug/ml | 100 |
| 47) | Acenaphthene | 7.52 | 153 | 548428 | 108.19 | ug/ml | 100 |
| 48) | 2,4-Dinitrophenol | 7.59 | 184 | 154768 | 150.37 | ug/ml | 97 |
| 49) | Dibenzofuran | 7.71 | 168 | 775307 | 106.80 | ug/ml | 100 |
| 50) | 4-Nitrophenol | 7.66 | 109 | 148133 | 106.98 | ug/ml | 94 |
| 51) | 2,4-Dinitrotoluene | 7.73 | 165 | 255136 | 120.74 | ug/ml | 96 |
| 52) | Fluorene | 8.10 | 166 | 436569 | 87.57 | ug/ml | 100 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 215355 | 88.85 | ug/ml | 95 |
| 54) | Diethyl phthalate | 7.99 | 149 | 809253 | 104.92 | ug/ml | 99 |
| 55) | 4-Nitroaniline | 8.17 | 138 | 218235 | 117.04 | ug/ml | 94 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.19 | 198 | 171781 | 129.78 | ug/ml# | 72 |
| 58) | n-Nitrosodiphenylamine | 8.25 | 169 | 713628 | 99.91 | ug/ml | 100 |
| 59) | 1,2-diphenyl-Hydrazine | 8.28 | 77 | 767940 | 106.66 | ug/ml | 99 |
| 61) | 4-Bromophenyl phenylether | 8.64 | 248 | 165229 | 98.30 | ug/ml | 99 |
| 62) | Hexachlorobenzene | 8.71 | 284 | 228551 | 102.50 | ug/ml | 98 |
| 63) | Pentachlorophenol | 8.92 | 266 | 121649 | 94.60 | ug/ml | 98 |
| 64) | Phenanthrene | 9.15 | 178 | 767705 | 98.54 | ug/ml | 99 |
| 65) | Anthracene | 9.20 | 178 | 784394 | 98.49 | ug/ml | 99 |
| 66) | Carbazole | 9.35 | 167 | 841163 | 90.89 | ug/ml# | 96 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 1259106 | 99.65 | ug/ml | 99 |
| 68) | Fluoranthene | 10.24 | 202 | 759800 | 98.62 | ug/ml | 98 |
| 70) | Benzidine | 10.35 | 184 | 242984 | 120.44 | ug/ml | 95 |
| 71) | Pyrene | 10.43 | 202 | 765584 | 106.10 | ug/ml | 98 |
| 73) | Butyl benzyl phthalate | 10.96 | 149 | 521119 | 100.76 | ug/ml | 100 |
| 74) | Benzo[a]anthracene | 11.45 | 228 | 578674 | 105.24 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.42 | 252 | 170517 | 81.87 | ug/ml | 95 |
| 76) | Chrysene | 11.48 | 228 | 549893 | 107.01 | ug/ml | 100 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 494266 | 80.46 | ug/ml | 99 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 1169329 | 140.02 | ug/ml | 100 |
| 80) | Benzo[b]fluoranthene | 12.35 | 252 | 522136m | 113.89 | ug/ml | |
| 81) | Benzo[k]fluoranthene | 12.37 | 252 | 336875m | 130.10 | ug/ml | |
| 82) | Benzo[a]pyrene | 12.64 | 252 | 384492 | 111.57 | ug/ml# | 92 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 249651 | 94.40 | ug/ml | 98 |
| 84) | Dibenz[a,h]anthracene | 13.89 | 278 | 135113 | 107.04 | ug/ml | 95 |
| 85) | Benzo[g,h,i]perylene | 14.24 | 276 | 190463 | 87.40 | ug/ml | 94 |



(#) = qualifier out of range (m) = manual integration
D032809.D SVOA0328.M Fri Mar 28 21:13:35 2008 SVOA 4 Page 2

Data File : C:\HPCHEM\1\DATA\D032708\D032809.D Vial: 9
Acq On : 28 Mar 2008 7:44 pm Operator: mills
Sample : ,ical,svoa ical 120ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:03 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# CONTINUING CALIBRATION RAW DATA

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D  Vial: 2
Acq On : 2 Apr 2008 4:14 pm  Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1,  Inst : SVOA 4
Misc : 8270_w  Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 103 | -0.01 |
| 2 | | Pyridine | 1.414 | 1.474 | -4.2 | 105 | 0.00 |
| 3 | | n-Nitrosodimethylamine | 0.894 | 0.940 | -5.1 | 103 | -0.01 |
| 4 | S | 2-Fluorophenol | 1.240 | 1.276 | -2.9 | 101 | -0.01 |
| 5 | S | Phenol-d5 | 1.640 | 1.704 | -3.9 | 104 | 0.00 |
| 6 | T,C | Phenol | 1.556 | 1.628 | -4.6 | 106 | 0.00 |
| 7 | | Aniline | 1.707 | 1.705 | 0.1 | 101 | 0.00 |
| 8 | T | bis(2-Chloroethyl)ether | 1.298 | 1.432 | -10.3 | 110 | -0.01 |
| 9 | T | 2-Chlorophenol | 1.245 | 1.338 | -7.5 | 102 | -0.01 |
| 10 | T | 1,3-Dichlorobenzene | 1.399 | 1.480 | -5.8 | 104 | -0.01 |
| 11 | T,C | 1,4-Dichlorobenzene | 1.397 | 1.522 | -8.9 | 104 | 0.00 |
| 12 | T | 1,2-Dichlorobenzene | 1.318 | 1.443 | -9.5 | 104 | 0.00 |
| 13 | | Benzyl alcohol | 0.757 | 0.796 | -5.2 | 102 | -0.01 |
| 14 | T | bis(2-chloroisopropyl)ether | 2.495 | 2.605 | -4.4 | 105 | 0.00 |
| 15 | | 2-Methylphenol | 1.092 | 1.100 | -0.7 | 100 | 0.00 |
| 16 | T | Hexachloroethane | 0.723 | 0.781 | -8.0 | 105 | -0.01 |
| 17 | T,P | N-Nitrosodi-n-propylamine | 0.909 | 0.907 | 0.2 | 98 | -0.01 |
| 18 | | 3/4-Methylphenol | 1.102 | 1.133 | -2.8 | 102 | 0.00 |
| 19 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 101 | -0.01 |
| 20 | S | Nitrobenzene-d5 | 0.481 | 0.504 | -4.8 | 103 | 0.00 |
| 21 | T | Nitrobenzene | 0.440 | 0.456 | -3.6 | 101 | 0.00 |
| 22 | | Acetophenone | 0.568 | 0.595 | -4.8 | 101 | 0.00 |
| 23 | T | Isophorone | 0.827 | 0.870 | -5.2 | 106 | 0.00 |
| 24 | T,C | 2-Nitrophenol | 0.242 | 0.248 | -2.5 | 103 | 0.00 |
| 25 | T | 2,4-Dimethylphenol | 0.408 | 0.434 | -6.4 | 103 | 0.00 |
| 26 | T | bis(2-Chloroethoxy)methane | 0.492 | 0.505 | -2.6 | 99 | -0.01 |
| 27 | T,C | 2,4-Dichlorophenol | 0.345 | 0.350 | -1.4 | 98 | 0.00 |
| 28 | | Benzoic acid | 0.203 | 0.210 | -3.4 | 95 | -0.01 |
| 29 | T | 1,2,4-Trichlorobenzene | 0.355 | 0.377 | -6.2 | 102 | 0.00 |
| 30 | T | Naphthalene | 0.937 | 0.982 | -4.8 | 103 | 0.00 |
| 31 | | 2,6-Dichlorophenol | 0.313 | 0.335 | -7.0 | 100 | 0.00 |
| 32 | | 4-Chloroaniline | 0.404 | 0.396 | 2.0 | 96 | 0.00 |
| 33 | T,C | Hexachlorobutadiene | 0.217 | 0.228 | -5.1 | 101 | 0.00 |
| 34 | T,C | 4-Chloro-3-methylphenol | 0.333 | 0.342 | -2.7 | 102 | 0.00 |
| 35 | | 2-Methylnaphthalene | 0.599 | 0.619 | -3.3 | 100 | -0.01 |
| 36 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 97 | -0.01 |
| 37 | P | Hexachlorocyclopentadiene | 0.316 | 0.290 | 8.2 | 97 | 0.00 |
| 38 | | 2,4,5-Trichlorophenol | 0.457 | 0.522 | -14.2 | 100 | 0.00 |
| 39 | T,C | 2,4,6-Trichlorophenol | 0.455 | 0.466 | -2.4 | 99 | -0.01 |
| 40 | S | 2-Fluorobiphenyl | 1.254 | 1.355 | -8.1 | 99 | 0.00 |
| 41 | T | 2-Chloronaphthalene | 1.520 | 1.361 | 10.5 | 81 | 0.00 |
| 42 | | 2-Nitroaniline | 0.504 | 0.517 | -2.6 | 95 | -0.01 |
| 43 | T | Acenaphthylene | 1.791 | 1.910 | -6.6 | 98 | 0.00 |
| 44 | T | Dimethyl phthalate | 1.512 | 1.598 | -5.7 | 100 | 0.00 |
| 45 | T | 2,6-Dinitrotoluene | 0.359 | 0.388 | -8.1 | 97 | -0.01 |
| 46 | | 3-Nitroaniline | 0.392 | 0.417 | -6.4 | 101 | 0.00 |
| 47 | T,C | Acenaphthene | 1.036 | 1.114 | -7.5 | 100 | 0.00 |
| 48 | T,P | 2,4-Dinitrophenol | 0.219 | 0.241 | -10.0 | 102 | -0.01 |

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D  Vial: 2
Acq On : 2 Apr 2008 4:14 pm  Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1,  Inst : SVOA 4
Misc : 8270_w  Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | | Dibenzofuran | 1.457 | 1.591 | -9.2 | 104 | 0.00 |
| 50 | T,P | 4-Nitrophenol | 0.278 | 0.315 | -13.3 | 95 | 0.00 |
| 51 | T | 2,4-Dinitrotoluene | 0.433 | 0.451 | -4.2 | 101 | 0.00 |
| 52 | T | Fluorene | 1.014 | 1.048 | -3.4 | 98 | -0.01 |
| 53 | T | 4-Chlorophenyl phenylether | 0.474 | 0.554 | -16.9 | 102 | -0.01 |
| 54 | T | Diethyl phthalate | 1.544 | 1.663 | -7.7 | 104 | 0.00 |
| 55 | | 4-Nitroaniline | 0.380 | 0.373 | 1.8 | 97 | -0.01 |
| 56 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 57 | T | 4,6-Dinitro-2-methylphenol | 0.202 | 0.227 | -12.4 | 105 | 0.00 |
| 58 | C | n-Nitrosodiphenylamine | 1.047 | 1.171 | -11.8 | 97 | 0.00 |
| 59 | | 1,2-diphenyl-Hydrazine | 1.065 | 1.194 | -12.1 | 99 | 0.00 |
| 60 | S | 2,4,6-Tribromophenol | 0.225 | 0.254 | -12.9 | 100 | 0.00 |
| 61 | T | 4-Bromophenyl phenylether | 0.246 | 0.280 | -13.8 | 101 | 0.00 |
| 62 | T | Hexachlorobenzene | 0.328 | 0.362 | -10.4 | 97 | 0.00 |
| 63 | T,C | Pentachlorophenol | 0.187 | 0.224 | -19.8 | 104 | 0.00 |
| 64 | T | Phenanthrene | 1.147 | 1.266 | -10.4 | 95 | -0.01 |
| 65 | T | Anthracene | 1.177 | 1.305 | -10.9 | 95 | -0.01 |
| 66 | | Carbazole | 1.339 | 1.734 | -29.5# | 90 | 0.00 |
| 67 | T | Di-n-butyl phthalate | 1.851 | 2.133 | -15.2 | 102 | 0.00 |
| 68 | T,C | Fluoranthene | 1.115 | 1.298 | -16.4 | 101 | 0.00 |
| 69 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 98 | -0.01 |
| 70 | | Benzidine | 0.420 | 0.319 | 24.0# | 99 | 0.00 |
| 71 | T | Pyrene | 1.449 | 1.574 | -8.6 | 98 | 0.00 |
| 72 | S | Terphenyl-d14 | 0.875 | 0.926 | -5.8 | 99 | 0.00 |
| 73 | T | Butyl benzyl phthalate | 1.048 | 1.144 | -9.2 | 98 | -0.01 |
| 74 | T | Benzo[a]anthracene | 1.113 | 1.227 | -10.2 | 106 | -0.01 |
| 75 | T | 3,3'-Dichlorobenzidine | 0.411 | 0.454 | -10.5 | 92 | -0.01 |
| 76 | T | Chrysene | 1.076 | 1.070 | 0.6 | 98 | -0.01 |
| 77 | T | bis(2-Ethylhexyl)phthalate | 1.209 | 1.404 | -16.1 | 98 | -0.01 |
| 78 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 94 | -0.01 |
| 79 | T,C | Di-n-octyl phthalate | 3.107 | 3.149 | -1.4 | 102 | -0.01 |
| 80 | T | Benzo[b]fluoranthene | 1.662 | 1.788 | -7.6 | 96 | -0.01 |
| 81 | T | Benzo[k]fluoranthene | 1.120 | 0.744 | 33.6# | 98 | -0.01 |
| 82 | T,C | Benzo[a]pyrene | 1.305 | 1.204 | 7.7 | 94 | -0.01 |
| 83 | T | Indeno[1,2,3cd]pyrene | 0.943 | 0.811 | 14.0 | 80 | -0.02 |
| 84 | T | Dibenz[a,h]anthracene | 0.523 | 0.375 | 28.3# | 74 | -0.02 |
| 85 | T | Benzo[g,h,i]perylene | 0.783 | 0.627 | 19.9 | 74 | -0.02 |

4-2-08

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

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D Vial: 2
Acq On : 2 Apr 2008 4:14 pm Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 16:31 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 120354 | 40.00 | ug/ml | -0.01 |
| 19) Naphthalene-d8 | 5.54 | 136 | 372704 | 40.00 | ug/ml | -0.01 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 179485 | 40.00 | ug/ml | -0.01 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 222834 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 177706 | 40.00 | ug/ml | -0.01 |
| 78) Perylene-d12 | 12.67 | 264 | 149943 | 40.00 | ug/ml | -0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 192035 | 51.46 | ug/ml | -0.01 |
| 5) Phenol-d5 | 3.90 | 99 | 256331 | 51.94 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 234713 | 52.39 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 303926 | 54.03 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 70811 | 56.57 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 205616 | 52.91 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.37 | 79 | 221745 | 52.13 | ug/ml | 95 |
| 3) n-Nitrosodimethylamine | 2.34 | 74 | 141367 | 52.56 | ug/ml | 92 |
| 6) Phenol | 3.91 | 94 | 244944 | 52.32 | ug/ml | 99 |
| 7) Aniline | 3.97 | 93 | 256479 | 49.93 | ug/ml | 98 |
| 8) bis(2-Chloroethyl)ether | 4.01 | 93 | 215427 | 55.14 | ug/ml | 99 |
| 9) 2-Chlorophenol | 4.07 | 128 | 201254 | 53.73 | ug/ml | 95 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 222674 | 52.89 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 228935 | 54.46 | ug/ml | 97 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 217149 | 54.76 | ug/ml | 99 |
| 13) Benzyl alcohol | 4.39 | 108 | 119736 | 52.54 | ug/ml | 99 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 391967 | 52.21 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.48 | 108 | 165520 | 50.38 | ug/ml | 96 |
| 16) Hexachloroethane | 4.76 | 117 | 117530 | 54.05 | ug/ml | 94 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 136450 | 49.90 | ug/ml | 91 |
| 18) 3/4-Methylphenol | 4.63 | 108 | 170502 | 51.41 | ug/ml | 97 |
| 21) Nitrobenzene | 4.83 | 77 | 212237 | 51.80 | ug/ml | 96 |
| 22) Acetophenone | 4.65 | 105 | 277342 | 52.44 | ug/ml | 96 |
| 23) Isophorone | 5.07 | 82 | 405335 | 52.59 | ug/ml | 97 |
| 24) 2-Nitrophenol | 5.15 | 139 | 115698 | 51.31 | ug/ml | 94 |
| 25) 2,4-Dimethylphenol | 5.18 | 107 | 202308 | 53.27 | ug/ml | 96 |
| 26) bis(2-Chloroethoxy)methane | 5.28 | 93 | 235039 | 51.24 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.39 | 162 | 163268 | 50.81 | ug/ml | 98 |
| 28) Benzoic acid | 5.30 | 122 | 97844 | 51.61 | ug/ml | 97 |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 175682 | 53.05 | ug/ml | 98 |
| 30) Naphthalene | 5.58 | 128 | 457526 | 52.39 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 156084 | 53.53 | ug/ml | 70 |
| 32) 4-Chloroaniline | 5.63 | 127 | 184308 | 49.01 | ug/ml | 97 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 106120 | 52.56 | ug/ml | 99 |
| 34) 4-Chloro-3-methylphenol | 6.14 | 107 | 159290 | 51.29 | ug/ml | 95 |
| 35) 2-Methylnaphthalene | 6.31 | 142 | 288193 | 51.61 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 65128 | 45.97 | ug/ml | 96 |
| 38) 2,4,5-Trichlorophenol | 6.66 | 196 | 117018 | 57.05 | ug/ml | 99 |
| 39) 2,4,6-Trichlorophenol | 6.62 | 196 | 104565 | 51.21 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 305353 | 44.78 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.97 | 65 | 116030 | 51.32 | ug/ml | 97 |

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

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D Vial: 2
Acq On : 2 Apr 2008 4:14 pm Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 16:31 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

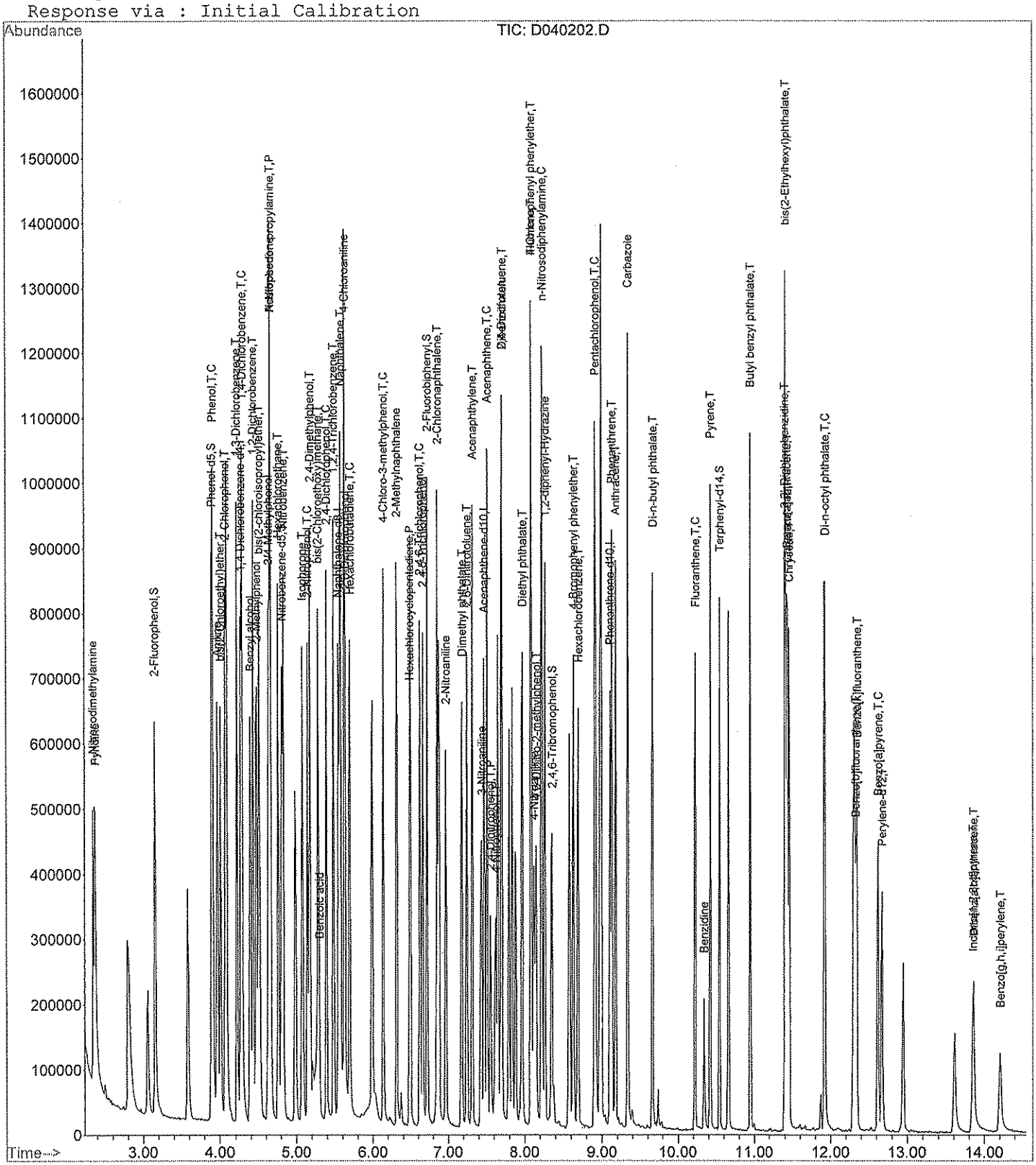
| Compound | R.T. | QIon | Response | Conc Unit | Qvalue |
|---|---|---|---|---|---|
| 43) Acenaphthylene | 7.31 | 152 | 428428 | 53.31 ug/ml | 99 |
| 44) Dimethyl phthalate | 7.18 | 163 | 358422 | 52.83 ug/ml | 99 |
| 45) 2,6-Dinitrotoluene | 7.24 | 165 | 87025 | 53.98 ug/ml | 94 |
| 46) 3-Nitroaniline | 7.44 | 138 | 93478 | 53.17 ug/ml | 91 |
| 47) Acenaphthene | 7.51 | 153 | 250003 | 53.77 ug/ml | 99 |
| 48) 2,4-Dinitrophenol | 7.55 | 184 | 54172 | 55.04 ug/ml | 86 |
| 49) Dibenzofuran | 7.70 | 168 | 356935 | 54.59 ug/ml | 97 |
| 50) 4-Nitrophenol | 7.62 | 109 | 70740 | 56.70 ug/ml | 93 |
| 51) 2,4-Dinitrotoluene | 7.70 | 165 | 101084 | 52.08 ug/ml | 83 |
| 52) Fluorene | 8.08 | 166 | 235184 | 51.68 ug/ml | 99 |
| 53) 4-Chlorophenyl phenylether | 8.08 | 204 | 124246 | 58.39 ug/ml | 91 |
| 54) Diethyl phthalate | 7.97 | 149 | 373158 | 53.85 ug/ml | 99 |
| 55) 4-Nitroaniline | 8.12 | 138 | 83697 | 49.12 ug/ml | 100 |
| 57) 4,6-Dinitro-2-methylphenol | 8.15 | 198 | 63094 | 56.00 ug/ml | 88 |
| 58) n-Nitrosodiphenylamine | 8.22 | 169 | 326175 | 55.94 ug/ml | 99 |
| 59) 1,2-diphenyl-Hydrazine | 8.27 | 77 | 332547 | 56.04 ug/ml | 98 |
| 61) 4-Bromophenyl phenylether | 8.63 | 248 | 78045 | 57.01 ug/ml | 97 |
| 62) Hexachlorobenzene | 8.69 | 284 | 100845 | 55.19 ug/ml | 93 |
| 63) Pentachlorophenol | 8.91 | 266 | 62424 | 59.92 ug/ml | 93 |
| 64) Phenanthrene | 9.12 | 178 | 352507 | 55.16 ug/ml | 99 |
| 65) Anthracene | 9.18 | 178 | 363448 | 55.44 ug/ml | 99 |
| 66) Carbazole | 9.34 | 167 | 482941 | 64.75 ug/ml | 97 |
| 67) Di-n-butyl phthalate | 9.67 | 149 | 594162 | 57.62 ug/ml | 100 |
| 68) Fluoranthene | 10.23 | 202 | 361601 | 58.19 ug/ml | 92 |
| 70) Benzidine | 10.34 | 184 | 70871 | 37.94 ug/ml | 99 |
| 71) Pyrene | 10.42 | 202 | 349717 | 54.33 ug/ml | 100 |
| 73) Butyl benzyl phthalate | 10.95 | 149 | 254188 | 54.57 ug/ml | 90 |
| 74) Benzo[a]anthracene | 11.43 | 228 | 272487 | 55.12 ug/ml | 99 |
| 75) 3,3'-Dichlorobenzidine | 11.40 | 252 | 100877 | 55.27 ug/ml | 98 |
| 76) Chrysene | 11.46 | 228 | 237735 | 49.74 ug/ml | 100 |
| 77) bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 311797 | 58.04 ug/ml | 94 |
| 79) Di-n-octyl phthalate | 11.93 | 149 | 590129 | 50.67 ug/ml | 99 |
| 80) Benzo[b]fluoranthene | 12.33 | 252 | 335100 | 53.79 ug/ml | 96 |
| 81) Benzo[k]fluoranthene | 12.35 | 252 | 139469 | 33.22 ug/ml | 98 |
| 82) Benzo[a]pyrene | 12.62 | 252 | 225631 | 46.13 ug/ml | 99 |
| 83) Indeno[1,2,3cd]pyrene | 13.85 | 276 | 152056 | 43.00 ug/ml | 95 |
| 84) Dibenz[a,h]anthracene | 13.86 | 278 | 70362 | 35.88 ug/ml | 94 |
| 85) Benzo[g,h,i]perylene | 14.21 | 276 | 117573 | 40.07 ug/ml | 93 |

4/2/08

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

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D Vial: 2
Acq On : 2 Apr 2008 4:14 pm Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 16:31 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D  Vial: 2
Acq On : 3 Apr 2008 7:53 pm  Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1,  Inst : SVOA 4
Misc : 8270_w  Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 95 | 0.00 |
| 2 | | Pyridine | 1.414 | 1.297 | 8.3 | 93 | 0.00 |
| 3 | | n-Nitrosodimethylamine | 0.894 | 0.838 | 6.3 | 89 | 0.00 |
| 4 | S | 2-Fluorophenol | 1.240 | 1.199 | 3.3 | 93 | 0.00 |
| 5 | S | Phenol-d5 | 1.640 | 1.644 | -0.2 | 94 | 0.02 |
| 6 | T,C | Phenol | 1.556 | 1.559 | -0.2 | 95 | 0.02 |
| 7 | | Aniline | 1.707 | 1.643 | 3.7 | 87 | 0.02 |
| 8 | T | bis(2-Chloroethyl)ether | 1.298 | 1.167 | 10.1 | 96 | 0.00 |
| 9 | T | 2-Chlorophenol | 1.245 | 1.262 | -1.4 | 99 | 0.00 |
| 10 | T | 1,3-Dichlorobenzene | 1.399 | 1.400 | -0.1 | 100 | 0.00 |
| 11 | T,C | 1,4-Dichlorobenzene | 1.397 | 1.365 | 2.3 | 98 | 0.00 |
| 12 | T | 1,2-Dichlorobenzene | 1.318 | 1.304 | 1.1 | 99 | 0.00 |
| 13 | | Benzyl alcohol | 0.757 | 0.766 | -1.2 | 94 | 0.02 |
| 14 | T | bis(2-chloroisopropyl)ether | 2.495 | 2.373 | 4.9 | 92 | 0.00 |
| 15 | | 2-Methylphenol | 1.092 | 1.097 | -0.5 | 96 | 0.02 |
| 16 | T | Hexachloroethane | 0.723 | 0.723 | 0.0 | 98 | 0.00 |
| 17 | T,P | N-Nitrosodi-n-propylamine | 0.909 | 0.879 | 3.3 | 95 | 0.02 |
| 18 | | 3/4-Methylphenol | 1.102 | 1.146 | -4.0 | 97 | 0.03 |
| 19 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 20 | S | Nitrobenzene-d5 | 0.481 | 0.466 | 3.1 | 96 | 0.02 |
| 21 | T | Nitrobenzene | 0.440 | 0.432 | 1.8 | 99 | 0.02 |
| 22 | | Acetophenone | 0.568 | 0.578 | -1.8 | 101 | 0.02 |
| 23 | T | Isophorone | 0.827 | 0.793 | 4.1 | 94 | 0.03 |
| 24 | T,C | 2-Nitrophenol | 0.242 | 0.234 | 3.3 | 94 | 0.02 |
| 25 | T | 2,4-Dimethylphenol | 0.408 | 0.420 | -2.9 | 98 | 0.02 |
| 26 | T | bis(2-Chloroethoxy)methane | 0.492 | 0.479 | 2.6 | 93 | 0.00 |
| 27 | T,C | 2,4-Dichlorophenol | 0.345 | 0.344 | 0.3 | 97 | 0.02 |
| 28 | | Benzoic acid | 0.203 | 0.200 | 1.5 | 83 | 0.04 |
| 29 | T | 1,2,4-Trichlorobenzene | 0.355 | 0.363 | -2.3 | 102 | 0.00 |
| 30 | T | Naphthalene | 0.937 | 0.900 | 3.9 | 98 | 0.00 |
| 31 | | 2,6-Dichlorophenol | 0.313 | 0.324 | -3.5 | 107 | 0.00 |
| 32 | | 4-Chloroaniline | 0.404 | 0.394 | 2.5 | 100 | 0.02 |
| 33 | T,C | Hexachlorobutadiene | 0.217 | 0.210 | 3.2 | 99 | 0.00 |
| 34 | T,C | 4-Chloro-3-methylphenol | 0.333 | 0.340 | -2.1 | 96 | 0.02 |
| 35 | | 2-Methylnaphthalene | 0.599 | 0.563 | 6.0 | 94 | 0.00 |
| 36 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 37 | P | Hexachlorocyclopentadiene | 0.316 | 0.262 | 17.1 | 99 | 0.00 |
| 38 | | 2,4,5-Trichlorophenol | 0.457 | 0.476 | -4.2 | 100 | 0.02 |
| 39 | T,C | 2,4,6-Trichlorophenol | 0.455 | 0.467 | -2.6 | 104 | 0.00 |
| 40 | S | 2-Fluorobiphenyl | 1.254 | 1.227 | 2.2 | 104 | 0.00 |
| 41 | T | 2-Chloronaphthalene | 1.520 | 1.476 | 2.9 | 93 | 0.02 |
| 42 | | 2-Nitroaniline | 0.504 | 0.497 | 1.4 | 98 | 0.00 |
| 43 | T | Acenaphthylene | 1.791 | 1.777 | 0.8 | 106 | 0.00 |
| 44 | T | Dimethyl phthalate | 1.512 | 1.479 | 2.2 | 98 | 0.02 |
| 45 | T | 2,6-Dinitrotoluene | 0.359 | 0.370 | -3.1 | 102 | 0.00 |
| 46 | | 3-Nitroaniline | 0.392 | 0.376 | 4.1 | 95 | 0.02 |
| 47 | T,C | Acenaphthene | 1.036 | 1.019 | 1.6 | 107 | 0.00 |
| 48 | T,P | 2,4-Dinitrophenol | 0.219 | 0.235 | -7.3 | 98 | 0.02 |

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,ccv, svoa ccv 80ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | | Dibenzofuran | 1.457 | 1.436 | 1.4 | 107 | 0.00 |
| 50 | T,P | 4-Nitrophenol | 0.278 | 0.292 | -5.0 | 98 | 0.03 |
| 51 | T | 2,4-Dinitrotoluene | 0.433 | 0.410 | 5.3 | 97 | 0.02 |
| 52 | T | Fluorene | 1.014 | 0.847 | 16.5 | 99 | 0.00 |
| 53 | T | 4-Chlorophenyl phenylether | 0.474 | 0.460 | 3.0 | 104 | 0.00 |
| 54 | T | Diethyl phthalate | 1.544 | 1.523 | 1.4 | 102 | 0.02 |
| 55 | | 4-Nitroaniline | 0.380 | 0.360 | 5.3 | 92 | 0.03 |
| 56 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 57 | T | 4,6-Dinitro-2-methylphenol | 0.202 | 0.213 | -5.4 | 98 | 0.03 |
| 58 | C | n-Nitrosodiphenylamine | 1.047 | 0.997 | 4.8 | 98 | 0.02 |
| 59 | | 1,2-diphenyl-Hydrazine | 1.065 | 1.035 | 2.8 | 102 | 0.00 |
| 60 | S | 2,4,6-Tribromophenol | 0.225 | 0.230 | -2.2 | 105 | 0.02 |
| 61 | T | 4-Bromophenyl phenylether | 0.246 | 0.248 | -0.8 | 105 | 0.00 |
| 62 | T | Hexachlorobenzene | 0.328 | 0.326 | 0.6 | 106 | 0.00 |
| 63 | T,C | Pentachlorophenol | 0.187 | 0.183 | 2.1 | 101 | 0.00 |
| 64 | T | Phenanthrene | 1.147 | 1.108 | 3.4 | 98 | 0.00 |
| 65 | T | Anthracene | 1.177 | 1.163 | 1.2 | 98 | 0.00 |
| 66 | | Carbazole | 1.339 | 1.662 | -24.1# | 98 | 0.02 |
| 67 | T | Di-n-butyl phthalate | 1.851 | 1.763 | 4.8 | 99 | 0.00 |
| 68 | T,C | Fluoranthene | 1.115 | 1.109 | 0.5 | 97 | 0.00 |
| 69 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 70 | | Benzidine | 0.420 | 0.285 | 32.1# | 78 | 0.00 |
| 71 | T | Pyrene | 1.449 | 1.435 | 1.0 | 97 | 0.00 |
| 72 | S | Terphenyl-d14 | 0.875 | 0.828 | 5.4 | 97 | 0.00 |
| 73 | T | Butyl benzyl phthalate | 1.048 | 0.998 | 4.8 | 96 | 0.00 |
| 74 | T | Benzo[a]anthracene | 1.113 | 1.155 | -3.8 | 98 | 0.00 |
| 75 | T | 3,3'-Dichlorobenzidine | 0.411 | 0.398 | 3.2 | 95 | 0.00 |
| 76 | T | Chrysene | 1.076 | 1.054 | 2.0 | 98 | 0.00 |
| 77 | T | bis(2-Ethylhexyl)phthalate | 1.209 | 1.105 | 8.6 | 101 | 0.00 |
| 78 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 79 | T,C | Di-n-octyl phthalate | 3.107 | 3.004 | 3.3 | 94 | 0.00 |
| 80 | T | Benzo[b]fluoranthene | 1.662 | 1.399 | 15.8 | 96 | 0.00 |
| 81 | T | Benzo[k]fluoranthene | 1.120 | 1.075 | 4.0 | 93 | 0.00 |
| 82 | T,C | Benzo[a]pyrene | 1.305 | 1.133 | 13.2 | 94 | 0.00 |
| 83 | T | Indeno[1,2,3cd]pyrene | 0.943 | 0.758 | 19.6 | 90 | 0.00 |
| 84 | T | Dibenz[a,h]anthracene | 0.523 | 0.383 | 26.8# | 89 | 0.00 |
| 85 | T | Benzo[g,h,i]perylene | 0.783 | 0.628 | 19.8 | 94 | 0.00 |

4-3-08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
D040302.D SVOA0328.M Thu Apr 03 21:09:12 2008 SVOA 4

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D Vial: 2
Acq On : 3 Apr 2008 7:53 pm Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120953 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 383369 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.49 | 164 | 202281 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 261771 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.46 | 240 | 186913 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 137911 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 289942 | 77.31 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.92 | 99 | 397778 | 80.21 | ug/ml | 0.02 |
| 20) Nitrobenzene-d5 | 4.83 | 82 | 357124 | 77.50 | ug/ml | 0.02 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 496268 | 78.28 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.38 | 330 | 120361 | 81.85 | ug/ml | 0.02 |
| 72) Terphenyl-d14 | 10.56 | 244 | 309466 | 75.71 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.37 | 79 | 313766 | 73.39 | ug/ml | 100 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 202760 | 75.01 | ug/ml | 88 |
| 6) Phenol | 3.93 | 94 | 377202m | 80.18 | ug/ml | |
| 7) Aniline | 3.99 | 93 | 397375 | 76.98 | ug/ml | 100 |
| 8) bis(2-Chloroethyl)ether | 4.03 | 93 | 282340 | 71.91 | ug/ml | 91 |
| 9) 2-Chlorophenol | 4.09 | 128 | 305263 | 81.09 | ug/ml | 99 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 338665 | 80.04 | ug/ml | 100 |
| 11) 1,4-Dichlorobenzene | 4.30 | 146 | 330232 | 78.17 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 315528 | 79.17 | ug/ml | 99 |
| 13) Benzyl alcohol | 4.42 | 108 | 185399 | 80.95 | ug/ml | 98 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 574073 | 76.09 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.50 | 108 | 265315 | 80.36 | ug/ml | 98 |
| 16) Hexachloroethane | 4.77 | 117 | 174924 | 80.05 | ug/ml | 95 |
| 17) N-Nitrosodi-n-propylamine | 4.68 | 70 | 212663 | 77.39 | ug/ml | 97 |
| 18) 3/4-Methylphenol | 4.66 | 108 | 277303 | 83.20 | ug/ml | 95 |
| 21) Nitrobenzene | 4.85 | 77 | 331475 | 78.66 | ug/ml | 92 |
| 22) Acetophenone | 4.67 | 105 | 443490 | 81.53 | ug/ml | 100 |
| 23) Isophorone | 5.10 | 82 | 608028 | 76.70 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.17 | 139 | 179177 | 77.26 | ug/ml | 89 |
| 25) 2,4-Dimethylphenol | 5.20 | 107 | 321963 | 82.42 | ug/ml | 96 |
| 26) bis(2-Chloroethoxy)methane | 5.30 | 93 | 367615 | 77.92 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.41 | 162 | 264069 | 79.90 | ug/ml | 99 |
| 28) Benzoic acid | 5.35 | 122 | 153720 | 78.82 | ug/ml | 98 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 278134 | 81.65 | ug/ml | 99 |
| 30) Naphthalene | 5.59 | 128 | 690138 | 76.83 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.65 | 162 | 248612 | 82.89 | ug/ml | 98 |
| 32) 4-Chloroaniline | 5.65 | 127 | 302069 | 78.09 | ug/ml | 98 |
| 33) Hexachlorobutadiene | 5.71 | 225 | 160741 | 77.40 | ug/ml | 97 |
| 34) 4-Chloro-3-methylphenol | 6.16 | 107 | 260374 | 81.51 | ug/ml | 92 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 431999 | 75.20 | ug/ml | 100 |
| 37) Hexachlorocyclopentadiene | 6.50 | 237 | 105901 | 66.33 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.68 | 196 | 192681 | 83.35 | ug/ml | 99 |
| 39) 2,4,6-Trichlorophenol | 6.64 | 196 | 188785 | 82.03 | ug/ml | 99 |
| 41) 2-Chloronaphthalene | 6.87 | 162 | 596967 | 77.69 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.99 | 65 | 200954 | 78.87 | ug/ml | 95 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D Vial: 2
Acq On : 3 Apr 2008 7:53 pm Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

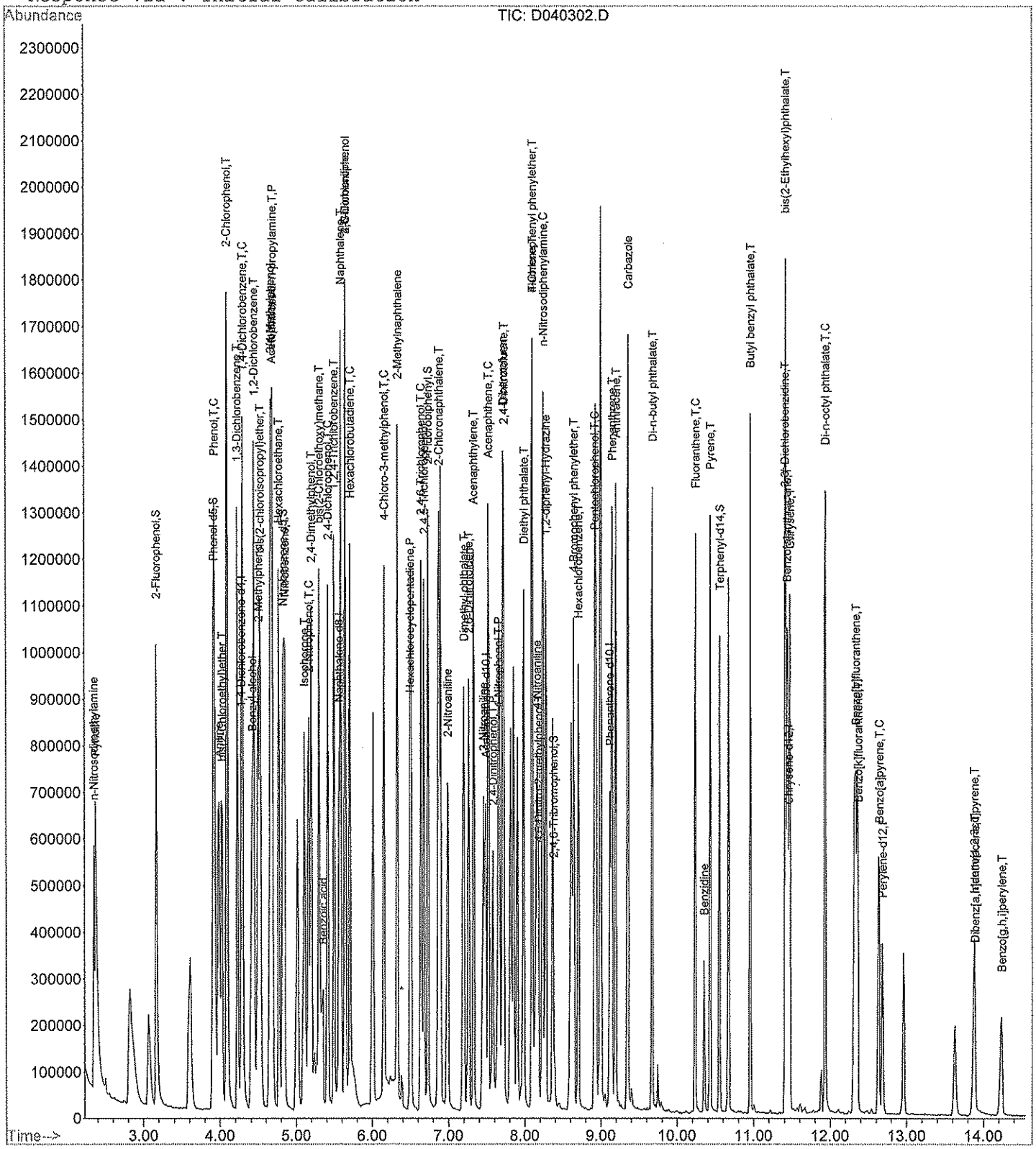
| | Compound | R.T. | QIon | Response | Conc Unit | Qvalue |
|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.32 | 152 | 718809 | 79.36 ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.20 | 163 | 598409 | 78.26 ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.26 | 165 | 149604 | 82.34 ug/ml | 94 |
| 46) | 3-Nitroaniline | 7.46 | 138 | 152219 | 76.82 ug/ml | 98 |
| 47) | Acenaphthene | 7.52 | 153 | 412120 | 78.65 ug/ml | 98 |
| 48) | 2,4-Dinitrophenol | 7.58 | 184 | 95214 | 85.83 ug/ml | 93 |
| 49) | Dibenzofuran | 7.71 | 168 | 580795 | 78.81 ug/ml | 97 |
| 50) | 4-Nitrophenol | 7.65 | 109 | 118253 | 84.10 ug/ml | 90 |
| 51) | 2,4-Dinitrotoluene | 7.72 | 165 | 165949 | 75.86 ug/ml | 77 |
| 52) | Fluorene | 8.10 | 166 | 342487 | 66.77 ug/ml | 98 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 186036 | 77.58 ug/ml | 99 |
| 54) | Diethyl phthalate | 7.99 | 149 | 616219 | 78.90 ug/ml | 98 |
| 55) | 4-Nitroaniline | 8.16 | 138 | 145463 | 75.75 ug/ml | 99 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.18 | 198 | 111413 | 84.17 ug/ml# | 75 |
| 58) | n-Nitrosodiphenylamine | 8.24 | 169 | 521835 | 76.18 ug/ml | 98 |
| 59) | 1,2-diphenyl-Hydrazine | 8.27 | 77 | 541938 | 77.74 ug/ml | 98 |
| 61) | 4-Bromophenyl phenylether | 8.64 | 248 | 129949 | 80.80 ug/ml | 94 |
| 62) | Hexachlorobenzene | 8.70 | 284 | 170426 | 79.40 ug/ml | 94 |
| 63) | Pentachlorophenol | 8.92 | 266 | 95645 | 78.15 ug/ml | 97 |
| 64) | Phenanthrene | 9.14 | 178 | 580202 | 77.29 ug/ml | 100 |
| 65) | Anthracene | 9.20 | 178 | 608748 | 79.04 ug/ml | 99 |
| 66) | Carbazole | 9.36 | 167 | 869866 | 99.28 ug/ml | 99 |
| 67) | Di-n-butyl phthalate | 9.68 | 149 | 922902 | 76.19 ug/ml | 100 |
| 68) | Fluoranthene | 10.24 | 202 | 580483 | 79.52 ug/ml | 97 |
| 70) | Benzidine | 10.35 | 184 | 106470 | 54.19 ug/ml | 96 |
| 71) | Pyrene | 10.43 | 202 | 536492 | 79.25 ug/ml | 100 |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 373001 | 76.13 ug/ml | 99 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 431660 | 83.01 ug/ml | 100 |
| 75) | 3,3'-Dichlorobenzidine | 11.40 | 252 | 148622 | 77.42 ug/ml | 100 |
| 76) | Chrysene | 11.48 | 228 | 393856 | 78.35 ug/ml | 100 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 413078 | 73.10 ug/ml | 98 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 828601 | 77.35 ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.34 | 252 | 385814 | 67.33 ug/ml | 97 |
| 81) | Benzo[k]fluoranthene | 12.37 | 252 | 296452 | 76.77 ug/ml | 97 |
| 82) | Benzo[a]pyrene | 12.64 | 252 | 312522 | 69.46 ug/ml | 98 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 209057 | 64.27 ug/ml | 99 |
| 84) | Dibenz[a,h]anthracene | 13.89 | 278 | 105747 | 58.63 ug/ml | 89 |
| 85) | Benzo[g,h,i]perylene | 14.24 | 276 | 173114 | 64.14 ug/ml | 90 |

4/3/08

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

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D Vial: 2
Acq On : 3 Apr 2008 7:53 pm Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040338.D Vial: 14
Acq On : 4 Apr 2008 3:21 am Operator: mills
Sample : ,samp,me0803b85-14b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:58 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

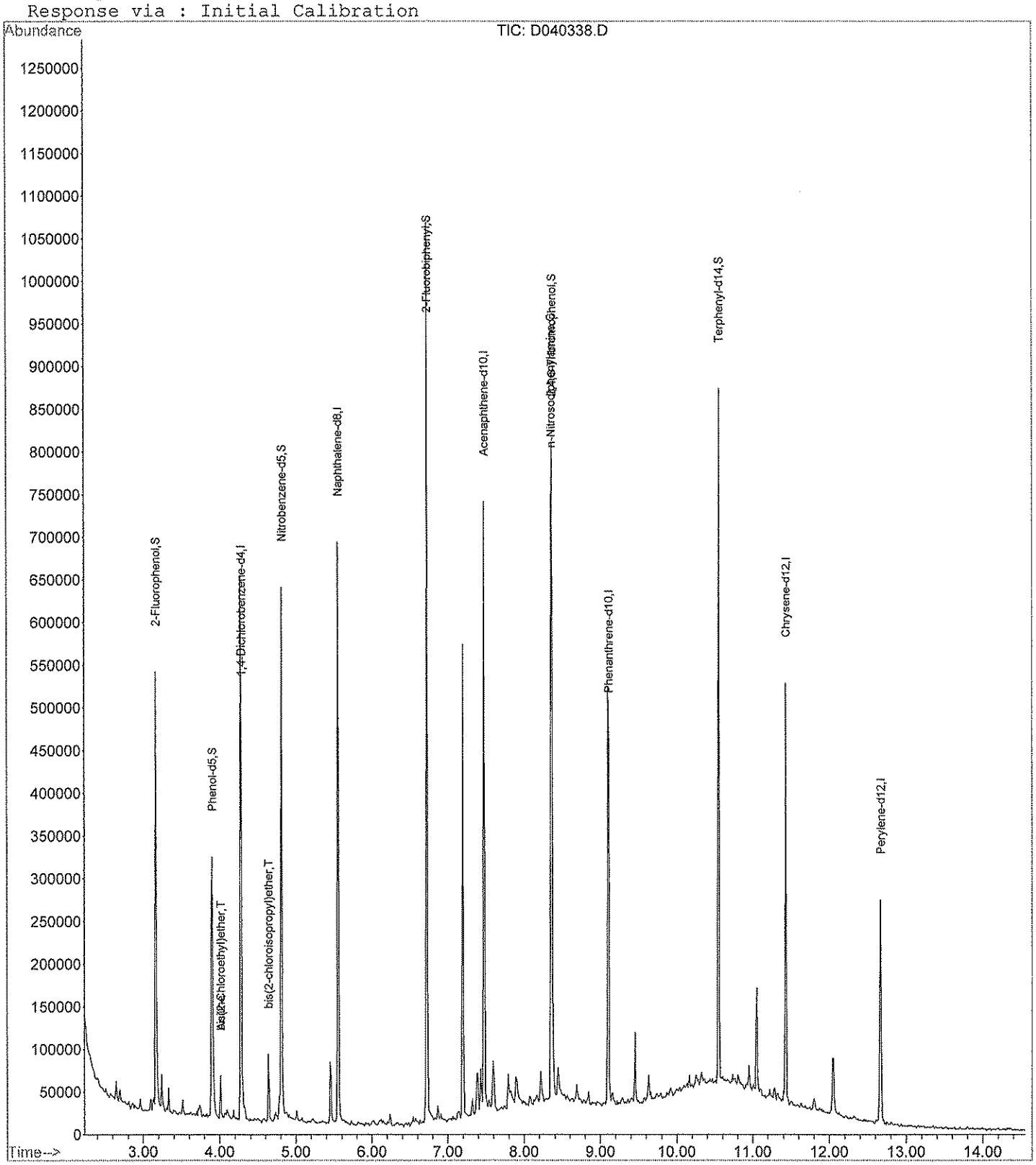
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 103836 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 315202 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 152043 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 196468 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.43 | 240 | 147356 | 40.00 | ug/ml | -0.02 |
| 78) Perylene-d12 | 12.67 | 264 | 120487 | 40.00 | ug/ml | -0.02 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 128660 | 39.96 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 125446 | 29.46 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 188554 | 49.77 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 307107 | 64.45 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 126166 | 114.32 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 208304 | 64.64 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 7) Aniline | 4.02 | 93 | 13854 | 3.13 | ug/ml# | 35 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 13854 | 4.11 | ug/ml | 89 |
| 14) bis(2-chloroisopropyl)ethe | 4.64 | 45 | 31467 | 4.86 | ug/ml# | 74 |
| 58) n-Nitrosodiphenylamine | 8.35 | 169 | 4686 | 0.91 | ug/ml# | 39 |

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D040308\D040338.D Vial: 14
Acq On : 4 Apr 2008 3:21 am Operator: mills
Sample : ,samp,me0803b85-14b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:58 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040339.D Vial: 15
Acq On : 4 Apr 2008 3:47 am Operator: mills
Sample : ,samp,me0803b85-17b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 105935 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 331903 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 154183 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 204026 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 155509 | 40.00 | ug/ml | -0.01 |
| 78) Perylene-d12 | 12.67 | 264 | 117185 | 40.00 | ug/ml | -0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 144322 | 43.94 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 135977 | 31.31 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 207224 | 51.94 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 341225 | 70.62 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 129427 | 112.93 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.56 | 244 | 212146 | 62.38 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 7) Aniline | 4.01 | 93 | 15694 | 3.47 | ug/ml# | 35 |
| 8) bis(2-Chloroethyl)ether | 4.01 | 93 | 15694 | 4.56 | ug/ml | 92 |
| 14) bis(2-chloroisopropyl)ethe | 4.64 | 45 | 39064 | 5.91 | ug/ml# | 75 |

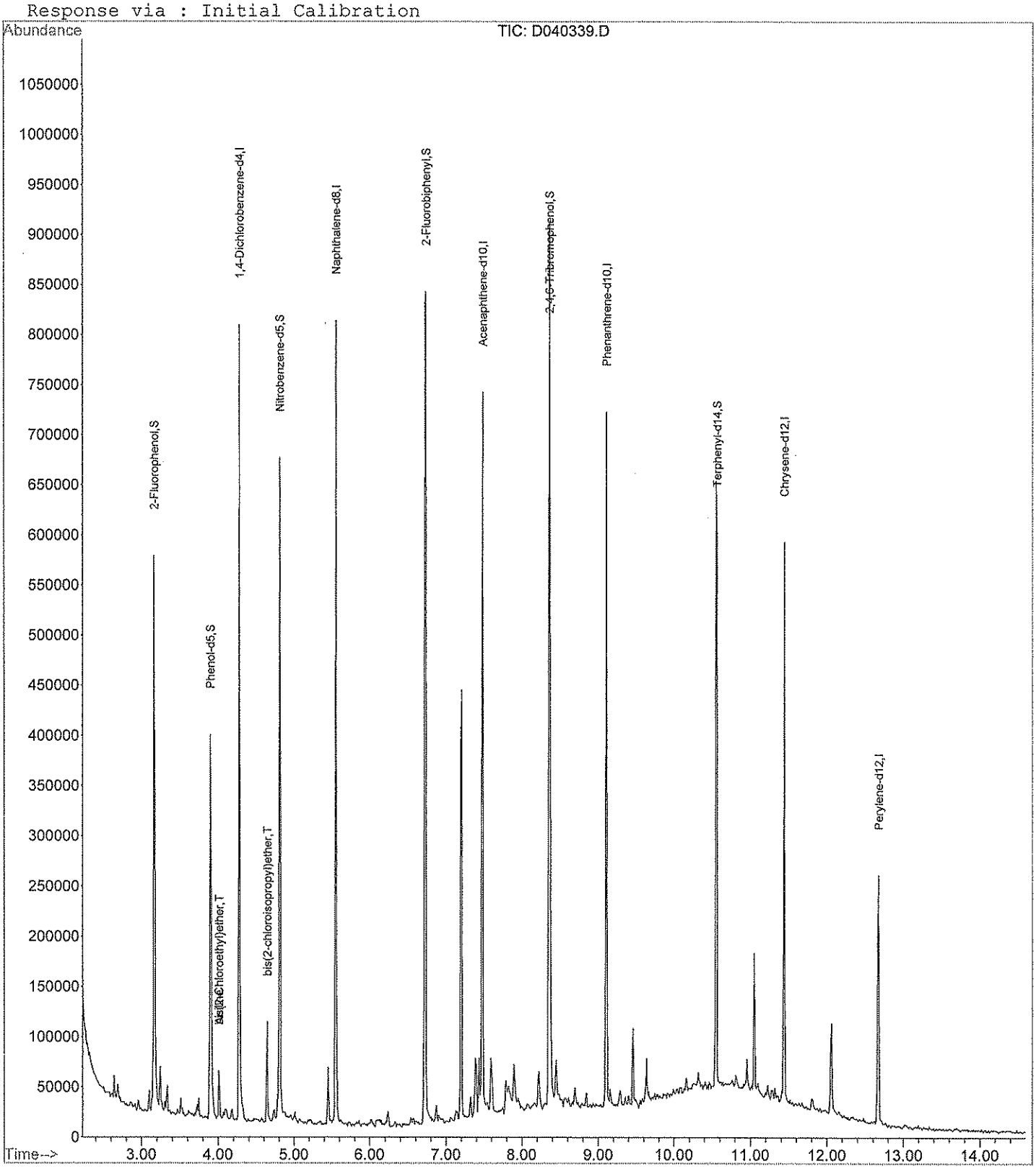
4-4-08

(#) = qualifier out of range (m) = manual integration
D040339.D SVOA0328.M Fri Apr 04 14:59:03 2008 SVOA 4

4/5/08

Data File : C:\HPCHEM\1\DATA\D040308\D040339.D Vial: 15
Acq On : 4 Apr 2008 3:47 am Operator: mills
Sample : ,samp,me0803b85-17b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# EXTRACTION LOG(S)

# Microbac Laboratories, Inc.

# PREP BATCH REPORT



Prep Batch **60802** Prep Code: **3510_B** Technician: **James Manley**

Prep Start Date: **4/2/2008 6:22:00 AM**
Prep End Date: **4/2/2008 1:44:00 PM**

| Sample ID | Matrix | pH | wt (g) | Ini vol (mL) | Sol Added | Sol Recov | Fin Vol (mL) | factor | PrepStart | PrepEnd |
|---|---|---|---|---|---|---|---|---|---|---|
| BK-1-040208 | | | | 1000 | 0 | 0 | 1 | 0.001 | 4/2/2008 | 4/2/2008 |
| LCS-1-040208 | | | | 1000 | 0 | 0 | 1 | 0.001 | 4/2/2008 | 4/2/2008 |
| ME0803A91-07B | Aqueous | | | 980 | 0 | 0 | 1 | 0.0010204 | 4/2/2008 | 4/2/2008 |
| ME0803A91-11C | Aqueous | | | 990 | 0 | 0 | 1 | 0.0010101 | 4/2/2008 | 4/2/2008 |
| ME0803B85-14B | Aqueous | | | 970 | 0 | 0 | 1 | 0.0010309 | 4/2/2008 | 4/2/2008 |
| ME0803B85-17B | Aqueous | | | 980 | 0 | 0 | 1 | 0.0010204 | 4/2/2008 | 4/2/2008 |
| ME0803C07-02B | Aqueous | | | 970 | 0 | 0 | 1 | 0.0010309 | 4/2/2008 | 4/2/2008 |
| ME0803C07-02BM | Aqueous | | | 470 | 0 | 0 | 1 | 0.0021277 | 4/2/2008 | 4/2/2008 |
| ME0803C07-02BM | Aqueous | | | 480 | 0 | 0 | 1 | 0.0020833 | 4/2/2008 | 4/2/2008 |
| ME0803C18-01B | Aqueous | | | 1010 | 0 | 0 | 1 | 0.0009901 | 4/2/2008 | 4/2/2008 |
| ME0804043-01B | Aqueous | | | 970 | 0 | 0 | 1 | 0.0010309 | 4/2/2008 | 4/2/2008 |
| ME0804043-02B | Aqueous | | | 990 | 0 | 0 | 1 | 0.0010101 | 4/2/2008 | 4/2/2008 |

| Spk ID | Spike Name | SampType | AmtAdd |
|---|---|---|---|
| 1MLSPAB62-12 | | | 0 |
| 1MLSRAB62-07 | | | 0 |

# Injection Log

Directory: C:\HPCHEM\1\DATA\D040208

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | D040201.D | 1. | ,tune,dftpp tune,1, | dftpp | 2 Apr 2008 15:55 |
| 2 | 2 | D040202.D | 1. | ,ccv, svoa ccv 50ug/ml,1, | 8270_w | 2 Apr 2008 16:14 |
| 3 | 100 | D040203.D | 1. | rinse | 8270_w | 2 Apr 2008 17:08 |
| 4 | 26 | D040204.D | 1. | ,mblk,bk-1-040208,1, | 8270_w | 2 Apr 2008 17:30 |
| 5 | 27 | D040205.D | 1. | ,mblk,bk-1-032708,1, | 8270_w | 2 Apr 2008 17:57 |
| 6 | 28 | D040206.D | 1. | ,lcs,lcs-1-040208,1, | 8270_w | 2 Apr 2008 18:23 |
| 7 | 29 | D040207.D | 1. | ,lcs,lcs-1-032708,1, | 8270_w | 2 Apr 2008 18:48 |
| 8 | 30 | D040208.D | 1. | ,samp,me0803c18-01b,1, | 8270_w | 2 Apr 2008 19:15 |
| 9 | 31 | D040209.D | 1. | ,samp,me0803968-01a,1, | 625_w | 2 Apr 2008 19:41 |
| 10 | 36 | D040210.D | 1. | ,lcs,lcs-9a-032108,1, | 8270_o | 2 Apr 2008 20:07 |
| 11 | 37 | D040211.D | 1. | ,lcs,lcs-9b-032108,1, | 8270_o | 2 Apr 2008 20:34 |
| 12 | 32 | D040212.D | 1. | ,ms,me0803866-02ems,1, | 8270_w | 2 Apr 2008 21:00 |
| 13 | 33 | D040213.D | 1. | ,msd,me0803866-02emsd,1, | 8270_w | 2 Apr 2008 21:26 |
| 14 | 34 | D040214.D | 1. | ,samp,me0803a91-07b,1, | 8270_w | 2 Apr 2008 21:52 |
| 15 | 35 | D040215.D | 1. | ,samp,me0803a91-11c,1, | 8270_w | 2 Apr 2008 22:18 |
| 16 | 38 | D040216.D | 1. | ,samp,me0803a81-01a,1, | 1311_b | 2 Apr 2008 22:41 |
| 17 | 39 | D040217.D | 1. | ,samp,me0803a19-01a,1, | 8270_s_pah | 2 Apr 2008 23:07 |
| 18 | 40 | D040218.D | 1. | ,samp,me0803a19-02a,1, | 8270_s_pah | 2 Apr 2008 23:32 |
| 19 | 41 | D040219.D | 1. | ,samp,me0803a19-03a,1, | 8270_s_pah | 2 Apr 2008 23:57 |
| 20 | 42 | D040220.D | 1. | ,samp,me0803880-01a,1, | 8270_s_pah | 3 Apr 2008 00:23 |
| 21 | 43 | D040221.D | 1. | ,ms,me0803880-01ams,1, | 8270_s_pah | 3 Apr 2008 00:48 |
| 22 | 44 | D040222.D | 1. | ,msd,me0803880-01amsd,1, | 8270_s_pah | 3 Apr 2008 01:13 |
| 23 | 45 | D040223.D | 1. | ,samp,me0803880-03a,1, | 8270_s_pah | 3 Apr 2008 01:38 |

1762699

SVOA Standards

Acquisition Method 8270-AE
Initial Linearity Date 3-28-08
Tune Std. # [illegible]
ICV Std. # [illegible]
CCV Std. # [illegible]
I.S. # [illegible]

# Injection Log

Directory: C:\HPCHEM\1\DATA\D040308

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | D040301.D | 1. | ,tune,dftpp tune,1, | dftpp | 3 Apr 2008 19:35 |
| 2 | 2 | D040302.D | 1. | ,ccv, svoa ccv 80ug/ml,1, | 8270_w | 3 Apr 2008 19:53 |
| 3 | 100 | D040303.D | 1. | rinse | 8270_w | 3 Apr 2008 21:16 |
| 4 | 3 | D040304.D | 1. | ,samp,me0803b68-01c,1,#37 only | 625+_w | 3 Apr 2008 21:41 |
| 5 | 100 | D040325.D | 1. | rinse | 8270_w | 3 Apr 2008 21:57 |
| 6 | 100 | D040327.D | 1. | rinse | 8270_w | 3 Apr 2008 22:23 |
| 7 | 4 | D040328.D | 1. | ,mblk,bk-8-040308,1,short 625 list | 8270_w | 3 Apr 2008 22:59 |
| 8 | 5 | D040329.D | 1. | ,lcs,lcs-8a-040308,1,short 625 list | 8270_w | 3 Apr 2008 23:27 |
| 9 | 6 | D040330.D | 1. | ,lcs,lcs-8b-040308,1,short 625 list | 8270_w | 3 Apr 2008 23:54 |
| 10 | 7 | D040331.D | 1. | ,samp,me0804101-01a,1, | 8270_w | 4 Apr 2008 00:22 |
| 11 | 8 | D040332.D | 1. | ,samp,me0804119-03b,1, | 8270_w | 4 Apr 2008 00:49 |
| 12 | 9 | D040333.D | 1. | ,samp,me0804119-04b,1, | 8270_w | 4 Apr 2008 01:13 |
| 13 | 10 | D040334.D | 1. | ,samp,me0804043-03b,1, | 8270_w | 4 Apr 2008 01:39 |
| 14 | 11 | D040335.D | 1. | ,samp,me0804043-04b,1, | 8270_w | 4 Apr 2008 02:04 |
| 15 | 12 | D040336.D | 1. | ,samp,me0804107-01a,1, | 625_w | 4 Apr 2008 02:30 |
| 16 | 13 | D040337.D | 1. | ,samp,me0804126-02a,1, | 625+_w | 4 Apr 2008 02:56 |
| 17 | 14 | D040338.D | 1. | ,samp,me0803b85-14b,1, | 8270_w | 4 Apr 2008 03:21 |
| 18 | 15 | D040339.D | 1. | ,samp,me0803b85-17b,1, | 8270_w | 4 Apr 2008 03:47 |
| 19 | 16 | D040340.D | 1. | ,samp,me0803c07-02b,1, | 8270_w | 4 Apr 2008 04:12 |
| 20 | 17 | D040341.D | 1. | ,ms,me0803c07-02bms,1, | 8270_w | 4 Apr 2008 04:38 |
| 21 | 18 | D040342.D | 1. | ,msd,me0803c07-02bmsd,1, | 8270_w | 4 Apr 2008 05:03 |
| 22 | 19 | D040343.D | 1. | ,samp,me0804043-01b,1, | 8270_w | 4 Apr 2008 05:29 |
| 23 | 20 | D040344.D | 1. | ,samp,me0804043-02b,1, | 8270_w | 4 Apr 2008 05:54 |
| 24 | 21 | D040345.D | 1. | ,samp,me0804053-01a,1, | 625_w | 4 Apr 2008 06:20 |
| 25 | 22 | D040346.D | 1. | ,samp,me0804005-01a,1, | 625_w | 4 Apr 2008 06:45 |
| 26 | 23 | D040347.D | 1. | ,lcs,lcs-2-033108,1, not used | 8270_s_pah | 4 Apr 2008 07:11 |
| 27 | 100 | D040350.D | 1. | rinse | 625_w | 4 Apr 2008 07:27 |

SVOA Standards

Acquisition Method 8270-AE
Initial Linearity Date 3-28-08
Tune Std. # T7726
ICV Std. # AB19-12
CCV Std. # AB61-03
LS # AB107-02

[illegible] 4-4-08

# VOA GC/MS
# RAW DATA

# METHOD BLANK RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040403.D
Acq On : 4 Apr 2008 7:40 am
Sample : ,mblk,bk_w25-40408,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 08:38:49 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 445671 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 430858 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 232307 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 122451 | 10.55 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 105.50% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 117913 | 10.59 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 105.90% | | |
| 44) toluene-d8 | 9.247 | 98 | 488648 | 9.34 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 93.40% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 214129 | 9.71 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.10% | | |
| Target Compounds | | | | | | Qvalue |
| 5) 1,3-butadiene | 1.968 | 39 | 239 | 0.02 | ug/L # | 66 |
| 83) naphthalene | 18.260 | 128 | 6455 | 0.39 | ug/L | 100 |
| 85) 2-methyl naphthalene | 19.318 | 142 | 7205 | 0.90 | ug/L | 98 |

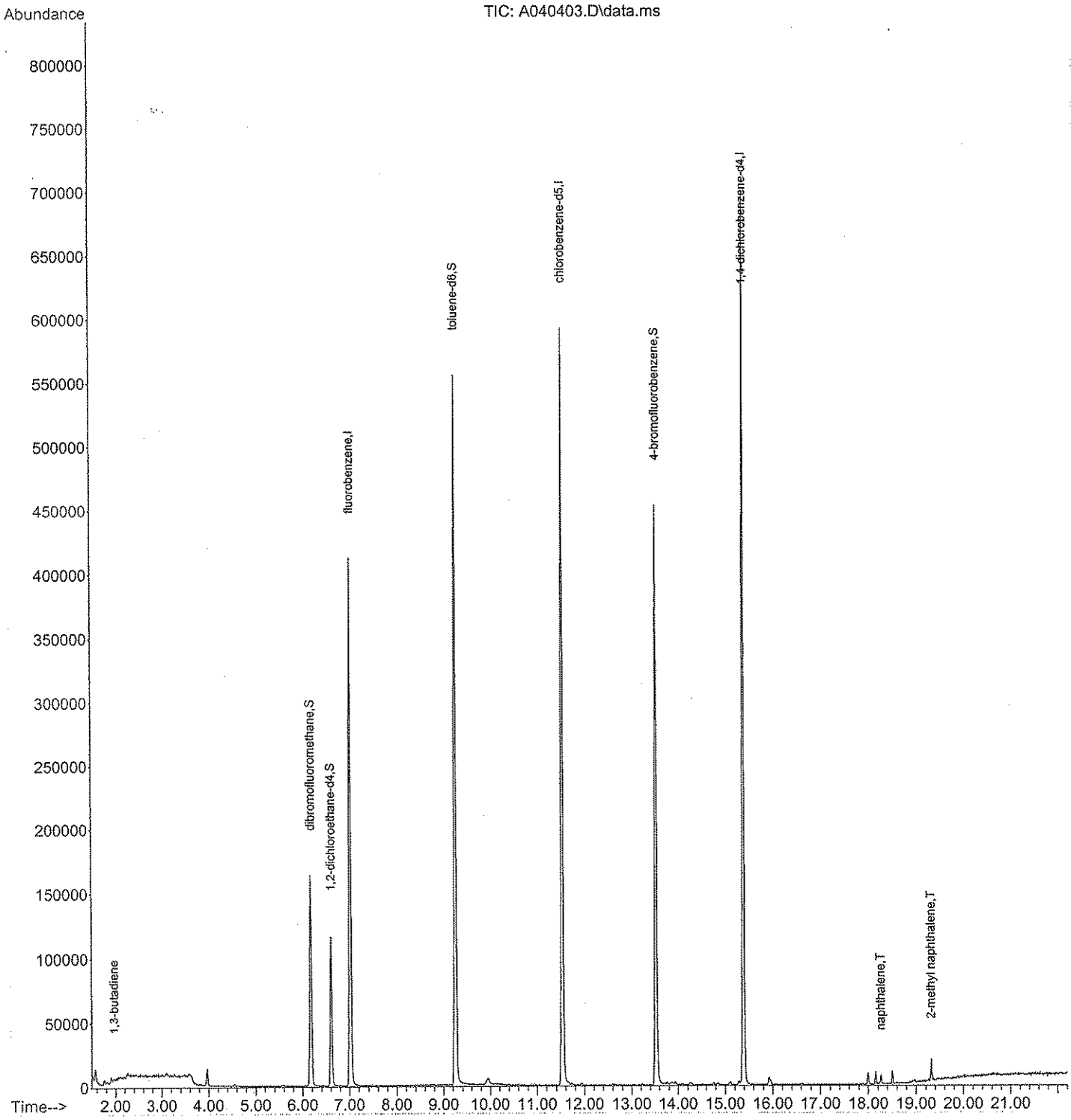
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040403.D
Acq On : 4 Apr 2008 7:40 am
Sample : ,mblk,bk_w25-40408,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 08:38:49 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040403.D 25ML0403.M Fri Apr 04 08:38:50 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040503.D
Acq On : 5 Apr 2008 7:16 am
Sample : ,MBLK,MB_W25 4/5,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 05 07:56:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 559297 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 380794 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 184550 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 143176 | 9.83 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.30% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 146719 | 10.50 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.00% | | | |
| 44) toluene-d8 | 9.247 | 98 | 530058 | 11.46 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.60% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 184435 | 9.47 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 94.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 83) naphthalene | 18.260 | 128 | 6431 | 0.49 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 3415 | 0.36 | ug/L | 93 |
| 85) 2-methyl naphthalene | 19.318 | 142 | 6779 | 1.06 | ug/L | 95 |

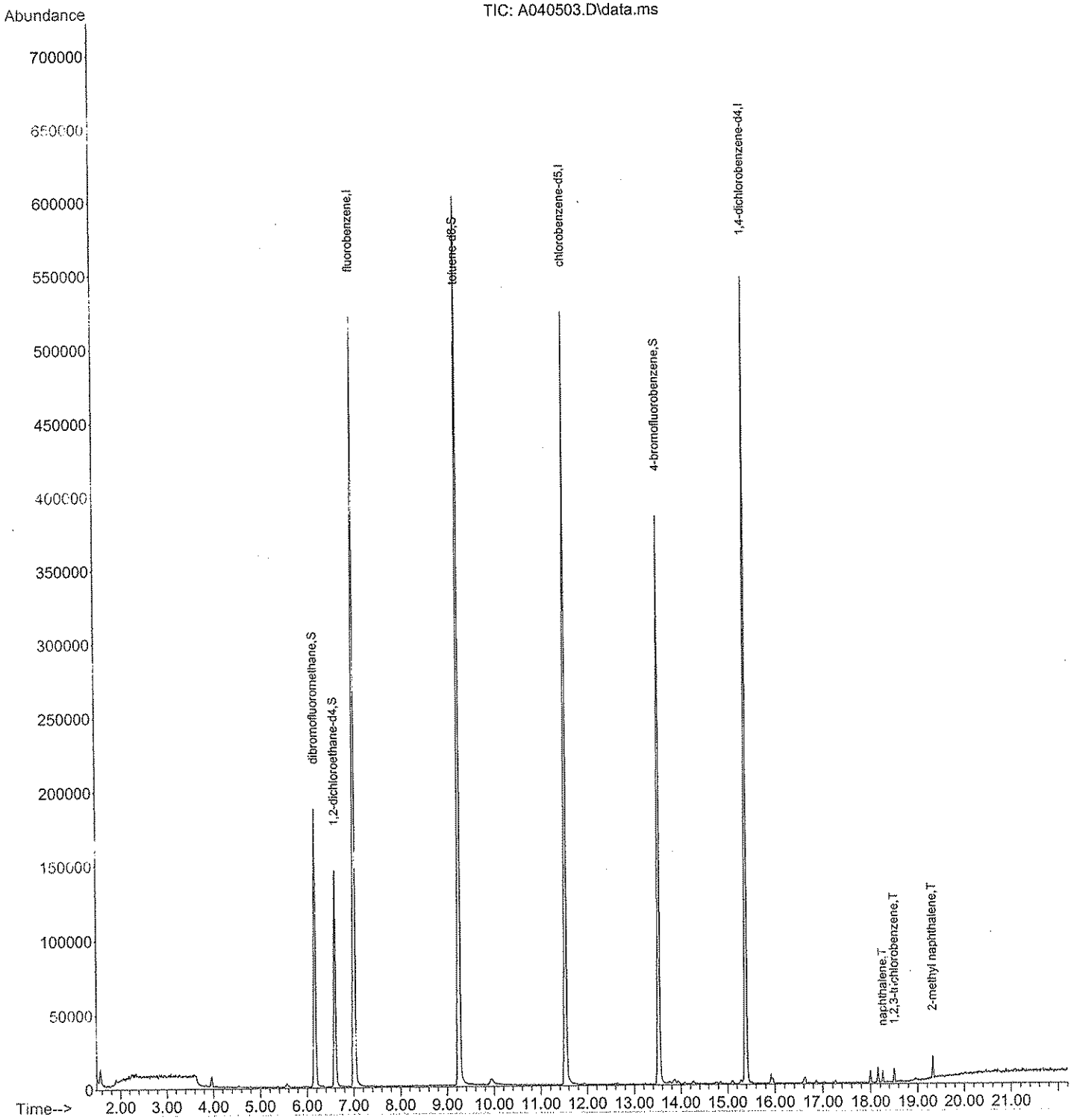
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/5/8

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040503.D
Acq On : 5 Apr 2008 7:16 am
Sample : ,MBLK,MB_W25 4/5,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 05 07:56:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW_ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040604.D
Acq On : 6 Apr 2008 4:41 pm
Sample : ,MBLK,MB_W25 4/6,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 17:08:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.011 | 96 | 627528 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 427806 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.385 | 152 | 211790 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.166 | 113 | 160712 | 9.83 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.30% | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 164232 | 10.48 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.80% | | | |
| 44) toluene-d8 | 9.249 | 98 | 595365 | 11.46 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.60% | | | |
| 63) 4-bromofluorobenzene | 13.524 | 95 | 211705 | 9.67 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 81) 1,2,4-trichlorobenzene | 18.000 | 180 | 4708 | 0.33 | ug/L | 85 |
| 82) hexachlorobutadiene | 18.158 | 225 | 4068 | 0.33 | ug/L | 95 |
| 83) naphthalene | 18.256 | 128 | 7187 | 0.48 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.505 | 180 | 5324 | 0.49 | ug/L | 96 |
| 85) 2-methyl naphthalene | 19.326 | 142 | 10760 | 1.47 | ug/L | 95 |

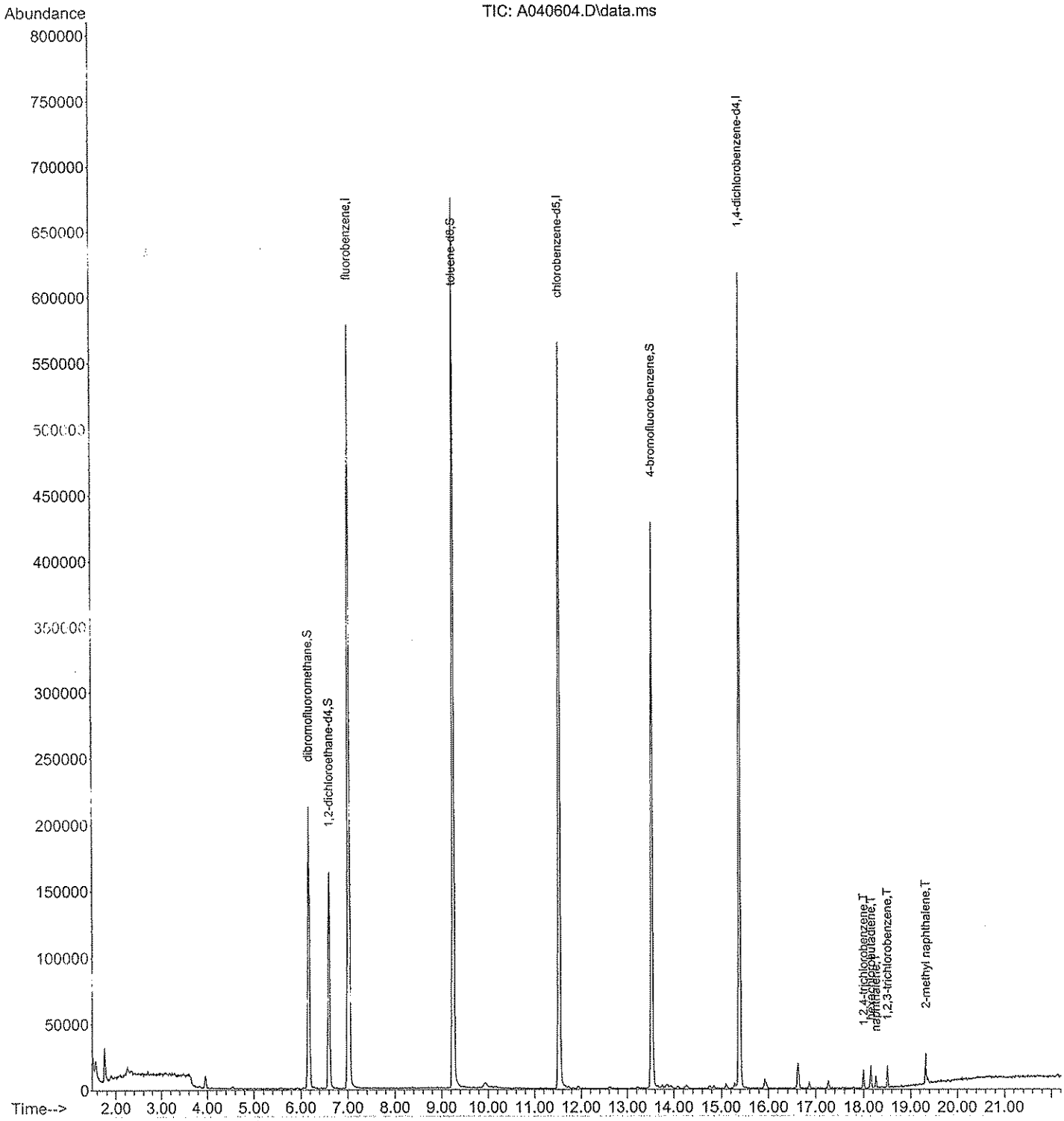
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4-6-08

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040604.D
Acq On : 6 Apr 2008 4:41 pm
Sample : ,MBLK,MB_W25 4/6,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 17:08:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040803.D
Acq On : 8 Apr 2008 8:11 am
Sample : ,MBLK,MB_W25 4/8,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 08 08:38:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

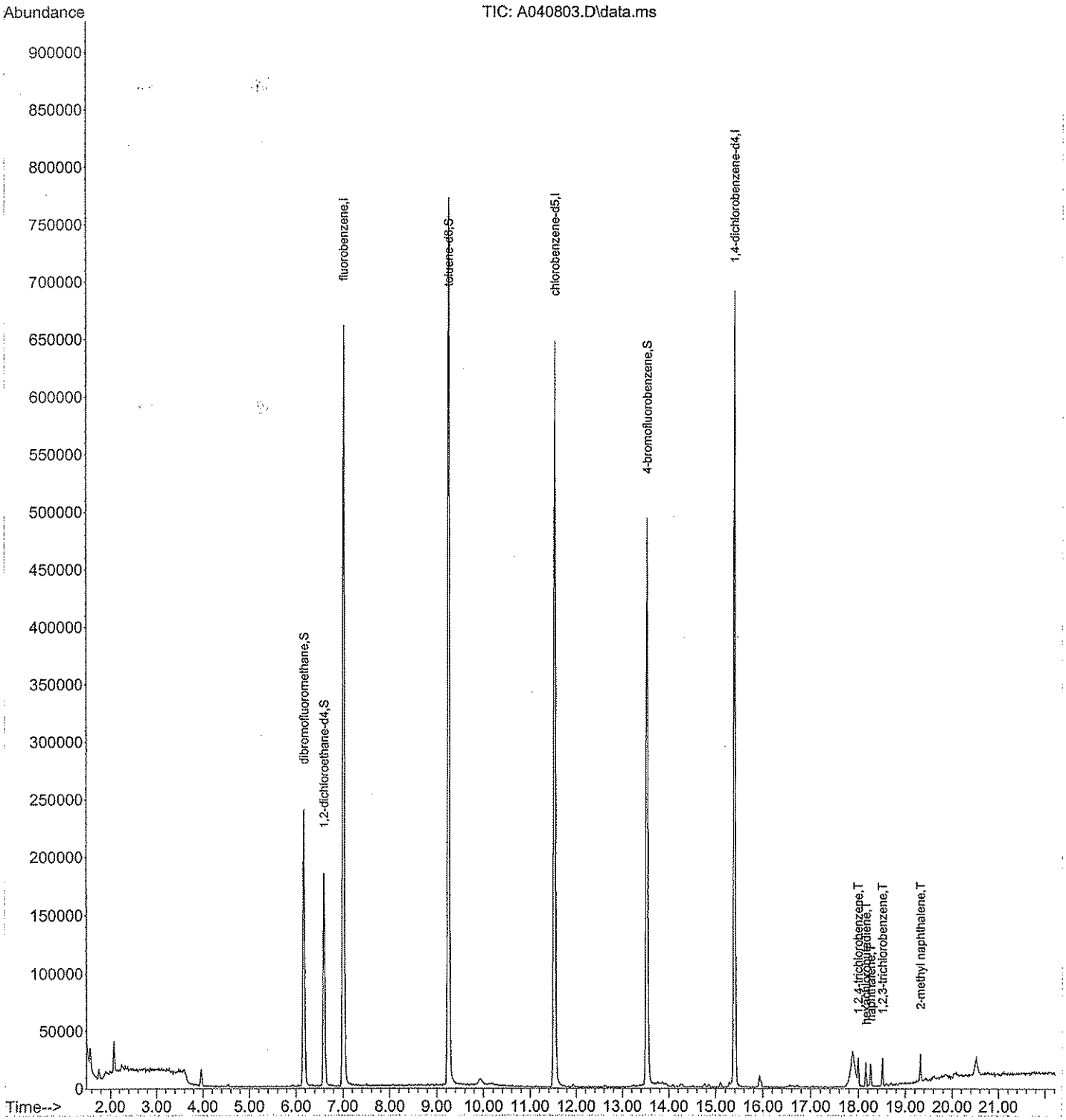
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 710960 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 495503 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 243132 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 182003 | 9.83 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.30% | | | |
| 30) 1,2-dichloroethane-d4 | 6.596 | 65 | 184449 | 10.39 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.90% | | | |
| 44) toluene-d8 | 9.248 | 98 | 687782 | 11.43 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.30% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 240030 | 9.47 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 94.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 7704 | 0.47 | ug/L | 94 |
| 82) hexachlorobutadiene | 18.163 | 225 | 4541 | 0.32 | ug/L | 82 |
| 83) naphthalene | 18.260 | 128 | 14622 | 0.85 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 7893 | 0.63 | ug/L | 95 |
| 85) 2-methyl naphthalene | 19.324 | 142 | 10521 | 1.25 | ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040803.D
Acq On : 8 Apr 2008 8:11 am
Sample :,,MBLK,MB_W25 4/8,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 08 08:38:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# LABORATORY CONTROL SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040404.D
Acq On : 4 Apr 2008 8:16 am
Sample : ,LCS,LCS_w25-10 PPB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 08:38:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 456255 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.529 | 117 | 450601 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 287866 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.165 | 113 | 128349 | 10.80 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 108.00% | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 123066 | 10.80 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 108.00% | | |
| 44) toluene-d8 | 9.248 | 98 | 508299 | 9.29 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 92.90% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 251637 | 10.92 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.20% | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 139862 | 14.86 | ug/L | 95 |
| 3) chloromethane | 1.817 | 50 | 253944 | 16.89 | ug/L | 97 |
| 4) vinyl chloride | 1.932 | 62 | 168087 | 10.47 | ug/L | 97 |
| 5) 1,3-butadiene | 1.975 | 39 | 600 | 0.04 | ug/L # | 25 |
| 6) bromomethane | 2.328 | 94 | 23521 | 4.15 | ug/L | 88 |
| 7) chloroethane | 2.443 | 64 | 113579 | 11.98 | ug/L | 95 |
| 8) trichlorofluoromethane | 2.729 | 101 | 353343 | 12.46 | ug/L | 98 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 126127 | 10.12 | ug/L | 97 |
| 11) acetone | 3.477 | 43 | 16847 | 10.31 | ug/L | 90 |
| 12) carbon disulfide | 3.586 | 76 | 453637 | 11.18 | ug/L | 99 |
| 13) methylene chloride | 3.963 | 84 | 150520 | 10.23 | ug/L | 91 |
| 14) acrylonitrile | 4.304 | 53 | 21188 | 13.02 | ug/L | 98 |
| 15) trans-1,2-dichloroethene | 4.267 | 96 | 143201 | 10.48 | ug/L | 97 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 228685 | 10.85 | ug/L | 100 |
| 17) acetonitrile | 3.830 | 41 | 8862 | 12.59 | ug/L | 95 |
| 19) 1,1-dichloroethane | 4.803 | 63 | 298276 | 10.97 | ug/L | 97 |
| 20) vinyl acetate | 4.869 | 43 | 139485 | 18.47 | ug/L | 96 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 139300 | 10.01 | ug/L | 97 |
| 22) 2,2-dichloropropane | 5.496 | 77 | 292866 | 10.88 | ug/L | 100 |
| 23) 2-butanone | 5.593 | 72 | 3893 | 11.30 | ug/L # | 58 |
| 25) chloroform | 5.958 | 83 | 308815 | 11.28 | ug/L | 100 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 318562 | 11.03 | ug/L | 97 |
| 29) carbon tetrachloride | 6.335 | 117 | 272377 | 10.95 | ug/L | 99 |
| 31) benzene | 6.627 | 78 | 535986 | 10.49 | ug/L | 99 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 207244 | 10.48 | ug/L | 99 |
| 33) 1,2-dichloroethane | 6.700 | 62 | 174583 | 11.04 | ug/L | 98 |
| 34) trichloroethene | 7.509 | 95 | 154919 | 10.11 | ug/L | 97 |
| 36) 1,2-dichloropropane | 7.843 | 63 | 116503 | 10.01 | ug/L | 95 |
| 37) methyl methacrylate | 7.843 | 41 | 105690 | 21.48 | ug/L # | 55 |
| 38) dibromomethane | 8.032 | 93 | 54310 | 10.72 | ug/L | 91 |
| 39) bromodichloromethane | 8.263 | 83 | 190318 | 10.54 | ug/L | 98 |
| 40) 2-chloroethyl vinyl ether | 8.682 | 63 | 232 | 0.53 | ug/L # | 47 |
| 42) cis-1,3-dichloropropene | 8.895 | 75 | 165650 | 8.95 | ug/L | 96 |
| 43) 4-methyl-2-pentanone | 9.133 | 43 | 51517 | 9.29 | ug/L | 92 |
| 45) toluene | 9.345 | 92 | 359466 | 9.16 | ug/L | 98 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040404.D
Acq On : 4 Apr 2008 8:16 am
Sample : ,LCS,LCS_w25-10 PPB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 08:38:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

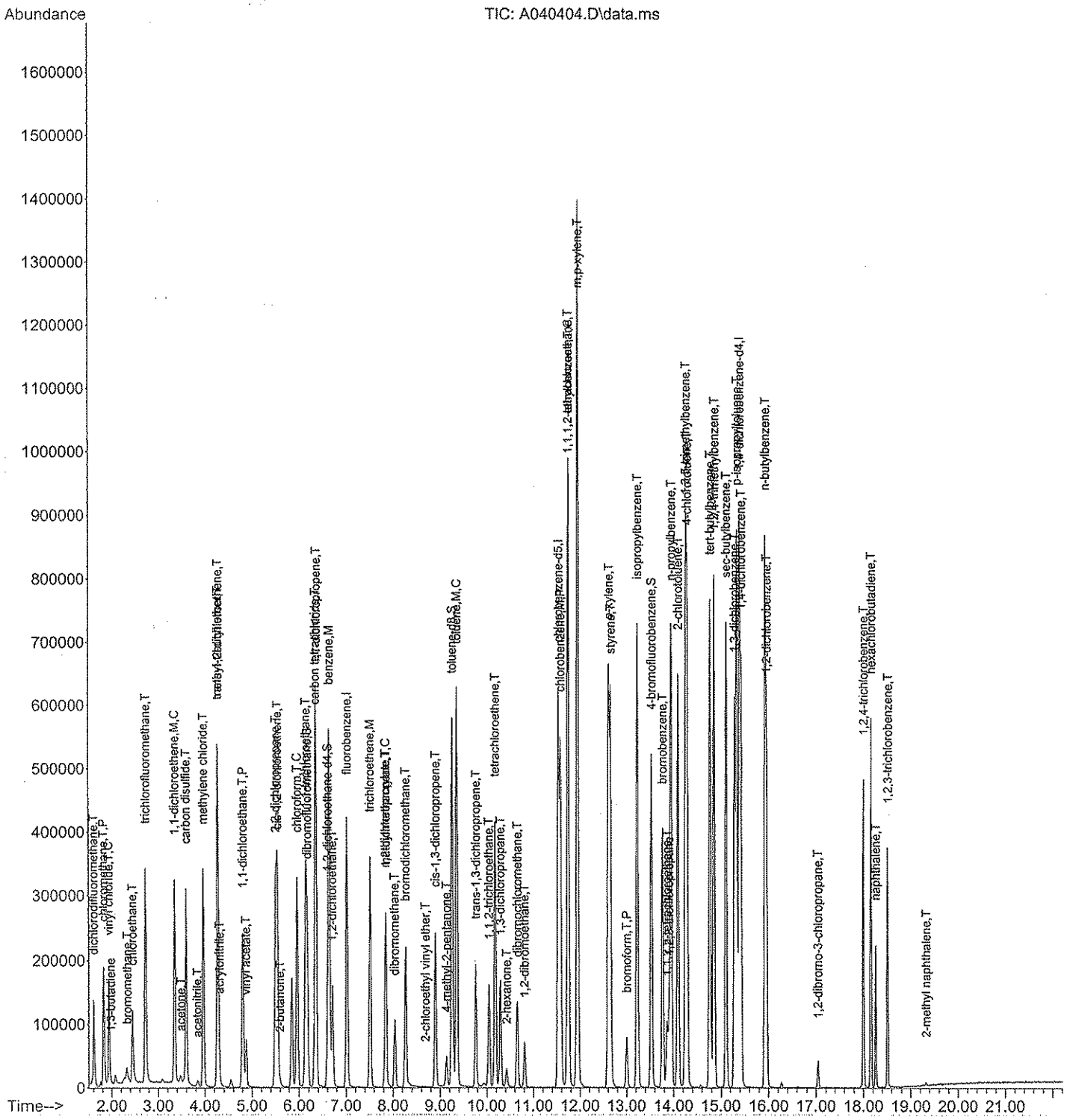
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 46) 1,1,2-trichloroethane | 10.039 | 83 | 55333 | 9.02 | ug/L | 99 |
| 47) 1,3-dichloropropane | 10.288 | 76 | 120172 | 9.13 | ug/L | 99 |
| 48) tetrachloroethene | 10.172 | 164 | 128139 | 8.93 | ug/L | 98 |
| 49) trans-1,3-dichloropropene | 9.759 | 75 | 135525 | 9.66 | ug/L | 98 |
| 50) 2-hexanone | 10.422 | 43 | 32648 | 9.77 | ug/L | 99 |
| 51) dibromochloromethane | 10.653 | 129 | 101263 | 9.36 | ug/L | 93 |
| 52) 1,2-dibromoethane | 10.805 | 107 | 68213 | 9.36 | ug/L | 99 |
| 53) chlorobenzene | 11.571 | 112 | 368686 | 9.25 | ug/L | 95 |
| 54) 1,1,1,2-tetrachloroethane | 11.729 | 131 | 135476 | 9.16 | ug/L | 96 |
| 55) ethylbenzene | 11.735 | 91 | 748562 | 9.41 | ug/L | 98 |
| 56) m,p-xylene | 11.936 | 106 | 535109 | 18.44 | ug/L | 97 |
| 58) o-xylene | 12.605 | 106 | 254731 | 9.38 | ug/L | 95 |
| 59) styrene | 12.648 | 104 | 402771 | 9.25 | ug/L | 99 |
| 60) isopropylbenzene | 13.225 | 105 | 711901 | 10.59 | ug/L | 99 |
| 61) bromobenzene | 13.760 | 156 | 164517 | 9.56 | ug/L | 98 |
| 62) bromoform | 13.000 | 173 | 56887 | 9.45 | ug/L | 98 |
| 64) 1,2,3-trichloropropane | 13.900 | 75 | 62075 | 9.34 | ug/L | 89 |
| 65) n-propylbenzene | 13.943 | 91 | 870737 | 9.56 | ug/L | 99 |
| 66) 2-chlorotoluene | 14.089 | 91 | 536343 | 9.54 | ug/L | 100 |
| 67) 4-chlorotoluene | 14.277 | 91 | 645010 | 9.78 | ug/L | 100 |
| 68) 1,3,5-trimethylbenzene | 14.247 | 105 | 633568 | 9.78 | ug/L | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.858 | 83 | 69596 | 8.68 | ug/L | 97 |
| 71) tert-butylbenzene | 14.764 | 119 | 499209 | 8.52 | ug/L | 99 |
| 72) sec-butylbenzene | 15.098 | 105 | 702206 | 8.19 | ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.849 | 105 | 633770 | 8.44 | ug/L | 99 |
| 74) 1,3-dichlorobenzene | 15.281 | 146 | 324598 | 8.50 | ug/L | 97 |
| 75) p-isopropyltoluene | 15.329 | 119 | 646764 | 9.03 | ug/L | 98 |
| 77) 1,4-dichlorobenzene | 15.421 | 146 | 325158 | 8.56 | ug/L | 99 |
| 78) 1,2-dichlorobenzene | 15.956 | 146 | 273977 | 8.81 | ug/L | 98 |
| 79) n-butylbenzene | 15.925 | 91 | 587933 | 8.63 | ug/L | 99 |
| 80) 1,2-dibromo-3-chloropr... | 17.038 | 75 | 13242 | 8.60 | ug/L | 97 |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 156678 | 8.14 | ug/L | 97 |
| 82) hexachlorobutadiene | 18.157 | 225 | 126392 | 7.55 | ug/L | 98 |
| 83) naphthalene | 18.261 | 128 | 164676 | 8.07 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.510 | 180 | 117401 | 7.94 | ug/L | 98 |
| 85) 2-methyl naphthalene | 19.325 | 142 | 2849 | 0.29 | ug/L | 93 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040404.D
Acq On : 4 Apr 2008 8:16 am
Sample : ,LCS,LCS_w25-10 PPB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 08:38:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040404.D 25ML0403.M Fri Apr 04 08:38:53 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040504.D
Acq On : 5 Apr 2008 7:51 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 08:15:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

2-LEVEL

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 566487 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 390445 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.383 | 152 | 230451 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 147409 | 9.99 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.90% | | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 150926 | 10.67 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.70% | | | |
| 44) toluene-d8 | 9.247 | 98 | 546898 | 11.53 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 115.30% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 209894 | 10.51 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 105.10% | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 91034 | 7.79 | ug/L | | 92 |
| 3) chloromethane | 1.815 | 50 | 203423 | 10.90 | ug/L | | 99 |
| 4) vinyl chloride | 1.937 | 62 | 153274 | 7.69 | ug/L | | 97 |
| 6) bromomethane | 2.320 | 94 | 37719 | 5.35 | ug/L | | 99 |
| 7) chloroethane | 2.442 | 64 | 106858 | 9.07 | ug/L | | 94 |
| 8) trichlorofluoromethane | 2.728 | 101 | 348624 | 9.90 | ug/L | | 100 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 137106 | 8.86 | ug/L | | 94 |
| 11) acetone | 3.476 | 43 | 16101 | 7.93 | ug/L | | 89 |
| 12) carbon disulfide | 3.591 | 76 | 388145 | 7.71 | ug/L | | 97 |
| 13) methylene chloride | 3.962 | 84 | 142616 | 7.80 | ug/L | | 90 |
| 14) acrylonitrile | 4.303 | 53 | 19459 | 9.63 | ug/L | | 97 |
| 15) trans-1,2-dichloroethene | 4.272 | 96 | 147785 | 8.71 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 212857 | 8.13 | ug/L | | 97 |
| 17) acetonitrile | 3.828 | 41 | 8024 | 9.18 | ug/L | | 96 |
| 19) 1,1-dichloroethane | 4.801 | 63 | 300721 | 8.90 | ug/L | | 98 |
| 20) vinyl acetate | 4.874 | 43 | 122731 | 13.09 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 142331 | 8.24 | ug/L | | 97 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 303771 | 9.09 | ug/L | | 99 |
| 23) 2-butanone | 5.598 | 72 | 3683 | 8.61 | ug/L | # | 70 |
| 25) chloroform | 5.957 | 83 | 314225 | 9.25 | ug/L | | 98 |
| 27) 1,1,1-trichloroethane | 6.139 | 97 | 331074 | 9.23 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.340 | 117 | 282848 | 9.16 | ug/L | | 96 |
| 31) benzene | 6.632 | 78 | 542189 | 8.55 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 213324 | 8.69 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 178925 | 9.12 | ug/L | | 100 |
| 34) trichloroethene | 7.514 | 95 | 158786 | 8.34 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 120227 | 8.32 | ug/L | | 95 |
| 37) methyl methacrylate | 7.842 | 41 | 110773 | 18.13 | ug/L | # | 58 |
| 38) dibromomethane | 8.031 | 93 | 54099 | 8.60 | ug/L | | 98 |
| 39) bromodichloromethane | 8.268 | 83 | 193700 | 8.64 | ug/L | | 99 |
| 40) 2-chloroethyl vinyl ether | 8.693 | 63 | 275 | 0.51 | ug/L | # | 47 |
| 42) cis-1,3-dichloropropene | 8.900 | 75 | 164366 | 10.25 | ug/L | | 97 |
| 43) 4-methyl-2-pentanone | 9.131 | 43 | 47499 | 9.88 | ug/L | | 99 |
| 45) toluene | 9.344 | 92 | 365513 | 10.75 | ug/L | | 96 |
| 46) 1,1,2-trichloroethane | 10.037 | 83 | 54897 | 10.33 | ug/L | | 94 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040504.D
Acq On : 5 Apr 2008 7:51 am
Sample : LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 08:15:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

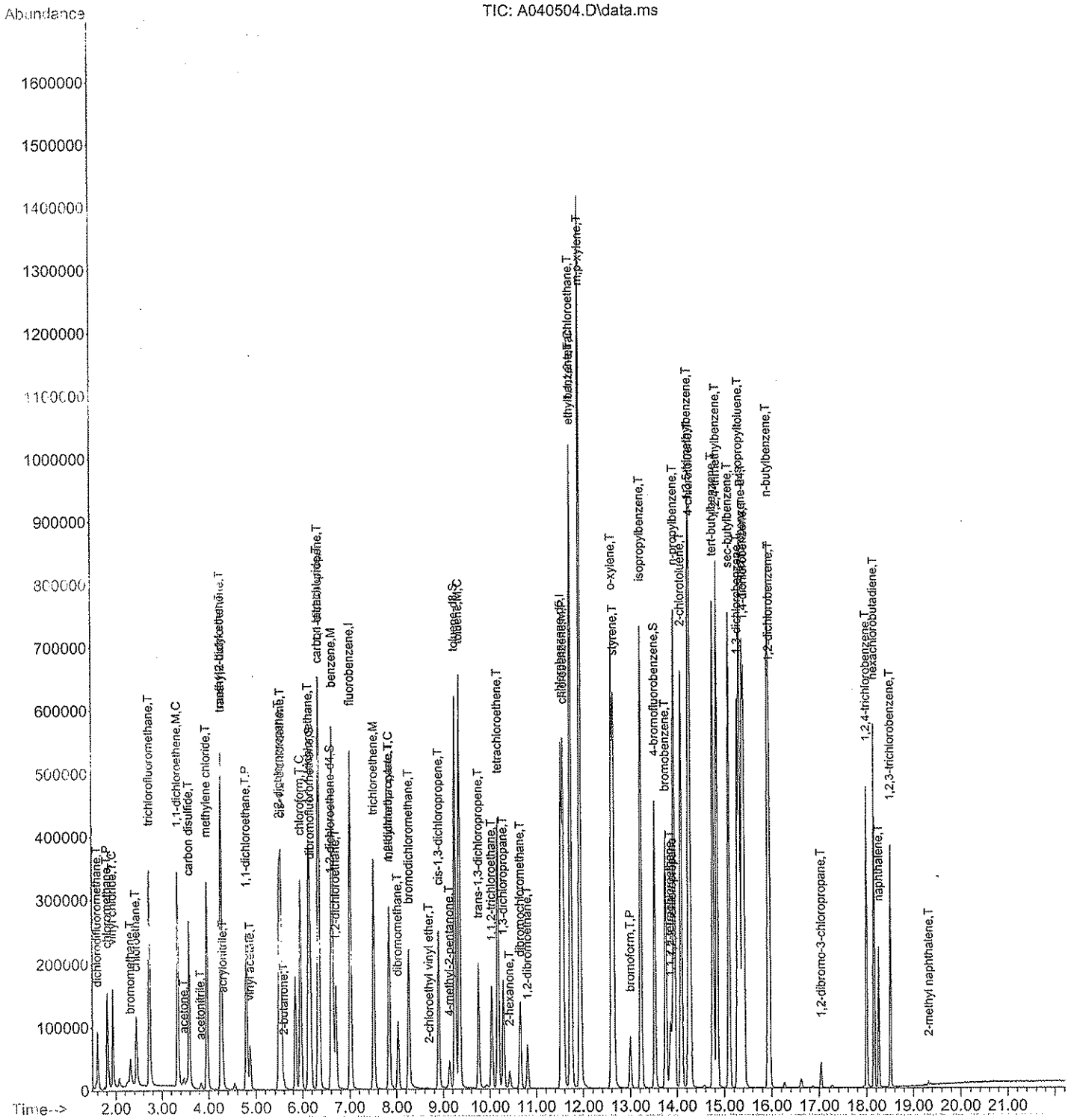
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 47) 1,3-dichloropropane | 10.287 | 76 | 118013 | 10.35 ug/L | 100 |
| 48) tetrachloroethene | 10.171 | 164 | 132197 | 10.64 ug/L | 91 |
| 49) trans-1,3-dichloropropene | 9.758 | 75 | 136022 | 11.19 ug/L | 98 |
| 50) 2-hexanone | 10.421 | 43 | 30701 | 10.60 ug/L | 96 |
| 51) dibromochloromethane | 10.652 | 129 | 101024 | 10.78 ug/L | 92 |
| 52) 1,2-dibromoethane | 10.804 | 107 | 66015 | 10.45 ug/L | 99 |
| 53) chlorobenzene | 11.576 | 112 | 370667 | 10.73 ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.734 | 131 | 138422 | 10.80 ug/L | 97 |
| 55) ethylbenzene | 11.740 | 91 | 763707 | 11.08 ug/L | 100 |
| 56) m,p-xylene | 11.935 | 106 | 543037 | 21.59 ug/L | 97 |
| 58) o-xylene | 12.604 | 106 | 255122 | 10.84 ug/L | 99 |
| 59) styrene | 12.646 | 104 | 401930 | 10.65 ug/L | 99 |
| 60) isopropylbenzene | 13.224 | 105 | 724556 | 12.43 ug/L | 98 |
| 61) bromobenzene | 13.759 | 156 | 162426 | 10.89 ug/L | 97 |
| 62) bromoform | 12.999 | 173 | 56013 | 10.73 ug/L | 93 |
| 64) 1,2,3-trichloropropane | 13.899 | 75 | 62528 | 10.85 ug/L | 96 |
| 65) n-propylbenzene | 13.942 | 91 | 886328 | 11.23 ug/L | 100 |
| 66) 2-chlorotoluene | 14.088 | 91 | 543833 | 11.16 ug/L | 100 |
| 67) 4-chlorotoluene | 14.276 | 91 | 649719 | 11.36 ug/L | 97 |
| 68) 1,3,5-trimethylbenzene | 14.246 | 105 | 641953 | 11.43 ug/L | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 66211 | 10.32 ug/L | 93 |
| 71) tert-butylbenzene | 14.763 | 119 | 508248 | 10.84 ug/L | 96 |
| 72) sec-butylbenzene | 15.097 | 105 | 698422 | 10.18 ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 643982 | 10.71 ug/L | 98 |
| 74) 1,3-dichlorobenzene | 15.286 | 146 | 325277 | 10.64 ug/L | 98 |
| 75) p-isopropyltoluene | 15.328 | 119 | 647018 | 11.28 ug/L | 98 |
| 77) 1,4-dichlorobenzene | 15.419 | 146 | 319665 | 10.51 ug/L | 97 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 273381 | 10.98 ug/L | 100 |
| 79) n-butylbenzene | 15.924 | 91 | 589656 | 10.81 ug/L | 99 |
| 80) 1,2-dibromo-3-chloropr... | 17.043 | 75 | 12823 | 10.40 ug/L | 94 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 155885 | 10.11 ug/L | 92 |
| 82) hexachlorobutadiene | 18.156 | 225 | 127771 | 9.53 ug/L | 99 |
| 83) naphthalene | 18.259 | 128 | 164165 | 10.05 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 116687 | 9.86 ug/L | 100 |
| 85) 2-methyl naphthalene | 19.324 | 142 | 2861 | 0.36 ug/L # | 78 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040504.D
Acq On : 5 Apr 2008 7:51 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 08:15:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040605.D
Acq On : 6 Apr 2008 5:16 pm
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 06 17:45:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.013 | 96 | 606659 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 424883 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.387 | 152 | 247235 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 158215 | 10.02 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.20% | | | |
| 30) 1,2-dichloroethane-d4 | 6.605 | 65 | 159317 | 10.52 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 105.20% | | | |
| 44) toluene-d8 | 9.251 | 98 | 593085 | 11.49 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 114.90% | | | |
| 63) 4-bromofluorobenzene | 13.520 | 95 | 226550 | 10.42 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 104.20% | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 79005 | 6.31 | ug/L | | 97 |
| 3) chloromethane | 1.819 | 50 | 194633 | 9.74 | ug/L | | 96 |
| 4) vinyl chloride | 1.935 | 62 | 157128 | 7.36 | ug/L | | 98 |
| 6) bromomethane | 2.318 | 94 | 44088 | 5.84 | ug/L | | 95 |
| 7) chloroethane | 2.446 | 64 | 113837 | 9.03 | ug/L | | 96 |
| 8) trichlorofluoromethane | 2.725 | 101 | 373231 | 9.90 | ug/L | | 99 |
| 9) acrolein | 3.273 | 56 | 1151 | 4.79 | ug/L | | 93 |
| 10) 1,1-dichloroethene | 3.346 | 96 | 152049 | 9.18 | ug/L | | 99 |
| 11) acetone | 3.473 | 43 | 18515 | 8.52 | ug/L | | 89 |
| 12) carbon disulfide | 3.589 | 76 | 386571 | 7.17 | ug/L | | 97 |
| 13) methylene chloride | 3.966 | 84 | 160296 | 8.19 | ug/L | | 89 |
| 14) acrylonitrile | 4.300 | 53 | 20820 | 9.63 | ug/L | | 98 |
| 15) trans-1,2-dichloroethene | 4.270 | 96 | 166187 | 9.15 | ug/L | | 98 |
| 16) methyl-t-butyl ether | 4.264 | 73 | 245940 | 8.78 | ug/L | | 99 |
| 17) acetonitrile | 3.826 | 41 | 8462 | 9.04 | ug/L | | 91 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 346301 | 9.57 | ug/L | | 99 |
| 20) vinyl acetate | 4.872 | 43 | 140728 | 14.01 | ug/L | | 100 |
| 21) cis-1,2-dichloroethene | 5.535 | 96 | 165195 | 8.93 | ug/L | | 95 |
| 22) 2,2-dichloropropane | 5.505 | 77 | 350557 | 9.79 | ug/L | | 98 |
| 23) 2-butanone | 5.577 | 72 | 3756 | 8.20 | ug/L | # | 83 |
| 25) chloroform | 5.955 | 83 | 361241 | 9.93 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.137 | 97 | 373763 | 9.73 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.344 | 117 | 323144 | 9.77 | ug/L | | 99 |
| 31) benzene | 6.630 | 78 | 619446 | 9.12 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.350 | 75 | 243629 | 9.27 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.703 | 62 | 205661 | 9.78 | ug/L | | 99 |
| 34) trichloroethene | 7.511 | 95 | 178870 | 8.78 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.846 | 63 | 139261 | 9.00 | ug/L | | 90 |
| 37) methyl methacrylate | 7.840 | 41 | 123734 | 18.91 | ug/L | # | 57 |
| 38) dibromomethane | 8.034 | 93 | 64123 | 9.52 | ug/L | | 96 |
| 39) bromodichloromethane | 8.265 | 83 | 225123 | 9.38 | ug/L | | 99 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 195066 | 11.18 | ug/L | | 94 |
| 43) 4-methyl-2-pentanone | 9.129 | 43 | 56970 | 10.89 | ug/L | | 99 |
| 45) toluene | 9.348 | 92 | 416191 | 11.25 | ug/L | | 98 |
| 46) 1,1,2-trichloroethane | 10.041 | 83 | 61646 | 10.66 | ug/L | | 96 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040605.D
Acq On : 6 Apr 2008 5:16 pm
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 06 17:45:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

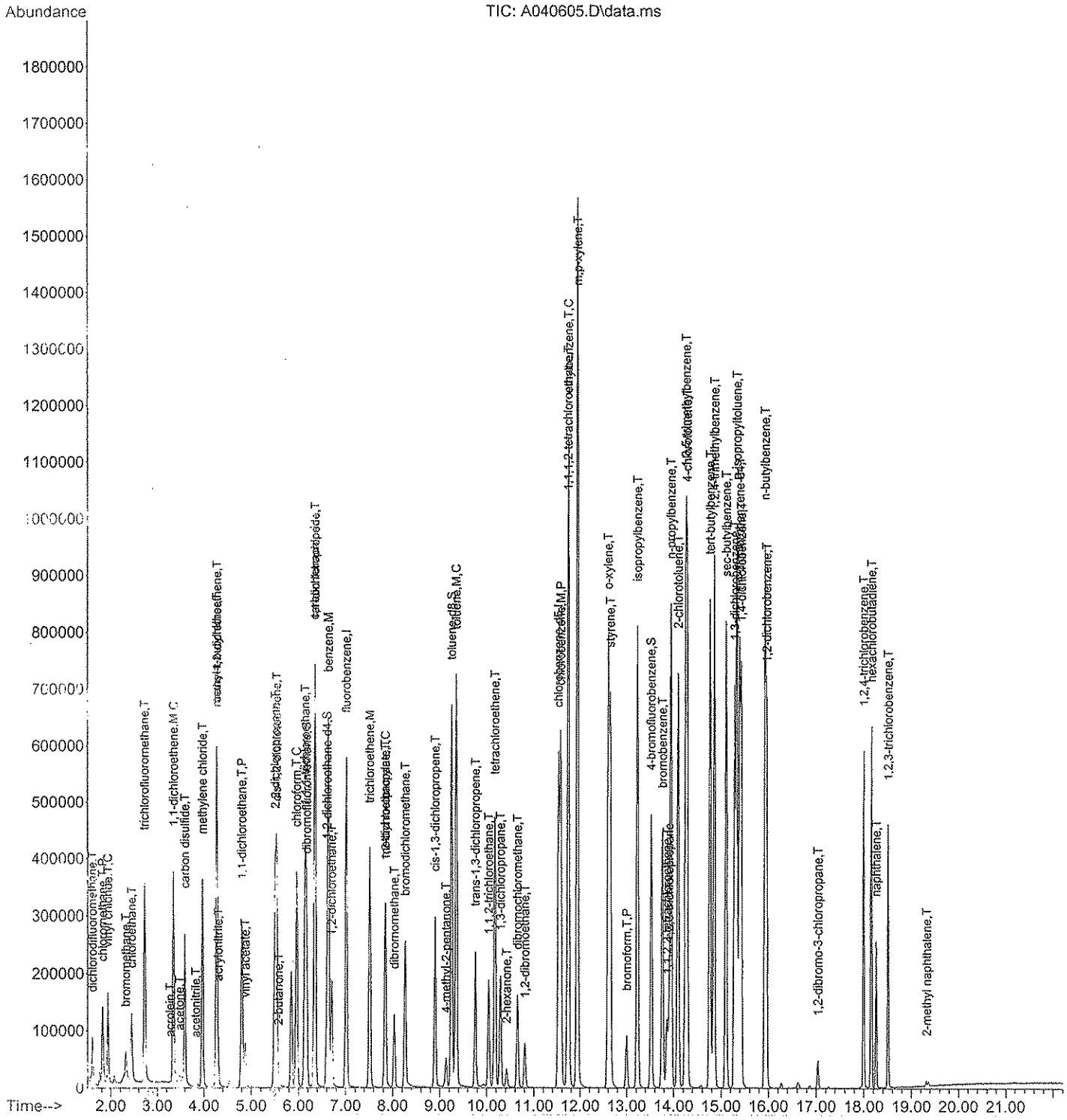
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 47) | 1,3-dichloropropane | 10.291 | 76 | 136946 | 11.03 | ug/L | | 99 |
| 48) | tetrachloroethene | 10.175 | 164 | 150785 | 11.15 | ug/L | | 98 |
| 49) | trans-1,3-dichloropropene | 9.755 | 75 | 165970 | 12.55 | ug/L | | 97 |
| 50) | 2-hexanone | 10.418 | 43 | 36805 | 11.68 | ug/L | | 95 |
| 51) | dibromochloromethane | 10.649 | 129 | 120541 | 11.82 | ug/L | | 96 |
| 52) | 1,2-dibromoethane | 10.807 | 107 | 78895 | 11.48 | ug/L | | 95 |
| 53) | chlorobenzene | 11.574 | 112 | 427596 | 11.38 | ug/L | | 98 |
| 54) | 1,1,1,2-tetrachloroethane | 11.726 | 131 | 157693 | 11.30 | ug/L | | 97 |
| 55) | ethylbenzene | 11.738 | 91 | 866504 | 11.55 | ug/L | | 100 |
| 56 | m,p-xylene | 11.939 | 106 | 625466 | 22.86 | ug/L | | 100 |
| 58) | o-xylene | 12.601 | 106 | 291065 | 11.36 | ug/L | | 96 |
| 59) | styrene | 12.644 | 104 | 455954 | 11.10 | ug/L | | 99 |
| 60) | isopropylbenzene | 13.228 | 105 | 826978 | 13.04 | ug/L | | 100 |
| 61) | bromobenzene | 13.763 | 156 | 190291 | 11.73 | ug/L | | 93 |
| 62) | bromoform | 13.003 | 173 | 66670 | 11.74 | ug/L | | 96 |
| 64) | 1,2,3-trichloropropane | 13.903 | 75 | 70455 | 11.24 | ug/L | | 92 |
| 65) | n-propylbenzene | 13.939 | 91 | 997889 | 11.62 | ug/L | | 99 |
| 66) | 2-chlorotoluene | 14.091 | 91 | 613762 | 11.57 | ug/L | | 99 |
| 67 | 4-chlorotoluene | 14.274 | 91 | 731985 | 11.77 | ug/L | | 96 |
| 68) | 1,3,5-trimethylbenzene | 14.249 | 105 | 721344 | 11.80 | ug/L | | 100 |
| 70) | 1,1,2,2-tetrachloroethane | 13.860 | 83 | 77239 | 11.22 | ug/L | | 95 |
| 71) | tert-butylbenzene | 14.760 | 119 | 576514 | 11.46 | ug/L | | 98 |
| 72) | sec-butylbenzene | 15.101 | 105 | 785595 | 10.67 | ug/L | | 100 |
| 73) | 1,2,4-trimethylbenzene | 14.845 | 105 | 723299 | 11.22 | ug/L | | 97 |
| 74) | 1,3-dichlorobenzene | 15.283 | 146 | 374379 | 11.42 | ug/L | | 98 |
| 75) | p-isopropyltoluene | 15.326 | 119 | 740997 | 12.04 | ug/L | | 99 |
| 77) | 1,4-dichlorobenzene | 15.423 | 146 | 368878 | 11.31 | ug/L | | 98 |
| 78) | 1,2-dichlorobenzene | 15.958 | 146 | 310648 | 11.63 | ug/L | | 98 |
| 79) | n-butylbenzene | 15.922 | 91 | 654301 | 11.18 | ug/L | | 100 |
| 80) | 1,2-dibromo-3-chloropr... | 17.041 | 75 | 15249 | 11.53 | ug/L | | 91 |
| 81) | 1,2,4-trichlorobenzene | 17.996 | 180 | 185478 | 11.22 | ug/L | | 96 |
| 82) | hexachlorobutadiene | 18.160 | 225 | 146028 | 10.15 | ug/L | | 99 |
| 83) | naphthalene | 18.257 | 128 | 189181 | 10.79 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.506 | 180 | 138052 | 10.87 | ug/L | | 99 |
| 85) | 2-methyl naphthalene | 19.327 | 142 | 3636 | 0.42 | ug/L | # | 78 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040605.D
Acq On : 6 Apr 2008 5:16 pm
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 06 17:45:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040804.D
Acq On : 8 Apr 2008 8:46 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 08 09:16:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 690153 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 488172 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 275032 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 178210 | 9.92 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 182290 | 10.58 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.80% | | | | |
| 44) toluene-d8 | 9.253 | 98 | 675936 | 11.40 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.00% | | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 253927 | 10.17 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.70% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 225751 | 15.85 | ug/L | | 96 |
| 3) chloromethane | 1.815 | 50 | 301424 | 13.26 | ug/L | | 99 |
| 4) vinyl chloride | 1.931 | 62 | 232097 | 9.55 | ug/L | | 99 |
| 6) bromomethane | 2.320 | 94 | 96638 | 11.26 | ug/L | | 98 |
| 7) chloroethane | 2.442 | 64 | 141743 | 9.88 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.728 | 101 | 430122 | 10.03 | ug/L | | 98 |
| 9) acrolein | 3.293 | 56 | 3130 | 11.45 | ug/L | | 98 |
| 10) 1,1-dichloroethene | 3.348 | 96 | 157163 | 8.34 | ug/L | | 98 |
| 11) acetone | 3.476 | 43 | 20250 | 8.19 | ug/L | | 98 |
| 12) carbon disulfide | 3.591 | 76 | 560040 | 9.13 | ug/L | | 99 |
| 13) methylene chloride | 3.962 | 84 | 174403 | 7.83 | ug/L | | 88 |
| 14) acrylonitrile | 4.303 | 53 | 22586 | 9.18 | ug/L | | 90 |
| 15) trans-1,2-dichloroethene | 4.272 | 96 | 169532 | 8.21 | ug/L | | 97 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 259766 | 8.15 | ug/L | | 100 |
| 17) acetonitrile | 3.828 | 41 | 9751 | 9.16 | ug/L | | 95 |
| 19) 1,1-dichloroethane | 4.801 | 63 | 352048 | 8.56 | ug/L | | 98 |
| 20) vinyl acetate | 4.874 | 43 | 183429 | 16.06 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 165454 | 7.86 | ug/L | | 96 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 359386 | 8.82 | ug/L | | 100 |
| 23) 2-butanone | 5.592 | 72 | 4276 | 8.20 | ug/L | # | 38 |
| 25) chloroform | 5.957 | 83 | 371511 | 8.97 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.139 | 97 | 384706 | 8.81 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.340 | 117 | 331090 | 8.80 | ug/L | | 99 |
| 31) benzene | 6.632 | 78 | 624321 | 8.08 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 250063 | 8.36 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 208593 | 8.72 | ug/L | | 97 |
| 34) trichloroethene | 7.508 | 95 | 187975 | 8.11 | ug/L | | 98 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 140199 | 7.96 | ug/L | | 96 |
| 37) methyl methacrylate | 7.842 | 41 | 128211 | 17.22 | ug/L | # | 59 |
| 38) dibromomethane | 8.037 | 93 | 65237 | 8.52 | ug/L | | 98 |
| 39) bromodichloromethane | 8.268 | 83 | 230165 | 8.43 | ug/L | | 99 |
| 42) cis-1,3-dichloropropene | 8.900 | 75 | 199206 | 9.94 | ug/L | | 92 |
| 43) 4-methyl-2-pentanone | 9.125 | 43 | 58227 | 9.69 | ug/L | | 93 |
| 45) toluene | 9.350 | 92 | 426313 | 10.03 | ug/L | | 100 |
| 46) 1,1,2-trichloroethane | 10.043 | 83 | 65219 | 9.82 | ug/L | | 98 |

CGL 4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040804.D
Acq On : 8 Apr 2008 8:46 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 08 09:16:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 47) | 1,3-dichloropropane | 10.287 | 76 | 140221 | 9.83 | ug/L | | 98 |
| 48) | tetrachloroethene | 10.171 | 164 | 159983 | 10.30 | ug/L | | 98 |
| 49) | trans-1,3-dichloropropene | 9.758 | 75 | 168042 | 11.06 | ug/L | | 96 |
| 50) | 2-hexanone | 10.420 | 43 | 38749 | 10.70 | ug/L | | 99 |
| 51) | dibromochloromethane | 10.652 | 129 | 122048 | 10.41 | ug/L | | 97 |
| 52) | 1,2-dibromoethane | 10.810 | 107 | 81504 | 10.32 | ug/L | | 97 |
| 53) | chlorobenzene | 11.576 | 112 | 433620 | 10.04 | ug/L | | 96 |
| 54) | 1,1,1,2-tetrachloroethane | 11.728 | 131 | 162343 | 10.13 | ug/L | | 95 |
| 55) | ethylbenzene | 11.740 | 91 | 887396 | 10.29 | ug/L | | 98 |
| 56) | m,p-xylene | 11.941 | 106 | 637150 | 20.27 | ug/L | | 98 |
| 58) | o-xylene | 12.604 | 106 | 299755 | 10.19 | ug/L | | 100 |
| 59) | styrene | 12.646 | 104 | 468151 | 9.92 | ug/L | | 99 |
| 60) | isopropylbenzene | 13.224 | 105 | 848020 | 11.64 | ug/L | | 99 |
| 61) | bromobenzene | 13.759 | 156 | 193309 | 10.37 | ug/L | | 95 |
| 62) | bromoform | 12.999 | 173 | 68617 | 10.52 | ug/L | | 99 |
| 64) | 1,2,3-trichloropropane | 13.911 | 75 | 70798 | 9.83 | ug/L | | 81 |
| 65) | n-propylbenzene | 13.942 | 91 | 1019484 | 10.33 | ug/L | | 100 |
| 66) | 2-chlorotoluene | 14.094 | 91 | 624543 | 10.25 | ug/L | | 98 |
| 67) | 4-chlorotoluene | 14.276 | 91 | 743712 | 10.40 | ug/L | | 97 |
| 68) | 1,3,5-trimethylbenzene | 14.252 | 105 | 744802 | 10.61 | ug/L | | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 13.856 | 83 | 76080 | 9.93 | ug/L | | 99 |
| 71) | tert-butylbenzene | 14.763 | 119 | 594213 | 10.62 | ug/L | | 98 |
| 72) | sec-butylbenzene | 15.103 | 105 | 796930 | 9.73 | ug/L | | 100 |
| 73) | 1,2,4-trimethylbenzene | 14.848 | 105 | 745999 | 10.40 | ug/L | | 97 |
| 74) | 1,3-dichlorobenzene | 15.286 | 146 | 379239 | 10.40 | ug/L | | 99 |
| 75) | p-isopropyltoluene | 15.328 | 119 | 747125 | 10.92 | ug/L | | 100 |
| 77) | 1,4-dichlorobenzene | 15.425 | 146 | 367946 | 10.14 | ug/L | | 100 |
| 78) | 1,2-dichlorobenzene | 15.954 | 146 | 313614 | 10.55 | ug/L | | 97 |
| 79) | n-butylbenzene | 15.924 | 91 | 649678 | 9.98 | ug/L | | 99 |
| 80) | 1,2-dibromo-3-chloropr... | 17.037 | 75 | 15502 | 10.54 | ug/L | | 93 |
| 81) | 1,2,4-trichlorobenzene | 17.998 | 180 | 186379 | 10.13 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.156 | 225 | 148317 | 9.27 | ug/L | | 99 |
| 83) | naphthalene | 18.259 | 128 | 187570 | 9.62 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.509 | 180 | 139938 | 9.90 | ug/L | | 98 |
| 85) | 2-methyl naphthalene | 19.324 | 142 | 3626 | 0.38 | ug/L | # | 77 |

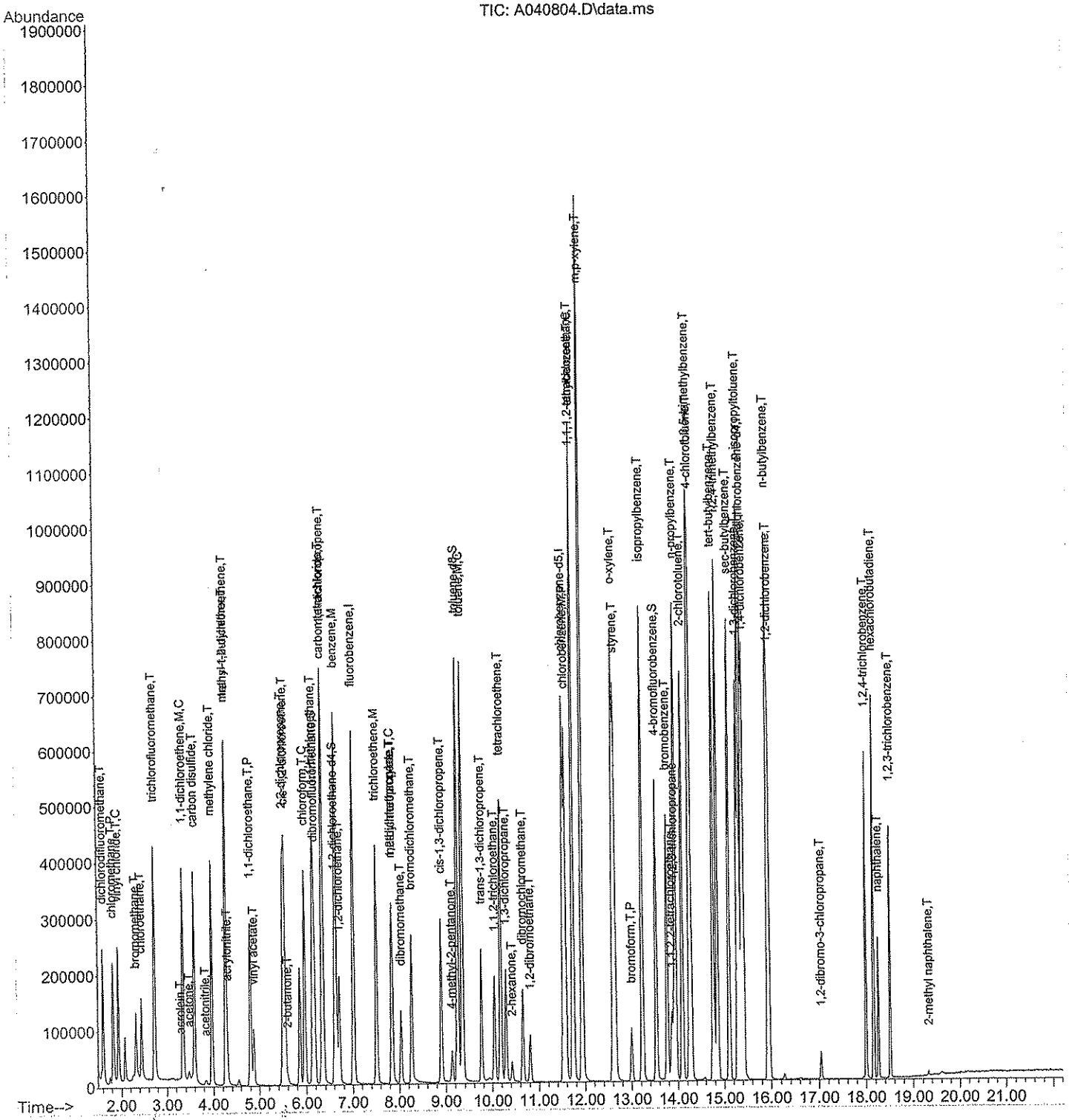
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040804.D
Acq On : 8 Apr 2008 8:46 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 08 09:16:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

TIC: A040804.D\data.ms



# MATRIX SPIKE/MATRIX SPIKE DUPLICATE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040417.D
Acq On : 4 Apr 2008 4:29 pm
Sample : ,SAMP,ME0803A25-05A,25,RA, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 04 16:54:37 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 509414 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.534 | 117 | 351188 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 172864 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.176 | 113 | 132457 | 9.99 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.90% | | | |
| 30) 1,2-dichloroethane-d4 | 6.608 | 65 | 138341 | 10.87 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 108.70% | | | |
| 44) toluene-d8 | 9.253 | 98 | 483476 | 11.33 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.30% | | | |
| 63) 4-bromofluorobenzene | 13.528 | 95 | 173045 | 9.63 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.30% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) vinyl chloride | 1.937 | 62 | 19099 | 1.07 | ug/L | 97 |
| 7) chloroethane | 2.448 | 64 | 135278 | 12.78 | ug/L | 95 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

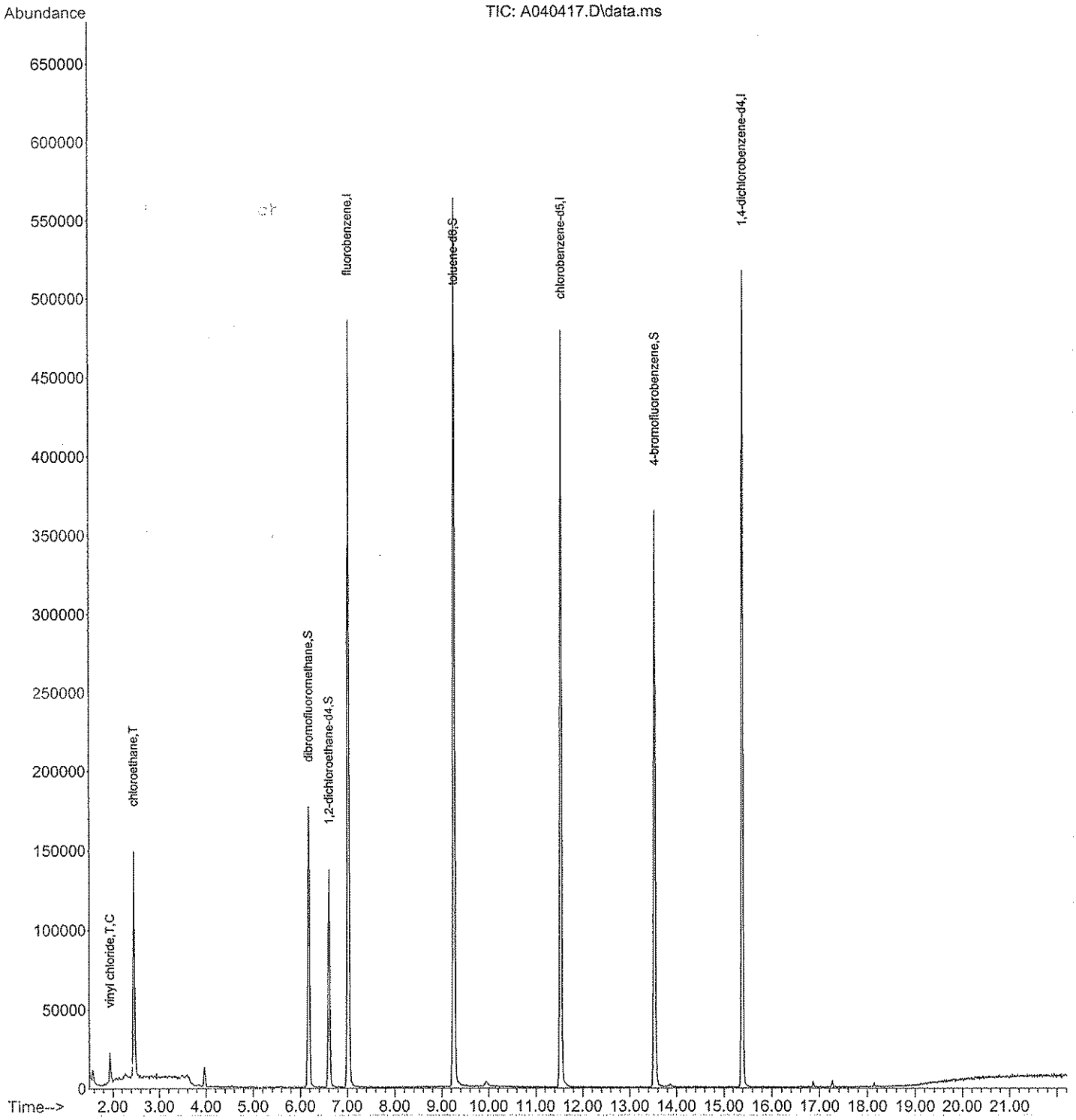
4/4/8

4/4/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040417.D
Acq On : 4 Apr 2008 4:29 pm
Sample : ,SAMP,ME0803A25-05A,25,RA, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 04 16:54:37 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040418.D
Acq On : 4 Apr 2008 5:04 pm
Sample : ,MS,ME0803A25-05AMS,25, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 18:07:20 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 550380 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 376255 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 230755 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.169 | 113 | 140651 | 9.81 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.10% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.607 | 65 | 145189 | 10.56 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.60% | | | | |
| 44) toluene-d8 | 9.253 | 98 | 528745 | 11.57 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.70% | | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 204510 | 10.62 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 106.20% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.602 | 85 | 127195 | 11.20 | ug/L | | 99 |
| 3) chloromethane | 1.815 | 50 | 246869 | 13.61 | ug/L | | 96 |
| 4) vinyl chloride | 1.937 | 62 | 185667 | 9.58 | ug/L | | 98 |
| 6) bromomethane | 2.314 | 94 | 23601 | 3.45 | ug/L | | 88 |
| 7) chloroethane | 2.448 | 64 | 248029 | 21.68 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.727 | 101 | 368795 | 10.78 | ug/L | | 98 |
| 10) 1,1-dichloroethene | 3.348 | 96 | 146339 | 9.74 | ug/L | | 92 |
| 11) acetone | 3.475 | 43 | 17654 | 8.95 | ug/L | | 91 |
| 12) carbon disulfide | 3.591 | 76 | 437807 | 8.95 | ug/L | | 99 |
| 13) methylene chloride | 3.968 | 84 | 149820 | 8.44 | ug/L | | 88 |
| 14) acrylonitrile | 4.309 | 53 | 18593 | 9.47 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.272 | 96 | 152991 | 9.29 | ug/L | | 98 |
| 16) methyl-t-butyl ether | 4.272 | 73 | 204522 | 8.04 | ug/L | | 100 |
| 17) acetonitrile | 3.828 | 41 | 8278 | 9.75 | ug/L | | 95 |
| 19) 1,1-dichloroethane | 4.801 | 63 | 315370 | 9.61 | ug/L | | 100 |
| 20) vinyl acetate | 4.874 | 43 | 120317 | 13.21 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.543 | 96 | 145418 | 8.66 | ug/L | | 95 |
| 22) 2,2-dichloropropane | 5.507 | 77 | 291972 | 8.99 | ug/L | | 99 |
| 23) 2-butanone | 5.592 | 72 | 3599 | 8.66 | ug/L | # | 88 |
| 25) chloroform | 5.963 | 83 | 325952 | 9.87 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.139 | 97 | 339805 | 9.75 | ug/L | | 99 |
| 29) carbon tetrachloride | 6.346 | 117 | 295302 | 9.84 | ug/L | | 97 |
| 31) benzene | 6.632 | 78 | 565903 | 9.18 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.358 | 75 | 222599 | 9.34 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 188424 | 9.88 | ug/L | | 99 |
| 34) trichloroethene | 7.513 | 95 | 163364 | 8.83 | ug/L | | 98 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 124272 | 8.85 | ug/L | | 94 |
| 37) methyl methacrylate | 7.842 | 41 | 113154 | 19.06 | ug/L | # | 56 |
| 38) dibromomethane | 8.036 | 93 | 57835 | 9.47 | ug/L | | 98 |
| 39) bromodichloromethane | 8.267 | 83 | 203124 | 9.33 | ug/L | | 97 |
| 42) cis-1,3-dichloropropene | 8.900 | 75 | 167172 | 10.82 | ug/L | | 94 |
| 43) 4-methyl-2-pentanone | 9.137 | 43 | 45517 | 9.83 | ug/L | | 97 |
| 45) toluene | 9.350 | 92 | 377254 | 11.51 | ug/L | | 97 |
| 46) 1,1,2-trichloroethane | 10.037 | 83 | 58354 | 11.39 | ug/L | | 94 |
| 47) 1,3-dichloropropane | 10.293 | 76 | 125539 | 11.42 | ug/L | | 98 |

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040418.D
Acq On : 4 Apr 2008 5:04 pm
Sample : ,MS,ME0803A25-05AMS,25, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 18:07:20 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

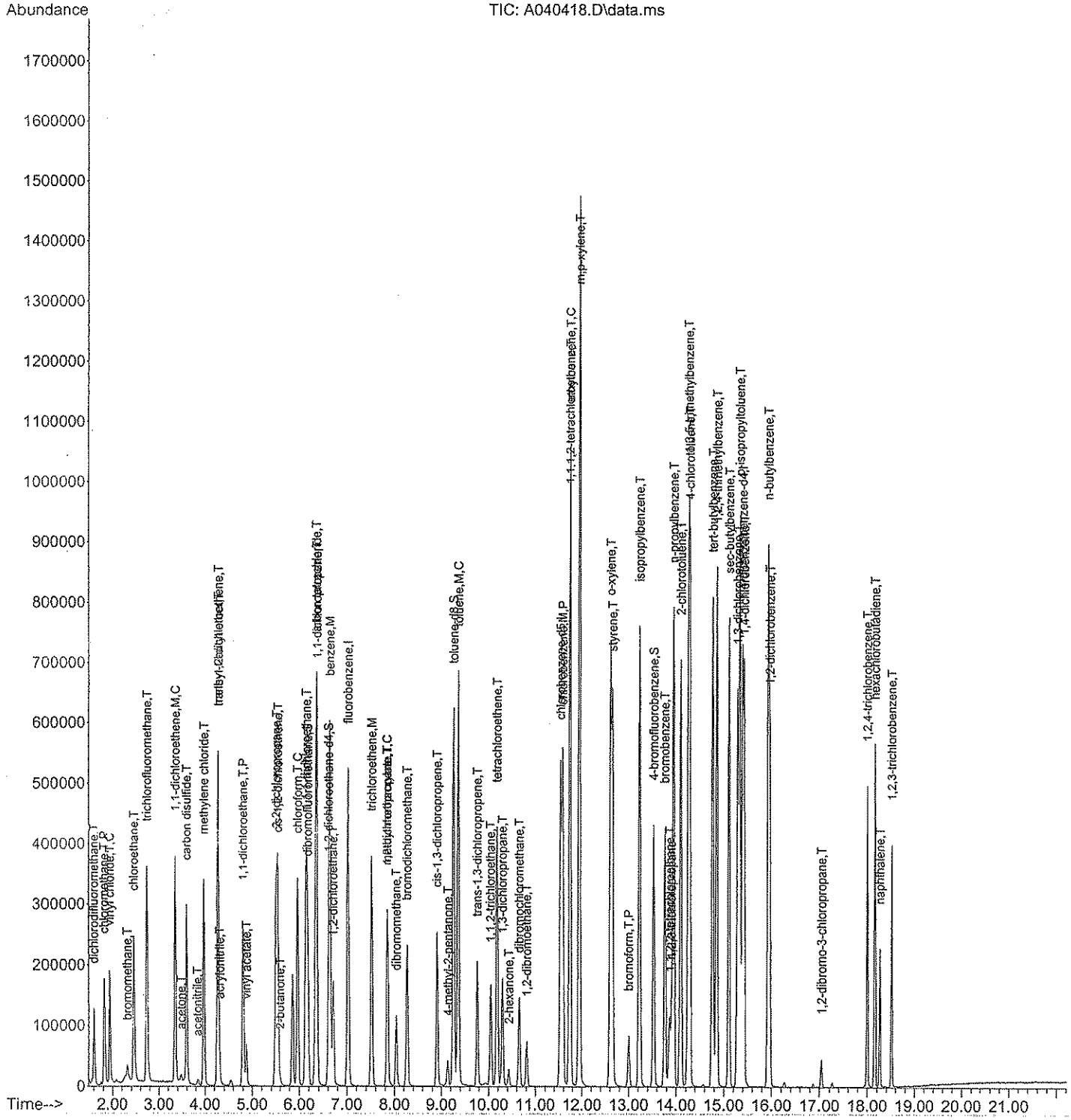
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 48) | tetrachloroethene | 10.177 | 164 | 133617 | 11.16 | ug/L | 97 |
| 49) | trans-1,3-dichloropropene | 9.757 | 75 | 141301 | 12.07 | ug/L | 98 |
| 50) | 2-hexanone | 10.426 | 43 | 27569 | 9.88 | ug/L | 95 |
| 51) | dibromochloromethane | 10.651 | 129 | 105503 | 11.68 | ug/L | 95 |
| 52) | 1,2-dibromoethane | 10.809 | 107 | 69825 | 11.47 | ug/L | 98 |
| 53) | chlorobenzene | 11.576 | 112 | 380417 | 11.43 | ug/L | 95 |
| 54) | 1,1,1,2-tetrachloroethane | 11.728 | 131 | 142656 | 11.55 | ug/L | 95 |
| 55) | ethylbenzene | 11.740 | 91 | 785936 | 11.83 | ug/L | 98 |
| 56) | m,p-xylene | 11.935 | 106 | 567368 | 23.41 | ug/L | 96 |
| 58) | o-xylene | 12.603 | 106 | 266504 | 11.75 | ug/L | 99 |
| 59) | styrene | 12.646 | 104 | 421019 | 11.57 | ug/L | 98 |
| 60) | isopropylbenzene | 13.224 | 105 | 758811 | 13.51 | ug/L | 99 |
| 61) | bromobenzene | 13.759 | 156 | 172413 | 12.00 | ug/L | 97 |
| 62) | bromoform | 12.999 | 173 | 59467 | 11.83 | ug/L | 98 |
| 64) | 1,2,3-trichloropropane | 13.899 | 75 | 66548 | 11.99 | ug/L | 90 |
| 65) | n-propylbenzene | 13.941 | 91 | 930122 | 12.23 | ug/L | 99 |
| 66) | 2-chlorotoluene | 14.093 | 91 | 575263 | 12.25 | ug/L | 99 |
| 67) | 4-chlorotoluene | 14.276 | 91 | 687548 | 12.48 | ug/L | 97 |
| 68) | 1,3,5-trimethylbenzene | 14.252 | 105 | 674185 | 12.46 | ug/L | 98 |
| 70) | 1,1,2,2-tetrachloroethane | 13.862 | 83 | 72092 | 11.22 | ug/L | 96 |
| 71) | tert-butylbenzene | 14.762 | 119 | 527780 | 11.24 | ug/L | 98 |
| 72) | sec-butylbenzene | 15.103 | 105 | 733431 | 10.67 | ug/L | 99 |
| 73) | 1,2,4-trimethylbenzene | 14.847 | 105 | 676840 | 11.24 | ug/L | 100 |
| 74) | 1,3-dichlorobenzene | 15.285 | 146 | 344133 | 11.25 | ug/L | 100 |
| 75) | p-isopropyltoluene | 15.328 | 119 | 680738 | 11.86 | ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.425 | 146 | 341454 | 11.22 | ug/L | 99 |
| 78) | 1,2-dichlorobenzene | 15.960 | 146 | 285870 | 11.46 | ug/L | 96 |
| 79) | n-butylbenzene | 15.924 | 91 | 601782 | 11.02 | ug/L | 100 |
| 80) | 1,2-dibromo-3-chloropr... | 17.043 | 75 | 14045 | 11.38 | ug/L | 92 |
| 81) | 1,2,4-trichlorobenzene | 17.998 | 180 | 158258 | 10.25 | ug/L | 98 |
| 82) | hexachlorobutadiene | 18.156 | 225 | 124316 | 9.26 | ug/L | 99 |
| 83) | naphthalene | 18.259 | 128 | 169678 | 10.37 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.508 | 180 | 116888 | 9.86 | ug/L | 98 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040418.D
Acq On : 4 Apr 2008 5:04 pm
Sample : ,MS,ME0803A25-05AMS,25, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 18:07:20 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040418.D 25ML0403.M Fri Apr 04 18:07:22 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040419.D
Acq On : 4 Apr 2008 5:39 pm
Sample : ,MSD,ME0803A25-05AMSD,25, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 04 18:07:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.004 | 96 | 585169 | 10.00 | ug/L | | -0.01 |
| 41) chlorobenzene-d5 | 11.523 | 117 | 400752 | 10.00 | ug/L | | -0.01 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 236474 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.153 | 113 | 153118 | 10.05 | ug/L | | -0.02 |
| Spiked Amount 10.000 | | | Recovery = 100.50% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.591 | 65 | 154445 | 10.57 | ug/L | | -0.01 |
| Spiked Amount 10.000 | | | Recovery = 105.70% | | | | |
| 44) toluene-d8 | 9.242 | 98 | 568357 | 11.68 | ug/L | | -0.01 |
| Spiked Amount 10.000 | | | Recovery = 116.80% | | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 212913 | 10.38 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.80% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 131833 | 10.92 | ug/L | | 95 |
| 3) chloromethane | 1.811 | 50 | 271176 | 14.07 | ug/L | | 96 |
| 4) vinyl chloride | 1.926 | 62 | 210873 | 10.24 | ug/L | | 98 |
| 6) bromomethane | 2.309 | 94 | 34887 | 4.79 | ug/L | | 93 |
| 7) chloroethane | 2.431 | 64 | 269101 | 22.12 | ug/L | | 96 |
| 8) trichlorofluoromethane | 2.711 | 101 | 366062 | 10.07 | ug/L | | 99 |
| 10) 1,1-dichloroethene | 3.325 | 96 | 137592 | 8.61 | ug/L | | 97 |
| 11) acetone | 3.459 | 43 | 18871 | 9.00 | ug/L | | 88 |
| 12) carbon disulfide | 3.574 | 76 | 451290 | 8.67 | ug/L | | 100 |
| 13) methylene chloride | 3.945 | 84 | 147896 | 7.83 | ug/L | | 94 |
| 14) acrylonitrile | 4.286 | 53 | 21212 | 10.17 | ug/L | | 97 |
| 15) trans-1,2-dichloroethene | 4.255 | 96 | 149360 | 8.53 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.249 | 73 | 233893 | 8.65 | ug/L | | 99 |
| 17) acetonitrile | 3.811 | 41 | 9224 | 10.22 | ug/L | | 98 |
| 19) 1,1-dichloroethane | 4.784 | 63 | 305407 | 8.75 | ug/L | | 100 |
| 20) vinyl acetate | 4.857 | 43 | 137918 | 14.24 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.520 | 96 | 141635 | 7.93 | ug/L | | 99 |
| 22) 2,2-dichloropropane | 5.484 | 77 | 274209 | 7.94 | ug/L | | 99 |
| 23) 2-butanone | 5.575 | 72 | 3731 | 8.44 | ug/L | # | 43 |
| 25) chloroform | 5.940 | 83 | 307976 | 8.77 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.122 | 97 | 321174 | 8.67 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.323 | 117 | 277582 | 8.70 | ug/L | | 99 |
| 31) benzene | 6.621 | 78 | 541850 | 8.27 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.341 | 75 | 210120 | 8.29 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.688 | 62 | 178526 | 8.81 | ug/L | | 95 |
| 34) trichloroethene | 7.503 | 95 | 157548 | 8.01 | ug/L | | 98 |
| 36) 1,2-dichloropropane | 7.831 | 63 | 120015 | 8.04 | ug/L | | 90 |
| 37) methyl methacrylate | 7.831 | 41 | 107893 | 17.10 | ug/L | # | 55 |
| 38) dibromomethane | 8.026 | 93 | 54154 | 8.34 | ug/L | | 98 |
| 39) bromodichloromethane | 8.257 | 83 | 195271 | 8.43 | ug/L | | 97 |
| 42) cis-1,3-dichloropropene | 8.889 | 75 | 161629 | 9.82 | ug/L | | 96 |
| 43) 4-methyl-2-pentanone | 9.127 | 43 | 49001 | 9.93 | ug/L | | 98 |
| 45) toluene | 9.339 | 92 | 365559 | 10.47 | ug/L | | 100 |
| 46) 1,1,2-trichloroethane | 10.039 | 83 | 55916 | 10.25 | ug/L | | 95 |
| 47) 1,3-dichloropropane | 10.282 | 76 | 122334 | 10.45 | ug/L | | 100 |

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040419.D
Acq On : 4 Apr 2008 5:39 pm
Sample : ,MSD,ME0803A25-05AMSD,25, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 04 18:07:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

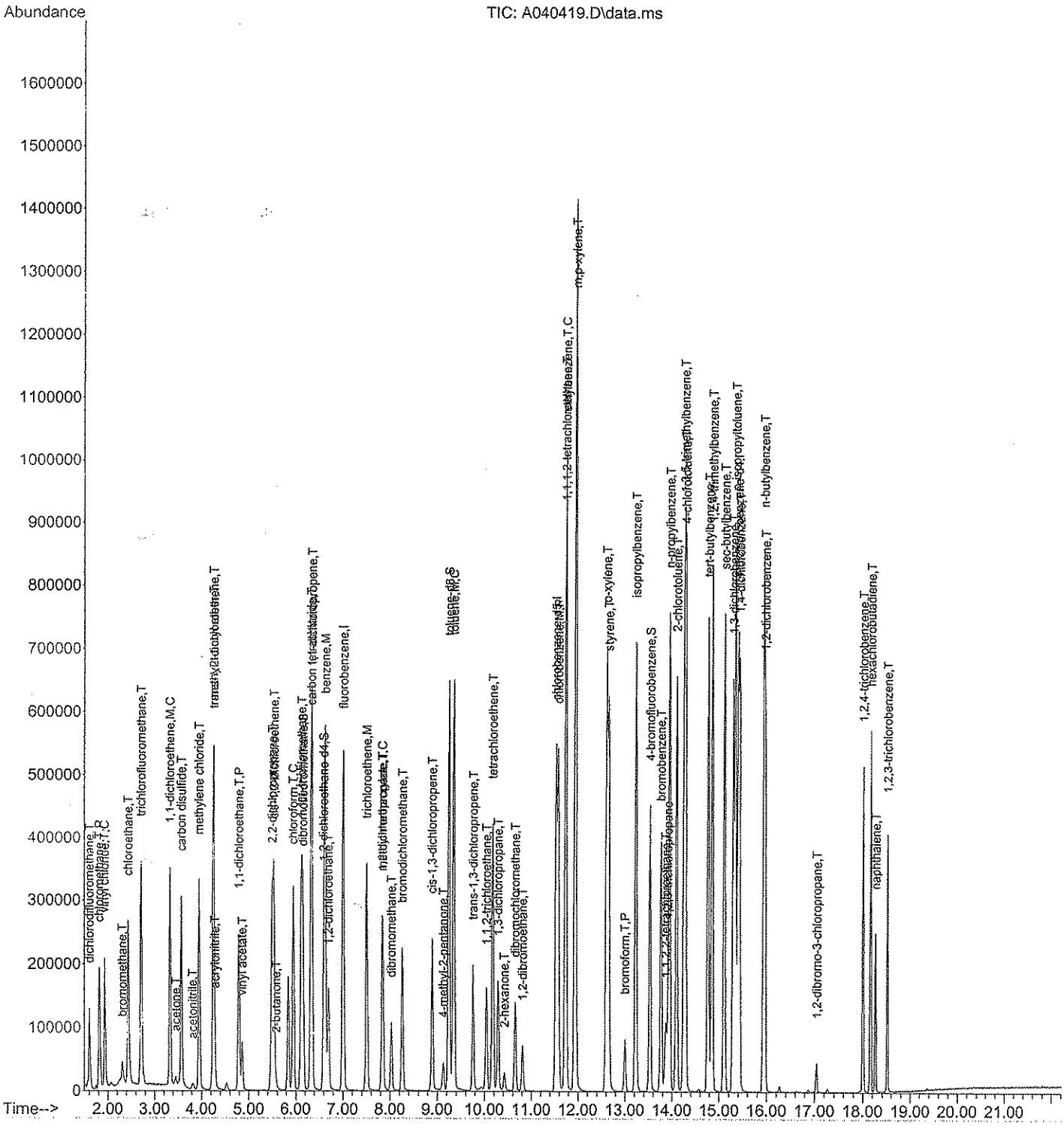
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 48) | tetrachloroethene | 10.166 | 164 | 131796 | 10.33 | ug/L | 96 |
| 49) | trans-1,3-dichloropropene | 9.753 | 75 | 135758 | 10.88 | ug/L | 97 |
| 50) | 2-hexanone | 10.416 | 43 | 31448 | 10.58 | ug/L | 96 |
| 51) | dibromochloromethane | 10.647 | 129 | 103022 | 10.71 | ug/L | 99 |
| 52) | 1,2-dibromoethane | 10.805 | 107 | 68873 | 10.62 | ug/L | 99 |
| 53) | chlorobenzene | 11.571 | 112 | 369471 | 10.42 | ug/L | 95 |
| 54) | 1,1,1,2-tetrachloroethane | 11.723 | 131 | 138256 | 10.51 | ug/L | 99 |
| 55) | ethylbenzene | 11.735 | 91 | 764354 | 10.80 | ug/L | 98 |
| 56) | m,p-xylene | 11.936 | 106 | 551978 | 21.39 | ug/L | 98 |
| 58) | o-xylene | 12.599 | 106 | 257995 | 10.68 | ug/L | 98 |
| 59) | styrene | 12.642 | 104 | 409295 | 10.56 | ug/L | 99 |
| 60) | isopropylbenzene | 13.219 | 105 | 723287 | 12.09 | ug/L | 99 |
| 61) | bromobenzene | 13.754 | 156 | 166290 | 10.86 | ug/L | 95 |
| 62) | bromoform | 12.994 | 173 | 59461 | 11.10 | ug/L | 99 |
| 64) | 1,2,3-trichloropropane | 13.906 | 75 | 64447 | 10.90 | ug/L | 99 |
| 65) | n-propylbenzene | 13.937 | 91 | 886864 | 10.95 | ug/L | 98 |
| 66) | 2-chlorotoluene | 14.089 | 91 | 552889 | 11.05 | ug/L | 99 |
| 67) | 4-chlorotoluene | 14.277 | 91 | 656524 | 11.19 | ug/L | 97 |
| 68) | 1,3,5-trimethylbenzene | 14.247 | 105 | 641617 | 11.13 | ug/L | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 13.858 | 83 | 70970 | 10.78 | ug/L | 98 |
| 71) | tert-butylbenzene | 14.764 | 119 | 504167 | 10.48 | ug/L | 99 |
| 72) | sec-butylbenzene | 15.098 | 105 | 698587 | 9.92 | ug/L | 100 |
| 73) | 1,2,4-trimethylbenzene | 14.843 | 105 | 645849 | 10.47 | ug/L | 98 |
| 74) | 1,3-dichlorobenzene | 15.281 | 146 | 329614 | 10.51 | ug/L | 98 |
| 75) | p-isopropyltoluene | 15.330 | 119 | 652294 | 11.09 | ug/L | 98 |
| 77) | 1,4-dichlorobenzene | 15.421 | 146 | 332379 | 10.65 | ug/L | 99 |
| 78) | 1,2-dichlorobenzene | 15.956 | 146 | 283190 | 11.08 | ug/L | 99 |
| 79) | n-butylbenzene | 15.925 | 91 | 583698 | 10.43 | ug/L | 98 |
| 80) | 1,2-dibromo-3-chloropr... | 17.044 | 75 | 14203 | 11.23 | ug/L | 96 |
| 81) | 1,2,4-trichlorobenzene | 17.999 | 180 | 164683 | 10.41 | ug/L | 93 |
| 82) | hexachlorobutadiene | 18.157 | 225 | 125277 | 9.11 | ug/L | 99 |
| 83) | naphthalene | 18.261 | 128 | 185714 | 11.08 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.510 | 180 | 126765 | 10.43 | ug/L | 96 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040419.D
Acq On : 4 Apr 2008 5:39 pm
Sample : ,MSD,ME0803A25-05AMSD,25, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 04 18:07:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040509.D
Acq On : 5 Apr 2008 10:59 am
Sample : ,SAMP,ME0803B85-07A,25,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 06 18:24:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 578562 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.522 | 117 | 388551 | 10.00 | ug/L | -0.01 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 190101 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.165 | 113 | 153234 | 10.17 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.70% | | | |
| 30) 1,2-dichloroethane-d4 | 6.596 | 65 | 157893 | 10.93 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.30% | | | |
| 44) toluene-d8 | 9.248 | 98 | 535616 | 11.35 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.50% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 191018 | 9.61 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.10% | | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.437 | 64 | 115452 | 9.60 | ug/L | 97 |
| 31) benzene | 6.627 | 78 | 916933 | 14.15 | ug/L | 99 |
| 38) 1,2-dichloroethane | 6.621 | 62 | 10663 | 0.53 | ug/L | 92 |

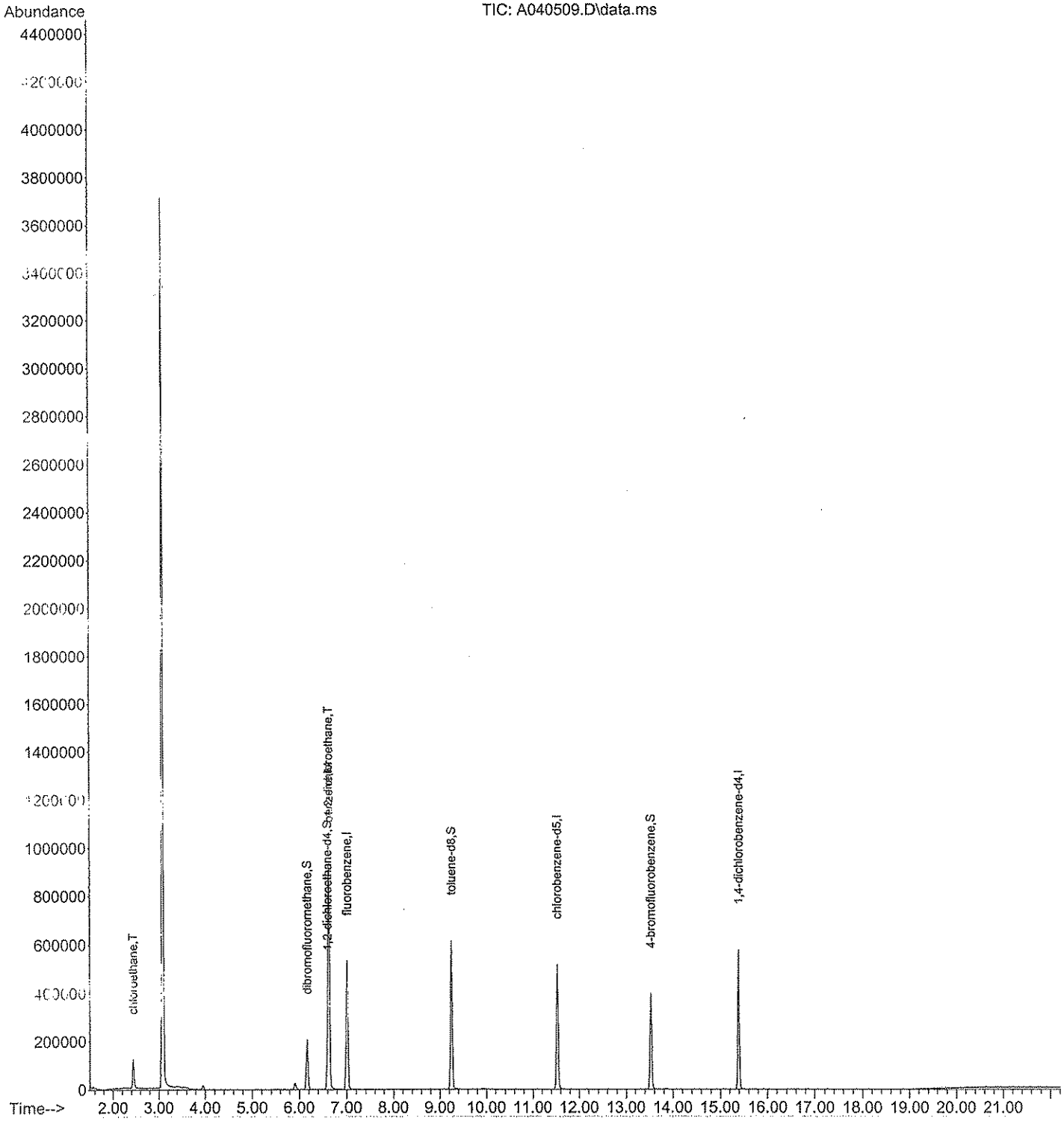
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040509.D
Acq On : 5 Apr 2008 10:59 am
Sample : ,SAMP,ME0803B85-07A,25,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 06 18:24:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040510.D
Acq On : 5 Apr 2008 11:34 am
Sample : ,MS,ME0803B85-07AMS,25, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 08 13:51:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 593910 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 407061 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.392 | 152 | 240022 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 157632 | 10.19 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.90% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 165698 | 11.17 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.70% | | | | |
| 44) toluene-d8 | 9.249 | 98 | 569667 | 11.52 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.20% | | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 220351 | 10.58 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.80% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 91845 | 7.49 | ug/L | | 100 |
| 3) chloromethane | 1.818 | 50 | 215648 | 11.02 | ug/L | | 97 |
| 4) vinyl chloride | 1.934 | 62 | 157499 | 7.53 | ug/L | | 99 |
| 6) bromomethane | 2.317 | 94 | 34938 | 4.73 | ug/L | | 94 |
| 7) chloroethane | 2.444 | 64 | 222641 | 18.03 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.724 | 101 | 358216 | 9.71 | ug/L | | 97 |
| 10) 1,1-dichloroethene | 3.344 | 96 | 148599 | 9.16 | ug/L | | 92 |
| 11) acetone | 3.472 | 43 | 17950m | 8.44 | ug/L | | |
| 12) carbon disulfide | 3.588 | 76 | 407720 | 7.72 | ug/L | | 100 |
| 13) methylene chloride | 3.965 | 84 | 155407 | 8.11 | ug/L | | 91 |
| 14) acrylonitrile | 4.305 | 53 | 19999 | 9.44 | ug/L | | 91 |
| 15) trans-1,2-dichloroethene | 4.269 | 96 | 163409 | 9.19 | ug/L | | 96 |
| 16) methyl-t-butyl ether | 4.269 | 73 | 233079 | 8.50 | ug/L | | 98 |
| 17) acetonitrile | 3.831 | 41 | 9675 | 10.56 | ug/L | | 92 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 331770 | 9.37 | ug/L | | 98 |
| 20) vinyl acetate | 4.871 | 43 | 132770 | 13.51 | ug/L | | 100 |
| 21) cis-1,2-dichloroethene | 5.540 | 96 | 157556 | 8.70 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.503 | 77 | 325424 | 9.29 | ug/L | | 100 |
| 23) 2-butanone | 5.582 | 72 | 4011 | 8.94 | ug/L | # | 55 |
| 25) chloroform | 5.959 | 83 | 348353 | 9.78 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.136 | 97 | 354842 | 9.44 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.343 | 117 | 302146 | 9.33 | ug/L | | 99 |
| 31) benzene | 6.634 | 78 | 1465745 | 22.04 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.349 | 75 | 231294 | 8.99 | ug/L | | 94 |
| 33) 1,2-dichloroethane | 6.701 | 62 | 197011 | 9.57 | ug/L | | 99 |
| 34) trichloroethene | 7.510 | 95 | 168210 | 8.43 | ug/L | | 96 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 128943 | 8.51 | ug/L | | 97 |
| 38) dibromomethane | 8.033 | 93 | 59611 | 9.04 | ug/L | | 97 |
| 39) bromodichloromethane | 8.264 | 83 | 210769 | 8.97 | ug/L | | 99 |
| 42) cis-1,3-dichloropropene | 8.897 | 75 | 175498 | 10.50 | ug/L | | 95 |
| 43) 4-methyl-2-pentanone | 9.134 | 43 | 51894 | 10.36 | ug/L | | 96 |
| 45) toluene | 9.347 | 92 | 381876 | 10.77 | ug/L | | 99 |
| 46) 1,1,2-trichloroethane | 10.040 | 83 | 58554 | 10.57 | ug/L | | 98 |
| 47) 1,3-dichloropropane | 10.289 | 76 | 126756 | 10.66 | ug/L | | 96 |
| 48) tetrachloroethene | 10.174 | 164 | 135465 | 10.45 | ug/L | | 95 |

mm/dd/yy
CL
4/8/08

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040510.D
Acq On : 5 Apr 2008 11:34 am
Sample : ,MS,ME0803B85-07AMS,25, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 08 13:51:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

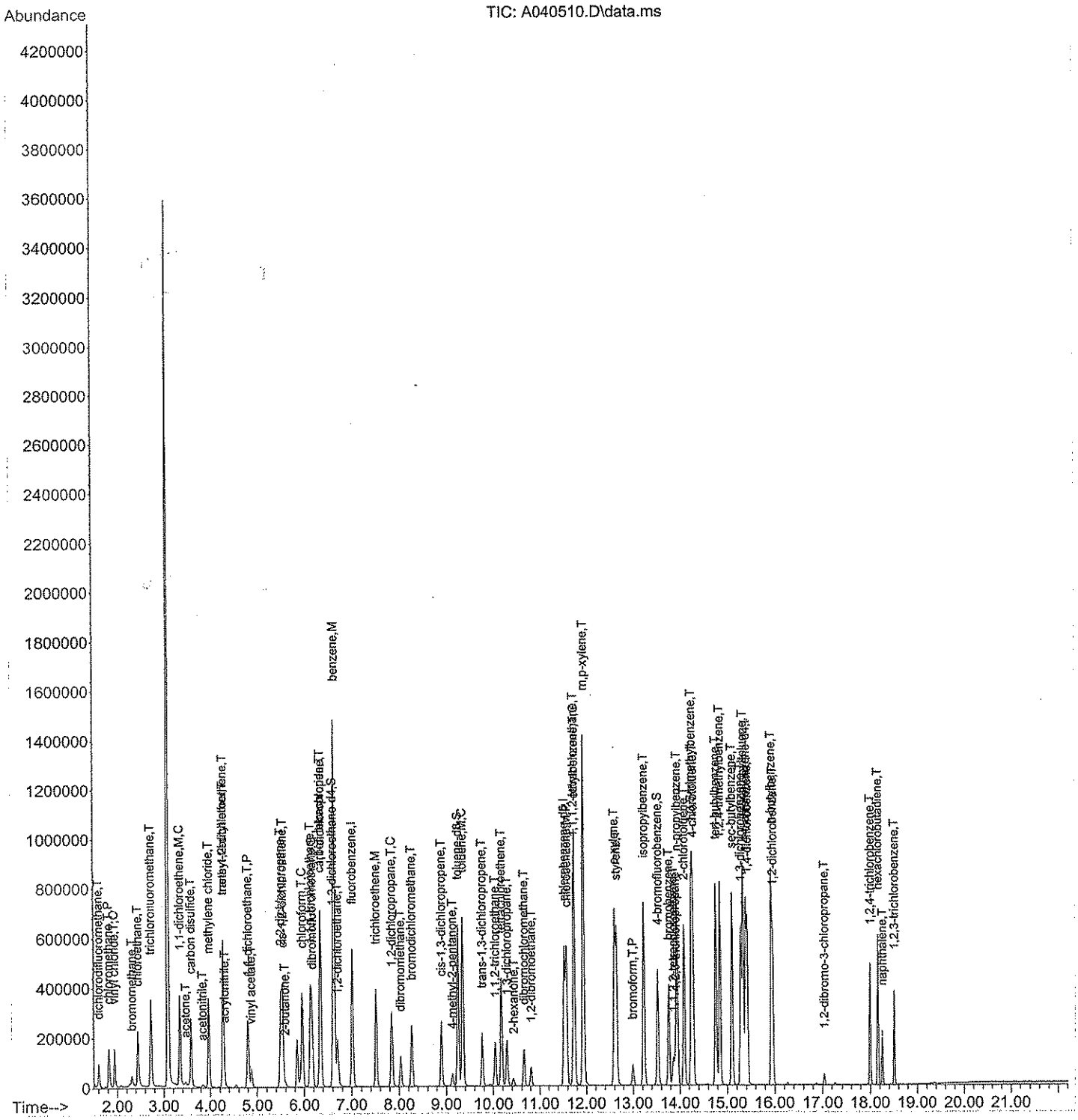
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 49) | trans-1,3-dichloropropene | 9.754 | 75 | 148603 | 11.73 | ug/L | 98 |
| 50) | 2-hexanone | 10.429 | 43 | 32226 | 10.67 | ug/L | 98 |
| 51) | dibromochloromethane | 10.654 | 129 | 107755 | 11.03 | ug/L | 96 |
| 52) | 1,2-dibromoethane | 10.812 | 107 | 71304 | 10.83 | ug/L | 98 |
| 53) | chlorobenzene | 11.579 | 112 | 378308 | 10.51 | ug/L | 97 |
| 54) | 1,1,1,2-tetrachloroethane | 11.725 | 131 | 145647 | 10.90 | ug/L | 97 |
| 55) | ethylbenzene | 11.743 | 91 | 769763 | 10.71 | ug/L | 99 |
| 56) | m,p-xylene | 11.937 | 106 | 555248 | 21.18 | ug/L | 100 |
| 58) | o-xylene | 12.600 | 106 | 260102 | 10.60 | ug/L | 99 |
| 59) | styrene | 12.643 | 104 | 409909 | 10.42 | ug/L | 99 |
| 60) | isopropylbenzene | 13.227 | 105 | 733747 | 12.08 | ug/L | 99 |
| 61) | bromobenzene | 13.762 | 156 | 166147 | 10.69 | ug/L | 97 |
| 62) | bromoform | 12.996 | 173 | 59188 | 10.88 | ug/L | 98 |
| 64) | 1,2,3-trichloropropane | 13.908 | 75 | 65420 | 10.89 | ug/L | 93 |
| 65) | n-propylbenzene | 13.938 | 91 | 883501 | 10.74 | ug/L | 99 |
| 66) | 2-chlorotoluene | 14.090 | 91 | 542120 | 10.67 | ug/L | 98 |
| 67) | 4-chlorotoluene | 14.279 | 91 | 650521 | 10.91 | ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.248 | 105 | 644307 | 11.01 | ug/L | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 13.859 | 83 | 71173 | 10.65 | ug/L | 95 |
| 71) | tert-butylbenzene | 14.759 | 119 | 517342 | 10.59 | ug/L | 97 |
| 72) | sec-butylbenzene | 15.100 | 105 | 712340 | 9.97 | ug/L | 99 |
| 73) | 1,2,4-trimethylbenzene | 14.844 | 105 | 637341 | 10.18 | ug/L | 97 |
| 74) | 1,3-dichlorobenzene | 15.282 | 146 | 326374 | 10.25 | ug/L | 100 |
| 75) | p-isopropyltoluene | 15.331 | 119 | 658528 | 11.03 | ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.422 | 146 | 318196 | 10.05 | ug/L | 97 |
| 78) | 1,2-dichlorobenzene | 15.957 | 146 | 269525 | 10.39 | ug/L | 97 |
| 79) | n-butylbenzene | 15.927 | 91 | 590539 | 10.40 | ug/L | 99 |
| 80) | 1,2-dibromo-3-chloropr... | 17.040 | 75 | 13921 | 10.84 | ug/L | 89 |
| 81) | 1,2,4-trichlorobenzene | 18.000 | 180 | 156948 | 9.78 | ug/L | 98 |
| 82) | hexachlorobutadiene | 18.159 | 225 | 135036 | 9.67 | ug/L | 100 |
| 83) | naphthalene | 18.256 | 128 | 159647 | 9.38 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.511 | 180 | 115010 | 9.33 | ug/L | 99 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040510.D
Acq On : 5 Apr 2008 11:34 am
Sample : ,MS,ME0803B85-07AMS,25, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 08 13:51:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040511.D
Acq On : 5 Apr 2008 12:09 pm
Sample : ,MSD,ME0803B85-07AMSD,25, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 08 13:53:05 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 618248 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 422275 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 240156 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 164138 | 10.20 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 102.00% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 168288 | 10.90 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.00% | | | | |
| 44) toluene-d8 | 9.253 | 98 | 592794 | 11.56 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.60% | | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 219655 | 10.17 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.70% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 99990 | 7.84 | ug/L | | 95 |
| 3) chloromethane | 1.816 | 50 | 232525 | 11.42 | ug/L | | 98 |
| 4) vinyl chloride | 1.937 | 62 | 172329 | 7.92 | ug/L | | 99 |
| 6) bromomethane | 2.314 | 94 | 48176 | 6.27 | ug/L | | 97 |
| 7) chloroethane | 2.442 | 64 | 235967 | 18.36 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.722 | 101 | 367686 | 9.57 | ug/L | | 98 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 155709 | 9.22 | ug/L | | 94 |
| 11) acetone | 3.470 | 43 | 19905m | 8.99 | ug/L | | |
| 12) carbon disulfide | 3.592 | 76 | 415136 | 7.55 | ug/L | | 98 |
| 13) methylene chloride | 3.962 | 84 | 163668 | 8.21 | ug/L | | 94 |
| 14) acrylonitrile | 4.297 | 53 | 22102 | 10.03 | ug/L | | 85 |
| 15) trans-1,2-dichloroethene | 4.267 | 96 | 175307 | 9.47 | ug/L | | 97 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 243810 | 8.54 | ug/L | | 99 |
| 17) acetonitrile | 3.823 | 41 | 8547 | 8.96 | ug/L | | 98 |
| 19) 1,1-dichloroethane | 4.796 | 63 | 348447 | 9.45 | ug/L | | 99 |
| 20) vinyl acetate | 4.869 | 43 | 139913 | 13.67 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 165664 | 8.78 | ug/L | | 99 |
| 22) 2,2-dichloropropane | 5.495 | 77 | 335187 | 9.19 | ug/L | | 99 |
| 23) 2-butanone | 5.580 | 72 | 4313 | 9.24 | ug/L | # | 83 |
| 25) chloroform | 5.957 | 83 | 363492 | 9.80 | ug/L | | 98 |
| 27) 1,1,1-trichloroethane | 6.140 | 97 | 370605 | 9.47 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.340 | 117 | 312441 | 9.27 | ug/L | | 100 |
| 31) benzene | 6.632 | 78 | 1531933 | 22.12 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 241945 | 9.03 | ug/L | | 96 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 207103 | 9.67 | ug/L | | 99 |
| 34) trichloroethene | 7.508 | 95 | 176019 | 8.47 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 134959 | 8.56 | ug/L | | 97 |
| 38) dibromomethane | 8.037 | 93 | 61329 | 8.94 | ug/L | | 95 |
| 39) bromodichloromethane | 8.262 | 83 | 216140 | 8.84 | ug/L | | 97 |
| 42) cis-1,3-dichloropropene | 8.901 | 75 | 183491 | 10.58 | ug/L | | 95 |
| 43) 4-methyl-2-pentanone | 9.132 | 43 | 53313 | 10.26 | ug/L | | 97 |
| 45) toluene | 9.351 | 92 | 395857 | 10.76 | ug/L | | 100 |
| 46) 1,1,2-trichloroethane | 10.044 | 83 | 61945 | 10.78 | ug/L | | 96 |
| 47) 1,3-dichloropropane | 10.287 | 76 | 132650 | 10.75 | ug/L | | 98 |
| 48) tetrachloroethene | 10.172 | 164 | 141850 | 10.55 | ug/L | | 90 |

4/18/08

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040511.D
Acq On : 5 Apr 2008 12:09 pm
Sample : ,MSD,ME0803B85-07AMSD,25, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 08 13:53:05 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

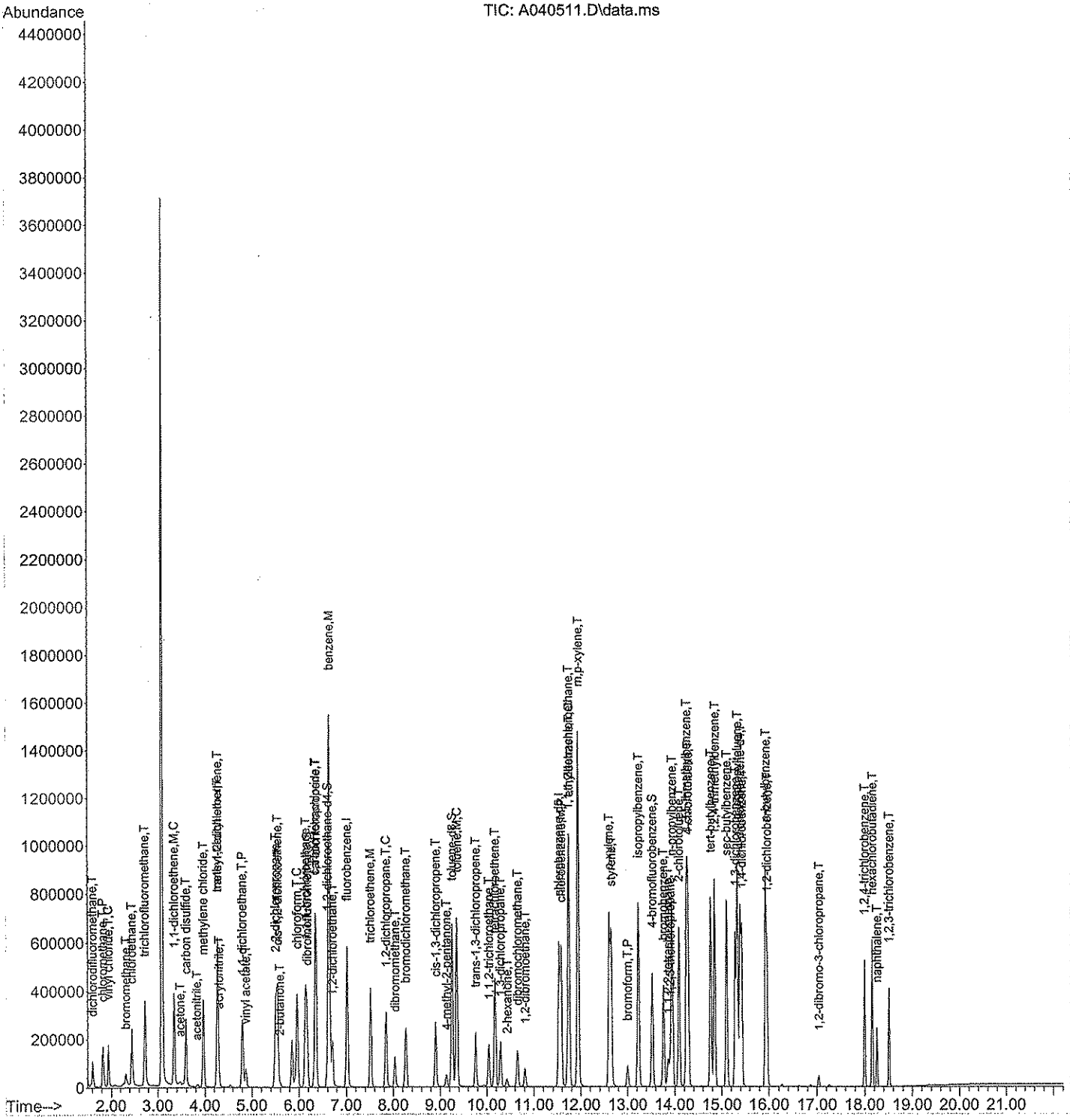
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 49) | trans-1,3-dichloropropene | 9.758 | 75 | 153358 | 11.67 | ug/L | 97 |
| 50) | 2-hexanone | 10.427 | 43 | 34203 | 10.92 | ug/L | 94 |
| 51) | dibromochloromethane | 10.652 | 129 | 112024 | 11.05 | ug/L | 93 |
| 52) | 1,2-dibromoethane | 10.810 | 107 | 73978 | 10.83 | ug/L | 98 |
| 53) | chlorobenzene | 11.576 | 112 | 394989 | 10.58 | ug/L | 97 |
| 54) | 1,1,1,2-tetrachloroethane | 11.728 | 131 | 150177 | 10.83 | ug/L | 98 |
| 55) | ethylbenzene | 11.741 | 91 | 807251 | 10.83 | ug/L | 99 |
| 56) | m,p-xylene | 11.935 | 106 | 581180 | 21.37 | ug/L | 99 |
| 58) | o-xylene | 12.598 | 106 | 267019 | 10.49 | ug/L | 98 |
| 59) | styrene | 12.647 | 104 | 423830 | 10.38 | ug/L | 98 |
| 60) | isopropylbenzene | 13.224 | 105 | 758202 | 12.03 | ug/L | 99 |
| 61) | bromobenzene | 13.760 | 156 | 174722 | 10.83 | ug/L | 93 |
| 62) | bromoform | 12.999 | 173 | 60711 | 10.76 | ug/L | 95 |
| 64) | 1,2,3-trichloropropane | 13.905 | 75 | 65955 | 10.58 | ug/L | 93 |
| 65) | n-propylbenzene | 13.942 | 91 | 912283 | 10.69 | ug/L | 99 |
| 66) | 2-chlorotoluene | 14.088 | 91 | 554791 | 10.52 | ug/L | 99 |
| 67) | 4-chlorotoluene | 14.276 | 91 | 662369 | 10.71 | ug/L | 98 |
| 68) | 1,3,5-trimethylbenzene | 14.246 | 105 | 662818 | 10.91 | ug/L | 100 |
| 70) | 1,1,2,2-tetrachloroethane | 13.857 | 83 | 72652 | 10.86 | ug/L | 97 |
| 71) | tert-butylbenzene | 14.763 | 119 | 523197 | 10.71 | ug/L | 98 |
| 72) | sec-butylbenzene | 15.097 | 105 | 729889 | 10.21 | ug/L | 100 |
| 73) | 1,2,4-trimethylbenzene | 14.848 | 105 | 658702 | 10.52 | ug/L | 96 |
| 74) | 1,3-dichlorobenzene | 15.286 | 146 | 341871 | 10.74 | ug/L | 97 |
| 75) | p-isopropyltoluene | 15.329 | 119 | 668286 | 11.18 | ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.426 | 146 | 329035 | 10.39 | ug/L | 98 |
| 78) | 1,2-dichlorobenzene | 15.955 | 146 | 274592 | 10.58 | ug/L | 99 |
| 79) | n-butylbenzene | 15.924 | 91 | 604200 | 10.63 | ug/L | 100 |
| 80) | 1,2-dibromo-3-chloropr... | 17.043 | 75 | 14213 | 11.06 | ug/L | 97 |
| 81) | 1,2,4-trichlorobenzene | 17.998 | 180 | 164115 | 10.22 | ug/L | 93 |
| 82) | hexachlorobutadiene | 18.156 | 225 | 136797 | 9.79 | ug/L | 97 |
| 83) | naphthalene | 18.260 | 128 | 182624 | 10.73 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.509 | 180 | 123977 | 10.05 | ug/L | 98 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040511.D
Acq On : 5 Apr 2008 12:09 pm
Sample : ,MSD,ME0803B85-07AMSD,25, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 08 13:53:05 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040815.D
Acq On : 8 Apr 2008 3:51 pm
Sample : ,MS,me0803c07-02AMS,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 08 16:17:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 551934 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 389035 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 237905 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.173 | 113 | 148385 | 10.32 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 158649 | 11.51 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.10% | | | | |
| 44) toluene-d8 | 9.250 | 98 | 537092 | 11.37 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.70% | | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 212425 | 10.67 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 106.70% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 186778 | 16.40 | ug/L | | 96 |
| 3) chloromethane | 1.818 | 50 | 261882 | 14.40 | ug/L | | 99 |
| 4) vinyl chloride | 1.934 | 62 | 201299 | 10.36 | ug/L | | 97 |
| 6) bromomethane | 2.317 | 94 | 68267 | 9.94 | ug/L | | 97 |
| 7) chloroethane | 2.445 | 64 | 164404 | 14.33 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.730 | 101 | 427470 | 12.46 | ug/L | | 97 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 137439 | 9.12 | ug/L | | 92 |
| 11) acetone | 3.472 | 43 | 21816 | 11.03 | ug/L | | 88 |
| 12) carbon disulfide | 3.594 | 76 | 517603 | 10.55 | ug/L | | 99 |
| 13) methylene chloride | 3.965 | 84 | 138243 | 7.76 | ug/L | | 89 |
| 14) acrylonitrile | 4.306 | 53 | 16283 | 8.27 | ug/L | | 94 |
| 15) trans-1,2-dichloroethene | 4.275 | 96 | 141792 | 8.58 | ug/L | | 98 |
| 16) methyl-t-butyl ether | 4.269 | 73 | 221488 | 8.69 | ug/L | | 99 |
| 17) acetonitrile | 3.831 | 41 | 7650 | 8.98 | ug/L | | 95 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 299535 | 9.10 | ug/L | | 99 |
| 20) vinyl acetate | 4.877 | 43 | 152923 | 16.74 | ug/L | | 96 |
| 21) cis-1,2-dichloroethene | 5.540 | 96 | 137000 | 8.14 | ug/L | | 93 |
| 22) 2,2-dichloropropane | 5.497 | 77 | 304412 | 9.35 | ug/L | | 98 |
| 23) 2-butanone | 5.589 | 72 | 3434 | 8.24 | ug/L | # | 89 |
| 25) chloroform | 5.960 | 83 | 308747 | 9.32 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.136 | 97 | 328421 | 9.40 | ug/L | | 97 |
| 29) carbon tetrachloride | 6.343 | 117 | 291253 | 9.68 | ug/L | | 98 |
| 31) benzene | 6.635 | 78 | 532565 | 8.62 | ug/L | | 97 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 207277 | 8.67 | ug/L | | 96 |
| 33) 1,2-dichloroethane | 6.708 | 62 | 182009 | 9.52 | ug/L | | 99 |
| 34) trichloroethene | 7.510 | 95 | 153439 | 8.27 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 113494 | 8.06 | ug/L | | 96 |
| 37) methyl methacrylate | 7.839 | 41 | 111498 | 18.73 | ug/L | # | 55 |
| 38) dibromomethane | 8.033 | 93 | 54513 | 8.90 | ug/L | | 89 |
| 39) bromodichloromethane | 8.265 | 83 | 196778 | 9.01 | ug/L | | 98 |
| 40) 2-chloroethyl vinyl ether | 8.909 | 63 | 874 | 1.67 | ug/L | # | 47 |
| 42) cis-1,3-dichloropropene | 8.897 | 75 | 160097 | 10.02 | ug/L | | 90 |
| 43) 4-methyl-2-pentanone | 9.128 | 43 | 47677 | 9.96 | ug/L | | 99 |
| 45) toluene | 9.353 | 92 | 344968 | 10.18 | ug/L | | 99 |
| 46) 1,1,2-trichloroethane | 10.046 | 83 | 53044 | 10.02 | ug/L | | 99 |

CR 4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040815.D
Acq On : 8 Apr 2008 3:51 pm
Sample : ,MS,me0803c07-02AMS,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 08 16:17:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

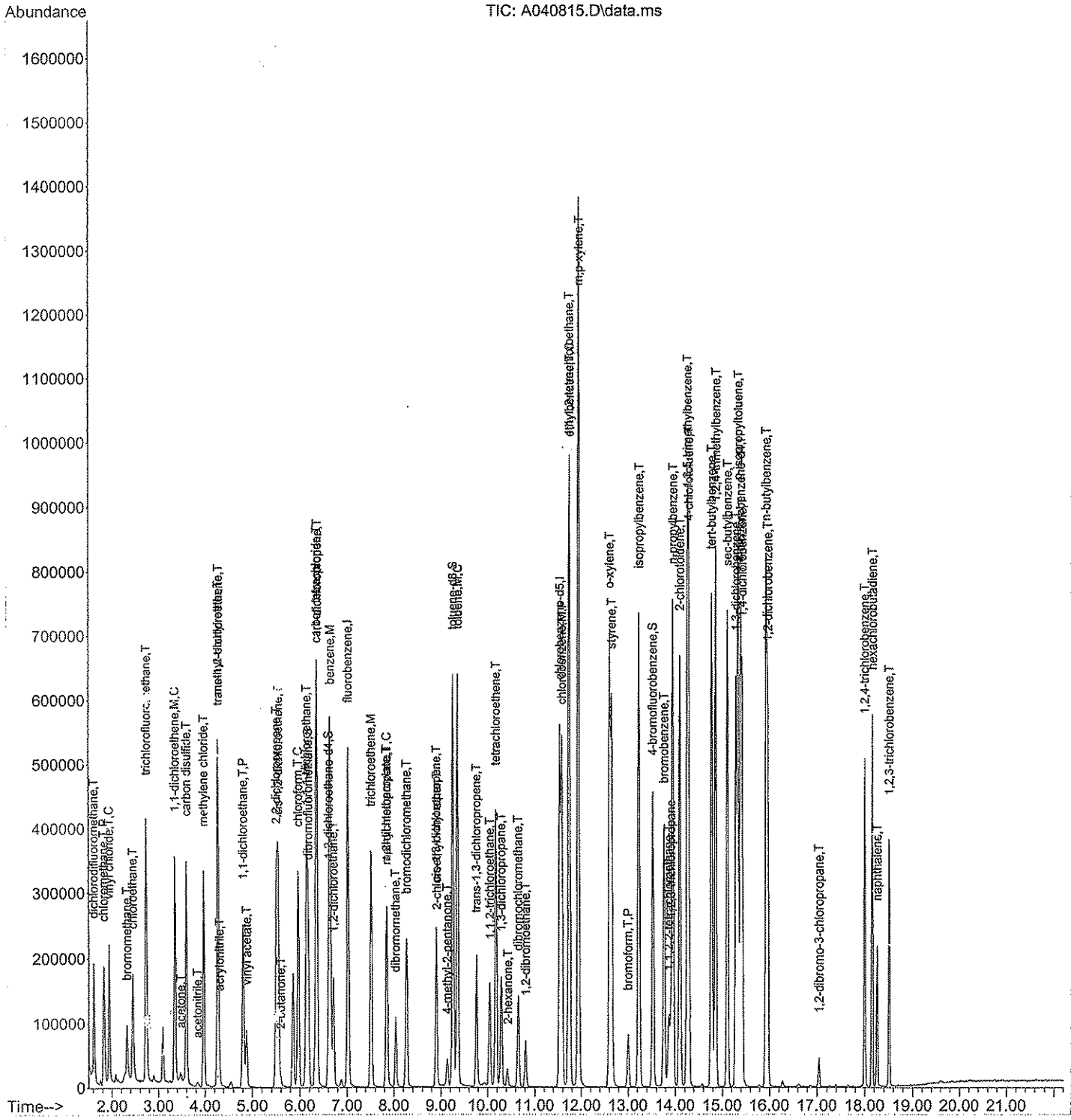
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 47) | 1,3-dichloropropane | 10.290 | 76 | 115532 | 10.17 | ug/L | 99 |
| 48) | tetrachloroethene | 10.174 | 164 | 126570 | 10.22 | ug/L | 95 |
| 49) | trans-1,3-dichloropropene | 9.754 | 75 | 135864 | 11.22 | ug/L | 97 |
| 50) | 2-hexanone | 10.429 | 43 | 29045 | 10.07 | ug/L | 96 |
| 51) | dibromochloromethane | 10.648 | 129 | 100652 | 10.78 | ug/L | 97 |
| 52) | 1,2-dibromoethane | 10.807 | 107 | 66682 | 10.59 | ug/L | 100 |
| 53) | chlorobenzene | 11.579 | 112 | 355884 | 10.34 | ug/L | 97 |
| 54) | 1,1,1,2-tetrachloroethane | 11.731 | 131 | 137094 | 10.73 | ug/L | 96 |
| 55) | ethylbenzene | 11.743 | 91 | 736931 | 10.73 | ug/L | 99 |
| 56) | m,p-xylene | 11.938 | 106 | 523408 | 20.89 | ug/L | 96 |
| 58) | o-xylene | 12.600 | 106 | 249842 | 10.65 | ug/L | 99 |
| 59) | styrene | 12.643 | 104 | 390824 | 10.39 | ug/L | 98 |
| 60) | isopropylbenzene | 13.227 | 105 | 714895 | 12.31 | ug/L | 98 |
| 61) | bromobenzene | 13.762 | 156 | 161639 | 10.88 | ug/L | 98 |
| 62) | bromoform | 12.996 | 173 | 56806 | 10.93 | ug/L | 99 |
| 64) | 1,2,3-trichloropropane | 13.908 | 75 | 62540 | 10.89 | ug/L | 99 |
| 65) | n-propylbenzene | 13.944 | 91 | 879846 | 11.19 | ug/L | 99 |
| 66) | 2-chlorotoluene | 14.090 | 91 | 542070 | 11.16 | ug/L | 99 |
| 67) | 4-chlorotoluene | 14.279 | 91 | 649419 | 11.40 | ug/L | 98 |
| 68) | 1,3,5-trimethylbenzene | 14.249 | 105 | 640651 | 11.45 | ug/L | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 13.859 | 83 | 67582 | 10.20 | ug/L | 96 |
| 71) | tert-butylbenzene | 14.759 | 119 | 509264 | 10.52 | ug/L | 96 |
| 72) | sec-butylbenzene | 15.100 | 105 | 696921 | 9.84 | ug/L | 100 |
| 73) | 1,2,4-trimethylbenzene | 14.851 | 105 | 649817 | 10.47 | ug/L | 98 |
| 74) | 1,3-dichlorobenzene | 15.282 | 146 | 324694 | 10.29 | ug/L | 98 |
| 75) | p-isopropyltoluene | 15.331 | 119 | 648083 | 10.95 | ug/L | 100 |
| 77) | 1,4-dichlorobenzene | 15.422 | 146 | 316154 | 10.07 | ug/L | 98 |
| 78) | 1,2-dichlorobenzene | 15.957 | 146 | 275795 | 10.73 | ug/L | 98 |
| 79) | n-butylbenzene | 15.921 | 91 | 565578 | 10.05 | ug/L | 99 |
| 80) | 1,2-dibromo-3-chloropr... | 17.040 | 75 | 14049 | 11.04 | ug/L | 88 |
| 81) | 1,2,4-trichlorobenzene | 17.995 | 180 | 160843 | 10.11 | ug/L | 95 |
| 82) | hexachlorobutadiene | 18.159 | 225 | 126325 | 9.13 | ug/L | 97 |
| 83) | naphthalene | 18.256 | 128 | 159383 | 9.45 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.505 | 180 | 117934 | 9.65 | ug/L | 96 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040815.D
Acq On : 8 Apr 2008 3:51 pm
Sample : ,MS,me0803c07-02AMS,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 08 16:17:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040816.D
Acq On : 8 Apr 2008 4:26 pm
Sample : ,MSD,me0803c07-02AMSD,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 08 16:53:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 577044 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 409049 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 244289 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.164 | 113 | 155331 | 10.34 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.40% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 164801 | 11.44 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.40% | | | | |
| 44) toluene-d8 | 9.254 | 98 | 566098 | 11.39 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.90% | | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 224325 | 10.72 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.20% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 202498 | 17.01 | ug/L | | 98 |
| 3) chloromethane | 1.816 | 50 | 288765 | 15.19 | ug/L | | 98 |
| 4) vinyl chloride | 1.932 | 62 | 222774 | 10.97 | ug/L | | 98 |
| 6) bromomethane | 2.315 | 94 | 83640 | 11.65 | ug/L | | 96 |
| 7) chloroethane | 2.442 | 64 | 178577 | 14.89 | ug/L | | 93 |
| 8) trichlorofluoromethane | 2.728 | 101 | 421531 | 11.76 | ug/L | | 96 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 144333 | 9.16 | ug/L | | 95 |
| 11) acetone | 3.470 | 43 | 20318 | 9.83 | ug/L | | 90 |
| 12) carbon disulfide | 3.586 | 76 | 531031 | 10.35 | ug/L | | 100 |
| 13) methylene chloride | 3.963 | 84 | 151997 | 8.17 | ug/L | | 88 |
| 14) acrylonitrile | 4.303 | 53 | 19980 | 9.71 | ug/L | | 90 |
| 15) trans-1,2-dichloroethene | 4.267 | 96 | 146742 | 8.49 | ug/L | | 94 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 231159 | 8.67 | ug/L | | 98 |
| 17) acetonitrile | 3.829 | 41 | 8412 | 9.45 | ug/L | | 97 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 318124 | 9.25 | ug/L | | 99 |
| 20) vinyl acetate | 4.869 | 43 | 162405 | 17.00 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 144943 | 8.23 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 315721 | 9.27 | ug/L | | 100 |
| 23) 2-butanone | 5.593 | 72 | 3907 | 8.97 | ug/L | # | 59 |
| 25) chloroform | 5.958 | 83 | 322235 | 9.31 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 346292 | 9.48 | ug/L | | 97 |
| 29) carbon tetrachloride | 6.341 | 117 | 297716 | 9.47 | ug/L | | 99 |
| 31) benzene | 6.633 | 78 | 541550 | 8.38 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 217453 | 8.70 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.706 | 62 | 187973 | 9.40 | ug/L | | 99 |
| 34) trichloroethene | 7.508 | 95 | 163250 | 8.42 | ug/L | | 96 |
| 36) 1,2-dichloropropane | 7.843 | 63 | 119244 | 8.10 | ug/L | | 95 |
| 37) methyl methacrylate | 7.843 | 41 | 116582 | 18.73 | ug/L | # | 53 |
| 38) dibromomethane | 8.037 | 93 | 56478 | 8.82 | ug/L | | 97 |
| 39) bromodichloromethane | 8.262 | 83 | 201005 | 8.80 | ug/L | | 98 |
| 40) 2-chloroethyl vinyl ether | 8.901 | 63 | 986 | 1.80 | ug/L | # | 47 |
| 42) cis-1,3-dichloropropene | 8.901 | 75 | 166261 | 9.90 | ug/L | | 94 |
| 43) 4-methyl-2-pentanone | 9.132 | 43 | 49517 | 9.83 | ug/L | | 98 |
| 45) toluene | 9.351 | 92 | 366490 | 10.29 | ug/L | | 98 |
| 46) 1,1,2-trichloroethane | 10.044 | 83 | 55025 | 9.88 | ug/L | | 96 |

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040816.D
Acq On : 8 Apr 2008 4:26 pm
Sample : ,MSD,me0803c07-02AMSD,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 08 16:53:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

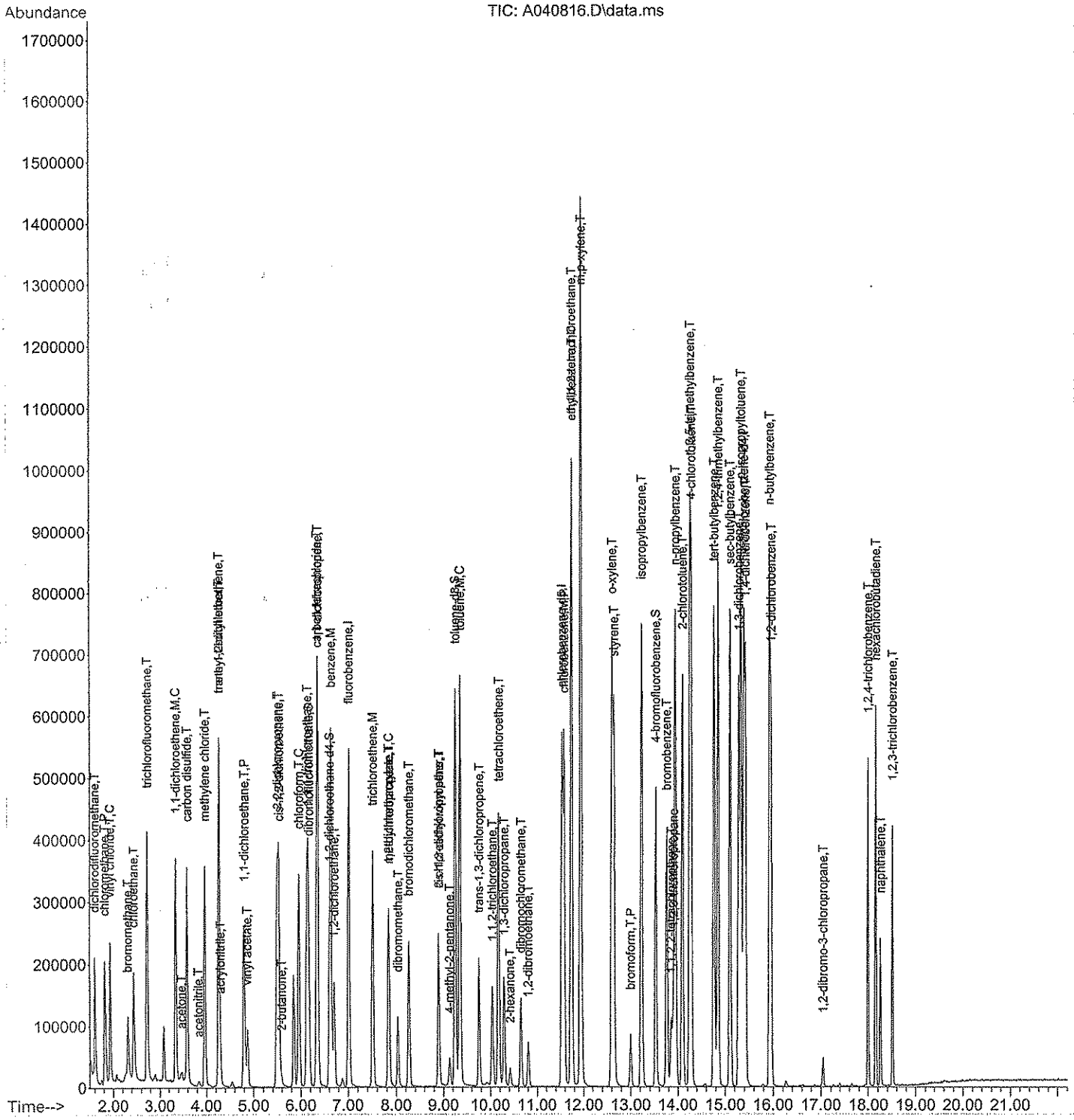
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 47) 1,3-dichloropropane | 10.294 | 76 | 122748 | 10.27 | ug/L | 99 |
| 48) tetrachloroethene | 10.178 | 164 | 136023 | 10.45 | ug/L | 98 |
| 49) trans-1,3-dichloropropene | 9.758 | 75 | 142527 | 11.19 | ug/L | 98 |
| 50) 2-hexanone | 10.421 | 43 | 32037 | 10.56 | ug/L | 98 |
| 51) dibromochloromethane | 10.652 | 129 | 104148 | 10.61 | ug/L | 96 |
| 52) 1,2-dibromoethane | 10.804 | 107 | 69296 | 10.47 | ug/L | 94 |
| 53) chlorobenzene | 11.577 | 112 | 376121 | 10.40 | ug/L | 96 |
| 54) 1,1,1,2-tetrachloroethane | 11.735 | 131 | 143396 | 10.68 | ug/L | 96 |
| 55) ethylbenzene | 11.741 | 91 | 775241 | 10.73 | ug/L | 98 |
| 56) m,p-xylene | 11.935 | 106 | 549244 | 20.85 | ug/L | 94 |
| 58) o-xylene | 12.604 | 106 | 259767 | 10.53 | ug/L | 99 |
| 59) styrene | 12.647 | 104 | 398833 | 10.08 | ug/L | 97 |
| 60) isopropylbenzene | 13.225 | 105 | 746564 | 12.23 | ug/L | 99 |
| 61) bromobenzene | 13.760 | 156 | 169145 | 10.83 | ug/L | 98 |
| 62) bromoform | 13.000 | 173 | 58698 | 10.74 | ug/L | 97 |
| 64) 1,2,3-trichloropropane | 13.906 | 75 | 65632 | 10.87 | ug/L | 95 |
| 65) n-propylbenzene | 13.942 | 91 | 911696 | 11.03 | ug/L | 99 |
| 66) 2-chlorotoluene | 14.094 | 91 | 561860 | 11.00 | ug/L | 98 |
| 67) 4-chlorotoluene | 14.277 | 91 | 676205 | 11.29 | ug/L | 98 |
| 68) 1,3,5-trimethylbenzene | 14.252 | 105 | 667160 | 11.34 | ug/L | 97 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 69652 | 10.24 | ug/L | 97 |
| 71) tert-butylbenzene | 14.763 | 119 | 528104 | 10.62 | ug/L | 97 |
| 72) sec-butylbenzene | 15.098 | 105 | 722148 | 9.93 | ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 656340 | 10.30 | ug/L | 98 |
| 74) 1,3-dichlorobenzene | 15.286 | 146 | 338507 | 10.45 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.329 | 119 | 664349 | 10.93 | ug/L | 98 |
| 77) 1,4-dichlorobenzene | 15.420 | 146 | 330419 | 10.25 | ug/L | 98 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 281532 | 10.67 | ug/L | 99 |
| 79) n-butylbenzene | 15.925 | 91 | 586428 | 10.14 | ug/L | 99 |
| 80) 1,2-dibromo-3-chloropr... | 17.044 | 75 | 14793 | 11.32 | ug/L | 89 |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 165634 | 10.14 | ug/L | 91 |
| 82) hexachlorobutadiene | 18.157 | 225 | 131834 | 9.28 | ug/L | 99 |
| 83) naphthalene | 18.260 | 128 | 181608 | 10.49 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 126133 | 10.05 | ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040816.D
Acq On : 8 Apr 2008 4:26 pm
Sample : ,MSD,me0803c07-02AMSD,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 08 16:53:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

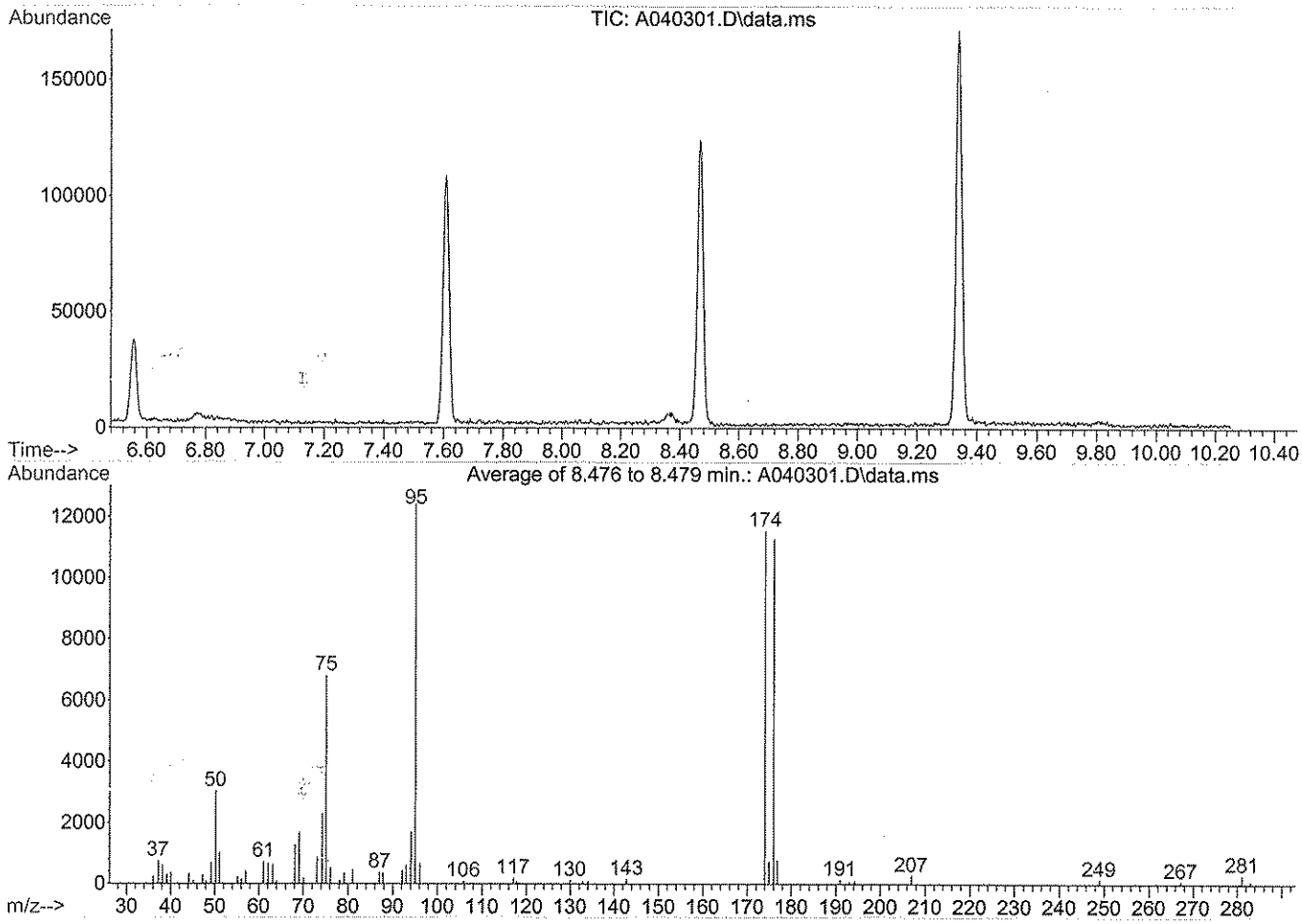


# TUNING RAW DATA

Data File: C:\msdchem\1\DATA\A040308\A040301.D
Acq On : 3 Apr 2008 7:03 am
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds
Last Update : Mon Mar 31 16:38:00 2008




Spectrum Information: Average of 8.476 to 8.479 min.

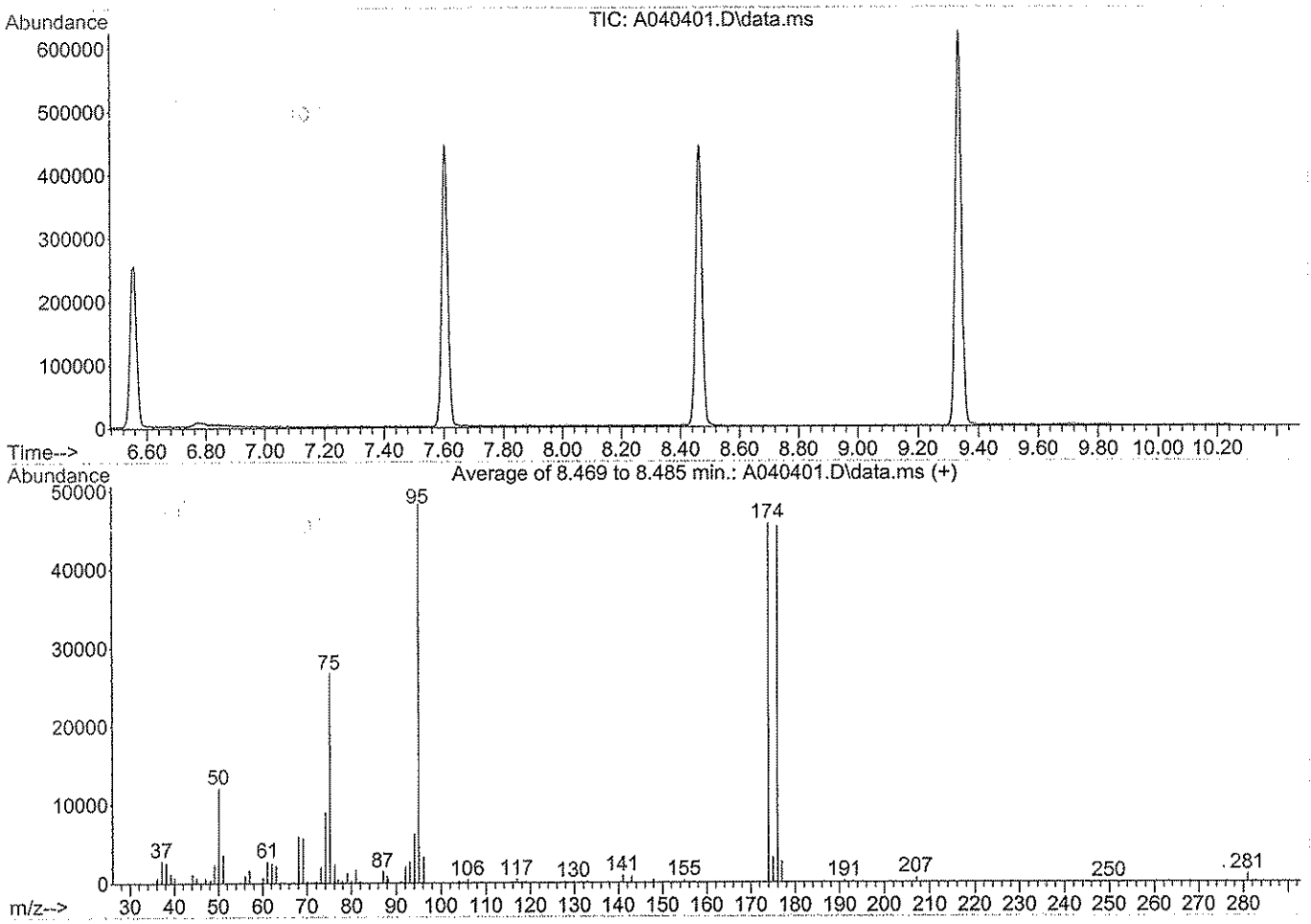
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 24.5 | 3039 | PASS |
| 75 | 95 | 30 | 60 | 54.9 | 6816 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 12410 | PASS |
| 96 | 95 | 5 | 9 | 5.3 | 657 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 93.1 | 11558 | PASS |
| 175 | 174 | 5 | 9 | 6.4 | 741 | PASS |
| 176 | 174 | 95 | 101 | 97.6 | 11286 | PASS |
| 177 | 176 | 5 | 9 | 6.9 | 774 | PASS |

4/8/08
04/03/08

Data File: C:\msdchem\1\DATA\A040408\A040401.D
Acq On : 4 Apr 2008 6:40 am
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Thu Apr 03 13:49:20 2008



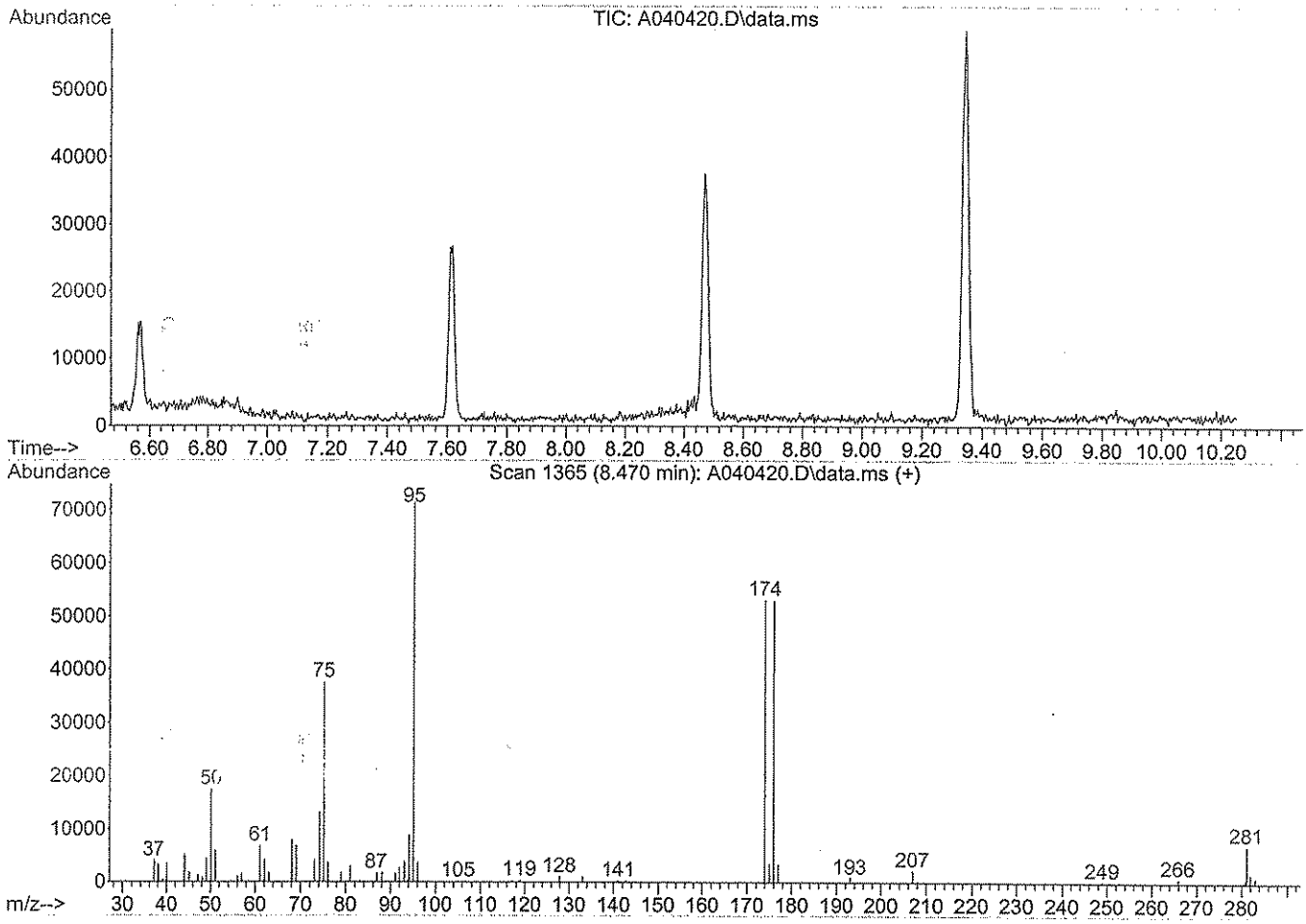

Spectrum Information: Average of 8.469 to 8.485 min.

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 25.1 | 12101 | PASS |
| 75 | 95 | 30 | 60 | 55.3 | 26673 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 48252 | PASS |
| 96 | 95 | 5 | 9 | 6.8 | 3272 | PASS |
| 173 | 174 | 0.00 | 2 | 0.2 | 70 | PASS |
| 174 | 95 | 50 | 250 | 94.6 | 45660 | PASS |
| 175 | 174 | 5 | 9 | 7.0 | 3201 | PASS |
| 176 | 174 | 95 | 101 | 99.2 | 45289 | PASS |
| 177 | 176 | 5 | 9 | 5.8 | 2625 | PASS |

Data File: C:\msdchem\1\DATA\A040408\A040420.D
Acq On : 4 Apr 2008 6:14 pm
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 20 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Fri Apr 04 10:20:24 2008




Spectrum Information: Scan 1365

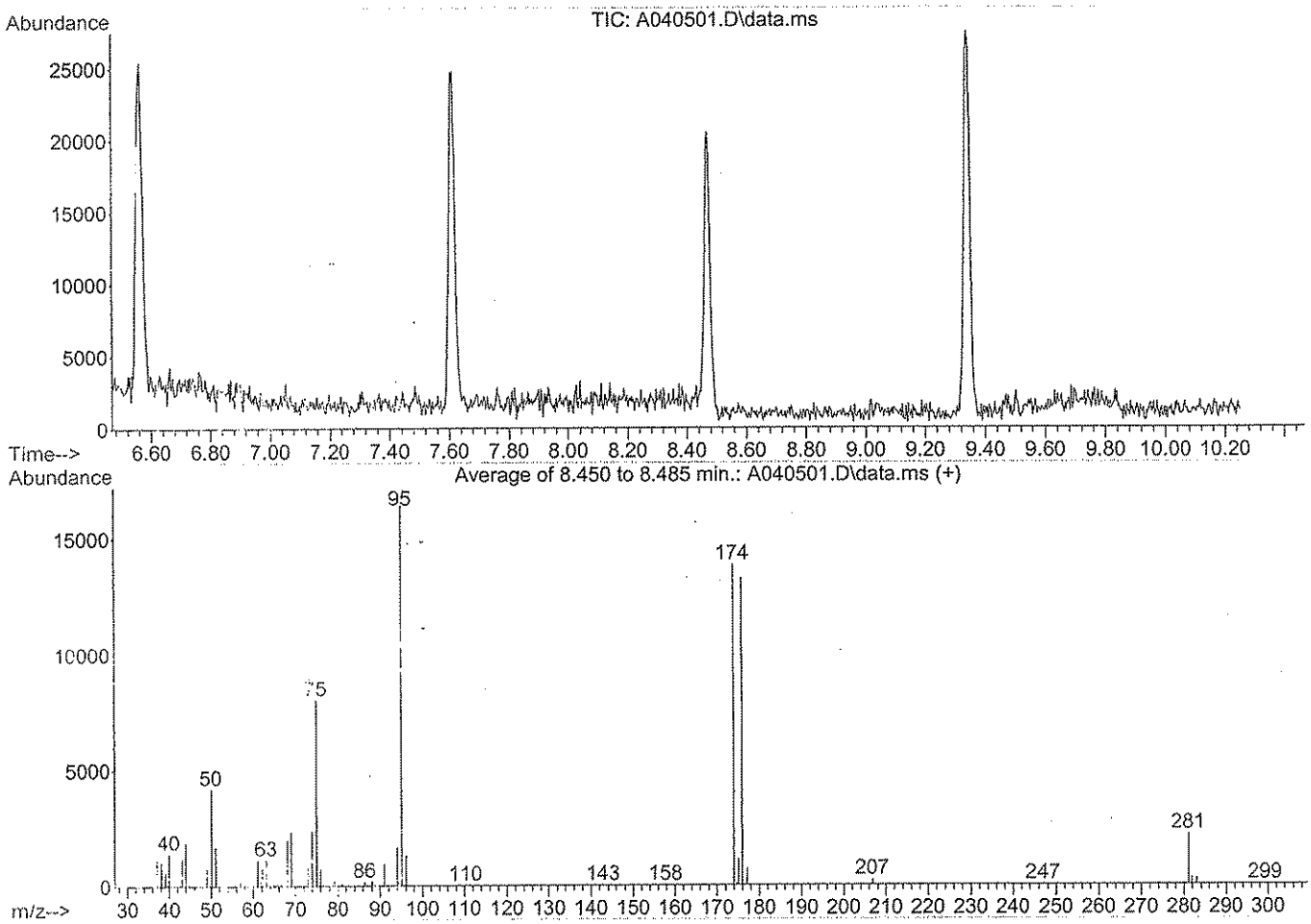
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 24.5 | 17438 | PASS |
| 75 | 95 | 30 | 60 | 52.8 | 37614 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 71281 | PASS |
| 96 | 95 | 5 | 9 | 5.1 | 3625 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 74.6 | 53176 | PASS |
| 175 | 174 | 5 | 9 | 6.5 | 3465 | PASS |
| 176 | 174 | 95 | 101 | 99.7 | 53028 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 3437 | PASS |

4/4/8

Data File: C:\msdchem\1\DATA\A040508\A040501.D
Acq On : 5 Apr 2008 6:13 am
Sample : ,TUNE,BFB TUNE,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Fri Apr 04 10:20:24 2008




Spectrum Information: Average of 8.450 to 8.485 min.

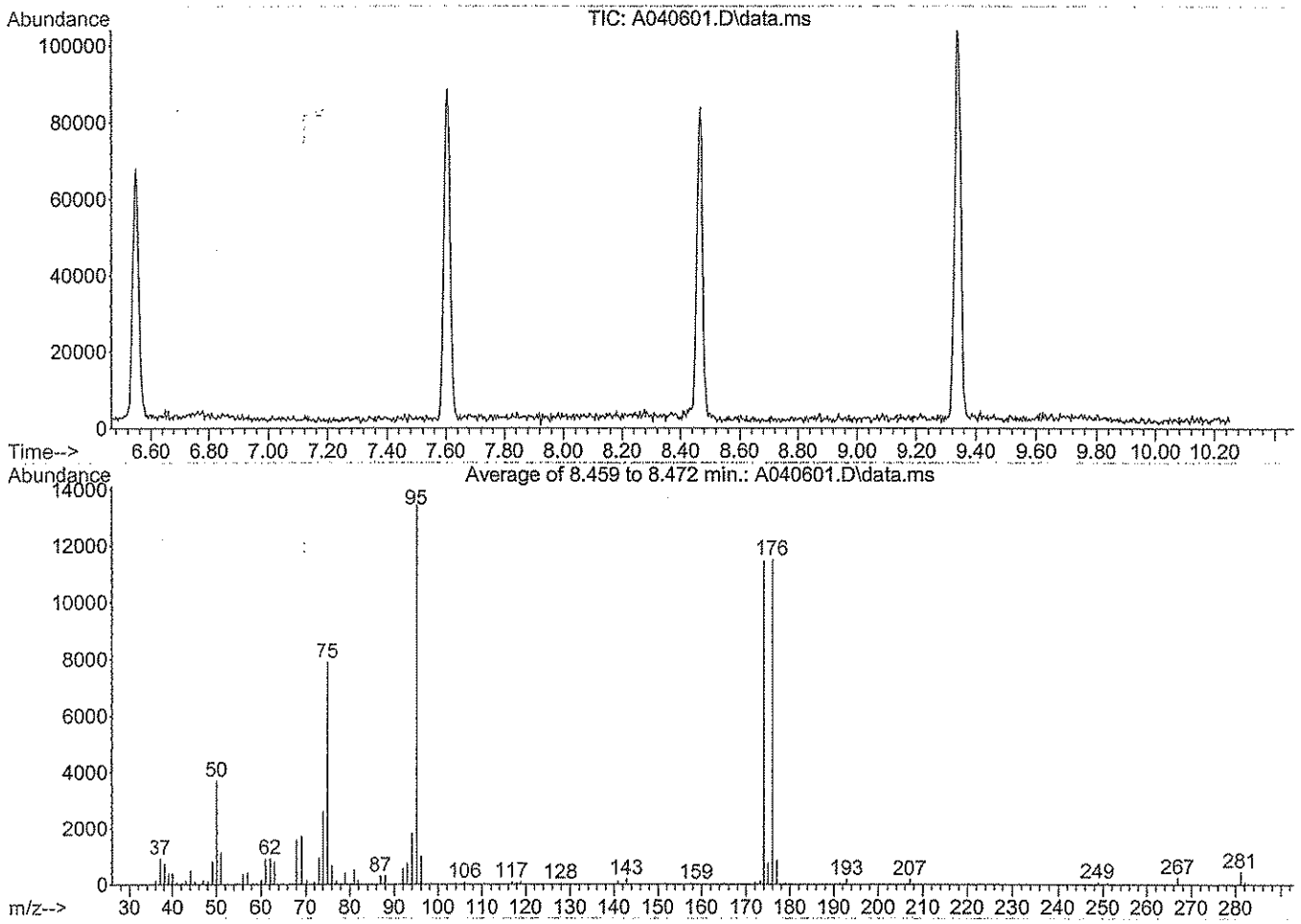
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 25.4 | 4167 | PASS |
| 75 | 95 | 30 | 60 | 48.9 | 8019 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 16391 | PASS |
| 96 | 95 | 5 | 9 | 7.9 | 1301 | PASS |
| 173 | 174 | 0.00 | 2 | 0.1 | 16 | PASS |
| 174 | 95 | 50 | 250 | 84.4 | 13834 | PASS |
| 175 | 174 | 5 | 9 | 8.0 | 1109 | PASS |
| 176 | 174 | 95 | 101 | 95.9 | 13260 | PASS |
| 177 | 176 | 5 | 9 | 5.2 | 696 | PASS |

4/8/08

Data File: C:\msdchem\1\DATA\A040608\A040601.D
Acq On : 6 Apr 2008 1:46 pm
Sample : ,TUNE,BFB TUNE,1, Inst : VOA1
Operator : jdb
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Fri Apr 04 10:20:24 2008




Spectrum Information: Average of 8.459 to 8.472 min.

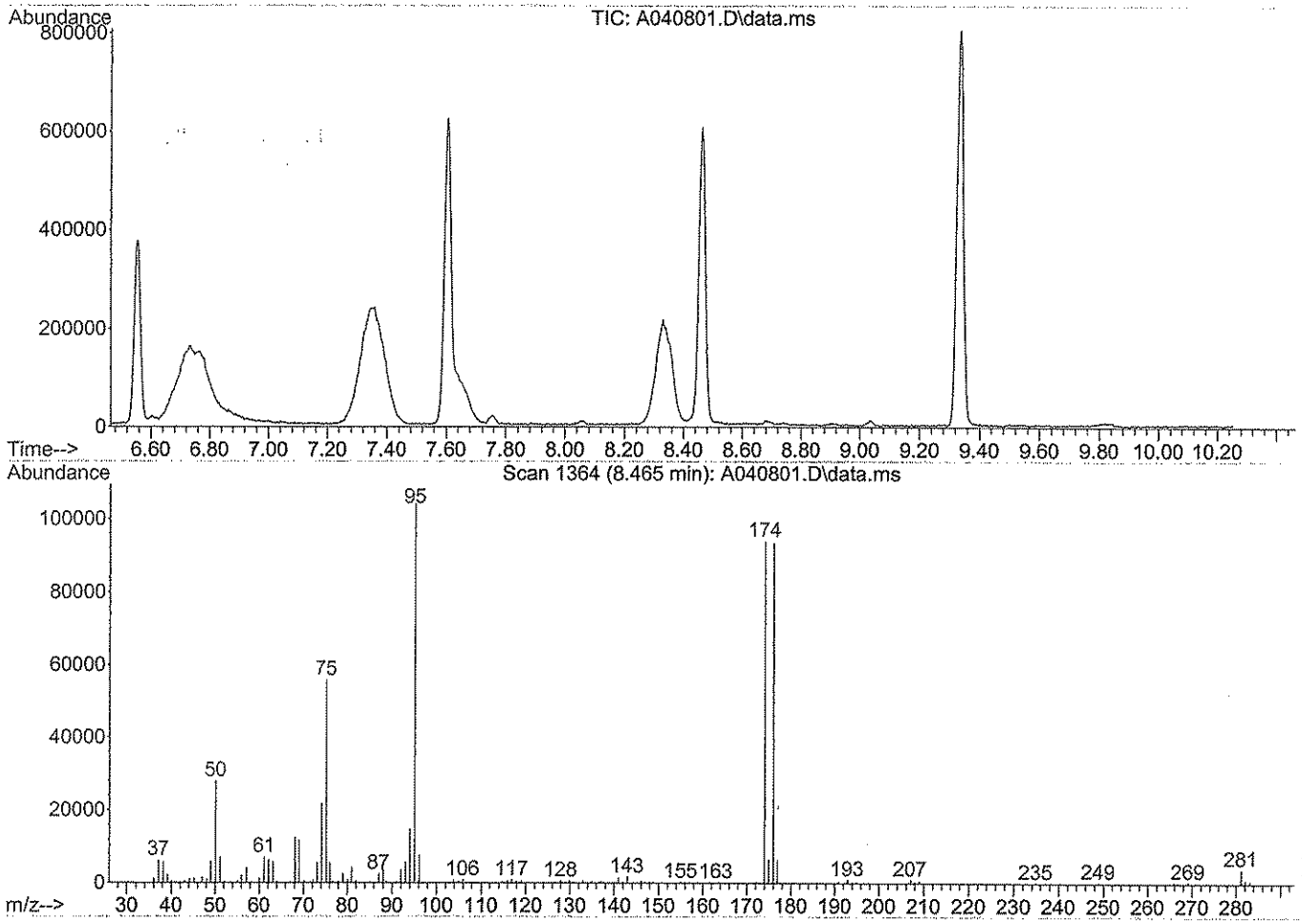
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 27.4 | 3689 | PASS |
| 75 | 95 | 30 | 60 | 58.7 | 7886 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 13439 | PASS |
| 96 | 95 | 5 | 9 | 7.4 | 1000 | PASS |
| 173 | 174 | 0.00 | 2 | 1.1 | 123 | PASS |
| 174 | 95 | 50 | 250 | 85.2 | 11453 | PASS |
| 175 | 174 | 5 | 9 | 6.5 | 742 | PASS |
| 176 | 174 | 95 | 101 | 100.4 | 11504 | PASS |
| 177 | 176 | 5 | 9 | 7.3 | 838 | PASS |

4-6-08

Data File: C:\msdchem\1\DATA\A040808\A040801.D
Acq On : 8 Apr 2008 6:51 am
Sample : ,TUNE,BFB TUNE,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Fri Apr 04 10:20:24 2008




Spectrum Information: Scan 1364

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 26.8 | 27936 | PASS |
| 75 | 95 | 30 | 60 | 53.6 | 55824 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 104072 | PASS |
| 96 | 95 | 5 | 9 | 7.2 | 7503 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 90.3 | 93952 | PASS |
| 175 | 174 | 5 | 9 | 6.8 | 6381 | PASS |
| 176 | 174 | 95 | 101 | 99.5 | 93456 | PASS |
| 177 | 176 | 5 | 9 | 6.6 | 6179 | PASS |

4/8/08

4/8/08

# INITIAL CALIBRATION RAW DATA

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Thu Apr 03 13:49:20 2008
Response Via : Initial Calibration

Calibration Files
1 =A040307.D 2 =A040306.D 4 =A040305.D 8 =A040304.D 10 =A040303.D 20 =A040308.D 40 =A040309.D

| | | Compound | 1 | 2 | 4 | 8 | 10 | 20 | 40 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | fluorobenzene | 1 | 2 | 4 | ISTD | 10 | 20 | 40 | Avg | |
| 2) | T | dichlorodifluo... | 0.216 | 0.194 | 0.219 | 0.213 | 0.206 | 0.190 | 0.206 | 0.206 | 5.32 |
| 3) | T,P | chloromethane | 0.381 | 0.352 | 0.350 | 0.332 | 0.307 | 0.292 | 0.292 | 0.329 | 10.26 |
| 4) | T,C | vinyl chloride | 0.383 | 0.351 | 0.371 | 0.362 | 0.335 | 0.327 | 0.335 | 0.352 | 5.98 |
| 5) | | 1,3-butadiene | 0.371 | 0.316 | 0.337 | 0.287 | 0.336 | 0.331 | 0.339 | 0.331 | 7.66 |
| 6) | T | bromomethane | 0.144 | 0.126 | 0.149 | 0.145 | 0.133 | 0.090 | 0.084 | 0.124 | 21.56 |
| 7) | T | chloroethane | 0.249 | 0.207 | 0.219 | 0.213 | 0.196 | 0.192 | 0.179 | 0.208 | 10.83 |
| 8) | T | trichlorofluor... | 0.674 | 0.579 | 0.633 | 0.644 | 0.605 | 0.614 | 0.600 | 0.621 | 5.07 |
| 9) | T | acrolein | 0.005 | 0.004 | 0.004 | 0.004 | 0.003 | 0.004 | 0.004 | 0.004 | 14.35 |
| 10) | M,C | 1,1-dichloroet... | 0.319 | 0.264 | 0.288 | 0.258 | 0.252 | 0.261 | 0.269 | 0.273 | 8.50 |
| 11) | T | acetone | PQL=5 | | 0.045 | 0.037 | 0.033 | 0.034 | 0.030 | 0.036 | 16.17 |
| 12) | T | carbon disulfide | 1.041 | 0.871 | 0.881 | 0.841 | 0.849 | 0.861 | 0.879 | 0.889 | 7.71 |
| 13) | T | methylene chlo... | PQL=2 | 0.425 | 0.378 | 0.315 | 0.278 | 0.274 | 0.265 | 0.323 | 20.20 |
| 14) | T | acrylonitrile | 0.041 | 0.035 | 0.038 | 0.037 | 0.030 | 0.034 | 0.035 | 0.036 | 8.77 |
| 15) | T | trans-1,2-dich... | 0.333 | 0.301 | 0.306 | 0.290 | 0.275 | 0.291 | 0.300 | 0.299 | 5.98 |
| 16) | T | methyl-t-butyl... | 0.538 | 0.466 | 0.483 | 0.475 | 0.400 | 0.450 | 0.423 | 0.462 | 9.61 |
| 17) | T | acetonitrile | 0.020 | 0.017 | 0.016 | 0.015 | 0.013 | 0.014 | 0.013 | 0.015 | 15.69 |
| 18) | T | hexane | 0.387 | 0.357 | 0.376 | 0.314 | 0.384 | 0.401 | 0.424 | 0.377 | 9.21 |
| 19) | T,P | 1,1-dichloroet... | 0.682 | 0.570 | 0.604 | 0.591 | 0.544 | 0.585 | 0.597 | 0.596 | 7.20 |
| 20) | T | vinyl acetate | 0.178 | 0.156 | 0.174 | 0.172 | 0.147 | 0.163 | 0.168 | 0.166 | 6.68 |
| 21) | T | cis-1,2-dichlo... | 0.344 | 0.295 | 0.311 | 0.298 | 0.275 | 0.303 | 0.309 | 0.305 | 6.92 |
| 22) | T | 2,2-dichloropr... | 0.638 | 0.569 | 0.601 | 0.575 | 0.549 | 0.585 | 0.614 | 0.590 | 5.07 |
| 23) | T | 2-butanone | 0.006 | 0.010 | 0.007 | 0.008 | 0.007 | 0.007 | 0.008 | 0.008 | 16.11 |
| 24) | T | methyl acrylate | 0.099 | 0.088 | 0.095 | 0.093 | 0.077 | 0.092 | 0.094 | 0.091 | 7.64 |
| 25) | T,C | chloroform | 0.681 | 0.589 | 0.616 | 0.587 | 0.546 | 0.587 | 0.593 | 0.600 | 6.88 |
| 26) | S | dibromofluorom... | 0.269 | 0.263 | 0.260 | 0.263 | 0.254 | 0.261 | 0.252 | 0.260 | 2.24 |
| 27) | T | 1,1,1-trichlor... | 0.689 | 0.613 | 0.653 | 0.611 | 0.586 | 0.633 | 0.645 | 0.633 | 5.34 |
| 28) | T | cyclohexane | 0.477 | 0.432 | 0.496 | 0.417 | 0.479 | 0.512 | 0.529 | 0.477 | 8.54 |
| 29) | T | carbon tetrach... | 0.604 | 0.517 | 0.553 | 0.520 | 0.512 | 0.548 | 0.561 | 0.545 | 5.93 |
| 30) | S | 1,2-dichloroet... | 0.261 | 0.253 | 0.254 | 0.253 | 0.239 | 0.247 | 0.241 | 0.250 | 3.14 |
| 31) | M | benzene | 1.267 | 1.086 | 1.139 | 1.096 | 1.029 | 1.108 | 1.115 | 1.120 | 6.54 |
| 32) | T | 1,1-dichloropr... | 0.468 | 0.408 | 0.441 | 0.420 | 0.402 | 0.440 | 0.455 | 0.433 | 5.63 |
| 33) | T | 1,2-dichloroet... | 0.410 | 0.342 | 0.352 | 0.347 | 0.304 | 0.337 | 0.334 | 0.346 | 9.30 |
| 34) | M | trichloroethene | 0.371 | 0.319 | 0.343 | 0.327 | 0.304 | 0.339 | 0.348 | 0.336 | 6.50 |
| 35) | T | ethyl acrylate | PQL=2 | 0.125 | 0.142 | 0.143 | 0.118 | 0.145 | 0.146 | 0.136 | 8.86 |
| 36) | T,C | 1,2-dichloropr... | 0.284 | 0.246 | 0.258 | 0.255 | 0.230 | 0.253 | 0.259 | 0.255 | 6.35 |
| 37) | T | methyl methacr... | PQL=2 | 0.099 | 0.115 | 0.114 | 0.093 | 0.114 | 0.112 | 0.108 | 8.64 |
| 38) | T | dibromomethane | 0.126 | 0.110 | 0.117 | 0.111 | 0.096 | 0.108 | 0.109 | 0.111 | 8.23 |

Avg %RSD < 15%.
2-CeVe 46%

CB 4/18/04

mm 10/01

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0403.M

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 39) | T | bromodichlorom... | 0.435 | 0.373 | 0.410 | 0.398 | 0.356 | 0.398 | 0.400 | 0.396 | 6.43 |
| 40) | T | 2-chloroethyl ... | 0.014 | 0.010 | 0.014 | 0.012 | 0.006 | 0.009 | 0.002 | 0.010 | 45.72 |
| 41) | I | chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | |
| 42) | T | cis-1,3-dichlo... | 0.428 | 0.373 | 0.407 | 0.414 | 0.381 | 0.427 | 0.444 | 0.411 | 6.27 |
| 43) | T | 4-methyl-2-pen... | 0.144 | 0.114 | 0.126 | 0.122 | 0.111 | 0.123 | 0.122 | 0.123 | 8.58 |
| 44) | S | toluene-d8 | 1.211 | 1.201 | 1.205 | 1.203 | 1.245 | 1.226 | 1.212 | 1.215 | 1.30 |
| 45) | M,C | toluene | 0.971 | 0.831 | 0.881 | 0.848 | 0.827 | 0.863 | 0.875 | 0.871 | 5.58 |
| 46) | T | 1,1,2-trichlor... | 0.152 | 0.135 | 0.136 | 0.134 | 0.122 | 0.137 | 0.138 | 0.136 | 6.38 |
| 47) | T | 1,3-dichloropr... | 0.315 | 0.273 | 0.295 | 0.296 | 0.266 | 0.299 | 0.301 | 0.292 | 5.79 |
| 48) | T | tetrachloroethene | 0.343 | 0.305 | 0.324 | 0.304 | 0.306 | 0.315 | 0.332 | 0.318 | 4.77 |
| 49) | T | trans-1,3-dich... | 0.315 | 0.279 | 0.311 | 0.322 | 0.286 | 0.325 | 0.339 | 0.311 | 6.90 |
| 50) | T | 2-hexanone | 0.080 | 0.065 | 0.072 | 0.075 | 0.065 | 0.080 | 0.082 | 0.074 | 9.52 |
| 51) | T | dibromochlorom... | 0.254 | 0.223 | 0.244 | 0.243 | 0.217 | 0.246 | 0.254 | 0.240 | 6.13 |
| 52) | T | 1,2-dibromoethane | 0.170 | 0.153 | 0.166 | 0.161 | 0.147 | 0.166 | 0.171 | 0.162 | 5.63 |
| 53) | M,P | chlorobenzene | 1.017 | 0.844 | 0.883 | 0.879 | 0.819 | 0.869 | 0.880 | 0.884 | 7.13 |
| 54) | T | 1,1,1,2-tetrac... | 0.357 | 0.313 | 0.326 | 0.329 | 0.306 | 0.330 | 0.337 | 0.328 | 5.06 |
| 55) | T,C | ethylbenzene | 1.858 | 1.648 | 1.804 | 1.751 | 1.711 | 1.777 | 1.811 | 1.766 | 3.96 |
| 56) | T | m,p-xylene | 0.690 | 0.619 | 0.662 | 0.625 | 0.621 | 0.645 | 0.646 | 0.644 | 4.00 |
| 57) | T | butyl acrylate | 0.320 | 0.363 | 0.374 | 0.326 | 0.372 | 0.359 | 0.352 | | 6.69 |
| 58) | T | o-xylene | 0.639 | 0.549 | 0.626 | 0.610 | 0.575 | 0.614 | 0.608 | 0.603 | 5.11 |
| 59) | T | styrene | 1.023 | 0.916 | 0.981 | 0.976 | 0.914 | 0.988 | 0.969 | 0.967 | 4.07 |
| 60) | T | isopropylbenzene | 1.473 | 1.363 | 1.497 | 1.470 | 1.486 | 1.569 | 1.589 | 1.492 | 4.97 |
| 61) | T | bromobenzene | 0.410 | 0.364 | 0.389 | 0.384 | 0.354 | 0.388 | 0.384 | 0.382 | 4.76 |
| 62) | T,P | bromoform | 0.134 | 0.120 | 0.134 | 0.140 | 0.121 | 0.142 | 0.145 | 0.134 | 7.41 |
| 63) | S | 4-bromofluorob... | 0.508 | 0.513 | 0.512 | 0.512 | 0.509 | 0.521 | 0.506 | 0.512 | 0.96 |
| 64) | | 1,2,3-trichlor... | 0.170 | 0.148 | 0.151 | 0.145 | 0.133 | 0.144 | 0.141 | 0.148 | 7.73 |
| 65) | T | n-propylbenzene | 2.090 | 1.883 | 2.040 | 1.955 | 2.000 | 2.090 | 2.089 | 2.021 | 3.96 |
| 66) | T | 2-chlorotoluene | 1.316 | 1.183 | 1.257 | 1.228 | 1.203 | 1.289 | 1.263 | 1.248 | 3.77 |
| 67) | T | 4-chlorotoluene | 1.624 | 1.358 | 1.476 | 1.435 | 1.414 | 1.479 | 1.464 | 1.464 | 5.61 |
| 68) | T | 1,3,5-trimethy... | 1.454 | 1.328 | 1.459 | 1.410 | 1.435 | 1.487 | 1.496 | 1.438 | 3.95 |
| 69) | I | 1,4-dichlorobenzen... | ----------ISTD---------- | | | | | | | | |
| 70) | T | 1,1,2,2-tetrac... | 0.301 | 0.275 | 0.285 | 0.277 | 0.247 | 0.274 | 0.291 | 0.278 | 6.04 |
| 71) | T | tert-butylbenzene | 2.037 | 1.844 | 2.030 | 1.927 | 2.009 | 2.122 | 2.274 | 2.035 | 6.77 |
| 72) | T | sec-butylbenzene | 2.955 | 2.707 | 2.966 | 2.840 | 2.985 | 3.078 | 3.312 | 2.977 | 6.35 |
| 73) | T | 1,2,4-trimethy... | 2.718 | 2.404 | 2.621 | 2.560 | 2.554 | 2.633 | 2.769 | 2.608 | 4.57 |
| 74) | T | 1,3-dichlorobe... | 1.465 | 1.270 | 1.362 | 1.287 | 1.238 | 1.297 | 1.363 | 1.326 | 5.78 |
| 75) | T | p-isopropyltol... | 2.465 | 2.299 | 2.463 | 2.387 | 2.487 | 2.545 | 2.772 | 2.488 | 5.94 |
| 76) | T | dicyclopentadiene | 2.938 | 2.515 | 2.730 | 2.513 | 2.613 | 2.787 | 2.915 | 2.716 | 6.50 |
| 77) | T | 1,4-dichlorobe... | 1.535 | 1.324 | 1.337 | 1.277 | 1.217 | 1.250 | 1.295 | 1.319 | 7.84 |
| 78) | T | 1,2-dichlorobe... | 1.218 | 1.046 | 1.123 | 1.065 | 0.991 | 1.049 | 1.071 | 1.081 | 6.69 |
| 79) | T | n-butylbenzene | 2.280 | 2.169 | 2.326 | 2.265 | 2.418 | 2.470 | 2.638 | 2.367 | 6.58 |
| 80) | T | 1,2-dibromo-3-... | 0.073 | 0.048 | 0.055 | 0.051 | 0.045 | 0.051 | 0.052 | 0.053 | 16.74 |
| 81) | T | 1,2,4-trichlor... | 0.721 | 0.641 | 0.684 | 0.655 | 0.624 | 0.658 | 0.699 | 0.669 | 5.14 |
| 82) | T | hexachlorobuta... | 0.639 | 0.579 | 0.561 | 0.528 | 0.557 | 0.572 | 0.637 | 0.582 | 7.15 |
| 83) | T | naphthalene | 0.716 | 0.675 | 0.727 | 0.724 | 0.664 | 0.706 | 0.751 | 0.709 | 4.30 |
| 84) | T | 1,2,3-trichlor... | 0.586 | 0.516 | 0.543 | 0.497 | 0.460 | 0.488 | 0.507 | 0.514 | 7.94 |

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0403.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 85) | T | 2-methyl napht... | 0.396 | 0.366 | 0.403 | 0.351 | 0.299 | 0.295 | 0.314 | 0.346 | 12.90 |

(#) = Out of Range

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040307.D
Acq On : 3 Apr 2008 11:44 am
Sample : ,ical,ical_w25-1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 03 12:08:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:32:57 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 572325 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 493126 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 280475 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 154106 | 10.96 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.60% | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 149534 | 11.50 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.00% | | | |
| 44) toluene-d8 | 9.244 | 98 | 597184 | 9.80 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.00% | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 250479 | 10.40 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.606 | 85 | 12352 | 1.42 | ug/L | 92 |
| 3) chloromethane | 1.819 | 50 | 21787 | 1.40 | ug/L | 86 |
| 4) vinyl chloride | 1.935 | 62 | 21943 | 1.31 | ug/L | 97 |
| 5) 1,3-butadiene | 1.971 | 39 | 21213 | 1.34 | ug/L | 87 |
| 6) bromomethane | 2.324 | 94 | 8253 | 1.45 | ug/L | 94 |
| 7) chloroethane | 2.451 | 64 | 14235 | 1.45 | ug/L | 93 |
| 8) trichlorofluoromethane | 2.731 | 101 | 38566 | 1.37 | ug/L | 97 |
| 9) acrolein | 3.279 | 56 | 2963 | 16.26 | ug/L | 93 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 18248 | 1.38 | ug/L | 94 |
| 11) acetone | 3.473 | 43 | 4488 | 2.62 | ug/L | 99 |
| 12) carbon disulfide | 3.589 | 76 | 59571 | 1.39 | ug/L | 100 |
| 13) methylene chloride | 3.966 | 84 | 34694 | 2.03 | ug/L | 97 |
| 14) acrylonitrile | 4.300 | 53 | 23199 | 12.62 | ug/L | 99 |
| 15) trans-1,2-dichloroethene | 4.270 | 96 | 19033 | 1.21 | ug/L | 95 |
| 16) methyl-t-butyl ether | 4.264 | 73 | 30765 | 1.25 | ug/L | 99 |
| 17) acetonitrile | 3.826 | 41 | 11397 | 14.98 | ug/L | 94 |
| 18) hexane | 4.550 | 57 | 22124 | 1.13 | ug/L | 89 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 39061 | 1.26 | ug/L | 96 |
| 20) vinyl acetate | 4.872 | 43 | 10211 | 1.16 | ug/L | 90 |
| 21) cis-1,2-dichloroethene | 5.535 | 96 | 19716 | 1.20 | ug/L | 96 |
| 22) 2,2-dichloropropane | 5.504 | 77 | 36521 | 1.24 | ug/L | 100 |
| 23) 2-butanone | 5.589 | 72 | 325 | 0.77 | ug/L # | 71 |
| 24) methyl acrylate | 5.693 | 55 | 5657 | 1.13 | ug/L | 86 |
| 25) chloroform | 5.954 | 83 | 38976 | 1.25 | ug/L | 95 |
| 27) 1,1,1-trichloroethane | 6.137 | 97 | 39459 | 1.24 | ug/L | 99 |
| 28) cyclohexane | 6.167 | 56 | 27302 | 1.08 | ug/L | 93 |
| 29) carbon tetrachloride | 6.337 | 117 | 34563 | 1.29 | ug/L | 96 |
| 31) benzene | 6.629 | 78 | 72521 | 1.21 | ug/L | 95 |
| 32) 1,1-dichloropropene | 6.356 | 75 | 26788 | 1.19 | ug/L | 87 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 23483 | 1.34 | ug/L | 93 |
| 34) trichloroethene | 7.511 | 95 | 21255 | 1.20 | ug/L | 96 |
| 35) ethyl acrylate | 7.694 | 55 | 7353 | 0.98 | ug/L | 90 |
| 36) 1,2-dichloropropane | 7.833 | 63 | 16251 | 1.16 | ug/L | 100 |
| 37) methyl methacrylate | 8.016 | 41 | 6356 | 1.10 | ug/L | 87 |
| 38) dibromomethane | 8.034 | 93 | 7199 | 1.23 | ug/L | 88 |

4/8/08

A040307.D 25ML0403.M Thu Apr 03 12:08:02 2008 voa1 Page: 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040307.D
Acq On : 3 Apr 2008 11:44 am
Sample : ,ical,ical_w25-1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 03 12:08:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:32:57 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

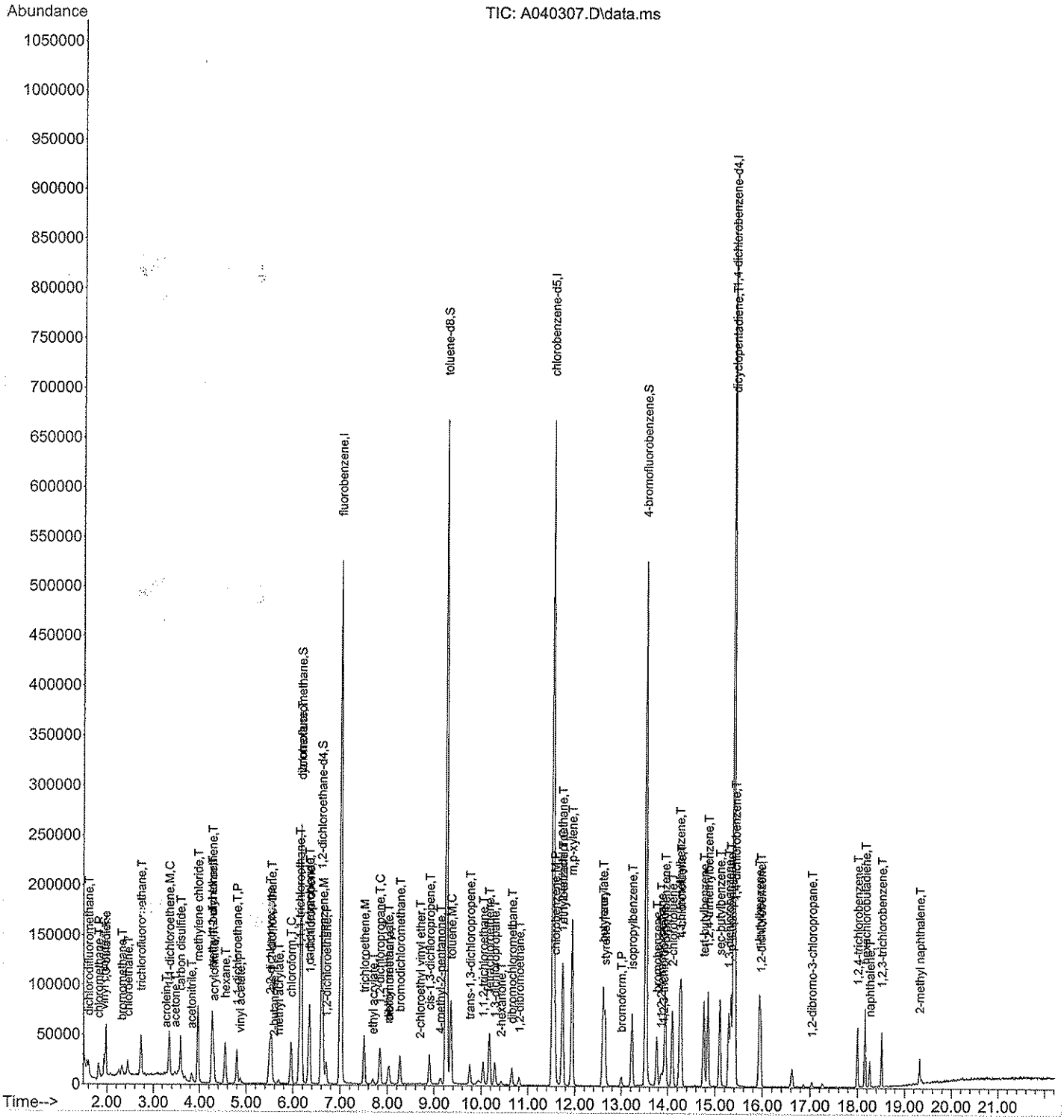
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.265 | 83 | 24875 | 1.21 ug/L | 94 |
| 40) 2-chloroethyl vinyl ether | 8.697 | 63 | 796 | 1.16 ug/L # | 47 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 21124 | 1.03 ug/L | 96 |
| 43) 4-methyl-2-pentanone | 9.129 | 43 | 7090 | 1.18 ug/L | 96 |
| 45) toluene | 9.354 | 92 | 47879 | 1.12 ug/L | 93 |
| 46) 1,1,2-trichloroethane | 10.035 | 83 | 7479 | 1.11 ug/L | 92 |
| 47) 1,3-dichloropropane | 10.284 | 76 | 15533 | 1.07 ug/L | 99 |
| 48) tetrachloroethene | 10.163 | 164 | 16892 | 1.08 ug/L | 95 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 15518 | 1.01 ug/L | 99 |
| 50) 2-hexanone | 10.424 | 43 | 3956 | 1.05 ug/L | 93 |
| 51) dibromochloromethane | 10.649 | 129 | 12505 | 1.07 ug/L | 95 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 8363 | 1.03 ug/L | 95 |
| 53) chlorobenzene | 11.573 | 112 | 50159 | 1.14 ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.725 | 131 | 17618 | 1.11 ug/L | 92 |
| 55) ethylbenzene | 11.738 | 91 | 91636 | 1.07 ug/L | 98 |
| 56) m,p-xylene | 11.932 | 106 | 68043 | 2.15 ug/L | 90 |
| 57) butyl acrylate | 12.601 | 55 | 16007 | 0.92 ug/L | 88 |
| 58) o-xylene | 12.601 | 106 | 31499 | 1.05 ug/L | 97 |
| 59) styrene | 12.644 | 104 | 50437 | 1.05 ug/L | 99 |
| 60) isopropylbenzene | 13.228 | 105 | 72614 | 1.00 ug/L | 94 |
| 61) bromobenzene | 13.763 | 156 | 20227 | 1.06 ug/L | 95 |
| 62) bromoform | 12.996 | 173 | 6594 | 1.00 ug/L | 96 |
| 64) 1,2,3-trichloropropane | 13.903 | 75 | 8388 | 1.18 ug/L | 93 |
| 65) n-propylbenzene | 13.939 | 91 | 103076 | 1.07 ug/L | 100 |
| 66) 2-chlorotoluene | 14.091 | 91 | 64896 | 1.08 ug/L | 97 |
| 67) 4-chlorotoluene | 14.274 | 91 | 80084 | 1.16 ug/L | 100 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 71696 | 1.04 ug/L | 91 |
| 70) 1,1,2,2-tetrachloroethane | 13.854 | 83 | 8437 | 1.01 ug/L | 87 |
| 71) tert-butylbenzene | 14.760 | 119 | 57128 | 0.98 ug/L | 98 |
| 72) sec-butylbenzene | 15.101 | 105 | 82889 | 0.97 ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.851 | 105 | 76223 | 1.02 ug/L | 96 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 41098 | 1.07 ug/L | 99 |
| 75) p-isopropyltoluene | 15.332 | 119 | 69147 | 0.97 ug/L | 99 |
| 76) dicyclopentadiene | 15.399 | 66 | 82416 | 1.07 ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 43042 | 1.13 ug/L | 95 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 34175 | 1.09 ug/L | 95 |
| 79) n-butylbenzene | 15.922 | 91 | 63936 | 0.96 ug/L | 97 |
| 80) 1,2-dibromo-3-chloropr... | 17.034 | 75 | 2039 | 1.41 ug/L | 88 |
| 81) 1,2,4-trichlorobenzene | 18.001 | 180 | 20231 | 1.00 ug/L | 89 |
| 82) hexachlorobutadiene | 18.160 | 225 | 17924 | 1.13 ug/L | 97 |
| 83) naphthalene | 18.257 | 128 | 20085 | 0.85 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 16443 | 1.07 ug/L | 98 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 11110 | 1.02 ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040307.D
Acq On : 3 Apr 2008 11:44 am
Sample : ,ical,ical_w25-1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 03 12:08:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:32:57 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040306.D
Acq On : 3 Apr 2008 10:53 am
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 11:32:32 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.014 | 96 | 582681 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.533 | 117 | 509493 | 10.00 | ug/L | | 0.01 |
| 69) 1,4-dichlorobenzene-d4 | 15.388 | 152 | 295062 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.169 | 113 | 153464 | 11.25 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 112.50% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 147699 | 12.24 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 122.40% | | | | |
| 44) toluene-d8 | 9.252 | 98 | 611845 | 9.59 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.90% | | | | |
| 63) 4-bromofluorobenzene | 13.521 | 95 | 261220 | 10.95 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.50% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.602 | 85 | 22570 | 3.73 | ug/L | | 98 |
| 3) chloromethane | 1.815 | 50 | 41071 | 3.29 | ug/L | | 92 |
| 4) vinyl chloride | 1.930 | 62 | 40887 | 3.03 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.973 | 39 | 36775 | 2.81 | ug/L | | 90 |
| 6) bromomethane | 2.320 | 94 | 14740 | 3.77 | ug/L | | 97 |
| 7) chloroethane | 2.441 | 64 | 24156 | 3.00 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.727 | 101 | 67522 | 3.15 | ug/L | | 89 |
| 9) acrolein | 3.274 | 56 | 4486 | 35.49 | ug/L | | 96 |
| 10) 1,1-dichloroethene | 3.341 | 96 | 30736 | 2.76 | ug/L | # | 83 |
| 11) acetone | 3.475 | 43 | 6889 | 4.83 | ug/L | | 96 |
| 12) carbon disulfide | 3.591 | 76 | 101524 | 2.77 | ug/L | | 99 |
| 13) methylene chloride | 3.961 | 84 | 49513 | 3.13 | ug/L | # | 82 |
| 14) acrylonitrile | 4.302 | 53 | 41303 | 25.02 | ug/L | | 82 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 35066 | 2.42 | ug/L | # | 86 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 54260 | 2.30 | ug/L | | 95 |
| 17) acetonitrile | 3.828 | 41 | 19429 | 29.72 | ug/L | | 96 |
| 18) hexane | 4.545 | 57 | 41599 | 2.36 | ug/L | | 100 |
| 19) 1,1-dichloroethane | 4.801 | 63 | 66470 | 2.33 | ug/L | | 95 |
| 20) vinyl acetate | 4.874 | 43 | 18160 | 2.17 | ug/L | | 95 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 34403 | 2.19 | ug/L | | 88 |
| 22) 2,2-dichloropropane | 5.500 | 77 | 66299 | 2.55 | ug/L | | 98 |
| 23) 2-butanone | 5.603 | 72 | 1127m3 | 2.79 | ug/L | | |
| 24) methyl acrylate | 5.689 | 55 | 10260 | 2.11 | ug/L | | 87 |
| 25) chloroform | 5.956 | 83 | 68613 | 2.40 | ug/L | | 96 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 71467 | 2.56 | ug/L | | 89 |
| 28) cyclohexane | 6.163 | 56 | 50287 | 2.19 | ug/L | | 92 |
| 29) carbon tetrachloride | 6.339 | 117 | 60263 | 2.62 | ug/L | | 91 |
| 31) benzene | 6.631 | 78 | 126559 | 2.22 | ug/L | | 90 |
| 32) 1,1-dichloropropene | 6.345 | 75 | 47555 | 2.33 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.704 | 62 | 39800 | 2.54 | ug/L | | 96 |
| 34) trichloroethene | 7.507 | 95 | 37229 | 2.25 | ug/L | | 91 |
| 35) ethyl acrylate | 7.695 | 55 | 14515 | 1.96 | ug/L | | 92 |
| 36) 1,2-dichloropropane | 7.847 | 63 | 28704 | 2.12 | ug/L | | 81 |
| 37) methyl methacrylate | 8.018 | 41 | 11573 | 2.10 | ug/L | | 96 |
| 38) dibromomethane | 8.042 | 93 | 12855 | 2.32 | ug/L | # | 82 |

4/8/08

4/8/08

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040306.D
Acq On : 3 Apr 2008 10:53 am
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 11:32:32 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

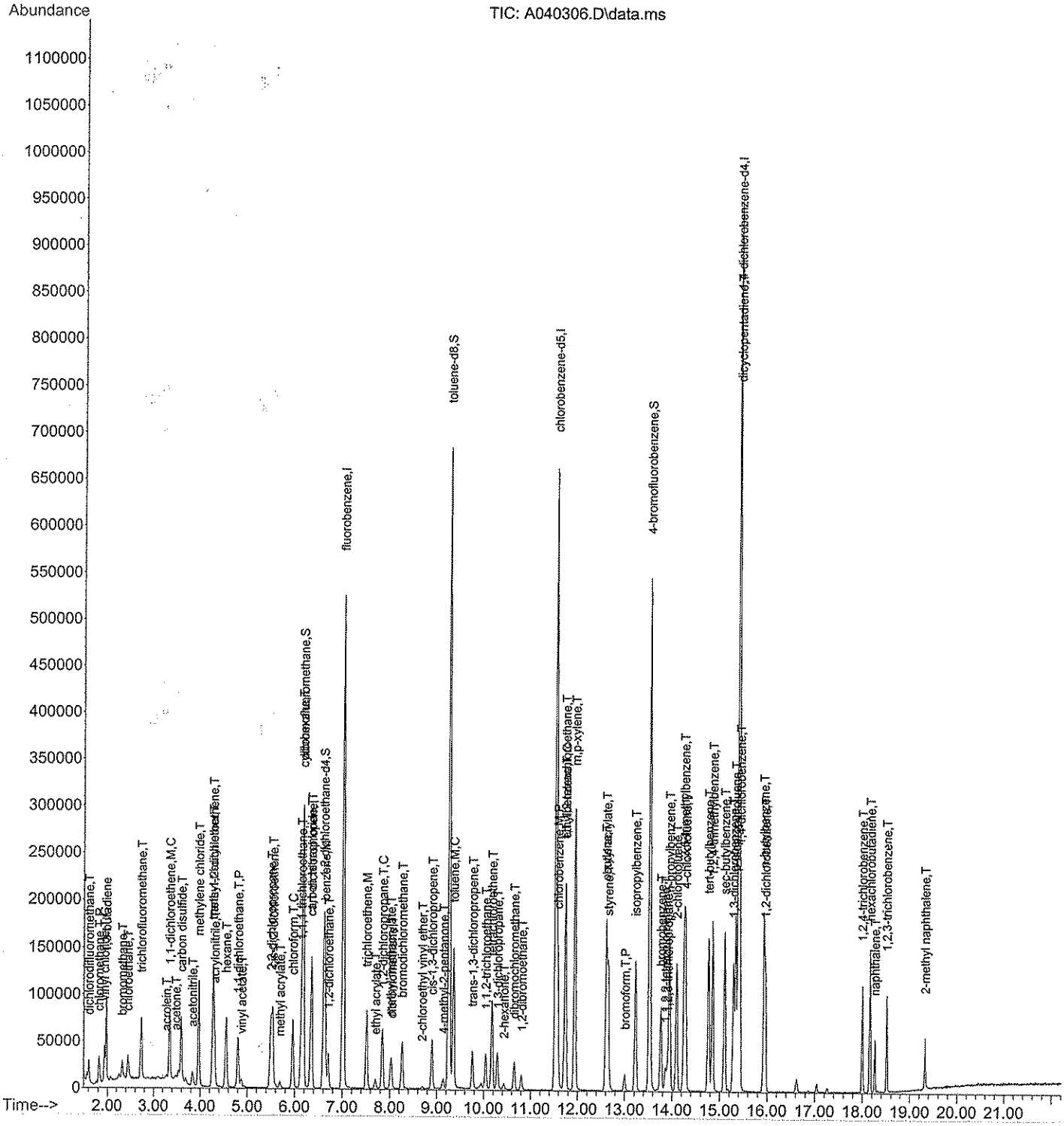
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.261 | 83 | 43476 | 2.27 | ug/L | | 97 |
| 40) | 2-chloroethyl vinyl ether | 8.687 | 63 | 1176 | 1.47 | ug/L | # | 72 |
| 42) | cis-1,3-dichloropropene | 8.893 | 75 | 38046 | 1.79 | ug/L | | 93 |
| 43) | 4-methyl-2-pentanone | 9.137 | 43 | 11658 | 1.89 | ug/L | | 99 |
| 45) | toluene | 9.350 | 92 | 84728 | 1.95 | ug/L | # | 85 |
| 46) | 1,1,2-trichloroethane | 10.037 | 83 | 13753 | 1.96 | ug/L | | 91 |
| 47) | 1,3-dichloropropane | 10.292 | 76 | 27771 | 1.84 | ug/L | | 92 |
| 48) | tetrachloroethene | 10.171 | 164 | 31045 | 2.01 | ug/L | | 93 |
| 49) | trans-1,3-dichloropropene | 9.757 | 75 | 28453 | 1.80 | ug/L | | 98 |
| 50) | 2-hexanone | 10.426 | 43 | 6633 | 1.66 | ug/L | # | 59 |
| 51) | dibromochloromethane | 10.645 | 129 | 22686 | 1.94 | ug/L | | 96 |
| 52) | 1,2-dibromoethane | 10.815 | 107 | 15558 | 1.83 | ug/L | | 96 |
| 53) | chlorobenzene | 11.575 | 112 | 85971 | 1.90 | ug/L | | 98 |
| 54) | 1,1,1,2-tetrachloroethane | 11.733 | 131 | 31855 | 2.01 | ug/L | | 86 |
| 55) | ethylbenzene | 11.740 | 91 | 167947 | 1.95 | ug/L | | 93 |
| 56) | m,p-xylene | 11.940 | 106 | 126068 | 3.92 | ug/L | # | 86 |
| 57) | butyl acrylate | 12.603 | 55 | 32599 | 1.83 | ug/L | | 92 |
| 58) | o-xylene | 12.597 | 106 | 55969 | 1.82 | ug/L | # | 81 |
| 59) | styrene | 12.646 | 104 | 93359 | 1.89 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.223 | 105 | 138870 | 1.91 | ug/L | | 96 |
| 61) | bromobenzene | 13.765 | 156 | 37140 | 1.89 | ug/L | | 96 |
| 62) | bromoform | 13.004 | 173 | 12187 | 1.84 | ug/L | | 98 |
| 64) | 1,2,3-trichloropropane | 13.904 | 75 | 15031 | 2.11 | ug/L | | 80 |
| 65) | n-propylbenzene | 13.941 | 91 | 191885 | 2.01 | ug/L | | 94 |
| 66) | 2-chlorotoluene | 14.093 | 91 | 120533 | 2.01 | ug/L | | 90 |
| 67) | 4-chlorotoluene | 14.281 | 91 | 138409 | 2.02 | ug/L | | 92 |
| 68) | 1,3,5-trimethylbenzene | 14.251 | 105 | 135296 | 1.96 | ug/L | | 91 |
| 70) | 1,1,2,2-tetrachloroethane | 13.856 | 83 | 16211 | 1.78 | ug/L | | 97 |
| 71) | tert-butylbenzene | 14.762 | 119 | 108795 | 1.75 | ug/L | | 92 |
| 72) | sec-butylbenzene | 15.096 | 105 | 159722 | 1.79 | ug/L | | 93 |
| 73) | 1,2,4-trimethylbenzene | 14.847 | 105 | 141893 | 1.78 | ug/L | | 86 |
| 74) | 1,3-dichlorobenzene | 15.285 | 146 | 74974 | 1.81 | ug/L | | 93 |
| 75) | p-isopropyltoluene | 15.327 | 119 | 135669 | 1.82 | ug/L | | 94 |
| 76) | dicyclopentadiene | 15.400 | 66 | 148392 | 1.86 | ug/L | | 96 |
| 77) | 1,4-dichlorobenzene | 15.425 | 146 | 78137 | 1.92 | ug/L | | 88 |
| 78) | 1,2-dichlorobenzene | 15.954 | 146 | 61746 | 1.83 | ug/L | | 92 |
| 79) | n-butylbenzene | 15.923 | 91 | 128024 | 1.83 | ug/L | | 89 |
| 80) | 1,2-dibromo-3-chloropr... | 17.036 | 75 | 2836 | 1.84 | ug/L | # | 63 |
| 81) | 1,2,4-trichlorobenzene | 17.997 | 180 | 37808 | 1.66 | ug/L | | 92 |
| 82) | hexachlorobutadiene | 18.161 | 225 | 34172 | 2.08 | ug/L | | 90 |
| 83) | naphthalene | 18.259 | 128 | 39813 | 1.42 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.508 | 180 | 30445 | 1.78 | ug/L | | 95 |
| 85) | 2-methyl naphthalene | 19.323 | 142 | 21609 | 1.75 | ug/L | | 86 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040306.D
Acq On : 3 Apr 2008 10:53 am
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 11:27:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040306.D 25ML0403.M Thu Apr 03 11:27:04 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040305.D
Acq On : 3 Apr 2008 10:18 am
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 11:26:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 595747 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 516987 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 297014 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 155096 | 11.12 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 151055 | 12.25 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 122.50% | | | | |
| 44) toluene-d8 | 9.254 | 98 | 622910 | 9.62 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.20% | | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 264699 | 10.94 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.40% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 52147 | 8.42 | ug/L | | 93 |
| 3) chloromethane | 1.822 | 50 | 83387 | 6.54 | ug/L | | 98 |
| 4) vinyl chloride | 1.938 | 62 | 88429 | 6.41 | ug/L | | 95 |
| 5) 1,3-butadiene | 1.974 | 39 | 80401 | 6.01 | ug/L | | 85 |
| 6) bromomethane | 2.321 | 94 | 35415 | 8.85 | ug/L | | 99 |
| 7) chloroethane | 2.449 | 64 | 52106 | 6.32 | ug/L | | 93 |
| 8) trichlorofluoromethane | 2.729 | 101 | 150808 | 6.89 | ug/L | | 93 |
| 9) acrolein | 3.276 | 56 | 9440 | 73.05 | ug/L | | 92 |
| 10) 1,1-dichloroethene | 3.349 | 96 | 68734 | 6.04 | ug/L | # | 87 |
| 11) acetone | 3.470 | 43 | 10777 | 7.39 | ug/L | | 97 |
| 12) carbon disulfide | 3.592 | 76 | 209916 | 5.61 | ug/L | | 99 |
| 13) methylene chloride | 3.969 | 84 | 90087 | 5.57 | ug/L | | 92 |
| 14) acrylonitrile | 4.304 | 53 | 89860 | 53.24 | ug/L | | 89 |
| 15) trans-1,2-dichloroethene | 4.273 | 96 | 73010 | 4.93 | ug/L | | 90 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 115031 | 4.76 | ug/L | | 96 |
| 17) acetonitrile | 3.835 | 41 | 39035 | 58.40 | ug/L | | 96 |
| 18) hexane | 4.553 | 57 | 89647 | 4.98 | ug/L | | 96 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 143945 | 4.93 | ug/L | | 97 |
| 20) vinyl acetate | 4.875 | 43 | 41508 | 4.86 | ug/L | | 90 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 74164 | 4.62 | ug/L | | 90 |
| 22) 2,2-dichloropropane | 5.502 | 77 | 143140 | 5.39 | ug/L | | 98 |
| 23) 2-butanone | 5.593 | 72 | 1762 | 4.27 | ug/L | # | 62 |
| 24) methyl acrylate | 5.690 | 55 | 22585 | 4.55 | ug/L | | 92 |
| 25) chloroform | 5.964 | 83 | 146816 | 5.01 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.140 | 97 | 155627 | 5.46 | ug/L | | 87 |
| 28) cyclohexane | 6.171 | 56 | 118155 | 5.04 | ug/L | | 96 |
| 29) carbon tetrachloride | 6.341 | 117 | 131704 | 5.61 | ug/L | | 91 |
| 31) benzene | 6.633 | 78 | 271427 | 4.66 | ug/L | | 93 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 105048 | 5.04 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.706 | 62 | 83996 | 5.23 | ug/L | | 97 |
| 34) trichloroethene | 7.508 | 95 | 81828 | 4.84 | ug/L | | 89 |
| 35) ethyl acrylate | 7.697 | 55 | 33734 | 4.46 | ug/L | | 96 |
| 36) 1,2-dichloropropane | 7.843 | 63 | 61559 | 4.44 | ug/L | | 92 |
| 37) methyl methacrylate | 8.019 | 41 | 27364 | 4.85 | ug/L | | 94 |
| 38) dibromomethane | 8.038 | 93 | 27877 | 4.92 | ug/L | # | 81 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040305.D
Acq On : 3 Apr 2008 10:18 am
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 11:26:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

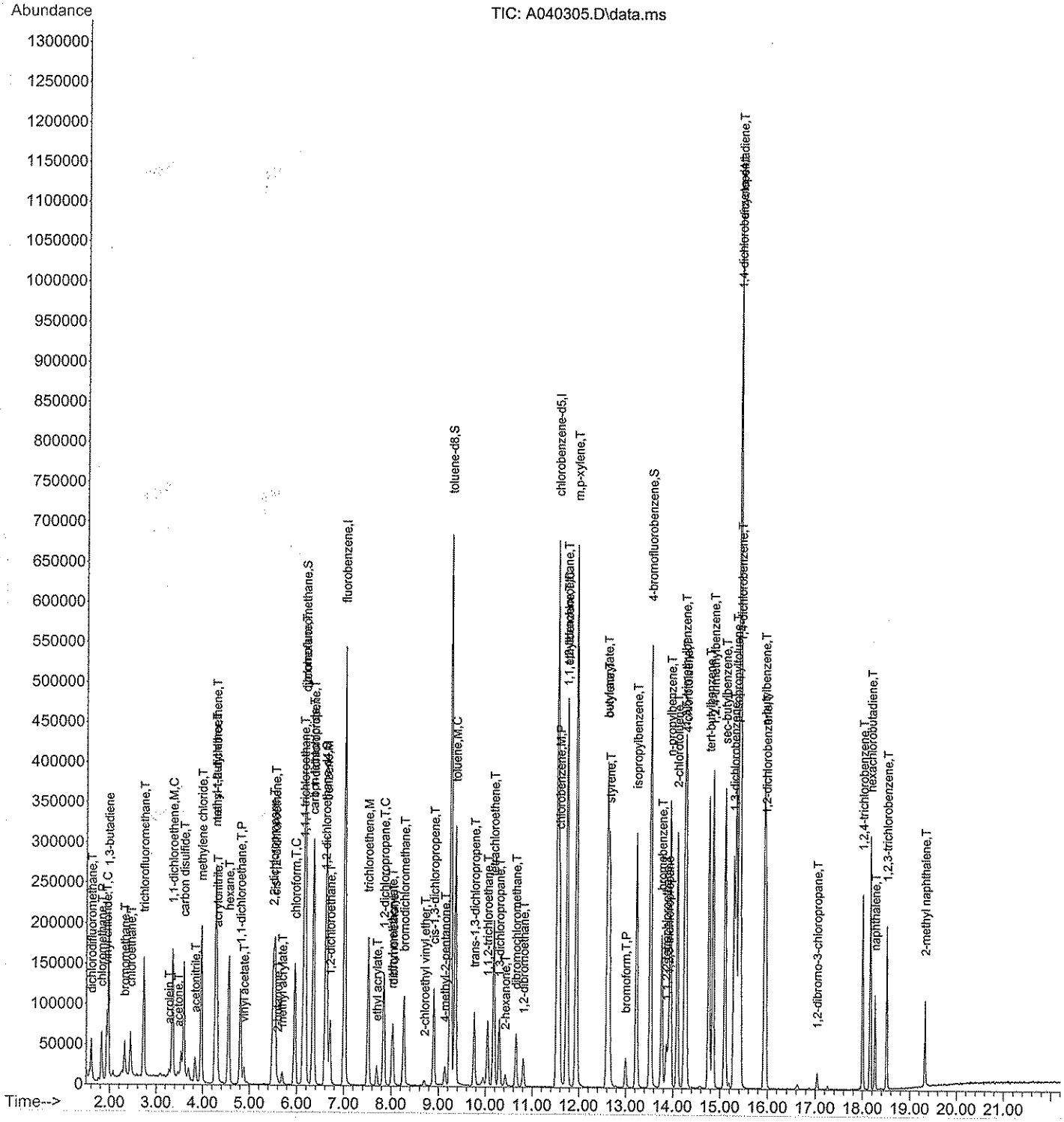
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.269 | 83 | 97741 | 4.99 | ug/L | | 96 |
| 40) | 2-chloroethyl vinyl ether | 8.706 | 63 | 3414 | 4.17 | ug/L | | 85 |
| 42) | cis-1,3-dichloropropene | 8.895 | 75 | 84179 | 3.91 | ug/L | | 95 |
| 43) | 4-methyl-2-pentanone | 9.132 | 43 | 26069 | 4.16 | ug/L | | 90 |
| 45) | toluene | 9.351 | 92 | 182170 | 4.14 | ug/L | # | 84 |
| 46) | 1,1,2-trichloroethane | 10.038 | 83 | 28073 | 3.95 | ug/L | | 92 |
| 47) | 1,3-dichloropropane | 10.294 | 76 | 60971 | 3.99 | ug/L | | 100 |
| 48) | tetrachloroethene | 10.172 | 164 | 67100 | 4.28 | ug/L | | 90 |
| 49) | trans-1,3-dichloropropene | 9.759 | 75 | 64376 | 4.01 | ug/L | | 90 |
| 50) | 2-hexanone | 10.421 | 43 | 14849 | 3.67 | ug/L | # | 50 |
| 51) | dibromochloromethane | 10.646 | 129 | 50560 | 4.26 | ug/L | | 97 |
| 52) | 1,2-dibromoethane | 10.811 | 107 | 34257 | 3.97 | ug/L | | 98 |
| 53) | chlorobenzene | 11.577 | 112 | 182658 | 3.97 | ug/L | | 99 |
| 54) | 1,1,1,2-tetrachloroethane | 11.729 | 131 | 67504 | 4.20 | ug/L | | 94 |
| 55) | ethylbenzene | 11.741 | 91 | 373051 | 4.27 | ug/L | | 96 |
| 56) | m,p-xylene | 11.936 | 106 | 273948 | 8.39 | ug/L | # | 77 |
| 57) | butyl acrylate | 12.599 | 55 | 75059 | 4.16 | ug/L | | 95 |
| 58) | o-xylene | 12.605 | 106 | 129441 | 4.14 | ug/L | # | 86 |
| 59) | styrene | 12.647 | 104 | 202956 | 4.05 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.225 | 105 | 309582 | 4.19 | ug/L | | 92 |
| 61) | bromobenzene | 13.760 | 156 | 80418 | 4.03 | ug/L | | 93 |
| 62) | bromoform | 13.000 | 173 | 27757 | 4.14 | ug/L | | 95 |
| 64) | 1,2,3-trichloropropane | 13.906 | 75 | 31252 | 4.32 | ug/L | | 93 |
| 65) | n-propylbenzene | 13.936 | 91 | 421897 | 4.37 | ug/L | | 95 |
| 66) | 2-chlorotoluene | 14.088 | 91 | 259935 | 4.28 | ug/L | | 89 |
| 67) | 4-chlorotoluene | 14.277 | 91 | 305288 | 4.39 | ug/L | | 92 |
| 68) | 1,3,5-trimethylbenzene | 14.247 | 105 | 301667 | 4.30 | ug/L | | 83 |
| 70) | 1,1,2,2-tetrachloroethane | 13.857 | 83 | 33814 | 3.69 | ug/L | | 95 |
| 71) | tert-butylbenzene | 14.763 | 119 | 241120 | 3.86 | ug/L | | 93 |
| 72) | sec-butylbenzene | 15.098 | 105 | 352325 | 3.93 | ug/L | | 98 |
| 73) | 1,2,4-trimethylbenzene | 14.849 | 105 | 311377 | 3.88 | ug/L | | 87 |
| 74) | 1,3-dichlorobenzene | 15.280 | 146 | 161780 | 3.89 | ug/L | | 88 |
| 75) | p-isopropyltoluene | 15.329 | 119 | 292621 | 3.90 | ug/L | | 94 |
| 76) | dicyclopentadiene | 15.396 | 66 | 324384 | 4.03 | ug/L | | 97 |
| 77) | 1,4-dichlorobenzene | 15.420 | 146 | 158807 | 3.87 | ug/L | | 92 |
| 78) | 1,2-dichlorobenzene | 15.955 | 146 | 133476 | 3.94 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.925 | 91 | 276322 | 3.93 | ug/L | | 94 |
| 80) | 1,2-dibromo-3-chloropr... | 17.038 | 75 | 6484 | 4.19 | ug/L | # | 53 |
| 81) | 1,2,4-trichlorobenzene | 17.999 | 180 | 81262 | 3.54 | ug/L | | 91 |
| 82) | hexachlorobutadiene | 18.157 | 225 | 66646 | 4.03 | ug/L | | 95 |
| 83) | naphthalene | 18.260 | 128 | 86372 | 3.05 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.510 | 180 | 64462 | 3.75 | ug/L | | 93 |
| 85) | 2-methyl naphthalene | 19.324 | 142 | 47881 | 3.84 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040305.D
Acq On : 3 Apr 2008 10:18 am
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 11:26:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040305.D 25ML0403.M Thu Apr 03 11:27:00 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040304.D
Acq On : 3 Apr 2008 9:43 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 11:26:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth: VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 619228 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 529142 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 305040 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 162725 | 11.23 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.30% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 156668 | 12.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 122.20% | | |
| 44) toluene-d8 | 9.247 | 98 | 636646 | 9.61 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.10% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 270938 | 10.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.40% | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 105691 | 16.42 | ug/L | 98 |
| 3) chloromethane | 1.816 | 50 | 164348 | 12.40 | ug/L | 96 |
| 4) vinyl chloride | 1.937 | 62 | 179342 | 12.50 | ug/L | 98 |
| 5) 1,3-butadiene | 1.974 | 39 | 142290 | 10.23 | ug/L | 90 |
| 6) bromomethane | 2.320 | 94 | 71692 | 17.23 | ug/L | 96 |
| 7) chloroethane | 2.448 | 64 | 105597 | 12.33 | ug/L | 97 |
| 8) trichlorofluoromethane | 2.728 | 101 | 319219 | 14.02 | ug/L | 93 |
| 9) acrolein | 3.275 | 56 | 19371 | 144.22 | ug/L | 94 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 127600 | 10.78 | ug/L # | 82 |
| 11) acetone | 3.470 | 43 | 18327 | 12.09 | ug/L | 70 |
| 12) carbon disulfide | 3.591 | 76 | 416799 | 10.72 | ug/L | 100 |
| 13) methylene chloride | 3.962 | 84 | 156241 | 9.29 | ug/L | 90 |
| 14) acrylonitrile | 4.297 | 53 | 180974 | 103.16 | ug/L | 92 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 143530 | 9.33 | ug/L | 90 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 235179 | 9.37 | ug/L | 97 |
| 17) acetonitrile | 3.829 | 41 | 72626 | 104.53 | ug/L | 94 |
| 18) hexane | 4.546 | 57 | 155572 | 8.31 | ug/L | 99 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 292524 | 9.65 | ug/L | 95 |
| 20) vinyl acetate | 4.874 | 43 | 85273 | 9.60 | ug/L | 96 |
| 21) cis-1,2-dichloroethene | 5.531 | 96 | 147695 | 8.84 | ug/L # | 87 |
| 22) 2,2-dichloropropane | 5.495 | 77 | 284921 | 10.32 | ug/L | 94 |
| 23) 2-butanone | 5.586 | 72 | 3816 | 8.90 | ug/L # | 91 |
| 24) methyl acrylate | 5.689 | 55 | 46229 | 8.96 | ug/L | 97 |
| 25) chloroform | 5.957 | 83 | 290782 | 9.55 | ug/L | 98 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 302703 | 10.21 | ug/L | 90 |
| 28) cyclohexane | 6.164 | 56 | 206417 | 8.46 | ug/L | 95 |
| 29) carbon tetrachloride | 6.340 | 117 | 257660 | 10.56 | ug/L | 93 |
| 31) benzene | 6.632 | 78 | 543144 | 8.96 | ug/L | 95 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 208032 | 9.59 | ug/L | 98 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 171827 | 10.30 | ug/L | 95 |
| 34) trichloroethene | 7.508 | 95 | 161824 | 9.20 | ug/L | 92 |
| 35) ethyl acrylate | 7.690 | 55 | 70687 | 8.98 | ug/L | 94 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 126279 | 8.77 | ug/L | 96 |
| 37) methyl methacrylate | 8.012 | 41 | 56301 | 9.60 | ug/L | 92 |
| 38) dibromomethane | 8.031 | 93 | 54945 | 9.33 | ug/L # | 88 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040304.D
Acq On : 3 Apr 2008 9:43 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 11:26:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

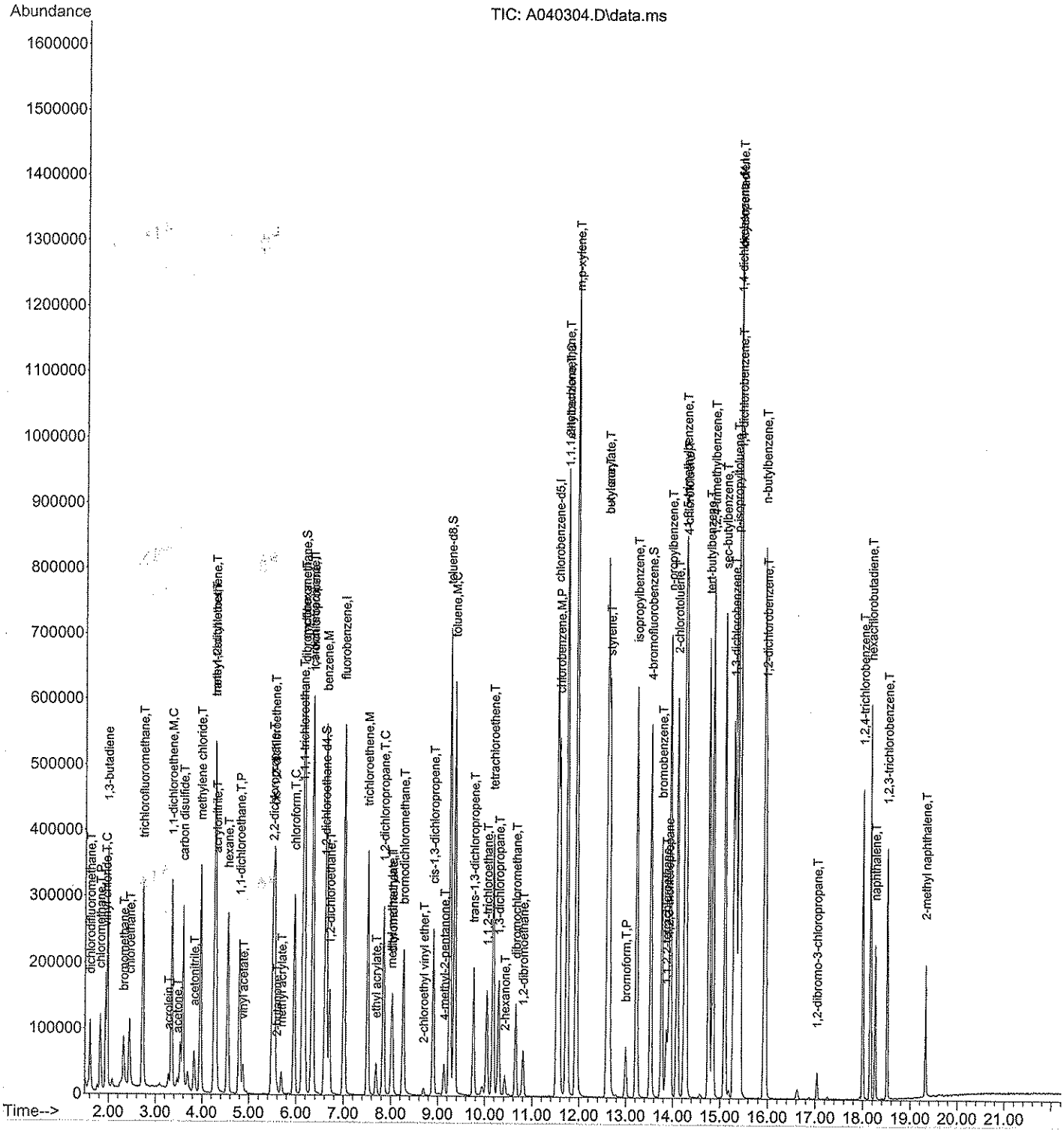
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.262 | 83 | 197374 | 9.69 | ug/L | | 93 |
| 40) | 2-chloroethyl vinyl ether | 8.694 | 63 | 5742 | 6.74 | ug/L | | 90 |
| 42) | cis-1,3-dichloropropene | 8.894 | 75 | 175080 | 7.94 | ug/L | | 90 |
| 43) | 4-methyl-2-pentanone | 9.131 | 43 | 51753 | 8.08 | ug/L | | 95 |
| 45) | toluene | 9.350 | 92 | 358796 | 7.96 | ug/L | | 87 |
| 46) | 1,1,2-trichloroethane | 10.044 | 83 | 56620 | 7.78 | ug/L | | 88 |
| 47) | 1,3-dichloropropane | 10.287 | 76 | 125271 | 8.01 | ug/L | | 93 |
| 48) | tetrachloroethene | 10.171 | 164 | 128592 | 8.01 | ug/L | | 93 |
| 49) | trans-1,3-dichloropropene | 9.752 | 75 | 136494 | 8.31 | ug/L | | 98 |
| 50) | 2-hexanone | 10.421 | 43 | 31911 | 7.71 | ug/L | # | 56 |
| 51) | dibromochloromethane | 10.652 | 129 | 102808 | 8.45 | ug/L | | 93 |
| 52) | 1,2-dibromoethane | 10.804 | 107 | 67991 | 7.69 | ug/L | | 99 |
| 53) | chlorobenzene | 11.570 | 112 | 372136 | 7.91 | ug/L | | 98 |
| 54) | 1,1,1,2-tetrachloroethane | 11.728 | 131 | 139416 | 8.47 | ug/L | | 91 |
| 55) | ethylbenzene | 11.740 | 91 | 741087 | 8.28 | ug/L | | 94 |
| 56) | m,p-xylene | 11.935 | 106 | 529561 | 15.84 | ug/L | # | 69 |
| 57) | butyl acrylate | 12.598 | 55 | 158250 | 8.57 | ug/L | | 93 |
| 58) | o-xylene | 12.598 | 106 | 258030 | 8.06 | ug/L | # | 82 |
| 59) | styrene | 12.646 | 104 | 413264 | 8.05 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.224 | 105 | 622456 | 8.24 | ug/L | | 92 |
| 61) | bromobenzene | 13.759 | 156 | 162356 | 7.94 | ug/L | | 91 |
| 62) | bromoform | 12.999 | 173 | 59079 | 8.61 | ug/L | | 95 |
| 64) | 1,2,3-trichloropropane | 13.905 | 75 | 61557 | 8.32 | ug/L | | 99 |
| 65) | n-propylbenzene | 13.942 | 91 | 827616 | 8.37 | ug/L | | 95 |
| 66) | 2-chlorotoluene | 14.088 | 91 | 519856 | 8.36 | ug/L | | 91 |
| 67) | 4-chlorotoluene | 14.276 | 91 | 607383 | 8.53 | ug/L | | 87 |
| 68) | 1,3,5-trimethylbenzene | 14.246 | 105 | 596769 | 8.31 | ug/L | | 83 |
| 70) | 1,1,2,2-tetrachloroethane | 13.857 | 83 | 67689 | 7.19 | ug/L | | 93 |
| 71) | tert-butylbenzene | 14.757 | 119 | 470230 | 7.33 | ug/L | | 90 |
| 72) | sec-butylbenzene | 15.097 | 105 | 693080 | 7.52 | ug/L | | 97 |
| 73) | 1,2,4-trimethylbenzene | 14.848 | 105 | 624763 | 7.59 | ug/L | | 84 |
| 74) | 1,3-dichlorobenzene | 15.286 | 146 | 314022 | 7.35 | ug/L | | 90 |
| 75) | p-isopropyltoluene | 15.328 | 119 | 582601 | 7.56 | ug/L | | 95 |
| 76) | dicyclopentadiene | 15.401 | 66 | 613241 | 7.42 | ug/L | | 97 |
| 77) | 1,4-dichlorobenzene | 15.420 | 146 | 311676 | 7.40 | ug/L | | 91 |
| 78) | 1,2-dichlorobenzene | 15.955 | 146 | 259887 | 7.46 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.924 | 91 | 552724 | 7.66 | ug/L | | 90 |
| 80) | 1,2-dibromo-3-chloropr... | 17.037 | 75 | 12533 | 7.88 | ug/L | # | 64 |
| 81) | 1,2,4-trichlorobenzene | 17.998 | 180 | 159778 | 6.79 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.156 | 225 | 128749 | 7.58 | ug/L | | 96 |
| 83) | naphthalene | 18.259 | 128 | 176767 | 6.09 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.509 | 180 | 121247 | 6.87 | ug/L | | 92 |
| 85) | 2-methyl naphthalene | 19.324 | 142 | 85737 | 6.70 | ug/L | | 98 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040304.D
Acq On : 3 Apr 2008 9:43 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 11:26:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040304.D 25ML0403.M Thu Apr 03 11:26:57 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040303.D
Acq On : 3 Apr 2008 9:08 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 03 11:26:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 609711 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.522 | 117 | 500750 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 287117 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.165 | 113 | 154807 | 10.85 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 108.50% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.597 | 65 | 145797 | 11.55 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.50% | | | | |
| 44) toluene-d8 | 9.248 | 98 | 623514 | 9.94 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.40% | | | | |
| 63) 4-bromofluorobenzene | 13.517 | 95 | 254852 | 10.87 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 108.70% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 125823 | 19.85 | ug/L | | 94 |
| 3) chloromethane | 1.817 | 50 | 187232 | 14.35 | ug/L | | 92 |
| 4) vinyl chloride | 1.932 | 62 | 204100 | 14.45 | ug/L | | 99 |
| 5) 1,3-butadiene | 1.975 | 39 | 204668 | 14.95 | ug/L | | 91 |
| 6) bromomethane | 2.315 | 94 | 81101 | 19.80 | ug/L | | 92 |
| 7) chloroethane | 2.443 | 64 | 119673 | 14.19 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.723 | 101 | 368690 | 16.45 | ug/L | | 94 |
| 9) acrolein | 3.276 | 56 | 20777 | 157.11 | ug/L | | 100 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 153949 | 13.21 | ug/L | # | 86 |
| 11) acetone | 3.471 | 43 | 19911 | 13.34 | ug/L | | 83 |
| 12) carbon disulfide | 3.586 | 76 | 517792 | 13.53 | ug/L | | 98 |
| 13) methylene chloride | 3.963 | 84 | 169377 | 10.23 | ug/L | | 92 |
| 14) acrylonitrile | 4.298 | 53 | 185803 | 107.57 | ug/L | | 90 |
| 15) trans-1,2-dichloroethene | 4.261 | 96 | 167557 | 11.06 | ug/L | | 89 |
| 16) methyl-t-butyl ether | 4.261 | 73 | 243975 | 9.87 | ug/L | | 94 |
| 17) acetonitrile | 3.824 | 41 | 79945 | 116.86 | ug/L | | 98 |
| 18) hexane | 4.547 | 57 | 233925 | 12.69 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.797 | 63 | 331680 | 11.11 | ug/L | | 95 |
| 20) vinyl acetate | 4.863 | 43 | 89617 | 10.25 | ug/L | | 95 |
| 21) cis-1,2-dichloroethene | 5.532 | 96 | 167573 | 10.19 | ug/L | # | 87 |
| 22) 2,2-dichloropropane | 5.496 | 77 | 334723 | 12.31 | ug/L | | 96 |
| 23) 2-butanone | 5.575 | 72 | 4380 | 10.38 | ug/L | # | 76 |
| 24) methyl acrylate | 5.684 | 55 | 47034 | 9.26 | ug/L | | 99 |
| 25) chloroform | 5.952 | 83 | 333159 | 11.11 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 357138 | 12.24 | ug/L | | 89 |
| 28) cyclohexane | 6.165 | 56 | 291844 | 12.15 | ug/L | | 94 |
| 29) carbon tetrachloride | 6.335 | 117 | 312362 | 13.00 | ug/L | | 92 |
| 31) benzene | 6.627 | 78 | 627503 | 10.52 | ug/L | | 95 |
| 32) 1,1-dichloropropene | 6.347 | 75 | 244935 | 11.47 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.700 | 62 | 185158 | 11.28 | ug/L | | 94 |
| 34) trichloroethene | 7.503 | 95 | 185203 | 10.69 | ug/L | | 92 |
| 35) ethyl acrylate | 7.691 | 55 | 71653 | 9.25 | ug/L | | 96 |
| 36) 1,2-dichloropropane | 7.837 | 63 | 140199 | 9.88 | ug/L | | 99 |
| 37) methyl methacrylate | 8.007 | 41 | 56690 | 9.82 | ug/L | | 89 |
| 38) dibromomethane | 8.026 | 93 | 58350 | 10.06 | ug/L | # | 86 |

A040303.D 25ML0403.M Thu Apr 03 11:26:53 2008 voa1 Page: 1

Data File: C:\msdchem\1\DATA\A040308\A040303.D
Acq On : 3 Apr 2008 9:08 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 03 11:26:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

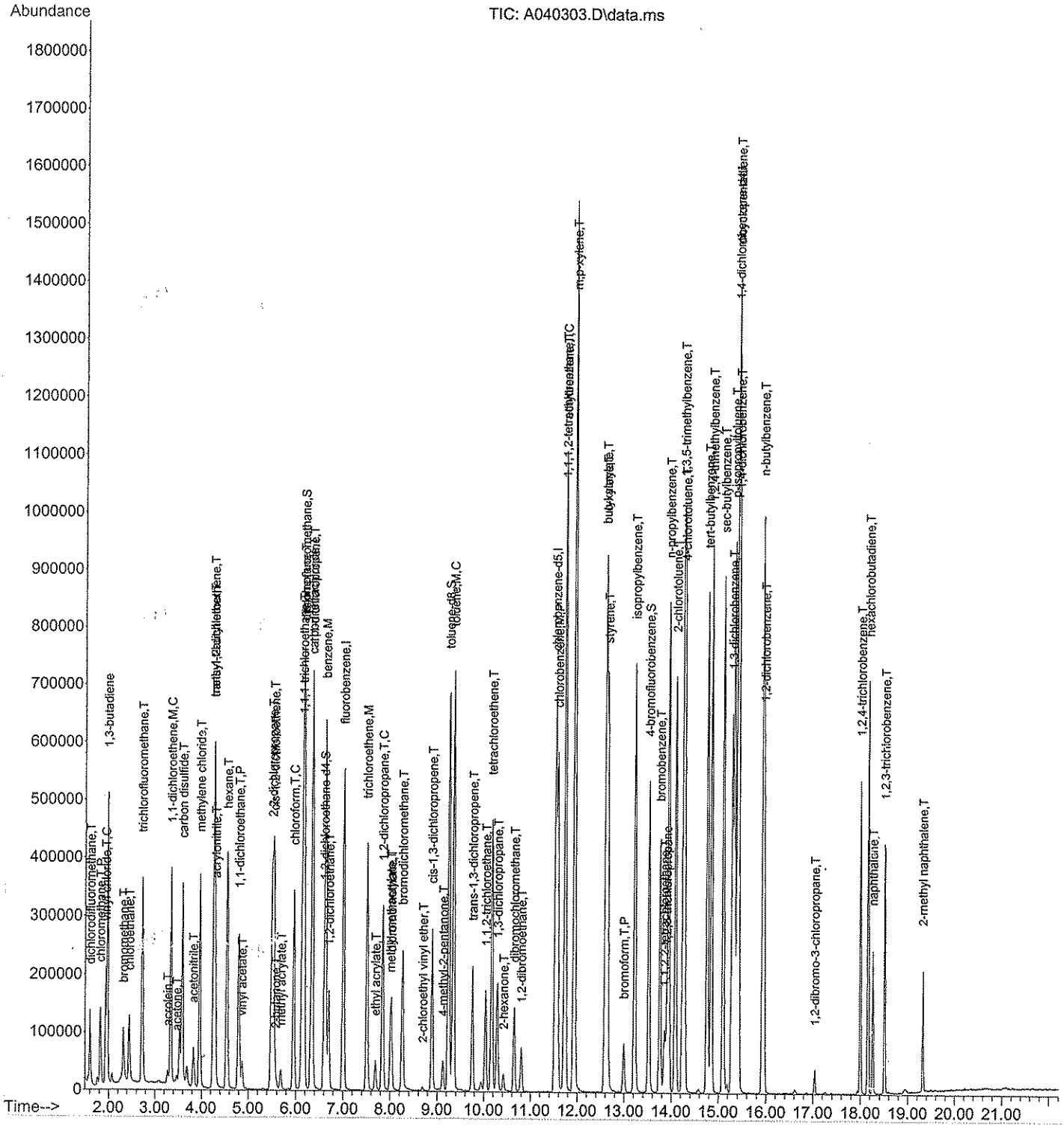
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.257 | 83 | 216794 | 10.81 | ug/L | | 94 |
| 40) 2-chloroethyl vinyl ether | 8.695 | 63 | 3489 | 4.16 | ug/L | | 81 |
| 42) cis-1,3-dichloropropene | 8.889 | 75 | 190915 | 9.15 | ug/L | | 93 |
| 43) 4-methyl-2-pentanone | 9.126 | 43 | 55407 | 9.14 | ug/L | | 88 |
| 45) toluene | 9.345 | 92 | 414343 | 9.71 | ug/L | | 86 |
| 46) 1,1,2-trichloroethane | 10.039 | 83 | 61059 | 8.87 | ug/L | | 91 |
| 47) 1,3-dichloropropane | 10.288 | 76 | 133425 | 9.01 | ug/L | | 95 |
| 48) tetrachloroethene | 10.166 | 164 | 153091 | 10.08 | ug/L | | 92 |
| 49) trans-1,3-dichloropropene | 9.753 | 75 | 143443 | 9.23 | ug/L | | 94 |
| 50) 2-hexanone | 10.422 | 43 | 32568 | 8.31 | ug/L | | 70 |
| 51) dibromochloromethane | 10.647 | 129 | 108427 | 9.42 | ug/L | | 92 |
| 52) 1,2-dibromoethane | 10.799 | 107 | 73433 | 8.78 | ug/L | | 95 |
| 53) chlorobenzene | 11.571 | 112 | 409924 | 9.20 | ug/L | | 99 |
| 54) 1,1,1,2-tetrachloroethane | 11.723 | 131 | 153322 | 9.84 | ug/L | | 90 |
| 55) ethylbenzene | 11.735 | 91 | 856669 | 10.12 | ug/L | | 95 |
| 56) m,p-xylene | 11.930 | 106 | 621755 | 19.66 | ug/L | # | 71 |
| 57) butyl acrylate | 12.593 | 55 | 163120 | 9.33 | ug/L | | 93 |
| 58) o-xylene | 12.599 | 106 | 287744 | 9.50 | ug/L | # | 79 |
| 59) styrene | 12.641 | 104 | 457480 | 9.41 | ug/L | | 90 |
| 60) isopropylbenzene | 13.219 | 105 | 744301 | 10.41 | ug/L | | 92 |
| 61) bromobenzene | 13.754 | 156 | 177252 | 9.16 | ug/L | # | 86 |
| 62) bromoform | 12.994 | 173 | 60697 | 9.35 | ug/L | | 100 |
| 64) 1,2,3-trichloropropane | 13.900 | 75 | 66718 | 9.53 | ug/L | | 95 |
| 65) n-propylbenzene | 13.937 | 91 | 1001304 | 10.70 | ug/L | | 96 |
| 66) 2-chlorotoluene | 14.089 | 91 | 602162 | 10.24 | ug/L | | 90 |
| 67) 4-chlorotoluene | 14.277 | 91 | 708028 | 10.51 | ug/L | | 90 |
| 68) 1,3,5-trimethylbenzene | 14.247 | 105 | 718340 | 10.57 | ug/L | | 83 |
| 70) 1,1,2,2-tetrachloroethane | 13.852 | 83 | 70980 | 8.01 | ug/L | | 96 |
| 71) tert-butylbenzene | 14.758 | 119 | 576922 | 9.56 | ug/L | | 90 |
| 72) sec-butylbenzene | 15.098 | 105 | 856965 | 9.88 | ug/L | | 97 |
| 73) 1,2,4-trimethylbenzene | 14.843 | 105 | 733372 | 9.46 | ug/L | | 84 |
| 74) 1,3-dichlorobenzene | 15.281 | 146 | 355364 | 8.84 | ug/L | | 90 |
| 75) p-isopropyltoluene | 15.323 | 119 | 713975 | 9.85 | ug/L | | 93 |
| 76) dicyclopentadiene | 15.396 | 66 | 750103 | 9.64 | ug/L | | 96 |
| 77) 1,4-dichlorobenzene | 15.421 | 146 | 349476 | 8.82 | ug/L | | 91 |
| 78) 1,2-dichlorobenzene | 15.956 | 146 | 284640 | 8.68 | ug/L | | 91 |
| 79) n-butylbenzene | 15.919 | 91 | 694264 | 10.22 | ug/L | | 90 |
| 80) 1,2-dibromo-3-chloropr... | 17.038 | 75 | 13022 | 8.70 | ug/L | # | 66 |
| 81) 1,2,4-trichlorobenzene | 17.993 | 180 | 179026 | 8.08 | ug/L | | 90 |
| 82) hexachlorobutadiene | 18.157 | 225 | 159959 | 10.00 | ug/L | | 95 |
| 83) naphthalene | 18.255 | 128 | 190599 | 6.97 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.504 | 180 | 132030 | 7.94 | ug/L | | 92 |
| 85) 2-methyl naphthalene | 19.319 | 142 | 85859 | 7.13 | ug/L | | 96 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040303.D
Acq On : 3 Apr 2008 9:08 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 03 11:26:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040303.D 25ML0403.M Thu Apr 03 11:26:53 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040308.D
Acq On : 3 Apr 2008 12:31 pm
Sample : ,ical,ical_w25-20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 03 13:09:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:09:32 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.006 | 96 | 636403 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.531 | 117 | 538672 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 314672 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 166143 | 10.44 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.40% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 156883 | 10.53 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.30% | | | | |
| 44) toluene-d8 | 9.250 | 98 | 660414 | 9.96 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.60% | | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 280840 | 10.54 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.40% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 241802 | 22.68 | ug/L | | 98 |
| 3) chloromethane | 1.819 | 50 | 371463 | 20.46 | ug/L | | 98 |
| 4) vinyl chloride | 1.934 | 62 | 416256 | 21.27 | ug/L | | 98 |
| 5) 1,3-butadiene | 1.971 | 39 | 420959 | 22.74 | ug/L | | 99 |
| 6) bromomethane | 2.311 | 94 | 113926 | 16.30 | ug/L | | 99 |
| 7) chloroethane | 2.439 | 64 | 244620 | 21.13 | ug/L | | 96 |
| 8) trichlorofluoromethane | 2.725 | 101 | 781680 | 23.27 | ug/L | | 99 |
| 9) acrolein | 3.278 | 56 | 46057 | 200.90 | ug/L | | 95 |
| 10) 1,1-dichloroethene | 3.339 | 96 | 332816 | 21.41 | ug/L | | 97 |
| 11) acetone | 3.473 | 43 | 43244 | 22.72 | ug/L | | 98 |
| 12) carbon disulfide | 3.588 | 76 | 1096322 | 21.78 | ug/L | | 99 |
| 13) methylene chloride | 3.959 | 84 | 349065 | 18.40 | ug/L | | 94 |
| 14) acrylonitrile | 4.300 | 53 | 437615 | 207.00 | ug/L | | 100 |
| 15) trans-1,2-dichloroethene | 4.263 | 96 | 370232 | 20.81 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.263 | 73 | 573250 | 20.55 | ug/L | | 100 |
| 17) acetonitrile | 3.825 | 41 | 177781 | 200.29 | ug/L | | 98 |
| 18) hexane | 4.543 | 57 | 509855 | 22.89 | ug/L | | 96 |
| 19) 1,1-dichloroethane | 4.798 | 63 | 744301 | 21.11 | ug/L | | 99 |
| 20) vinyl acetate | 4.871 | 43 | 207861 | 20.98 | ug/L | | 100 |
| 21) cis-1,2-dichloroethene | 5.534 | 96 | 385248 | 20.88 | ug/L | | 99 |
| 22) 2,2-dichloropropane | 5.498 | 77 | 744338 | 21.96 | ug/L | | 100 |
| 23) 2-butanone | 5.583 | 72 | 8949 | 18.46 | ug/L | # | 28 |
| 24) methyl acrylate | 5.680 | 55 | 117557 | 21.17 | ug/L | | 96 |
| 25) chloroform | 5.954 | 83 | 747101 | 21.13 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.136 | 97 | 805319 | 21.95 | ug/L | | 99 |
| 28) cyclohexane | 6.167 | 56 | 651395 | 22.80 | ug/L | | 99 |
| 29) carbon tetrachloride | 6.337 | 117 | 697082 | 22.26 | ug/L | | 99 |
| 31) benzene | 6.623 | 78 | 1409643 | 20.91 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.349 | 75 | 559480 | 21.78 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 428522 | 21.28 | ug/L | | 98 |
| 34) trichloroethene | 7.505 | 95 | 432060 | 21.53 | ug/L | | 98 |
| 35) ethyl acrylate | 7.693 | 55 | 184129 | 22.04 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.839 | 63 | 321899 | 20.69 | ug/L | | 96 |
| 37) methyl methacrylate | 8.009 | 41 | 145089 | 22.58 | ug/L | | 92 |
| 38) dibromomethane | 8.034 | 93 | 137981 | 20.78 | ug/L | | 94 |

A040308.D 25ML0403.M Thu Apr 03 13:09:57 2008 voa1 Page: 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040308.D
Acq On : 3 Apr 2008 12:31 pm
Sample : ,ical,ical_w25-20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 03 13:09:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:09:32 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

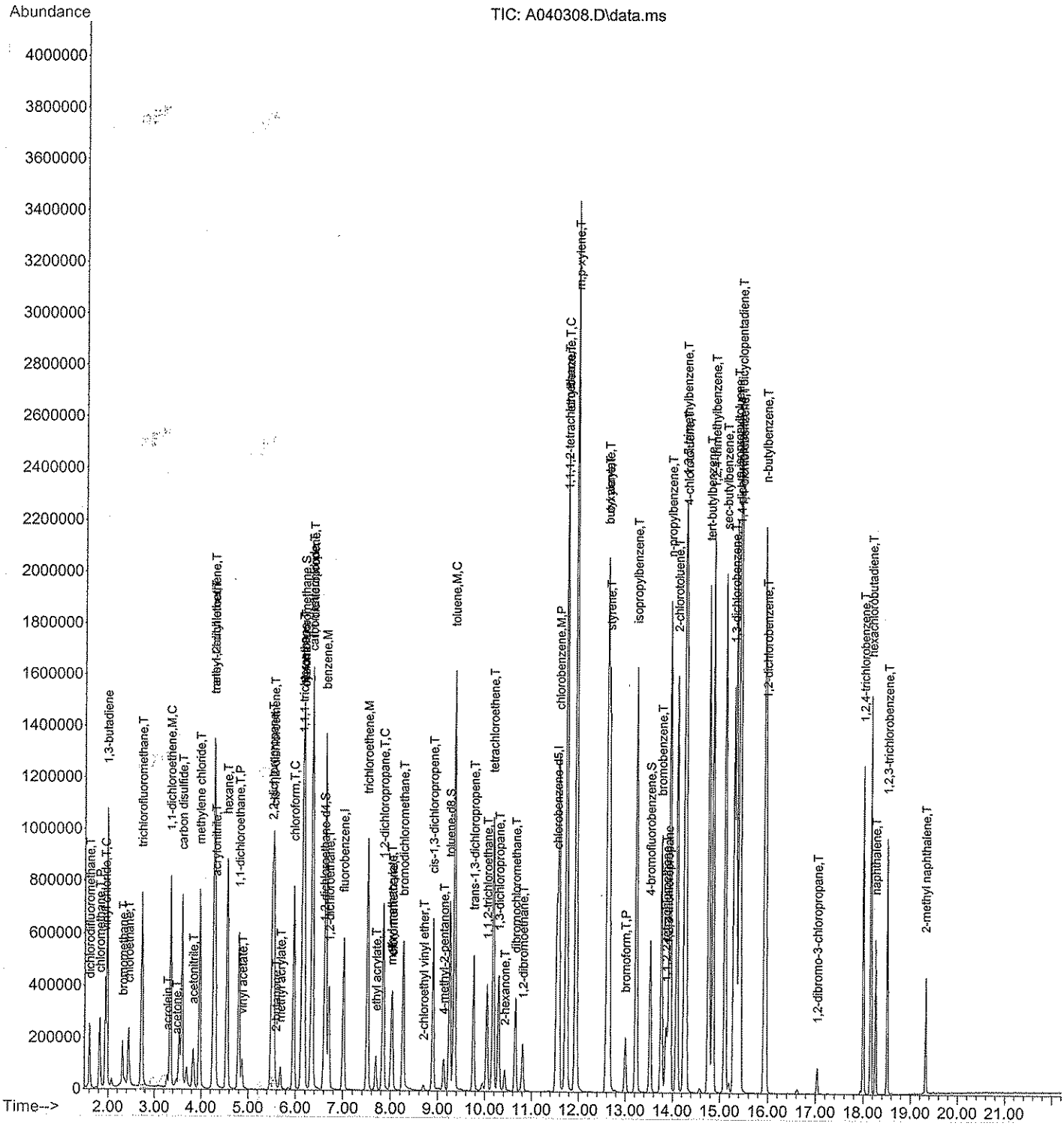
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.259 | 83 | 506387 | 21.62 | ug/L | 100 |
| 40) 2-chloroethyl vinyl ether | 8.691 | 63 | 10882 | 14.47 | ug/L | 84 |
| 42) cis-1,3-dichloropropene | 8.891 | 75 | 460529 | 20.81 | ug/L | 98 |
| 43) 4-methyl-2-pentanone | 9.122 | 43 | 132270 | 20.01 | ug/L | 95 |
| 45) toluene | 9.347 | 92 | 929818 | 20.05 | ug/L | 97 |
| 46) 1,1,2-trichloroethane | 10.041 | 83 | 147766 | 20.18 | ug/L | 99 |
| 47) 1,3-dichloropropane | 10.290 | 76 | 322533 | 20.51 | ug/L | 99 |
| 48) tetrachloroethene | 10.168 | 164 | 339201 | 19.99 | ug/L | 95 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 350404 | 21.07 | ug/L | 98 |
| 50) 2-hexanone | 10.418 | 43 | 86356 | 21.28 | ug/L | 95 |
| 51) dibromochloromethane | 10.649 | 129 | 265517 | 20.82 | ug/L | 97 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 178842 | 20.40 | ug/L | 96 |
| 53) chlorobenzene | 11.573 | 112 | 936492 | 19.69 | ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.725 | 131 | 355085 | 20.49 | ug/L | 99 |
| 55) ethylbenzene | 11.737 | 91 | 1914631 | 20.60 | ug/L | 99 |
| 56) m,p-xylene | 11.932 | 106 | 1390218 | 40.67 | ug/L | 99 |
| 57) butyl acrylate | 12.595 | 55 | 401260 | 21.21 | ug/L | 100 |
| 58) o-xylene | 12.601 | 106 | 661803 | 20.58 | ug/L | 99 |
| 59) styrene | 12.643 | 104 | 1064837 | 20.55 | ug/L | 98 |
| 60) isopropylbenzene | 13.221 | 105 | 1690484 | 21.61 | ug/L | 99 |
| 61) bromobenzene | 13.756 | 156 | 418309 | 20.40 | ug/L | 96 |
| 62) bromoform | 12.996 | 173 | 153107 | 21.46 | ug/L | 98 |
| 64) 1,2,3-trichloropropane | 13.902 | 75 | 155632 | 19.97 | ug/L | 99 |
| 65) n-propylbenzene | 13.939 | 91 | 2251715 | 21.44 | ug/L | 100 |
| 66) 2-chlorotoluene | 14.091 | 91 | 1388369 | 21.37 | ug/L | 99 |
| 67) 4-chlorotoluene | 14.273 | 91 | 1593103 | 21.03 | ug/L | 97 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 1601551 | 21.40 | ug/L | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.860 | 83 | 172277 | 18.87 | ug/L | 97 |
| 71) tert-butylbenzene | 14.760 | 119 | 1335707 | 20.81 | ug/L | 100 |
| 72) sec-butylbenzene | 15.100 | 105 | 1937140 | 20.73 | ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 1656776 | 20.13 | ug/L | 98 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 816448 | 19.27 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.325 | 119 | 1601780 | 20.53 | ug/L | 99 |
| 76) dicyclopentadiene | 15.398 | 66 | 1753826 | 20.77 | ug/L | 100 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 786751 | 18.78 | ug/L | 100 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 660045 | 19.10 | ug/L | 98 |
| 79) n-butylbenzene | 15.921 | 91 | 1554308 | 21.14 | ug/L | 100 |
| 80) 1,2-dibromo-3-chloropr... | 17.040 | 75 | 31904 | 18.96 | ug/L | 98 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 414040 | 19.01 | ug/L | 94 |
| 82) hexachlorobutadiene | 18.159 | 225 | 359723 | 20.17 | ug/L | 99 |
| 83) naphthalene | 18.256 | 128 | 444086 | 18.49 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 307173 | 18.37 | ug/L | 99 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 185748 | 16.24 | ug/L | 95 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040308.D
Acq On : 3 Apr 2008 12:31 pm
Sample : ,ical,ical_w25-20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 03 13:09:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:09:32 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040308.D 25ML0403.M Thu Apr 03 13:09:58 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040309.D
Acq On : 3 Apr 2008 1:18 pm
Sample : ,ical,ical_w25-40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 03 13:46:50 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:11:01 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.013 | 96 | 734079 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 611872 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.387 | 152 | 332450 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 185071 | 9.93 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.30% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 177001 | 10.07 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.70% | | | | |
| 44) toluene-d8 | 9.251 | 98 | 741366 | 9.89 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.90% | | | | |
| 63) 4-bromofluorobenzene | 13.520 | 95 | 309777 | 10.09 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.90% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 605961 | 46.07 | ug/L | | 97 |
| 3) chloromethane | 1.813 | 50 | 858835 | 39.23 | ug/L | | 96 |
| 4) vinyl chloride | 1.935 | 62 | 983730 | 41.76 | ug/L | | 97 |
| 5) 1,3-butadiene | 1.971 | 39 | 996600 | 44.57 | ug/L | | 97 |
| 6) bromomethane | 2.306 | 94 | 246823 | 30.04 | ug/L | | 98 |
| 7) chloroethane | 2.421 | 64 | 524934 | 37.57 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.719 | 101 | 1762908 | 42.95 | ug/L | | 99 |
| 9) acrolein | 3.273 | 56 | 111850 | 412.01 | ug/L | | 92 |
| 10) 1,1-dichloroethene | 3.340 | 96 | 790471 | 42.60 | ug/L | | 99 |
| 11) acetone | 3.473 | 43 | 88839 | 37.74 | ug/L | | 94 |
| 12) carbon disulfide | 3.583 | 76 | 2579664 | 42.77 | ug/L | | 100 |
| 13) methylene chloride | 3.960 | 84 | 778785 | 34.90 | ug/L | | 96 |
| 14) acrylonitrile | 4.300 | 53 | 1013385 | 406.40 | ug/L | | 98 |
| 15) trans-1,2-dichloroethene | 4.264 | 96 | 881484 | 42.14 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.258 | 73 | 1240676 | 37.89 | ug/L | | 99 |
| 17) acetonitrile | 3.826 | 41 | 390796 | 369.42 | ug/L | | 96 |
| 18) hexane | 4.544 | 57 | 1244695 | 47.10 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 1753058 | 42.15 | ug/L | | 100 |
| 20) vinyl acetate | 4.866 | 43 | 492828 | 42.30 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.529 | 96 | 907131 | 42.01 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.498 | 77 | 1802839 | 44.65 | ug/L | | 99 |
| 23) 2-butanone | 5.584 | 72 | 24082 | 43.54 | ug/L | # | 73 |
| 24) methyl acrylate | 5.681 | 55 | 275514 | 42.30 | ug/L | | 99 |
| 25) chloroform | 5.955 | 83 | 1741268 | 41.66 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.131 | 97 | 1894570 | 43.38 | ug/L | | 98 |
| 28) cyclohexane | 6.167 | 56 | 1552714 | 46.00 | ug/L | | 99 |
| 29) carbon tetrachloride | 6.338 | 117 | 1647862 | 44.11 | ug/L | | 99 |
| 31) benzene | 6.630 | 78 | 3273357 | 41.34 | ug/L | | 100 |
| 32) 1,1-dichloropropene | 6.350 | 75 | 1334808 | 44.04 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.703 | 62 | 980095 | 40.90 | ug/L | | 99 |
| 34) trichloroethene | 7.505 | 95 | 1021221 | 43.24 | ug/L | | 99 |
| 35) ethyl acrylate | 7.688 | 55 | 429320 | 43.74 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.840 | 63 | 761657 | 41.90 | ug/L | | 95 |
| 37) methyl methacrylate | 8.010 | 41 | 329893 | 43.33 | ug/L | | 95 |
| 38) dibromomethane | 8.034 | 93 | 319724 | 40.93 | ug/L | | 95 |

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040309.D
Acq On : 3 Apr 2008 1:18 pm
Sample : ,ical,ical_w25-40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 03 13:46:50 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:11:01 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

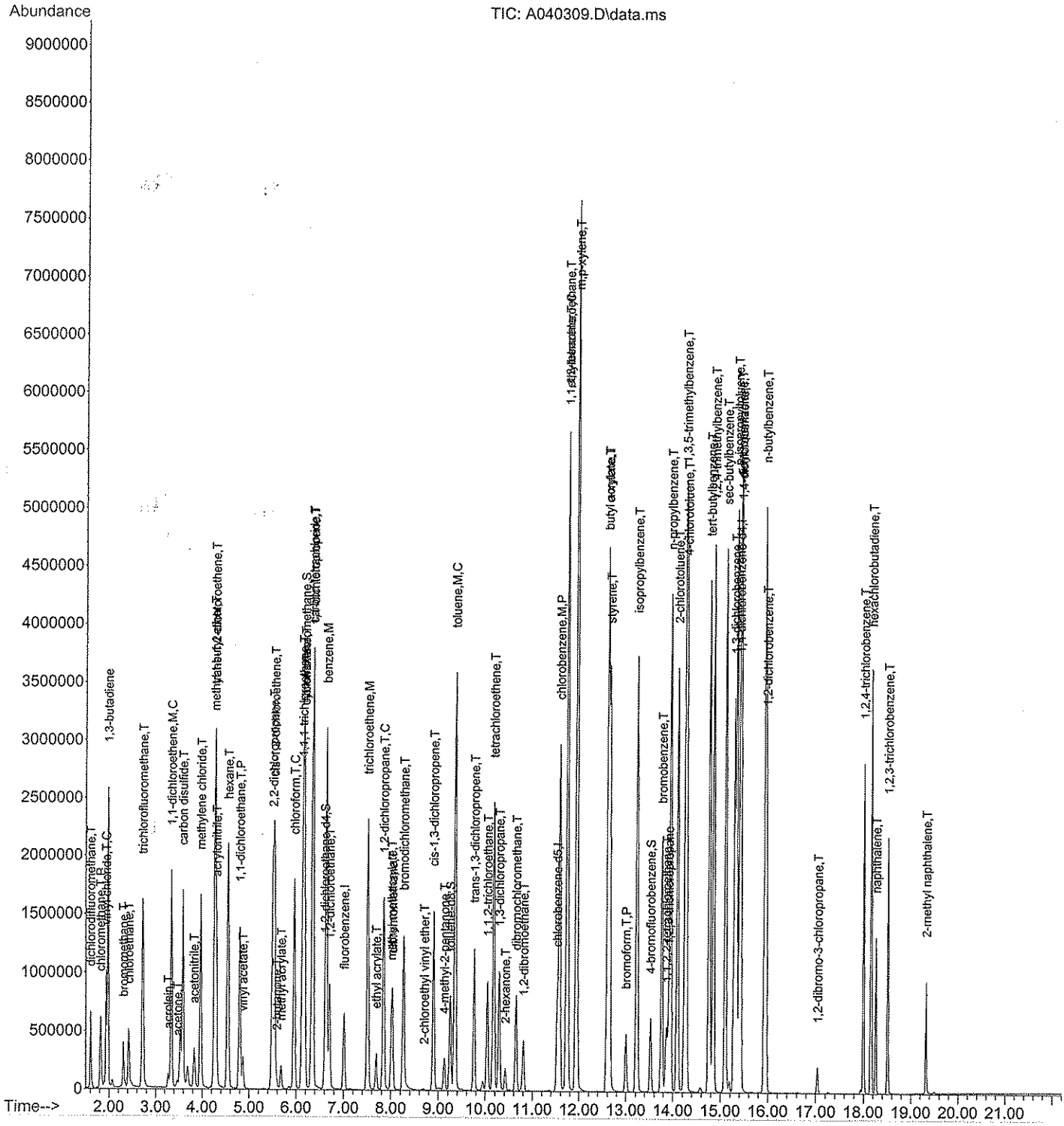
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.265 | 83 | 1174913 | 42.43 | ug/L | 99 |
| 40) | 2-chloroethyl vinyl ether | 8.703 | 63 | 6974 | 8.58 | ug/L | 73 |
| 42) | cis-1,3-dichloropropene | 8.892 | 75 | 1086425 | 43.22 | ug/L | 99 |
| 43) | 4-methyl-2-pentanone | 9.123 | 43 | 298084 | 39.62 | ug/L | 96 |
| 45) | toluene | 9.348 | 92 | 2142474 | 40.60 | ug/L | 97 |
| 46) | 1,1,2-trichloroethane | 10.041 | 83 | 336608 | 40.42 | ug/L | 98 |
| 47) | 1,3-dichloropropane | 10.284 | 76 | 736374 | 41.20 | ug/L | 100 |
| 48) | tetrachloroethene | 10.169 | 164 | 812967 | 42.20 | ug/L | 98 |
| 49) | trans-1,3-dichloropropene | 9.755 | 75 | 830863 | 43.82 | ug/L | 98 |
| 50) | 2-hexanone | 10.418 | 43 | 199529 | 43.36 | ug/L | 88 |
| 51) | dibromochloromethane | 10.649 | 129 | 621272 | 42.69 | ug/L | 94 |
| 52) | 1,2-dibromoethane | 10.807 | 107 | 419358 | 42.20 | ug/L | 99 |
| 53) | chlorobenzene | 11.574 | 112 | 2154356 | 39.97 | ug/L | 97 |
| 54) | 1,1,1,2-tetrachloroethane | 11.732 | 131 | 825230 | 41.67 | ug/L | 98 |
| 55) | ethylbenzene | 11.738 | 91 | 4432216 | 41.72 | ug/L | 99 |
| 56) | m,p-xylene | 11.939 | 106 | 3161736 | 81.20 | ug/L | 96 |
| 57) | butyl acrylate | 12.595 | 55 | 877966 | 40.61 | ug/L | 99 |
| 58) | o-xylene | 12.601 | 106 | 1487187 | 40.61 | ug/L | 97 |
| 59) | styrene | 12.644 | 104 | 2372249 | 40.21 | ug/L | 98 |
| 60) | isopropylbenzene | 13.228 | 105 | 3889253 | 43.37 | ug/L | 98 |
| 61) | bromobenzene | 13.763 | 156 | 941046 | 40.33 | ug/L | 94 |
| 62) | bromoform | 12.997 | 173 | 355015 | 43.59 | ug/L | 98 |
| 64) | 1,2,3-trichloropropane | 13.903 | 75 | 345392 | 38.76 | ug/L | 97 |
| 65) | n-propylbenzene | 13.939 | 91 | 5112657 | 42.34 | ug/L | 99 |
| 66) | 2-chlorotoluene | 14.091 | 91 | 3091219 | 41.36 | ug/L | 99 |
| 67) | 4-chlorotoluene | 14.280 | 91 | 3582409 | 41.08 | ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.249 | 105 | 3661701 | 42.62 | ug/L | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 13.860 | 83 | 386505 | 40.72 | ug/L | 99 |
| 71) | tert-butylbenzene | 14.760 | 119 | 3024572 | 44.76 | ug/L | 99 |
| 72) | sec-butylbenzene | 15.101 | 105 | 4403808 | 44.74 | ug/L | 99 |
| 73) | 1,2,4-trimethylbenzene | 14.845 | 105 | 3682384 | 42.50 | ug/L | 99 |
| 74) | 1,3-dichlorobenzene | 15.283 | 146 | 1812690 | 40.87 | ug/L | 99 |
| 75) | p-isopropyltoluene | 15.326 | 119 | 3686652 | 44.82 | ug/L | 99 |
| 76) | dicyclopentadiene | 15.399 | 66 | 3876697 | 43.27 | ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.423 | 146 | 1722219 | 39.24 | ug/L | 99 |
| 78) | 1,2-dichlorobenzene | 15.958 | 146 | 1423562 | 39.36 | ug/L | 98 |
| 79) | n-butylbenzene | 15.922 | 91 | 3508447 | 45.12 | ug/L | 99 |
| 80) | 1,2-dibromo-3-chloropr... | 17.041 | 75 | 68777 | 38.78 | ug/L | 90 |
| 81) | 1,2,4-trichlorobenzene | 17.996 | 180 | 929979 | 41.12 | ug/L | 95 |
| 82) | hexachlorobutadiene | 18.160 | 225 | 846536 | 44.86 | ug/L | 99 |
| 83) | naphthalene | 18.257 | 128 | 998133 | 40.47 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.506 | 180 | 674184 | 38.84 | ug/L | 99 |
| 85) | 2-methyl naphthalene | 19.321 | 142 | 418035 | 35.51 | ug/L | 100 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040309.D
Acq On : 3 Apr 2008 1:18 pm
Sample : ,ical,ical_w25-40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 03 13:46:50 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:11:01 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040309.D 25ML0403.M Thu Apr 03 13:46:52 2008 voa1 Page: 3

# CONTINUING CALIBRATION RAW DATA

# Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040408\A040402.D
Acq On : 4 Apr 2008 7:01 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 04 07:39:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 77 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.206 | 0.225 | -9.2 | 84 | 0.00 |
| 3 | T,P | chloromethane | 0.329 | 0.514 | -56.2# | 129 | 0.00 |
| 4 | T,C | vinyl chloride | 0.352 | 0.372 | -5.7 | 86 | 0.00 |
| 5 | | 1,3-butadiene | 0.331 | 0.383 | -15.7 | 88 | 0.00 |
| 6 | T | bromomethane | 0.124 | 0.060 | 51.6# | 35# | 0.00 |
| 7 | T | chloroethane | 0.208 | 0.229 | -10.1 | 90 | 0.00 |
| 8 | T | trichlorofluoromethane | 0.621 | 0.776 | -25.0# | 99 | 0.00 |
| 9 | T | acrolein | 0.004 | 0.004 | 0.0 | 96 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.273 | 0.304 | -11.4 | 93 | 0.00 |
| 11 | T | acetone | 0.036 | 0.043 | -19.4 | 103 | 0.00 |
| 12 | T | carbon disulfide | 0.889 | 0.997 | -12.1 | 91 | 0.00 |
| 13 | T | methylene chloride | 0.323 | 0.326 | -0.9 | 91 | 0.00 |
| 14 | T | acrylonitrile | 0.036 | 0.036 | 0.0 | 92 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.299 | 0.316 | -5.7 | 89 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.462 | 0.438 | 5.2 | 84 | 0.00 |
| 17 | T | acetonitrile | 0.015 | 0.015 | 0.0 | 90 | 0.00 |
| 18 | T | hexane | 0.377 | 0.450 | -19.4 | 91 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.596 | 0.624 | -4.7 | 89 | 0.00 |
| 20 | T | vinyl acetate | 0.166 | 0.157 | 5.4 | 82 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.305 | 0.310 | -1.6 | 87 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.590 | 0.650 | -10.2 | 91 | 0.00 |
| 23 | T | 2-butanone | 0.008 | 0.007 | 12.5 | 74 | -0.02 |
| 24 | T | methyl acrylate | 0.091 | 0.083 | 8.8 | 83 | 0.00 |
| 25 | T,C | chloroform | 0.600 | 0.647 | -7.8 | 91 | 0.00 |
| 26 | S | dibromofluoromethane | 0.260 | 0.271 | -4.2 | 82 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.633 | 0.697 | -10.1 | 92 | 0.00 |
| 28 | T | cyclohexane | 0.477 | 0.562 | -17.8 | 91 | 0.00 |
| 29 | T | carbon tetrachloride | 0.545 | 0.591 | -8.4 | 89 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.250 | 0.262 | -4.8 | 84 | 0.00 |
| 31 | M | benzene | 1.120 | 1.157 | -3.3 | 87 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.433 | 0.468 | -8.1 | 90 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.346 | 0.363 | -4.9 | 92 | 0.00 |
| 34 | M | trichloroethene | 0.336 | 0.356 | -6.0 | 90 | 0.00 |
| 35 | T | ethyl acrylate | 0.136 | 0.125 | 8.1 | 82 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.255 | 0.264 | -3.5 | 89 | -0.01 |
| 37 | T | methyl methacrylate | 0.108 | 0.104 | 3.7 | 86 | 0.00 |
| 38 | T | dibromomethane | 0.111 | 0.112 | -0.9 | 91 | 0.00 |
| 39 | T | bromodichloromethane | 0.396 | 0.425 | -7.3 | 92 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.010 | 0.001 | 90.0# | 8# | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 90 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.411 | 0.372 | 9.5 | 87 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.123 | 0.111 | 9.8 | 89 | -0.01 |
| 44 | S | toluene-d8 | 1.215 | 1.178 | 3.0 | 85 | 0.00 |
| 45 | M,C | toluene | 0.871 | 0.823 | 5.5 | 89 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.136 | 0.125 | 8.1 | 91 | 0.00 |

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040408\A040402.D
Acq On : 2 Apr 2008 7:01 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 04 07:39:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev 20% Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| T | 1,3-dichloropropane | 0.292 | 0.265 | 9.2 | 89 | 0.00 |
| T | tetrachloroethene | 0.318 | 0.302 | 5.0 | 89 | 0.00 |
| T | trans-1,3-dichloropropene | 0.311 | 0.281 | 9.6 | 88 | 0.00 |
| T | 2-hexanone | 0.074 | 0.066 | 10.8 | 91 | 0.00 |
| T | dibromochloromethane | 0.240 | 0.223 | 7.1 | 92 | 0.00 |
| T | 1,2-dibromoethane | 0.162 | 0.150 | 7.4 | 92 | -0.01 |
| M,P | chlorobenzene | 0.884 | 0.828 | 6.3 | 91 | 0.00 |
| T | 1,1,1,2-tetrachloroethane | 0.328 | 0.309 | 5.8 | 90 | 0.00 |
| T,C | ethylbenzene | 1.766 | 1.728 | 2.2 | 90 | 0.00 |
| T | m,p-xylene | 0.644 | 0.618 | 4.0 | 89 | 0.00 |
| T | butyl acrylate | 0.352 | 0.306 | 13.1 | 84 | 0.00 |
| T | o-xylene | 0.603 | 0.579 | 4.0 | 90 | 0.00 |
| T | styrene | 0.967 | 0.916 | 5.3 | 90 | 0.00 |
| T | isopropylbenzene | 1.492 | 1.496 | -0.3 | 90 | 0.00 |
| T | bromobenzene | 0.382 | 0.356 | 6.8 | 90 | 0.00 |
| T,P | bromoform | 0.134 | 0.120 | 10.4 | 89 | 0.00 |
| S | 4-bromofluorobenzene | 0.512 | 0.530 | -3.5 | 93 | 0.00 |
| | 1,2,3-trichloropropane | 0.148 | 0.135 | 8.8 | 91 | 0.00 |
| T | n-propylbenzene | 2.021 | 2.046 | -1.2 | 92 | 0.00 |
| T | 2-chlorotoluene | 1.248 | 1.240 | 0.6 | 92 | 0.00 |
| T | 4-chlorotoluene | 1.464 | 1.467 | -0.2 | 93 | 0.00 |
| T | 1,3,5-trimethylbenzene | 1.438 | 1.470 | -2.2 | 92 | 0.00 |
| I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 95 | 0.00 |
| T | 1,1,2,2-tetrachloroethane | 0.278 | 0.237 | 14.7 | 92 | 0.00 |
| T | tert-butylbenzene | 2.035 | 1.954 | 4.0 | 93 | 0.00 |
| T | sec-butylbenzene | 2.977 | 2.908 | 2.3 | 93 | 0.00 |
| T | 1,2,4-trimethylbenzene | 2.608 | 2.442 | 6.4 | 91 | 0.00 |
| T | 1,3-dichlorobenzene | 1.326 | 1.181 | 10.9 | 91 | 0.00 |
| T | p-isopropyltoluene | 2.488 | 2.414 | 3.0 | 93 | 0.00 |
| T | dicyclopentadiene | 2.716 | 2.575 | 5.2 | 94 | 0.00 |
| T | 1,4-dichlorobenzene | 1.319 | 1.174 | 11.0 | 92 | 0.00 |
| T | 1,2-dichlorobenzene | 1.081 | 0.947 | 12.4 | 91 | 0.00 |
| T | n-butylbenzene | 2.367 | 2.342 | 1.1 | 92 | 0.00 |
| T | 1,2-dibromo-3-chloropropane | 0.053 | 0.043 | 18.9 | 91 | 0.00 |
| T | 1,2,4-trichlorobenzene | 0.669 | 0.555 | 17.0 | 85 | 0.00 |
| T | hexachlorobutadiene | 0.582 | 0.535 | 8.1 | 91 | 0.00 |
| T | naphthalene | 0.709 | 0.551 | 22.3# | 79 | 0.00 |
| T | 1,2,3-trichlorobenzene | 0.514 | 0.398 | 22.6# | 83 | 0.00 |
| T | 2-methyl naphthalene | 0.346 | 0.186 | 46.2# | 59 | 0.00 |

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

4/4/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040402.D
Acq On : 4 Apr 2008 7:01 am Inst : VOA1
Sample : ,ccv,ccv_w25 10 ppb,1,
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 04 07:39:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 471008 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 448280 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 273642 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 127518 | 10.40 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.00% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 123188 | 10.47 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.70% | | | |
| 44) toluene-d8 | 9.248 | 98 | 528179 | 9.70 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.00% | | | |
| 63) 4-bromofluorobenzene | 13.517 | 95 | 237629 | 10.36 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.60% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 105943 | 10.90 | ug/L | 96 |
| 3) chloromethane | 1.810 | 50 | 241939 | 15.59 | ug/L | 99 |
| 4) vinyl chloride | 1.938 | 62 | 175061 | 10.56 | ug/L | 96 |
| 5) 1,3-butadiene | 1.974 | 39 | 180521 | 11.58 | ug/L | 97 |
| 6) bromomethane | 2.315 | 94 | 28106 | 4.80 | ug/L | 86 |
| 7) chloroethane | 2.443 | 64 | 108060 | 11.04 | ug/L | 96 |
| 8) trichlorofluoromethane | 2.728 | 101 | 365570 | 12.49 | ug/L | 99 |
| 9) acrolein | 3.282 | 56 | 19976 | 107.05 | ug/L | 98 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 143260 | 11.14 | ug/L | 97 |
| 11) acetone | 3.470 | 43 | 20468 | 12.13 | ug/L | 91 |
| 12) carbon disulfide | 3.592 | 76 | 469413 | 11.21 | ug/L | 99 |
| 13) methylene chloride | 3.963 | 84 | 153545 | 10.11 | ug/L | 88 |
| 14) acrylonitrile | 4.303 | 53 | 171604 | 102.18 | ug/L | 98 |
| 15) trans-1,2-dichloroethene | 4.267 | 96 | 148619 | 10.54 | ug/L | 98 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 206088 | 9.47 | ug/L | 100 |
| 17) acetonitrile | 3.829 | 41 | 71721 | 98.68 | ug/L | 96 |
| 18) hexane | 4.547 | 57 | 212039 | 11.93 | ug/L | 98 |
| 19) 1,1-dichloroethane | 4.796 | 63 | 294144 | 10.48 | ug/L | 99 |
| 20) vinyl acetate | 4.869 | 43 | 73914 | 9.48 | ug/L | 98 |
| 21) cis-1,2-dichloroethene | 5.532 | 96 | 146124 | 10.17 | ug/L | 94 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 306160 | 11.02 | ug/L | 98 |
| 23) 2-butanone | 5.587 | 72 | 3242 | 9.11 | ug/L # | 59 |
| 24) methyl acrylate | 5.684 | 55 | 39089 | 9.10 | ug/L | 96 |
| 25) chloroform | 5.958 | 83 | 304507 | 10.78 | ug/L | 99 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 328171 | 11.01 | ug/L | 98 |
| 28) cyclohexane | 6.164 | 56 | 264714 | 11.78 | ug/L | 97 |
| 29) carbon tetrachloride | 6.335 | 117 | 278591 | 10.85 | ug/L | 97 |
| 31) benzene | 6.633 | 78 | 545137 | 10.33 | ug/L | 99 |
| 32) 1,1-dichloropropene | 6.347 | 75 | 220639 | 10.81 | ug/L | 96 |
| 33) 1,2-dichloroethane | 6.699 | 62 | 171149 | 10.49 | ug/L | 98 |
| 34) trichloroethene | 7.508 | 95 | 167570 | 10.59 | ug/L | 96 |
| 35) ethyl acrylate | 7.691 | 55 | 58746 | 9.16 | ug/L | 97 |
| 36) 1,2-dichloropropane | 7.837 | 63 | 124290 | 10.34 | ug/L | 98 |
| 37) methyl methacrylate | 8.013 | 41 | 48821 | 9.61 | ug/L | 89 |
| 38) dibromomethane | 8.037 | 93 | 52813 | 10.10 | ug/L | 93 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040402.D
Acq On : 4 Apr 2008 7:01 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 04 07:39:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth: VOA-AQ.M

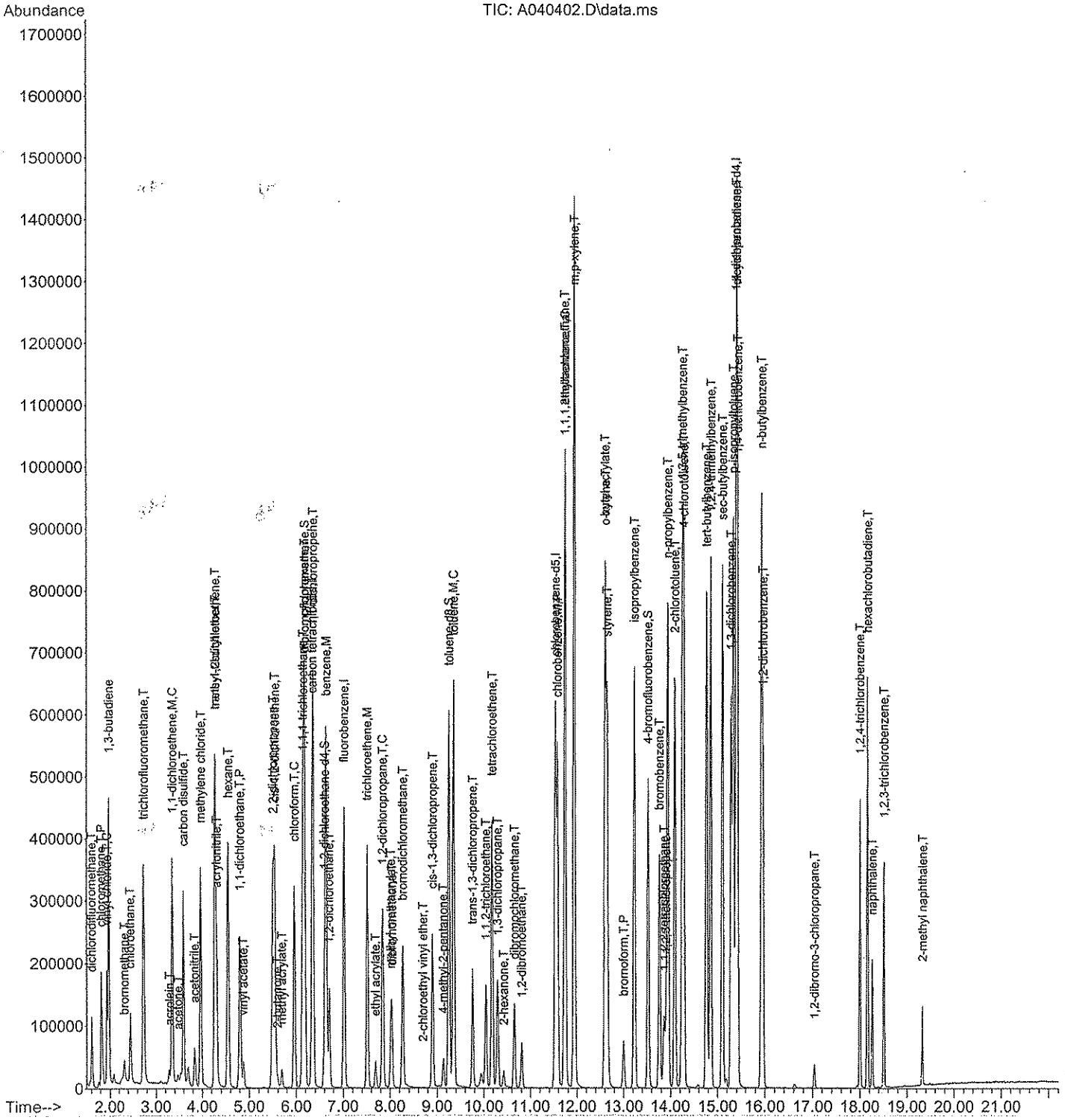
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.262 | 83 | 200233 | 10.74 | ug/L | | 99 |
| 40) 2-chloroethyl vinyl ether | 8.694 | 63 | 277 | 0.62 | ug/L | # | 47 |
| 42) cis-1,3-dichloropropene | 8.895 | 75 | 166709 | 9.05 | ug/L | | 93 |
| 43) 4-methyl-2-pentanone | 9.126 | 43 | 49540 | 8.98 | ug/L | | 93 |
| 45) toluene | 9.345 | 92 | 368871 | 9.45 | ug/L | | 99 |
| 46) 1,1,2-trichloroethane | 10.038 | 83 | 55851 | 9.15 | ug/L | | 97 |
| 47) 1,3-dichloropropane | 10.287 | 76 | 118991 | 9.09 | ug/L | | 96 |
| 48) tetrachloroethene | 10.172 | 164 | 135582 | 9.50 | ug/L | | 97 |
| 49) trans-1,3-dichloropropene | 9.752 | 75 | 125792 | 9.02 | ug/L | | 98 |
| 50) 2-hexanone | 10.421 | 43 | 29796 | 8.96 | ug/L | | 94 |
| 51) dibromochloromethane | 10.652 | 129 | 99758 | 9.27 | ug/L | | 91 |
| 52) 1,2-dibromoethane | 10.804 | 107 | 67354 | 9.29 | ug/L | | 97 |
| 53) chlorobenzene | 11.571 | 112 | 371276 | 9.36 | ug/L | | 96 |
| 54) 1,1,1,2-tetrachloroethane | 11.729 | 131 | 138649 | 9.42 | ug/L | | 98 |
| 55) ethylbenzene | 11.735 | 91 | 774795 | 9.79 | ug/L | | 99 |
| 56) m,p-xylene | 11.935 | 106 | 554466 | 19.20 | ug/L | | 99 |
| 57) butyl acrylate | 12.598 | 55 | 137302 | 8.69 | ug/L | | 98 |
| 58) o-xylene | 12.604 | 106 | 259640 | 9.61 | ug/L | | 99 |
| 59) styrene | 12.641 | 104 | 410503 | 9.47 | ug/L | | 99 |
| 60) isopropylbenzene | 13.225 | 105 | 670596 | 10.02 | ug/L | | 100 |
| 61) bromobenzene | 13.760 | 156 | 159457 | 9.31 | ug/L | | 96 |
| 62) bromoform | 13.000 | 173 | 53895 | 9.00 | ug/L | | 96 |
| 64) 1,2,3-trichloropropane | 13.900 | 75 | 60727 | 9.18 | ug/L | | 91 |
| 65) n-propylbenzene | 13.936 | 91 | 917263 | 10.12 | ug/L | | 100 |
| 66) 2-chlorotoluene | 14.088 | 91 | 555857 | 9.93 | ug/L | | 99 |
| 67) 4-chlorotoluene | 14.277 | 91 | 657536 | 10.02 | ug/L | | 100 |
| 68) 1,3,5-trimethylbenzene | 14.246 | 105 | 658855 | 10.22 | ug/L | | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 64975 | 8.53 | ug/L | | 97 |
| 71) tert-butylbenzene | 14.757 | 119 | 534809 | 9.61 | ug/L | | 96 |
| 72) sec-butylbenzene | 15.098 | 105 | 795722 | 9.77 | ug/L | | 100 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 668160 | 9.36 | ug/L | | 99 |
| 74) 1,3-dichlorobenzene | 15.280 | 146 | 323180 | 8.91 | ug/L | | 99 |
| 75) p-isopropyltoluene | 15.329 | 119 | 660652 | 9.70 | ug/L | | 99 |
| 76) dicyclopentadiene | 15.396 | 66 | 704622 | 9.48 | ug/L | | 99 |
| 77) 1,4-dichlorobenzene | 15.420 | 146 | 321124 | 8.90 | ug/L | | 98 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 259253 | 8.77 | ug/L | | 97 |
| 79) n-butylbenzene | 15.925 | 91 | 640835 | 9.90 | ug/L | | 99 |
| 80) 1,2-dibromo-3-chloropr... | 17.038 | 75 | 11866 | 8.11 | ug/L | # | 86 |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 151851 | 8.30 | ug/L | | 97 |
| 82) hexachlorobutadiene | 18.157 | 225 | 146358 | 9.19 | ug/L | | 98 |
| 83) naphthalene | 18.260 | 128 | 150802 | 7.77 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 108926 | 7.75 | ug/L | | 96 |
| 85) 2-methyl naphthalene | 19.324 | 142 | 50884 | 5.37 | ug/L | | 100 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040402.D
Acq On : 4 Apr 2008 7:01 am
Sample : ,ccv,ccv_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 04 07:39:54 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:49:20 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040408\A040422.D
Acq On : 4 Apr 2008 7:33 pm
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 04 19:57:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 107 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.206 | 0.326 | -58.3# | 169# | 0.00 |
| 3 | T,P | chloromethane | 0.329 | 0.502 | -52.6# | 175# | 0.00 |
| 4 | T,C | vinyl chloride | 0.352 | 0.403 | -14.5 | 129 | 0.00 |
| 5 | | 1,3-butadiene | 0.331 | 0.277 | 16.3 | 89 | 0.00 |
| 6 | T | bromomethane | 0.124 | 0.101 | 18.5 | 81 | 0.00 |
| 7 | T | chloroethane | 0.208 | 0.219 | -5.3 | 120 | 0.00 |
| 8 | T | trichlorofluoromethane | 0.621 | 0.675 | -8.7 | 120 | 0.00 |
| 9 | T | acrolein | 0.004 | 0.003 | 25.0# | 95 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.273 | 0.244 | 10.6 | 104 | 0.00 |
| 11 | T | acetone | 0.036 | 0.031 | 13.9 | 102 | 0.00 |
| 12 | T | carbon disulfide | 0.889 | 0.752 | 15.4 | 95 | 0.00 |
| 13 | T | methylene chloride | 0.323 | 0.271 | 16.1 | 105 | 0.00 |
| 14 | T | acrylonitrile | 0.036 | 0.030 | 16.7 | 105 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.299 | 0.262 | 12.4 | 102 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.462 | 0.392 | 15.2 | 105 | 0.00 |
| 17 | T | acetonitrile | 0.015 | 0.012 | 20.0 | 98 | 0.00 |
| 18 | T | hexane | 0.377 | 0.352 | 6.6 | 99 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.596 | 0.528 | 11.4 | 104 | 0.00 |
| 20 | T | vinyl acetate | 0.166 | 0.140 | 15.7 | 102 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.305 | 0.268 | 12.1 | 105 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.590 | 0.538 | 8.8 | 105 | 0.00 |
| 23 | T | 2-butanone | 0.008 | 0.007 | 12.5 | 105 | -0.02 |
| 24 | T | methyl acrylate | 0.091 | 0.074 | 18.7 | 103 | 0.00 |
| 25 | T,C | chloroform | 0.600 | 0.540 | 10.0 | 106 | 0.00 |
| 26 | S | dibromofluoromethane | 0.260 | 0.256 | 1.5 | 108 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.633 | 0.576 | 9.0 | 106 | 0.00 |
| 28 | T | cyclohexane | 0.477 | 0.439 | 8.0 | 98 | 0.00 |
| 29 | T | carbon tetrachloride | 0.545 | 0.490 | 10.1 | 103 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.250 | 0.260 | -4.0 | 117 | 0.00 |
| 31 | M | benzene | 1.120 | 0.994 | 11.3 | 104 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.433 | 0.397 | 8.3 | 106 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.346 | 0.303 | 12.4 | 107 | 0.00 |
| 34 | M | trichloroethene | 0.336 | 0.300 | 10.7 | 106 | 0.00 |
| 35 | T | ethyl acrylate | 0.136 | 0.111 | 18.4 | 101 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.255 | 0.227 | 11.0 | 106 | 0.00 |
| 37 | T | methyl methacrylate | 0.108 | 0.087 | 19.4 | 101 | 0.00 |
| 38 | T | dibromomethane | 0.111 | 0.095 | 14.4 | 107 | 0.00 |
| 39 | T | bromodichloromethane | 0.396 | 0.358 | 9.6 | 108 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.010 | 0.001 | 90.0# | 19# | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 89 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.411 | 0.451 | -9.7 | 105 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.123 | 0.125 | -1.6 | 100 | 0.00 |
| 44 | S | toluene-d8 | 1.215 | 1.413 | -16.3 | 101 | 0.00 |
| 45 | M,C | toluene | 0.871 | 0.955 | -9.6 | 103 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.136 | 0.150 | -10.3 | 109 | 0.00 |

A040422.D 25ML0403.M Fri Apr 04 19:57:30 2008 voa1 Page: 1

Data File: C:\msdchem\1\DATA\A040408\A040422.D
Acq On : 4 Apr 2008 7:33 pm
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 04 19:57:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.292 | 0.319 | -9.2 | 107 | 0.00 |
| 48 | T | tetrachloroethene | 0.318 | 0.353 | -11.0 | 103 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.344 | -10.6 | 107 | 0.00 |
| 50 | T | 2-hexanone | 0.074 | 0.082 | -10.8 | 113 | 0.00 |
| 51 | T | dibromochloromethane | 0.240 | 0.264 | -10.0 | 109 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.162 | 0.174 | -7.4 | 106 | 0.00 |
| 53 | M,P | chlorobenzene | 0.884 | 0.971 | -9.8 | 106 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.328 | 0.362 | -10.4 | 105 | 0.00 |
| 55 | T,C | ethylbenzene | 1.766 | 2.013 | -14.0 | 105 | 0.00 |
| 56 | T | m,p-xylene | 0.644 | 0.721 | -12.0 | 103 | 0.00 |
| 57 | T | butyl acrylate | 0.352 | 0.363 | -3.1 | 99 | 0.00 |
| 58 | T | o-xylene | 0.603 | 0.681 | -12.9 | 106 | 0.00 |
| 59 | T | styrene | 0.967 | 1.073 | -11.0 | 105 | 0.00 |
| 60 | T | isopropylbenzene | 1.492 | 1.752 | -17.4 | 105 | 0.00 |
| 61 | T | bromobenzene | 0.382 | 0.420 | -9.9 | 106 | 0.00 |
| 62 | T,P | bromoform | 0.134 | 0.142 | -6.0 | 104 | 0.00 |
| 63 | S | 4-bromofluorobenzene | 0.512 | 0.515 | -0.6 | 90 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.148 | 0.155 | -4.7 | 104 | 0.00 |
| 65 | T | n-propylbenzene | 2.021 | 2.362 | -16.9 | 105 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.248 | 1.423 | -14.0 | 105 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.464 | 1.682 | -14.9 | 106 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.438 | 1.680 | -16.8 | 104 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 87 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.278 | 0.311 | -11.9 | 110 | 0.00 |
| 71 | T | tert-butylbenzene | 2.035 | 2.453 | -20.5# | 106 | 0.00 |
| 72 | T | sec-butylbenzene | 2.977 | 3.671 | -23.3# | 107 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.608 | 3.073 | -17.8 | 105 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.326 | 1.493 | -12.6 | 105 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.488 | 3.036 | -22.0# | 106 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 3.072 | -13.1 | 102 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.319 | 1.448 | -9.8 | 104 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.081 | 1.194 | -10.5 | 105 | 0.00 |
| 79 | T | n-butylbenzene | 2.367 | 2.924 | -23.5# | 105 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.053 | 0.057 | -7.5 | 109 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.669 | 0.720 | -7.6 | 100 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.582 | 0.671 | -15.3 | 105 | 0.00 |
| 83 | T | naphthalene | 0.709 | 0.755 | -6.5 | 99 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.514 | 0.531 | -3.3 | 100 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.346 | 0.310 | 10.4 | 90 | 0.00 |

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

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040422.D
Acq On : 4 Apr 2008 7:33 pm
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 04 19:57:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 654308 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 445780 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 249717 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.166 | 113 | 167201 | 9.81 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.10% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.598 | 65 | 170022 | 10.41 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.10% | | | | |
| 44) toluene-d8 | 9.244 | 98 | 630075 | 11.64 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 116.40% | | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 229536 | 10.06 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.60% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 213010 | 15.78 | ug/L | | 95 |
| 3) chloromethane | 1.812 | 50 | 328507 | 15.24 | ug/L | | 98 |
| 4) vinyl chloride | 1.934 | 62 | 263851 | 11.46 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.970 | 39 | 181340 | 8.37 | ug/L | | 95 |
| 6) bromomethane | 2.311 | 94 | 66047 | 8.12 | ug/L | | 94 |
| 7) chloroethane | 2.445 | 64 | 143197 | 10.53 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.724 | 101 | 441930 | 10.87 | ug/L | | 100 |
| 9) acrolein | 3.278 | 56 | 19740 | 76.15 | ug/L | | 92 |
| 10) 1,1-dichloroethene | 3.339 | 96 | 159872 | 8.95 | ug/L | | 97 |
| 11) acetone | 3.472 | 43 | 20395 | 8.70 | ug/L | | 95 |
| 12) carbon disulfide | 3.588 | 76 | 492326 | 8.46 | ug/L | | 99 |
| 13) methylene chloride | 3.959 | 84 | 177445 | 8.41 | ug/L | | 92 |
| 14) acrylonitrile | 4.299 | 53 | 194775 | 83.49 | ug/L | | 98 |
| 15) trans-1,2-dichloroethene | 4.269 | 96 | 171469 | 8.75 | ug/L | | 98 |
| 16) methyl-t-butyl ether | 4.263 | 73 | 256742 | 8.49 | ug/L | | 99 |
| 17) acetonitrile | 3.825 | 41 | 78595 | 77.84 | ug/L | | 95 |
| 18) hexane | 4.543 | 57 | 230443 | 9.33 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.798 | 63 | 345193 | 8.85 | ug/L | | 99 |
| 20) vinyl acetate | 4.871 | 43 | 91586 | 8.46 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.534 | 96 | 175277 | 8.78 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.497 | 77 | 351803 | 9.11 | ug/L | | 97 |
| 23) 2-butanone | 5.583 | 72 | 4608 | 9.33 | ug/L | # | 53 |
| 24) methyl acrylate | 5.686 | 55 | 48222 | 8.08 | ug/L | | 96 |
| 25) chloroform | 5.954 | 83 | 353226 | 9.00 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.136 | 97 | 376886 | 9.10 | ug/L | | 98 |
| 28) cyclohexane | 6.166 | 56 | 287380 | 9.20 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.337 | 117 | 320715 | 8.99 | ug/L | | 98 |
| 31) benzene | 6.629 | 78 | 650378 | 8.87 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.349 | 75 | 259907 | 9.17 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 198529 | 8.76 | ug/L | | 99 |
| 34) trichloroethene | 7.504 | 95 | 196089 | 8.92 | ug/L | | 99 |
| 35) ethyl acrylate | 7.693 | 55 | 72589 | 8.15 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 148801 | 8.91 | ug/L | | 95 |
| 37) methyl methacrylate | 8.009 | 41 | 57243 | 8.11 | ug/L | | 94 |
| 38) dibromomethane | 8.033 | 93 | 62292 | 8.58 | ug/L | | 97 |

CS 4/8/08

Data File: C:\msdchem\1\DATA\A040408\A040422.D
Acq On : 4 Apr 2008 7:33 pm
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 04 19:57:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

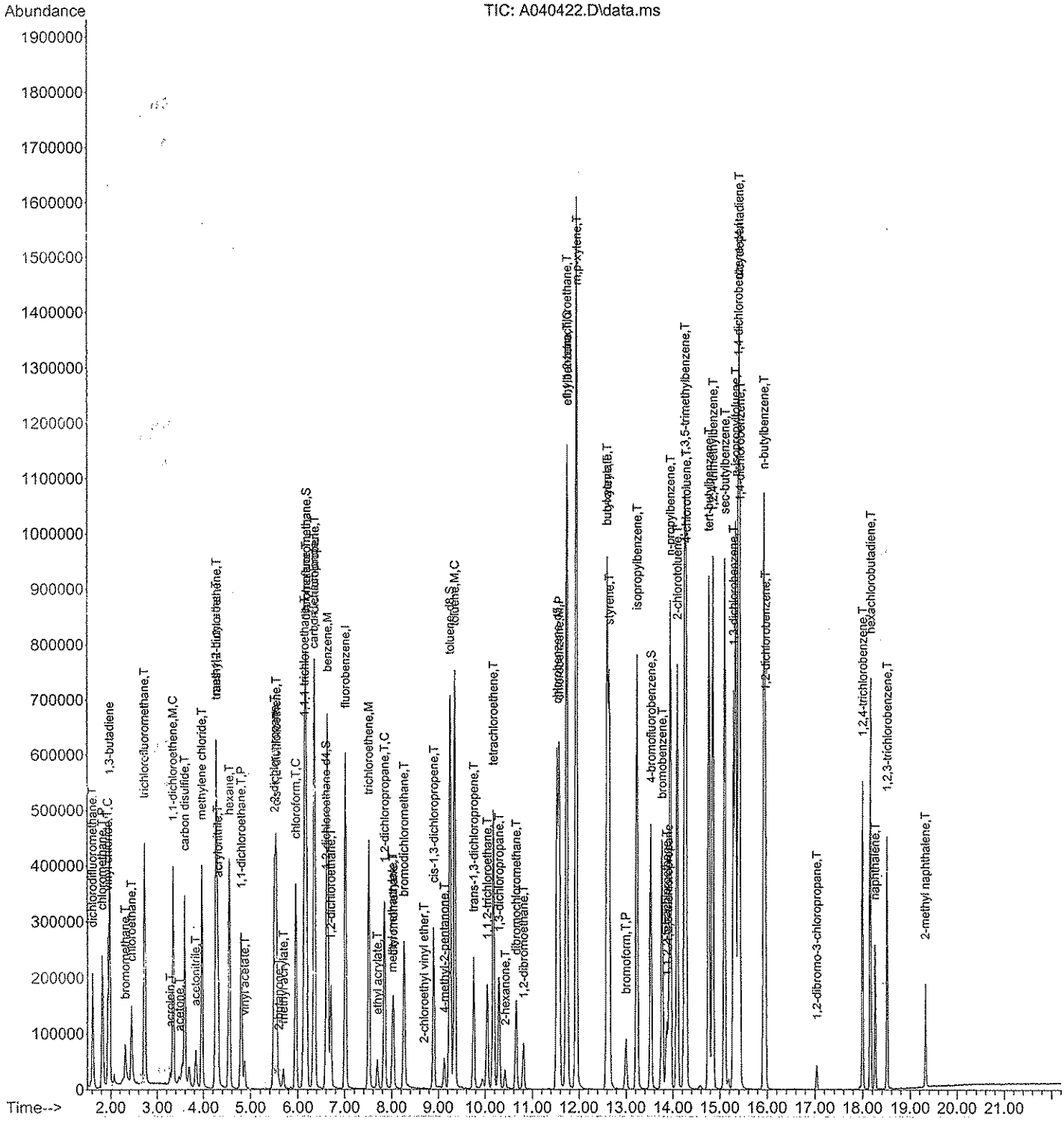
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.258 | 83 | 233930 | 9.04 ug/L | 100 |
| 40) 2-chloroethyl vinyl ether | 8.690 | 63 | 669 | 1.08 ug/L # | 47 |
| 42) cis-1,3-dichloropropene | 8.897 | 75 | 201077 | 10.98 ug/L | 97 |
| 43) 4-methyl-2-pentanone | 9.128 | 43 | 55589 | 10.13 ug/L | 89 |
| 45) toluene | 9.347 | 92 | 425523 | 10.96 ug/L | 100 |
| 46) 1,1,2-trichloroethane | 10.040 | 83 | 66845 | 11.02 ug/L | 95 |
| 47) 1,3-dichloropropane | 10.290 | 76 | 142155 | 10.92 ug/L | 97 |
| 48) tetrachloroethene | 10.168 | 164 | 157461 | 11.10 ug/L | 97 |
| 49) trans-1,3-dichloropropene | 9.754 | 75 | 153423 | 11.06 ug/L | 96 |
| 50) 2-hexanone | 10.423 | 43 | 36756 | 11.12 ug/L | 98 |
| 51) dibromochloromethane | 10.648 | 129 | 117903 | 11.02 ug/L | 97 |
| 52) 1,2-dibromoethane | 10.806 | 107 | 77495 | 10.74 ug/L | 99 |
| 53) chlorobenzene | 11.573 | 112 | 432890 | 10.98 ug/L | 96 |
| 54) 1,1,1,2-tetrachloroethane | 11.731 | 131 | 161392 | 11.03 ug/L | 98 |
| 55) ethylbenzene | 11.737 | 91 | 897462 | 11.40 ug/L | 99 |
| 56) m,p-xylene | 11.938 | 106 | 642680 | 22.39 ug/L | 99 |
| 57) butyl acrylate | 12.594 | 55 | 161684 | 10.30 ug/L | 99 |
| 58) o-xylene | 12.600 | 106 | 303689 | 11.30 ug/L | 96 |
| 59) styrene | 12.643 | 104 | 478135 | 11.09 ug/L | 100 |
| 60) isopropylbenzene | 13.227 | 105 | 780968 | 11.74 ug/L | 96 |
| 61) bromobenzene | 13.762 | 156 | 187208 | 10.99 ug/L | 96 |
| 62) bromoform | 12.996 | 173 | 63284 | 10.62 ug/L | 98 |
| 64) 1,2,3-trichloropropane | 13.902 | 75 | 69283 | 10.53 ug/L | 97 |
| 65) n-propylbenzene | 13.938 | 91 | 1052995 | 11.69 ug/L | 99 |
| 66) 2-chlorotoluene | 14.090 | 91 | 634463 | 11.40 ug/L | 99 |
| 67) 4-chlorotoluene | 14.279 | 91 | 749820 | 11.49 ug/L | 98 |
| 68) 1,3,5-trimethylbenzene | 14.248 | 105 | 748771 | 11.68 ug/L | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.859 | 83 | 77780 | 11.19 ug/L | 92 |
| 71) tert-butylbenzene | 14.759 | 119 | 612662 | 12.06 ug/L | 98 |
| 72) sec-butylbenzene | 15.100 | 105 | 916768 | 12.33 ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.844 | 105 | 767337 | 11.78 ug/L | 100 |
| 74) 1,3-dichlorobenzene | 15.282 | 146 | 372801 | 11.26 ug/L | 98 |
| 75) p-isopropyltoluene | 15.325 | 119 | 758097 | 12.20 ug/L | 98 |
| 76) dicyclopentadiene | 15.398 | 66 | 767014 | 11.31 ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.422 | 146 | 361713 | 10.98 ug/L | 99 |
| 78) 1,2-dichlorobenzene | 15.957 | 146 | 298078 | 11.05 ug/L | 99 |
| 79) n-butylbenzene | 15.921 | 91 | 730129 | 12.35 ug/L | 100 |
| 80) 1,2-dibromo-3-chloropr... | 17.040 | 75 | 14202 | 10.63 ug/L | 95 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 179875 | 10.77 ug/L | 93 |
| 82) hexachlorobutadiene | 18.159 | 225 | 167442 | 11.53 ug/L | 100 |
| 83) naphthalene | 18.256 | 128 | 188558 | 10.65 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.505 | 180 | 132586 | 10.33 ug/L | 98 |
| 85) 2-methyl naphthalene | 19.320 | 142 | 77468 | 8.95 ug/L | 98 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040422.D
Acq On : 4 Apr 2008 7:33 pm
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 04 19:57:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040508\A040502.D
Acq On : 5 Apr 2008 6:38 am
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 05 07:15:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.206 | 0.320 | -55.3# | 149 | 0.00 |
| 3 | T,P | chloromethane | 0.329 | 0.487 | -48.0# | 152# | 0.00 |
| 4 | T,C | vinyl chloride | 0.352 | 0.392 | -11.4 | 113 | 0.00 |
| 5 | | 1,3-butadiene | 0.331 | 0.310 | 6.3 | 89 | 0.00 |
| 6 | T | bromomethane | 0.124 | 0.090 | 27.4# | 65 | 0.00 |
| 7 | T | chloroethane | 0.208 | 0.225 | -8.2 | 110 | 0.00 |
| 8 | T | trichlorofluoromethane | 0.621 | 0.757 | -21.9# | 120 | 0.00 |
| 9 | T | acrolein | 0.004 | 0.003 | 25.0# | 84 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.273 | 0.242 | 11.4 | 92 | 0.00 |
| 11 | T | acetone | 0.036 | 0.036 | 0.0 | 105 | 0.00 |
| 12 | T | carbon disulfide | 0.889 | 0.737 | 17.1 | 83 | 0.00 |
| 13 | T | methylene chloride | 0.323 | 0.235 | 27.2# | 81 | 0.00 |
| 14 | T | acrylonitrile | 0.036 | 0.028 | 22.2# | 88 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.299 | 0.247 | 17.4 | 86 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.462 | 0.345 | 25.3# | 83 | 0.00 |
| 17 | T | acetonitrile | 0.015 | 0.012 | 20.0 | 89 | 0.00 |
| 18 | T | hexane | 0.377 | 0.350 | 7.2 | 88 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.596 | 0.499 | 16.3 | 88 | 0.00 |
| 20 | T | vinyl acetate | 0.166 | 0.125 | 24.7# | 81 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.305 | 0.247 | 19.0 | 86 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.590 | 0.529 | 10.3 | 93 | 0.00 |
| 23 | T | 2-butanone | 0.008 | 0.006 | 25.0# | 81 | -0.02 |
| 24 | T | methyl acrylate | 0.091 | 0.069 | 24.2# | 86 | 0.00 |
| 25 | T,C | chloroform | 0.600 | 0.522 | 13.0 | 92 | 0.00 |
| 26 | S | dibromofluoromethane | 0.260 | 0.255 | 1.9 | 96 | 0.00 |
| 27 | I | 1,1,1-trichloroethane | 0.633 | 0.572 | 9.6 | 94 | 0.00 |
| 28 | T | cyclohexane | 0.477 | 0.453 | 5.0 | 91 | 0.00 |
| 29 | T | carbon tetrachloride | 0.545 | 0.491 | 9.9 | 92 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.250 | 0.257 | -2.8 | 103 | 0.00 |
| 31 | M | benzene | 1.120 | 0.937 | 16.3 | 87 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.433 | 0.383 | 11.5 | 92 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.346 | 0.294 | 15.0 | 93 | 0.00 |
| 34 | M | trichloroethene | 0.336 | 0.288 | 14.3 | 91 | 0.00 |
| 35 | T | ethyl acrylate | 0.136 | 0.103 | 24.3# | 85 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.255 | 0.209 | 18.0 | 87 | 0.00 |
| 37 | T | methyl methacrylate | 0.108 | 0.086 | 20.4# | 89 | 0.00 |
| 38 | T | dibromomethane | 0.111 | 0.090 | 18.9 | 91 | -0.01 |
| 39 | T | bromodichloromethane | 0.396 | 0.344 | 13.1 | 93 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.010 | 0.001 | 90.0# | 9# | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 78 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.411 | 0.431 | -4.9 | 88 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.123 | 0.115 | 6.5 | 81 | -0.01 |
| 44 | S | toluene-d8 | 1.215 | 1.456 | -19.8 | 91 | 0.00 |
| 45 | M,C | toluene | 0.871 | 0.937 | -7.6 | 88 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.136 | 0.140 | -2.9 | 89 | 0.00 |

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040508\A040502.D
Acq On : 5 Apr 2008 6:38 am
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 05 07:15:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 17 | T | 1,3-dichloropropane | 0.292 | 0.302 | -3.4 | 88 | 0.00 |
| 48 | T | tetrachloroethene | 0.318 | 0.352 | -10.7 | 89 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.324 | -4.2 | 88 | 0.00 |
| 50 | T | 2-hexanone | 0.074 | 0.070 | 5.4 | 84 | -0.01 |
| 51 | T | dibromochloromethane | 0.240 | 0.257 | -7.1 | 92 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.162 | 0.168 | -3.7 | 89 | -0.01 |
| 53 | M,P | chlorobenzene | 0.884 | 0.934 | -5.7 | 89 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.328 | 0.353 | -7.6 | 90 | 0.00 |
| 55 | T,C | ethylbenzene | 1.766 | 1.990 | -12.7 | 90 | 0.00 |
| 56 | T | m,p-xylene | 0.644 | 0.711 | -10.4 | 89 | 0.00 |
| 57 | T | butyl acrylate | 0.352 | 0.351 | 0.3 | 84 | 0.00 |
| 58 | T | o-xylene | 0.603 | 0.663 | -10.0 | 89 | 0.00 |
| 59 | T | styrene | 0.967 | 1.040 | -7.5 | 88 | 0.00 |
| 60 | T | isopropylbenzene | 1.492 | 1.749 | -17.2 | 91 | 0.00 |
| 61 | T | bromobenzene | 0.382 | 0.407 | -6.5 | 89 | 0.00 |
| 62 | T,P | bromoform | 0.134 | 0.137 | -2.2 | 87 | -0.01 |
| 63 | S | 4-bromofluorobenzene | 0.512 | 0.522 | -2.0 | 80 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.148 | 0.151 | -2.0 | 88 | 0.00 |
| 65 | T | n-propylbenzene | 2.021 | 2.391 | -18.3 | 93 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.248 | 1.435 | -15.0 | 93 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.464 | 1.667 | -13.9 | 91 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.438 | 1.688 | -17.4 | 91 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 76 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.278 | 0.287 | -3.2 | 88 | 0.00 |
| 71 | T | tert-butylbenzene | 2.035 | 2.485 | -22.1# | 94 | 0.00 |
| 72 | T | sec-butylbenzene | 2.977 | 3.663 | -23.0# | 93 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.608 | 3.078 | -18.0 | 91 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.326 | 1.468 | -10.7 | 90 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.488 | 3.081 | -23.8# | 94 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 3.269 | -20.4# | 95 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.319 | 1.433 | -8.6 | 89 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.081 | 1.164 | -7.7 | 89 | 0.00 |
| 79 | T | n-butylbenzene | 2.367 | 2.927 | -23.7# | 92 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.053 | 0.053 | 0.0 | 89 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.669 | 0.671 | -0.3 | 82 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.582 | 0.675 | -16.0 | 92 | 0.00 |
| 83 | T | naphthalene | 0.709 | 0.650 | 8.3 | 74 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.514 | 0.478 | 7.0 | 79 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.346 | 0.235 | 32.1# | 59 | 0.00 |

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

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040502.D
Acq On : 5 Apr 2008 6:38 am
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 05 07:15:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 585305 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 388296 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.383 | 152 | 217636 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.163 | 113 | 149289 | 9.79 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.90% | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 150173 | 10.27 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 102.70% | | |
| 44) toluene-d8 | 9.247 | 98 | 565224 | 11.98 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 119.80% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 202665 | 10.20 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 102.00% | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.602 | 85 | 187541 | 15.53 | ug/L | 97 |
| 3) chloromethane | 1.809 | 50 | 285241 | 14.79 | ug/L | 97 |
| 4) vinyl chloride | 1.937 | 62 | 229654 | 11.15 | ug/L | 96 |
| 5) 1,3-butadiene | 1.973 | 39 | 181421 | 9.37 | ug/L | 96 |
| 6) bromomethane | 2.314 | 94 | 52544 | 7.22 | ug/L | 99 |
| 7) chloroethane | 2.442 | 64 | 131626 | 10.82 | ug/L | 95 |
| 8) trichlorofluoromethane | 2.727 | 101 | 442784 | 12.17 | ug/L | 99 |
| 9) acrolein | 3.275 | 56 | 17530 | 75.59 | ug/L | 97 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 141786 | 8.87 | ug/L | 95 |
| 11) acetone | 3.469 | 43 | 20852 | 9.95 | ug/L | 92 |
| 12) carbon disulfide | 3.585 | 76 | 431487 | 8.29 | ug/L | 99 |
| 13) methylene chloride | 3.962 | 84 | 137563 | 7.29 | ug/L | 93 |
| 14) acrylonitrile | 4.296 | 53 | 162648 | 77.94 | ug/L | 95 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 144288 | 8.24 | ug/L | 99 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 202048 | 7.47 | ug/L | 100 |
| 17) acetonitrile | 3.828 | 41 | 71036 | 78.65 | ug/L | 96 |
| 18) hexane | 4.546 | 57 | 204755 | 9.27 | ug/L | 97 |
| 19) 1,1-dichloroethane | 4.795 | 63 | 291800 | 8.36 | ug/L | 99 |
| 20) vinyl acetate | 4.868 | 43 | 72915 | 7.53 | ug/L | 97 |
| 21) cis-1,2-dichloroethene | 5.531 | 96 | 144857 | 8.11 | ug/L | 94 |
| 22) 2,2-dichloropropane | 5.494 | 77 | 309802 | 8.97 | ug/L | 98 |
| 23) 2-butanone | 5.580 | 72 | 3563 | 8.06 | ug/L # | 48 |
| 24) methyl acrylate | 5.689 | 55 | 40637 | 7.61 | ug/L | 90 |
| 25) chloroform | 5.957 | 83 | 305680 | 8.71 | ug/L | 98 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 334682 | 9.03 | ug/L | 98 |
| 28) cyclohexane | 6.163 | 56 | 265121 | 9.49 | ug/L | 97 |
| 29) carbon tetrachloride | 6.334 | 117 | 287357 | 9.01 | ug/L | 96 |
| 31) benzene | 6.626 | 78 | 548504 | 8.37 | ug/L | 98 |
| 32) 1,1-dichloropropene | 6.346 | 75 | 224231 | 8.84 | ug/L | 95 |
| 33) 1,2-dichloroethane | 6.699 | 62 | 172337 | 8.50 | ug/L | 95 |
| 34) trichloroethene | 7.507 | 95 | 168818 | 8.58 | ug/L | 99 |
| 35) ethyl acrylate | 7.690 | 55 | 60576 | 7.60 | ug/L | 98 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 122134 | 8.18 | ug/L | 94 |
| 37) methyl methacrylate | 8.012 | 41 | 50271 | 7.96 | ug/L | 95 |
| 38) dibromomethane | 8.030 | 93 | 52892 | 8.14 | ug/L | 98 |

Data File: C:\msdchem\1\DATA\A040508\A040502.D
Acq On : 5 Apr 2008 6:38 am
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 05 07:15:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

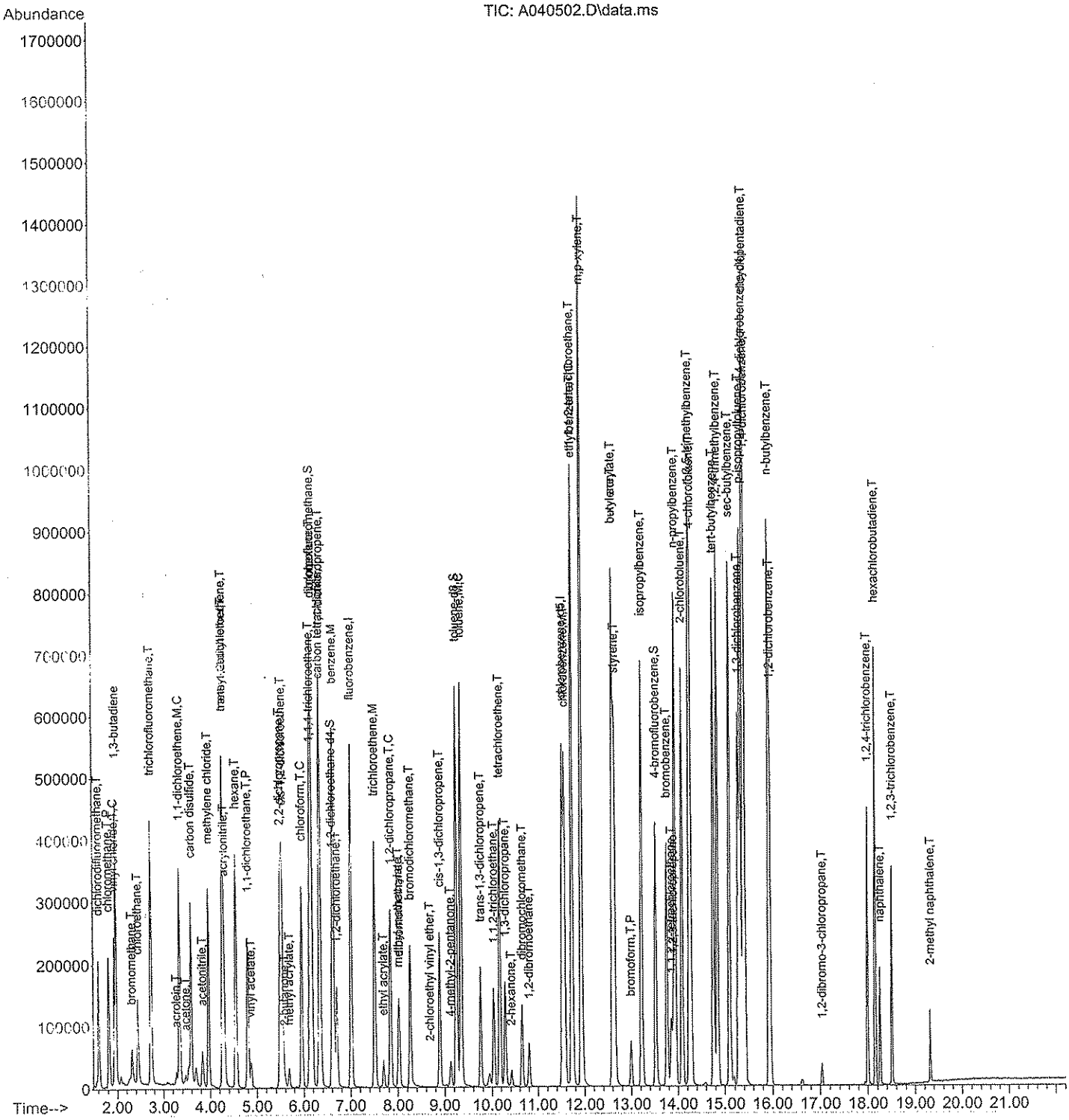
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.261 | 83 | 201402 | 8.70 ug/L | 97 |
| 40) 2-chloroethyl vinyl ether | 8.681 | 63 | 306 | 0.55 ug/L # | 47 |
| 42) cis-1,3-dichloropropene | 8.894 | 75 | 167543 | 10.51 ug/L | 93 |
| 43) 4-methyl-2-pentanone | 9.125 | 43 | 44769 | 9.37 ug/L | 93 |
| 45) toluene | 9.344 | 92 | 363911 | 10.76 ug/L | 98 |
| 46) 1,1,2-trichloroethane | 10.037 | 83 | 54267 | 10.27 ug/L | 98 |
| 47) 1,3-dichloropropane | 10.286 | 76 | 117260 | 10.34 ug/L | 99 |
| 48) tetrachloroethene | 10.165 | 164 | 136773 | 11.07 ug/L | 97 |
| 49) trans-1,3-dichloropropene | 9.751 | 75 | 125638 | 10.40 ug/L | 96 |
| 50) 2-hexanone | 10.414 | 43 | 27353 | 9.50 ug/L | 94 |
| 51) dibromochloromethane | 10.651 | 129 | 99898 | 10.72 ug/L | 96 |
| 52) 1,2-dibromoethane | 10.803 | 107 | 65296 | 10.39 ug/L | 97 |
| 53) chlorobenzene | 11.570 | 112 | 362862 | 10.57 ug/L | 95 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 137261 | 10.77 ug/L | 98 |
| 55) ethylbenzene | 11.740 | 91 | 772799 | 11.27 ug/L | 99 |
| 56) m,p-xylene | 11.935 | 106 | 552226 | 22.08 ug/L | 98 |
| 57) butyl acrylate | 12.597 | 55 | 136221 | 9.96 ug/L | 100 |
| 58) o-xylene | 12.597 | 106 | 257334 | 10.99 ug/L | 99 |
| 59) styrene | 12.646 | 104 | 403816 | 10.76 ug/L | 99 |
| 60) isopropylbenzene | 13.224 | 105 | 679281 | 11.72 ug/L | 98 |
| 61) bromobenzene | 13.759 | 156 | 158089 | 10.66 ug/L | 97 |
| 62) bromoform | 12.993 | 173 | 53027 | 10.22 ug/L | 94 |
| 64) 1,2,3-trichloropropane | 13.899 | 75 | 58534 | 10.22 ug/L | 98 |
| 65) n-propylbenzene | 13.935 | 91 | 928510 | 11.83 ug/L | 99 |
| 66) 2-chlorotoluene | 14.087 | 91 | 557193 | 11.50 ug/L | 98 |
| 67) 4-chlorotoluene | 14.276 | 91 | 647366 | 11.39 ug/L | 98 |
| 68) 1,3,5-trimethylbenzene | 14.245 | 105 | 655534 | 11.74 ug/L | 98 |
| 70) 1,1,2,2-tetrachloroethane | 13.856 | 83 | 62520 | 10.32 ug/L | 98 |
| 71) tert-butylbenzene | 14.762 | 119 | 540924 | 12.22 ug/L | 99 |
| 72) sec-butylbenzene | 15.097 | 105 | 797211 | 12.30 ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.847 | 105 | 669799 | 11.80 ug/L | 99 |
| 74) 1,3-dichlorobenzene | 15.285 | 146 | 319425 | 11.07 ug/L | 99 |
| 75) p-isopropyltoluene | 15.328 | 119 | 670446 | 12.38 ug/L | 99 |
| 76) dicyclopentadiene | 15.401 | 66 | 711506 | 12.04 ug/L | 100 |
| 77) 1,4-dichlorobenzene | 15.419 | 146 | 311894 | 10.86 ug/L | 97 |
| 78) 1,2-dichlorobenzene | 15.954 | 146 | 253352 | 10.77 ug/L | 99 |
| 79) n-butylbenzene | 15.924 | 91 | 637006 | 12.37 ug/L | 99 |
| 80) 1,2-dibromo-3-chloropr... | 17.043 | 75 | 11566 | 9.93 ug/L | 97 |
| 81) 1,2,4-trichlorobenzene | 17.992 | 180 | 146027 | 10.03 ug/L | 97 |
| 82) hexachlorobutadiene | 18.156 | 225 | 146887 | 11.60 ug/L | 98 |
| 83) naphthalene | 18.259 | 128 | 141543 | 9.17 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.508 | 180 | 103998 | 9.30 ug/L | 97 |
| 85) 2-methyl naphthalene | 19.323 | 142 | 51077 | 6.77 ug/L | 99 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040502.D
Acq On : 5 Apr 2008 6:38 am
Sample : ,CCV,CCV_W25 10 ppB,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 05 07:15:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

4-6-08 JB

ok full 8260

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.206 | 0.332 | -61.2# | 171# | 0.00 |
| 3 | T,P | chloromethane | 0.329 | 0.465 | -41.3# | 161# | 0.00 |
| 4 | T,C | vinyl chloride | 0.352 | 0.421 | -19.6 | 133 | 0.00 |
| 5 | | 1,3-butadiene | 0.331 | 0.263 | 20.5# | 83 | 0.00 |
| 6 | T | bromomethane | 0.124 | 0.146 | -17.7 | 117 | 0.00 |
| 7 | T | chloroethane | 0.208 | 0.230 | -10.6 | 124 | 0.00 |
| 8 | T | trichlorofluoromethane | 0.621 | 0.710 | -14.3 | 125 | 0.00 |
| 9 | T | acrolein | 0.004 | 0.003 | 25.0# | 92 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.273 | 0.221 | 19.0 | 93 | 0.00 |
| 11 | T | acetone | 0.036 | 0.030 | 16.7 | 97 | 0.00 |
| 12 | T | carbon disulfide | 0.889 | 0.633 | 28.8# | 79 | 0.00 |
| 13 | T | methylene chloride | 0.323 | 0.240 | 25.7# | 92 | 0.00 |
| 14 | T | acrylonitrile | 0.036 | 0.030 | 16.7 | 104 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.299 | 0.245 | 18.1 | 94 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.462 | 0.380 | 17.7 | 101 | 0.00 |
| 17 | T | acetonitrile | 0.015 | 0.012 | 20.0 | 100 | 0.00 |
| 18 | T | hexane | 0.377 | 0.363 | 3.7 | 100 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.596 | 0.500 | 16.1 | 97 | 0.00 |
| 20 | T | vinyl acetate | 0.166 | 0.136 | 18.1 | 98 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.305 | 0.258 | 15.4 | 99 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.590 | 0.531 | 10.0 | 102 | 0.00 |
| 23 | T | 2-butanone | 0.008 | 0.007 | 12.5 | 97 | -0.02 |
| 24 | T | methyl acrylate | 0.091 | 0.079 | 13.2 | 109 | 0.00 |
| 25 | T,C | chloroform | 0.600 | 0.527 | 12.2 | 102 | 0.00 |
| 26 | S | dibromofluoromethane | 0.260 | 0.253 | 2.7 | 106 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.633 | 0.578 | 8.7 | 105 | 0.00 |
| 28 | T | cyclohexane | 0.477 | 0.454 | 4.8 | 101 | 0.00 |
| 29 | T | carbon tetrachloride | 0.545 | 0.490 | 10.1 | 101 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.250 | 0.254 | -1.6 | 112 | 0.00 |
| 31 | M | benzene | 1.120 | 0.959 | 14.4 | 99 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.433 | 0.386 | 10.9 | 102 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.346 | 0.303 | 12.4 | 106 | 0.00 |
| 34 | M | trichloroethene | 0.336 | 0.299 | 11.0 | 104 | 0.00 |
| 35 | T | ethyl acrylate | 0.136 | 0.114 | 16.2 | 103 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.255 | 0.222 | 12.9 | 102 | 0.00 |
| 37 | T | methyl methacrylate | 0.108 | 0.094 | 13.0 | 107 | 0.00 |
| 38 | T | dibromomethane | 0.111 | 0.097 | 12.6 | 107 | -0.01 |
| 39 | T | bromodichloromethane | 0.396 | 0.355 | 10.4 | 106 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.010 | 0.000 | 100.0# | 2# | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 89 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.411 | 0.448 | -9.0 | 104 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.123 | 0.124 | -0.8 | 100 | 0.00 |
| 44 | S | toluene-d8 | 1.215 | 1.410 | -16.0 | 100 | 0.00 |
| 45 | M,C | toluene | 0.871 | 0.953 | -9.4 | 102 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.136 | 0.143 | -5.1 | 104 | 0.00 |

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.292 | 0.311 | -6.5 | 104 | 0.00 |
| 48 | T | tetrachloroethene | 0.318 | 0.360 | -13.2 | 104 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.340 | -9.3 | 105 | 0.00 |
| 50 | T | 2-hexanone | 0.074 | 0.083 | -12.2 | 113 | -0.01 |
| 51 | T | dibromochloromethane | 0.240 | 0.267 | -11.3 | 109 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.162 | 0.173 | -6.8 | 104 | -0.01 |
| 53 | M,P | chlorobenzene | 0.884 | 0.978 | -10.6 | 106 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.328 | 0.367 | -11.9 | 106 | 0.00 |
| 55 | T,C | ethylbenzene | 1.766 | 2.030 | -14.9 | 105 | 0.00 |
| 56 | T | m,p-xylene | 0.644 | 0.731 | -13.5 | 104 | 0.00 |
| 57 | T | butyl acrylate | 0.352 | 0.368 | -4.5 | 100 | 0.00 |
| 58 | T | o-xylene | 0.603 | 0.689 | -14.3 | 106 | 0.00 |
| 59 | T | styrene | 0.967 | 1.076 | -11.3 | 104 | 0.00 |
| 60 | T | isopropylbenzene | 1.492 | 1.780 | -19.3 | 106 | 0.00 |
| 61 | T | bromobenzene | 0.382 | 0.424 | -11.0 | 106 | 0.00 |
| 62 | T,P | bromoform | 0.134 | 0.147 | -9.7 | 108 | -0.01 |
| 63 | S | 4-bromofluorobenzene | 0.512 | 0.520 | -1.6 | 91 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.148 | 0.153 | -3.4 | 102 | 0.00 |
| 65 | T | n-propylbenzene | 2.021 | 2.381 | -17.8 | 106 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.248 | 1.426 | -14.3 | 105 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.464 | 1.671 | -14.1 | 105 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.438 | 1.703 | -18.4 | 105 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 85 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.278 | 0.306 | -10.1 | 105 | 0.00 |
| 71 | T | tert-butylbenzene | 2.035 | 2.574 | -26.5# | 108 | 0.00 |
| 72 | T | sec-butylbenzene | 2.977 | 3.841 | -29.0# | 109 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.608 | 3.182 | -22.0# | 105 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.326 | 1.562 | -17.8 | 107 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.488 | 3.198 | -28.5# | 109 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 3.103 | -14.2 | 100 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.319 | 1.489 | -12.9 | 103 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.081 | 1.247 | -15.4 | 106 | 0.00 |
| 79 | T | n-butylbenzene | 2.367 | 3.018 | -27.5# | 105 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.053 | 0.056 | -5.7 | 105 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.669 | 0.760 | -13.6 | 103 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.582 | 0.743 | -27.7# | 113 | 0.00 |
| 83 | T | naphthalene | 0.709 | 0.772 | -8.9 | 98 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.514 | 0.567 | -10.3 | 104 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.346 | 0.362 | -4.6 | 102 | 0.00 |

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

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 646461 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 443830 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 242707 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.164 | 113 | 163573 | 9.72 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.20% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 163891 | 10.15 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.50% | | | |
| 44) toluene-d8 | 9.247 | 98 | 625800 | 11.61 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 116.10% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 230988 | 10.17 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 214661 | 16.09 | ug/L | 96 |
| 3) chloromethane | 1.816 | 50 | 300518 | 14.11 | ug/L | 94 |
| 4) vinyl chloride | 1.937 | 62 | 272310 | 11.97 | ug/L | 99 |
| 5) 1,3-butadiene | 1.974 | 39 | 170290 | 7.96 | ug/L | 97 |
| 6) bromomethane | 2.314 | 94 | 94659 | 11.77 | ug/L | 97 |
| 7) chloroethane | 2.442 | 64 | 148598 | 11.06 | ug/L | 96 |
| 8) trichlorofluoromethane | 2.728 | 101 | 459181 | 11.43 | ug/L | 99 |
| 9) acrolein | 3.275 | 56 | 19129 | 74.69 | ug/L | 93 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 142551 | 8.07 | ug/L | 97 |
| 11) acetone | 3.476 | 43 | 19330 | 8.35 | ug/L | 99 |
| 12) carbon disulfide | 3.585 | 76 | 409180 | 7.12 | ug/L | 100 |
| 13) methylene chloride | 3.962 | 84 | 155089 | 7.44 | ug/L | 91 |
| 14) acrylonitrile | 4.297 | 53 | 193272 | 83.85 | ug/L | 99 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 158212 | 8.18 | ug/L | 98 |
| 16) methyl-t-butyl ether | 4.260 | 73 | 245802 | 8.23 | ug/L | 98 |
| 17) acetonitrile | 3.822 | 41 | 80214 | 80.41 | ug/L | 95 |
| 18) hexane | 4.546 | 57 | 234404 | 9.61 | ug/L | 98 |
| 19) 1,1-dichloroethane | 4.795 | 63 | 323199 | 8.39 | ug/L | 99 |
| 20) vinyl acetate | 4.874 | 43 | 88079 | 8.23 | ug/L | 99 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 166631 | 8.45 | ug/L | 98 |
| 22) 2,2-dichloropropane | 5.495 | 77 | 343021 | 8.99 | ug/L | 98 |
| 23) 2-butanone | 5.586 | 72 | 4227 | 8.66 | ug/L # | 85 |
| 24) methyl acrylate | 5.683 | 55 | 51102 | 8.67 | ug/L | 94 |
| 25) chloroform | 5.957 | 83 | 340751 | 8.79 | ug/L | 99 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 373762 | 9.13 | ug/L | 99 |
| 28) cyclohexane | 6.164 | 56 | 293775 | 9.52 | ug/L | 97 |
| 29) carbon tetrachloride | 6.334 | 117 | 317025 | 9.00 | ug/L | 99 |
| 31) benzene | 6.626 | 78 | 620195 | 8.57 | ug/L | 98 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 249441 | 8.91 | ug/L | 99 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 195909 | 8.75 | ug/L | 98 |
| 34) trichloroethene | 7.508 | 95 | 193024 | 8.89 | ug/L | 99 |
| 35) ethyl acrylate | 7.690 | 55 | 73685 | 8.37 | ug/L | 99 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 143365 | 8.69 | ug/L | 91 |
| 37) methyl methacrylate | 8.012 | 41 | 60733 | 8.71 | ug/L | 91 |
| 38) dibromomethane | 8.031 | 93 | 62469 | 8.71 | ug/L | 96 |

4-6-08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

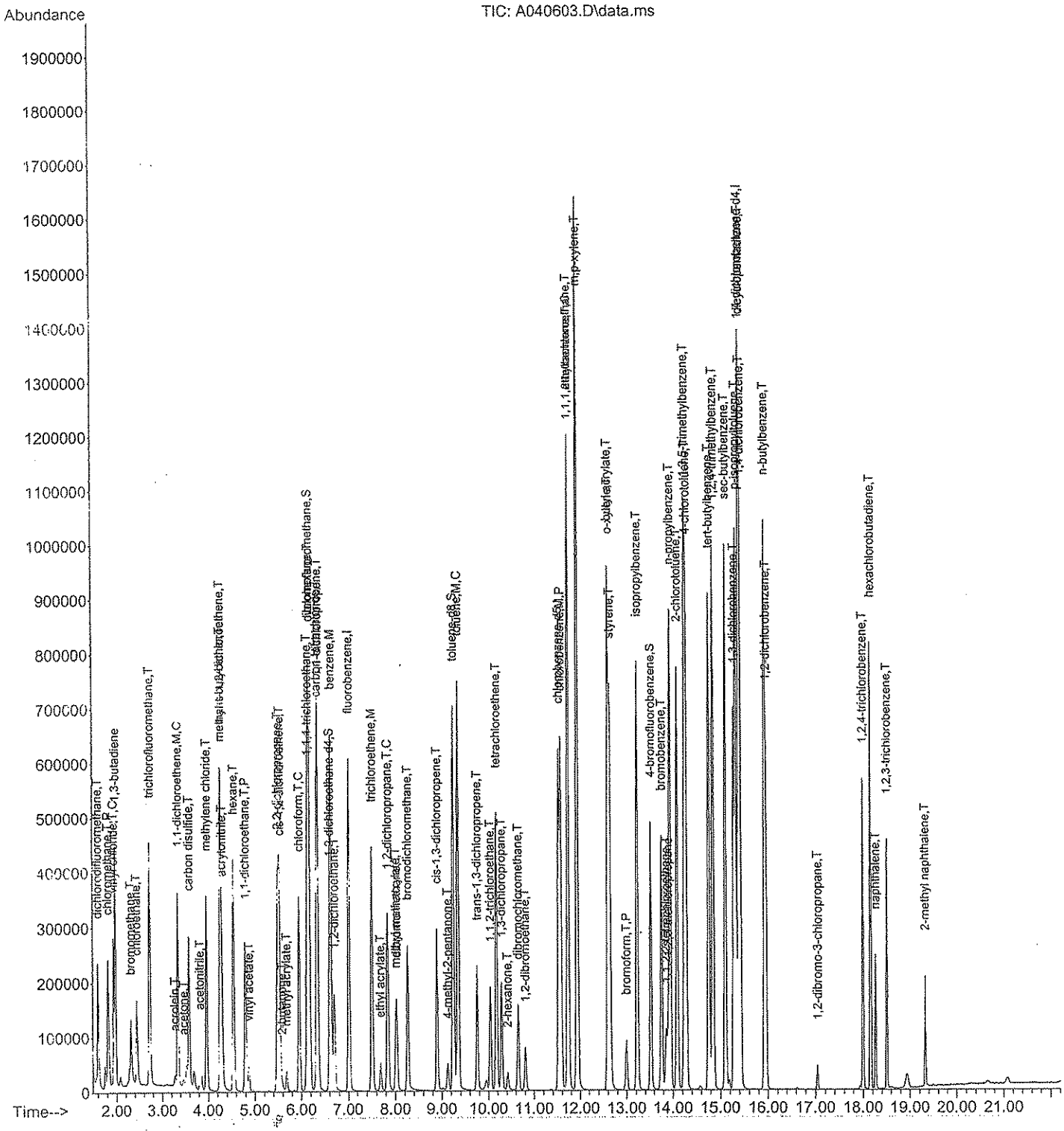
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.262 | 83 | 229467 | 8.97 | ug/L | 99 |
| 42) cis-1,3-dichloropropene | 8.894 | 75 | 198963 | 10.91 | ug/L | 97 |
| 43) 4-methyl-2-pentanone | 9.131 | 43 | 55136 | 10.09 | ug/L | 96 |
| 45) toluene | 9.344 | 92 | 423149 | 10.95 | ug/L | 99 |
| 46) 1,1,2-trichloroethane | 10.037 | 83 | 63367 | 10.49 | ug/L | 98 |
| 47) 1,3-dichloropropane | 10.287 | 76 | 138183 | 10.66 | ug/L | 98 |
| 48) tetrachloroethene | 10.171 | 164 | 159892 | 11.32 | ug/L | 95 |
| 49) trans-1,3-dichloropropene | 9.752 | 75 | 151032 | 10.93 | ug/L | 95 |
| 50) 2-hexanone | 10.415 | 43 | 36645 | 11.13 | ug/L | 95 |
| 51) dibromochloromethane | 10.646 | 129 | 118514 | 11.12 | ug/L | 95 |
| 52) 1,2-dibromoethane | 10.804 | 107 | 76709 | 10.68 | ug/L | 98 |
| 53) chlorobenzene | 11.570 | 112 | 434184 | 11.06 | ug/L | 96 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 162720 | 11.16 | ug/L | 96 |
| 55) ethylbenzene | 11.734 | 91 | 900972 | 11.50 | ug/L | 97 |
| 56) m,p-xylene | 11.935 | 106 | 648820 | 22.70 | ug/L | 96 |
| 57) butyl acrylate | 12.598 | 55 | 163389 | 10.45 | ug/L | 98 |
| 58) o-xylene | 12.604 | 106 | 305833 | 11.43 | ug/L | 95 |
| 59) styrene | 12.640 | 104 | 477557 | 11.13 | ug/L | 98 |
| 60) isopropylbenzene | 13.224 | 105 | 790173 | 11.93 | ug/L | 100 |
| 61) bromobenzene | 13.759 | 156 | 188362 | 11.11 | ug/L | 96 |
| 62) bromoform | 12.993 | 173 | 65283 | 11.01 | ug/L | 97 |
| 64) 1,2,3-trichloropropane | 13.899 | 75 | 68018 | 10.39 | ug/L | 99 |
| 65) n-propylbenzene | 13.936 | 91 | 1056838 | 11.78 | ug/L | 100 |
| 66) 2-chlorotoluene | 14.088 | 91 | 633016 | 11.43 | ug/L | 100 |
| 67) 4-chlorotoluene | 14.276 | 91 | 741536 | 11.41 | ug/L | 97 |
| 68) 1,3,5-trimethylbenzene | 14.246 | 105 | 755989 | 11.84 | ug/L | 98 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 74370 | 11.00 | ug/L | 99 |
| 71) tert-butylbenzene | 14.763 | 119 | 624793 | 12.65 | ug/L | 100 |
| 72) sec-butylbenzene | 15.097 | 105 | 932207 | 12.90 | ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 772220 | 12.20 | ug/L | 99 |
| 74) 1,3-dichlorobenzene | 15.286 | 146 | 379153 | 11.78 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.328 | 119 | 776148 | 12.85 | ug/L | 99 |
| 76) dicyclopentadiene | 15.401 | 66 | 753237 | 11.43 | ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.419 | 146 | 361388 | 11.29 | ug/L | 98 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 302709 | 11.54 | ug/L | 99 |
| 79) n-butylbenzene | 15.924 | 91 | 732402 | 12.75 | ug/L | 100 |
| 80) 1,2-dibromo-3-chloropr... | 17.043 | 75 | 13688 | 10.54 | ug/L | 90 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 184397 | 11.36 | ug/L | 96 |
| 82) hexachlorobutadiene | 18.156 | 225 | 180257 | 12.77 | ug/L | 98 |
| 83) naphthalene | 18.259 | 128 | 187250 | 10.88 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 137562 | 11.03 | ug/L | 98 |
| 85) 2-methyl naphthalene | 19.318 | 142 | 87792 | 10.44 | ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 122 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.206 | 0.280 | -35.9# | 165# | 0.00 |
| 3 | T,P | chloromethane | 0.329 | 0.392 | -19.1 | 155# | 0.00 |
| 4 | T,C | vinyl chloride | 0.352 | 0.384 | -9.1 | 139 | 0.00 |
| 5 | | 1,3-butadiene | 0.331 | 0.202 | 39.0# | 73 | 0.00 |
| 6 | T | bromomethane | 0.124 | 0.175 | -41.1# | 160# | 0.00 |
| 7 | T | chloroethane | 0.208 | 0.207 | 0.5 | 128 | 0.00 |
| 8 | T | trichlorofluoromethane | 0.621 | 0.660 | -6.3 | 133 | 0.00 |
| 9 | T | acrolein | 0.004 | 0.003 | 25.0# | 97 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.273 | 0.254 | 7.0 | 123 | 0.00 |
| 11 | T | acetone | 0.036 | 0.033 | 8.3 | 122 | 0.00 |
| 12 | T | carbon disulfide | 0.889 | 0.801 | 9.9 | 115 | 0.00 |
| 13 | T | methylene chloride | 0.323 | 0.240 | 25.7# | 105 | 0.00 |
| 14 | T | acrylonitrile | 0.036 | 0.027 | 25.0# | 109 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.299 | 0.253 | 15.4 | 112 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.462 | 0.360 | 22.1# | 109 | 0.00 |
| 17 | T | acetonitrile | 0.015 | 0.012 | 20.0 | 109 | 0.00 |
| 18 | T | hexane | 0.377 | 0.308 | 18.3 | 98 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.596 | 0.506 | 15.1 | 113 | 0.00 |
| 20 | T | vinyl acetate | 0.166 | 0.136 | 18.1 | 113 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.305 | 0.254 | 16.7 | 112 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.590 | 0.538 | 8.8 | 119 | 0.00 |
| 23 | T | 2-butanone | 0.008 | 0.007 | 12.5 | 111 | -0.03 |
| 24 | T | methyl acrylate | 0.091 | 0.073 | 19.8 | 115 | 0.00 |
| 25 | T,C | chloroform | 0.600 | 0.526 | 12.3 | 117 | 0.00 |
| 26 | S | dibromofluoromethane | 0.260 | 0.259 | 0.4 | 124 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.633 | 0.581 | 8.2 | 121 | 0.00 |
| 28 | T | cyclohexane | 0.477 | 0.409 | 14.3 | 104 | 0.00 |
| 29 | T | carbon tetrachloride | 0.545 | 0.510 | 6.4 | 121 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.250 | 0.255 | -2.0 | 130 | 0.00 |
| 31 | M | benzene | 1.120 | 0.945 | 15.6 | 112 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.433 | 0.386 | 10.9 | 117 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.346 | 0.306 | 11.6 | 123 | 0.00 |
| 34 | M | trichloroethene | 0.336 | 0.295 | 12.2 | 118 | 0.00 |
| 35 | T | ethyl acrylate | 0.136 | 0.108 | 20.6# | 112 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.255 | 0.215 | 15.7 | 114 | 0.00 |
| 37 | T | methyl methacrylate | 0.108 | 0.092 | 14.8 | 120 | 0.00 |
| 38 | T | dibromomethane | 0.111 | 0.095 | 14.4 | 121 | -0.01 |
| 39 | T | bromodichloromethane | 0.396 | 0.354 | 10.6 | 121 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.010 | 0.000 | 100.0# | 2# | 0.01 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.411 | 0.437 | -6.3 | 115 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.123 | 0.122 | 0.8 | 111 | -0.01 |
| 44 | S | toluene-d8 | 1.215 | 1.421 | -17.0 | 115 | 0.00 |
| 45 | M,C | toluene | 0.871 | 0.921 | -5.7 | 112 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.136 | 0.139 | -2.2 | 115 | 0.00 |

CF 11808

A040802.D 25ML0403.M Tue Apr 08 08:03:05 2008 voa1 Page: 1



4/08/08

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.292 | 0.303 | -3.8 | 114 | 0.00 |
| 48 | T | tetrachloroethene | 0.318 | 0.352 | -10.7 | 116 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.339 | -9.0 | 119 | 0.00 |
| 50 | T | 2-hexanone | 0.074 | 0.078 | -5.4 | 121 | 0.00 |
| 51 | T | dibromochloromethane | 0.240 | 0.265 | -10.4 | 123 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.162 | 0.176 | -8.6 | 120 | -0.01 |
| 53 | M,P | chlorobenzene | 0.884 | 0.938 | -6.1 | 115 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.328 | 0.360 | -9.8 | 118 | 0.00 |
| 55 | T,C | ethylbenzene | 1.766 | 1.949 | -10.4 | 114 | 0.00 |
| 56 | T | m,p-xylene | 0.644 | 0.699 | -8.5 | 113 | -0.01 |
| 57 | T | butyl acrylate | 0.352 | 0.345 | 2.0 | 106 | 0.00 |
| 58 | T | o-xylene | 0.603 | 0.653 | -8.3 | 114 | 0.00 |
| 59 | T | styrene | 0.967 | 1.024 | -5.9 | 113 | 0.00 |
| 60 | T | isopropylbenzene | 1.492 | 1.731 | -16.0 | 117 | 0.00 |
| 61 | T | bromobenzene | 0.382 | 0.418 | -9.4 | 119 | 0.00 |
| 62 | T,P | bromoform | 0.134 | 0.148 | -10.4 | 123 | 0.00 |
| 63 | S | 4-bromofluorobenzene | 0.512 | 0.527 | -2.9 | 104 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.148 | 0.153 | -3.4 | 115 | 0.00 |
| 65 | T | n-propylbenzene | 2.021 | 2.298 | -13.7 | 115 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.248 | 1.386 | -11.1 | 116 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.464 | 1.615 | -10.3 | 115 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.438 | 1.666 | -15.9 | 117 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.278 | 0.295 | -6.1 | 117 | 0.00 |
| 71 | T | tert-butylbenzene | 2.035 | 2.438 | -19.8 | 119 | 0.00 |
| 72 | T | sec-butylbenzene | 2.977 | 3.545 | -19.1 | 117 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.608 | 3.016 | -15.6 | 116 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.326 | 1.465 | -10.5 | 116 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.488 | 2.953 | -18.7 | 117 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 2.866 | -5.5 | 108 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.319 | 1.427 | -8.2 | 115 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.081 | 1.175 | -8.7 | 116 | 0.00 |
| 79 | T | n-butylbenzene | 2.367 | 2.773 | -17.2 | 113 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.053 | 0.058 | -9.4 | 127 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.669 | 0.734 | -9.7 | 116 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.582 | 0.662 | -13.7 | 117 | 0.00 |
| 83 | T | naphthalene | 0.709 | 0.761 | -7.3 | 113 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.514 | 0.535 | -4.1 | 114 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.346 | 0.269 | 22.3# | 88 | 0.00 |

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

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.006 | 96 | 741636 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 502757 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 281954 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 191730 | 9.93 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.30% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 189438 | 10.23 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 102.30% | | | | |
| 44) toluene-d8 | 9.244 | 98 | 714493 | 11.70 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 117.00% | | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 265006 | 10.30 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.00% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 208008 | 13.59 | ug/L | | 99 |
| 3) chloromethane | 1.813 | 50 | 291033 | 11.91 | ug/L | | 98 |
| 4) vinyl chloride | 1.935 | 62 | 284612 | 10.90 | ug/L | | 99 |
| 5) 1,3-butadiene | 1.971 | 39 | 149506 | 6.09 | ug/L | | 97 |
| 6) bromomethane | 2.312 | 94 | 129511 | 14.04 | ug/L | | 100 |
| 7) chloroethane | 2.439 | 64 | 153568 | 9.96 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.725 | 101 | 489549 | 10.62 | ug/L | | 100 |
| 9) acrolein | 3.279 | 56 | 20110 | 68.44 | ug/L | | 99 |
| 10) 1,1-dichloroethene | 3.339 | 96 | 188626 | 9.31 | ug/L | | 99 |
| 11) acetone | 3.473 | 43 | 24198 | 9.11 | ug/L | | 97 |
| 12) carbon disulfide | 3.589 | 76 | 594114 | 9.01 | ug/L | | 100 |
| 13) methylene chloride | 3.960 | 84 | 177757 | 7.43 | ug/L | | 90 |
| 14) acrylonitrile | 4.300 | 53 | 202901 | 76.73 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.264 | 96 | 187325 | 8.44 | ug/L | | 98 |
| 16) methyl-t-butyl ether | 4.264 | 73 | 266819 | 7.79 | ug/L | | 98 |
| 17) acetonitrile | 3.826 | 41 | 86833 | 75.88 | ug/L | | 96 |
| 18) hexane | 4.543 | 57 | 228206 | 8.15 | ug/L | | 97 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 375155 | 8.48 | ug/L | | 99 |
| 20) vinyl acetate | 4.872 | 43 | 101069 | 8.23 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.535 | 96 | 188220 | 8.32 | ug/L | | 99 |
| 22) 2,2-dichloropropane | 5.498 | 77 | 398822 | 9.11 | ug/L | | 99 |
| 23) 2-butanone | 5.577 | 72 | 4873 | 8.70 | ug/L | # | 87 |
| 24) methyl acrylate | 5.681 | 55 | 53913 | 7.97 | ug/L | | 97 |
| 25) chloroform | 5.954 | 83 | 390325 | 8.77 | ug/L | | 98 |
| 27) 1,1,1-trichloroethane | 6.137 | 97 | 431092 | 9.18 | ug/L | | 99 |
| 28) cyclohexane | 6.161 | 56 | 303630 | 8.58 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.337 | 117 | 378473 | 9.36 | ug/L | | 99 |
| 31) benzene | 6.629 | 78 | 700995 | 8.44 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.350 | 75 | 286045 | 8.90 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 227010 | 8.83 | ug/L | | 99 |
| 34) trichloroethene | 7.505 | 95 | 218880 | 8.78 | ug/L | | 99 |
| 35) ethyl acrylate | 7.688 | 55 | 80067 | 7.93 | ug/L | | 95 |
| 36) 1,2-dichloropropane | 7.840 | 63 | 159494 | 8.43 | ug/L | | 94 |
| 37) methyl methacrylate | 8.010 | 41 | 68027 | 8.50 | ug/L | | 92 |
| 38) dibromomethane | 8.028 | 93 | 70352 | 8.55 | ug/L | | 95 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

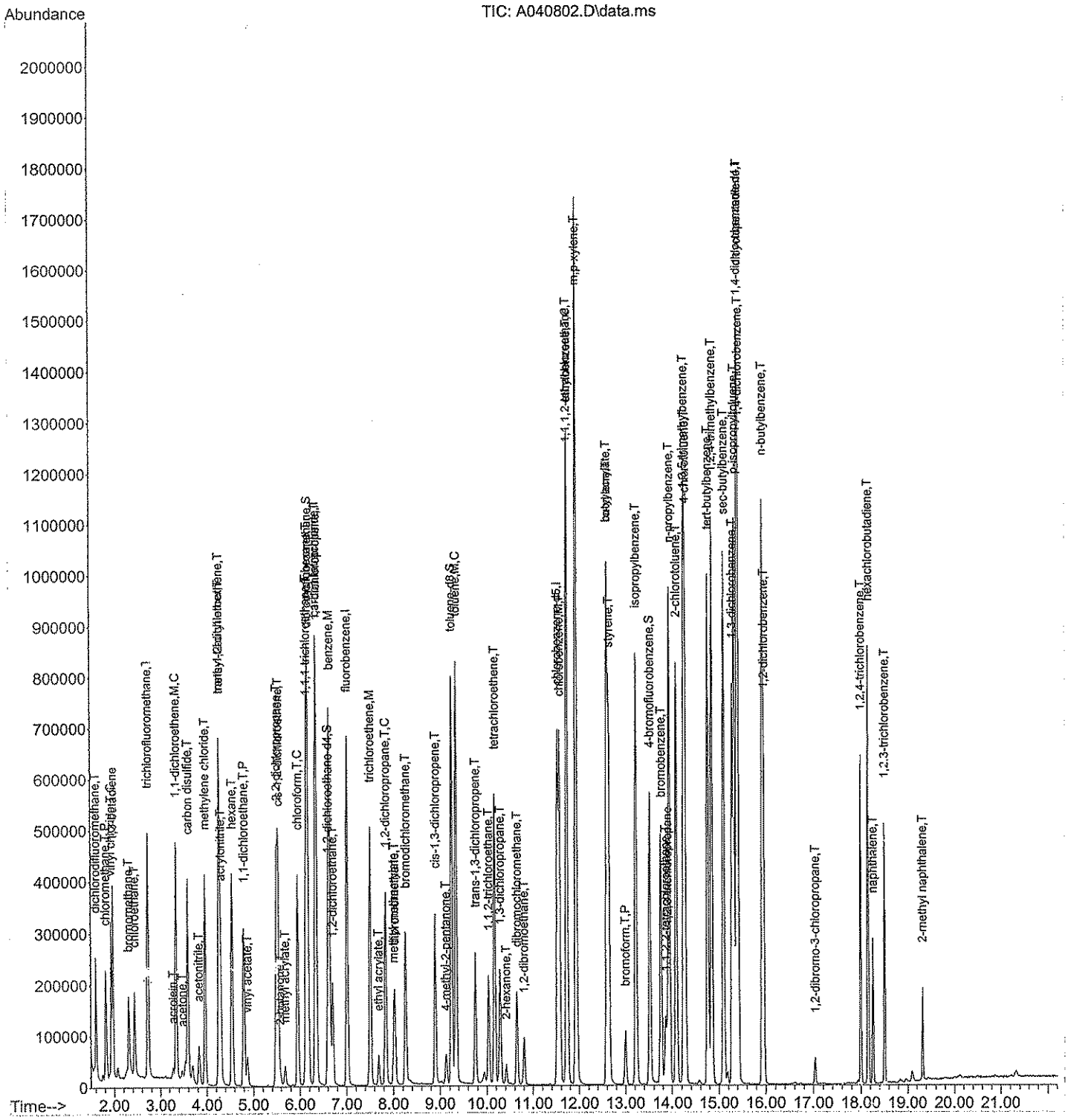
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.265 | 83 | 262416 | 8.94 | ug/L | 99 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 219938 | 10.65 | ug/L | 95 |
| 43) 4-methyl-2-pentanone | 9.123 | 43 | 61439 | 9.93 | ug/L | 95 |
| 45) toluene | 9.348 | 92 | 463245 | 10.58 | ug/L | 100 |
| 46) 1,1,2-trichloroethane | 10.035 | 83 | 70102 | 10.24 | ug/L | 97 |
| 47) 1,3-dichloropropane | 10.284 | 76 | 152262 | 10.37 | ug/L | 96 |
| 48) tetrachloroethene | 10.169 | 164 | 177089 | 11.07 | ug/L | 97 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 170524 | 10.90 | ug/L | 96 |
| 50) 2-hexanone | 10.418 | 43 | 39327 | 10.55 | ug/L | 93 |
| 51) dibromochloromethane | 10.649 | 129 | 133469 | 11.06 | ug/L | 92 |
| 52) 1,2-dibromoethane | 10.801 | 107 | 88338 | 10.86 | ug/L | 96 |
| 53) chlorobenzene | 11.573 | 112 | 471472 | 10.60 | ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.726 | 131 | 180807 | 10.95 | ug/L | 96 |
| 55) ethylbenzene | 11.738 | 91 | 979681 | 11.04 | ug/L | 100 |
| 56) m,p-xylene | 11.926 | 106 | 702558 | 21.70 | ug/L | 95 |
| 57) butyl acrylate | 12.595 | 55 | 173212 | 9.78 | ug/L | 99 |
| 58) o-xylene | 12.601 | 106 | 328209 | 10.83 | ug/L | 95 |
| 59) styrene | 12.644 | 104 | 514768 | 10.59 | ug/L | 98 |
| 60) isopropylbenzene | 13.222 | 105 | 870246 | 11.60 | ug/L | 100 |
| 61) bromobenzene | 13.763 | 156 | 210124 | 10.94 | ug/L | 90 |
| 62) bromoform | 12.996 | 173 | 74362 | 11.07 | ug/L | 98 |
| 64) 1,2,3-trichloropropane | 13.903 | 75 | 76820 | 10.35 | ug/L | 98 |
| 65) n-propylbenzene | 13.939 | 91 | 1155455 | 11.37 | ug/L | 100 |
| 66) 2-chlorotoluene | 14.085 | 91 | 696642 | 11.10 | ug/L | 97 |
| 67) 4-chlorotoluene | 14.274 | 91 | 811895 | 11.03 | ug/L | 98 |
| 68) 1,3,5-trimethylbenzene | 14.243 | 105 | 837356 | 11.58 | ug/L | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.860 | 83 | 83315 | 10.61 | ug/L | 94 |
| 71) tert-butylbenzene | 14.760 | 119 | 687393 | 11.98 | ug/L | 100 |
| 72) sec-butylbenzene | 15.101 | 105 | 999445 | 11.91 | ug/L | 98 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 850292 | 11.56 | ug/L | 98 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 413047 | 11.05 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.326 | 119 | 832714 | 11.87 | ug/L | 99 |
| 76) dicyclopentadiene | 15.399 | 66 | 808013 | 10.55 | ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.417 | 146 | 402283 | 10.81 | ug/L | 98 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 331247 | 10.87 | ug/L | 97 |
| 79) n-butylbenzene | 15.922 | 91 | 781861 | 11.72 | ug/L | 100 |
| 80) 1,2-dibromo-3-chloropr... | 17.041 | 75 | 16482 | 10.93 | ug/L | 92 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 206848 | 10.97 | ug/L | 95 |
| 82) hexachlorobutadiene | 18.153 | 225 | 186606 | 11.38 | ug/L | 98 |
| 83) naphthalene | 18.257 | 128 | 214681 | 10.74 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 150938 | 10.42 | ug/L | 98 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 75891 | 7.77 | ug/L | 100 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040425.D
Acq On : 4 Apr 2008 9:34 pm
Sample : ,SAMP,ME0803B85-01A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 05 06:11:10 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

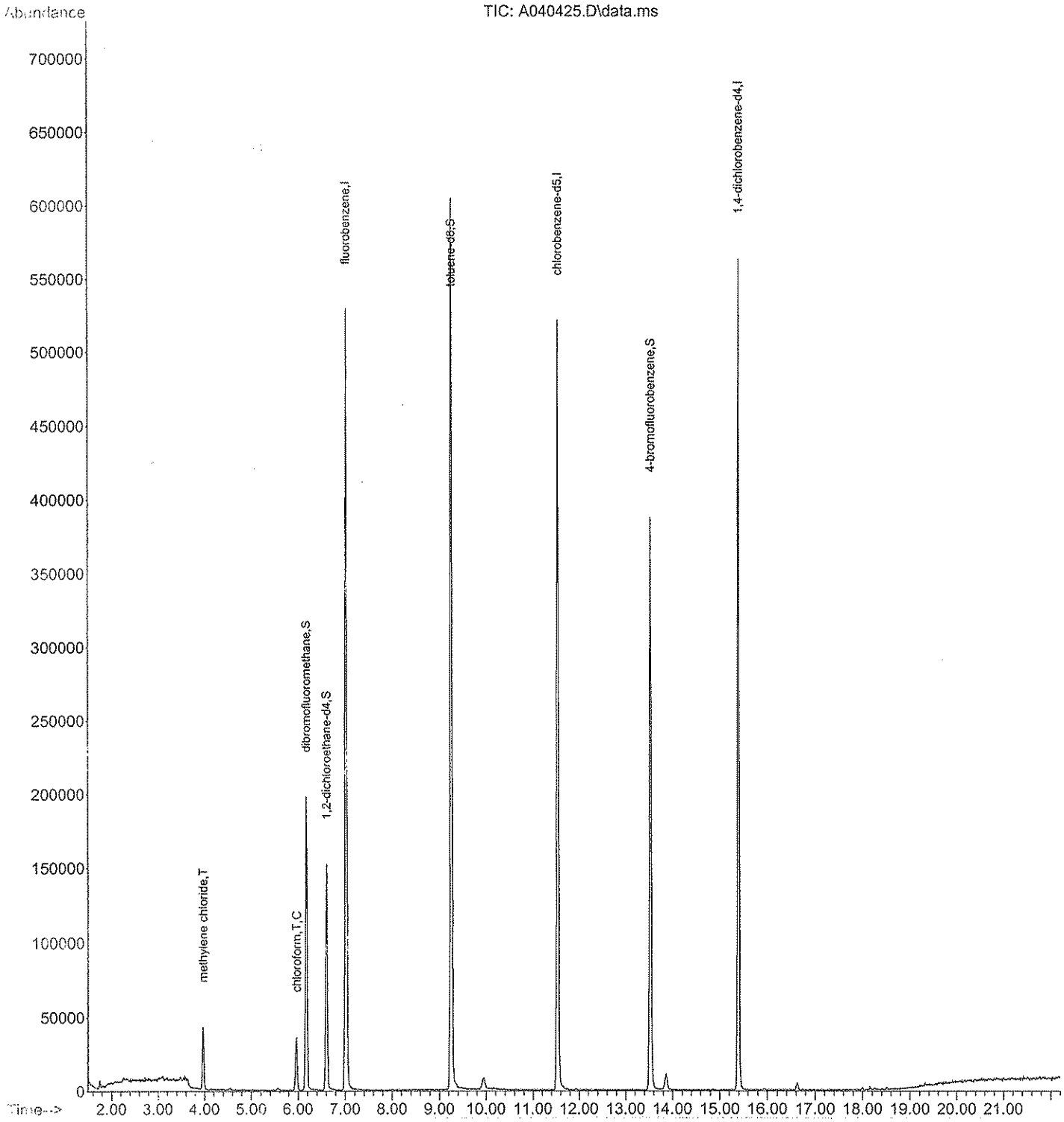
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 560803 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 387221 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 189965 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 147332 | 10.09 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.90% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 150383 | 10.74 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 107.40% | | |
| 44) toluene-d8 | 9.253 | 98 | 529987 | 11.27 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.70% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 187851 | 9.48 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 94.80% | | |
| Target Compounds | | | | | | Qvalue |
| 13) methylene chloride | 3.963 | 84 | 18122 | 1.00 | ug/L | 89 |
| 25) chloroform | 5.963 | 83 | 32607 | 0.97 | ug/L | 95 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040425.D
Acq On : 4 Apr 2008 9:34 pm
Sample : ,SAMP,ME0803B85-01A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 05 06:11:10 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040408\\
Data File : A040425.D
Acq On : 4 Apr 2008 9:34 pmm
Operator : BRR
Sample : ,SAMP,ME0803B85-01A,1,,
Misc : 8260+_w255
ALS Vial : 25 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected

**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040425.D
Acq On : 4 Apr 2008 9:34 pm
Operator : BR
Sample : ,SAMP,ME0803B85-01A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040425.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.963 | 399 | 407 | 420 | rVB | 42087 | 92588 | 5.92% | 1.231% |
| 2 | 5.963 | 723 | 736 | 747 | rBV2 | 36070 | 89325 | 5.71% | 1.188% |
| 3 | 6.170 | 758 | 770 | 791 | rBV | 197262 | 502279 | 32.11% | 6.678% |
| 4 | 6.602 | 831 | 841 | 859 | rBV | 151868 | 379418 | 24.26% | 5.044% |
| 5 | 7.015 | 897 | 909 | 931 | rBV | 528585 | 1333180 | 85.23% | 17.724% |
| 6 | 9.253 | 1262 | 1277 | 1301 | rBV | 603664 | 1564175 | 100.00% | 20.796% |
| 7 | 11.528 | 1641 | 1651 | 1670 | rBV | 520632 | 1329899 | 85.02% | 17.681% |
| 8 | 13.522 | 1968 | 1979 | 1999 | rBV | 387257 | 992664 | 63.46% | 13.197% |
| 9 | 15.389 | 2273 | 2286 | 2304 | rBV | 562814 | 1238168 | 79.16% | 16.461% |

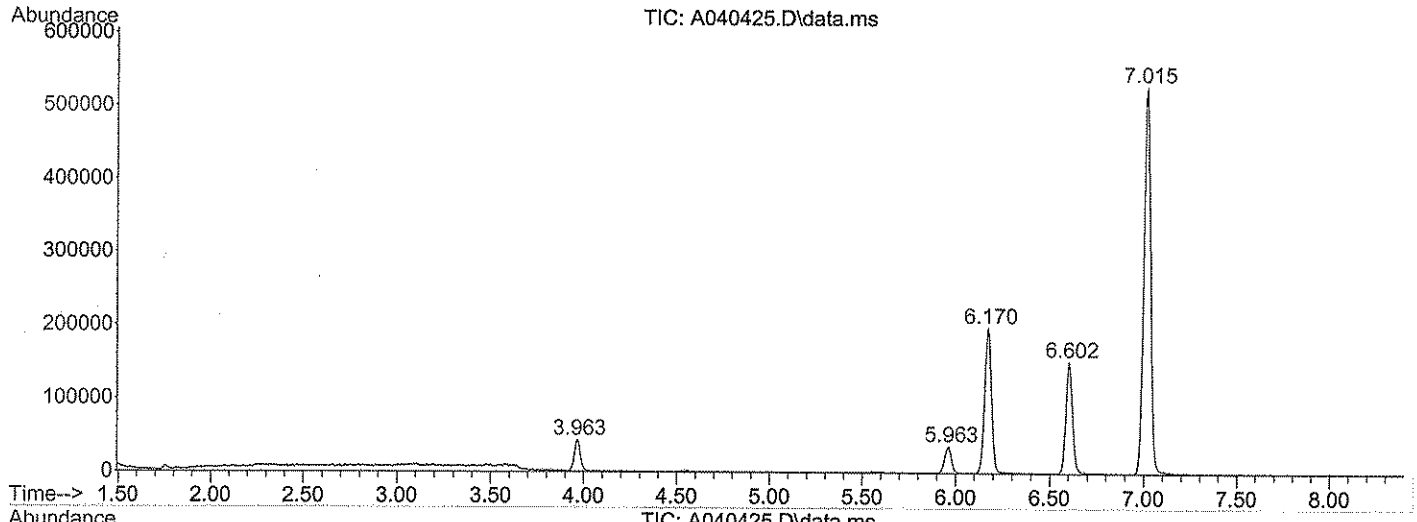
Sum of corrected areas: 7521696

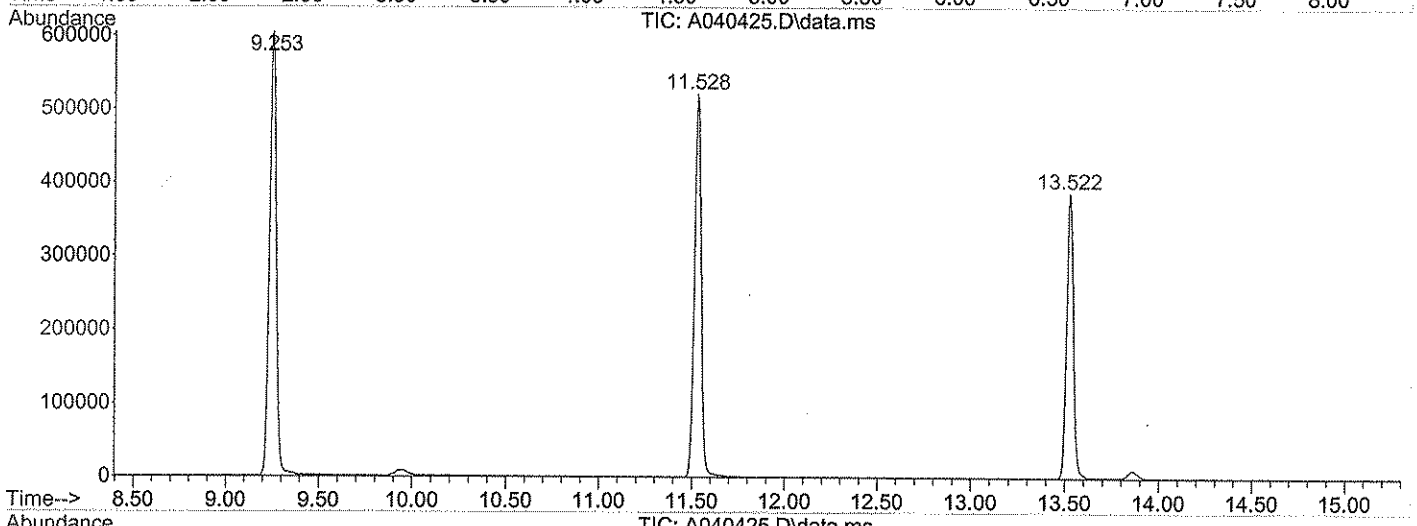
LSC Report - Integrated Chromatogram

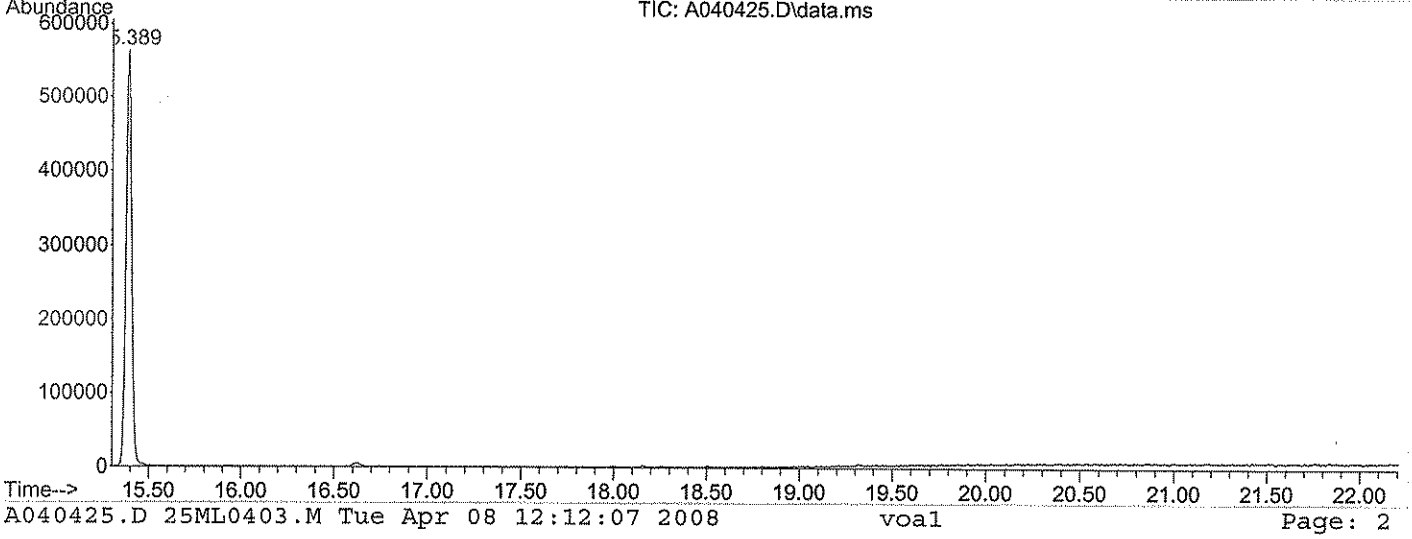
Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040425.D
Acq On : 4 Apr 2008 9:34 pm
Operator : BR
Sample : ,SAMP,ME0803B85-01A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040425.D 25ML0403.M Tue Apr 08 12:12:07 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040426.D
Acq On : 4 Apr 2008 10:09 pm
Sample : ,SAMP,ME0803B85-02A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 05 06:11:13 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.011 | 96 | 547265 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 377386 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.392 | 152 | 187471 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 143299 | 10.06 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.60% | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 153329 | 11.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.20% | | |
| 44) toluene-d8 | 9.249 | 98 | 520269 | 11.35 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 113.50% | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 185254 | 9.59 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.90% | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.444 | 64 | 12312 | 1.08 | ug/L | 92 |
| 11) acetone | 3.478 | 43 | 5184 | 2.64 | ug/L | 82 |

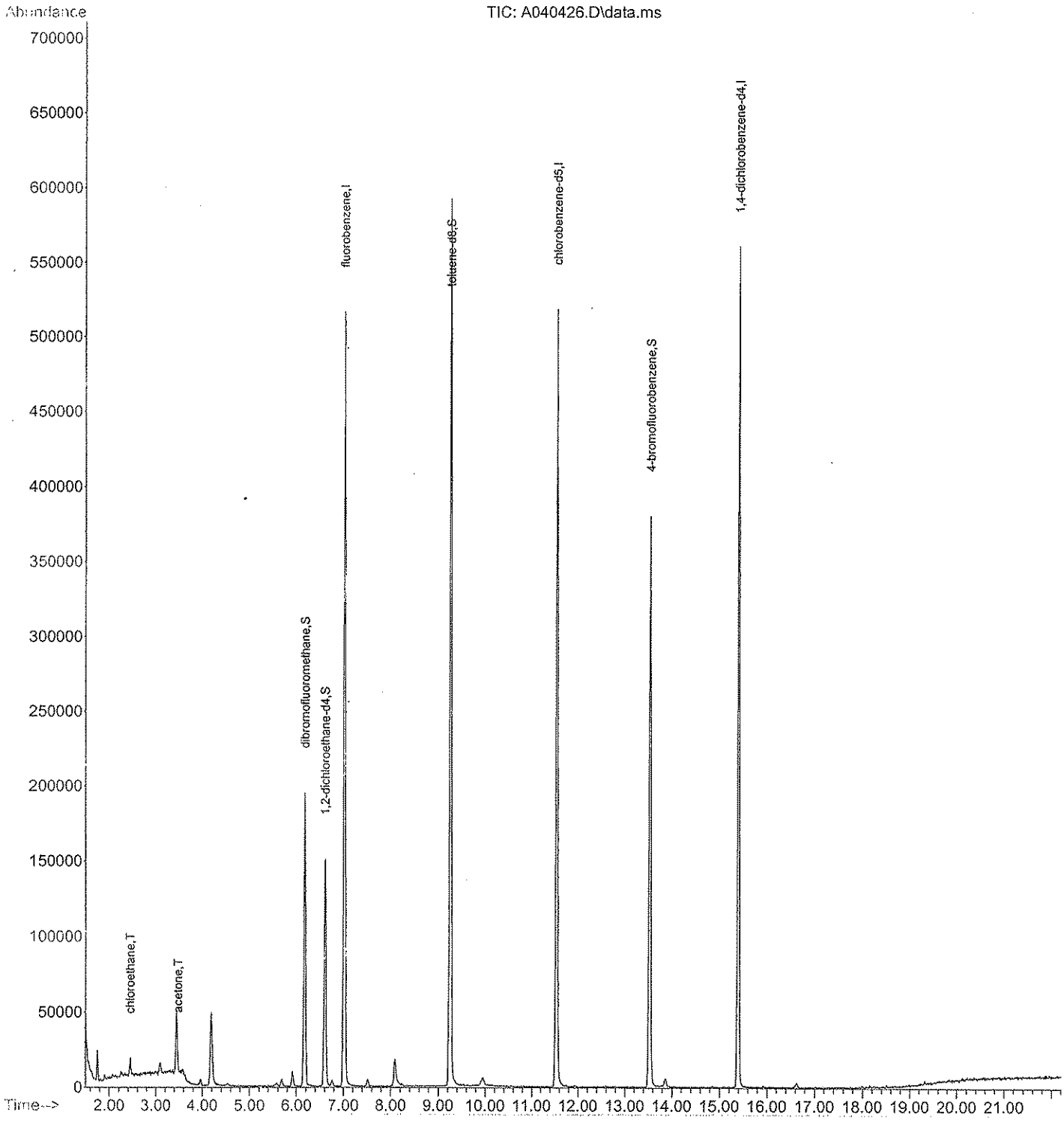
(#) = qualifier out of range (m) = manual integration (+) = signals summed

CP 4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040426.D
Acq On : 4 Apr 2008 10:09 pm
Sample : ,SAMP,ME0803B85-02A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 05 06:11:13 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040426.D
Acq On : 4 Apr 2008 10:09 pm
Operator : BR
Sample : ,SAMP,ME0803B85-02A,1,
Misc : 8260+_w25
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|
| 2-Propanol, 2-m... | 4.190 | 1.2 | ug/L | 151014 | 1 | 7.011 | 1307750 | 10.0 |

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040426.D
Acq On : 4 Apr 2008 10:09 pm
Operator : BR
Sample : ,SAMP,ME0803B85-02A,1,
Misc : 8260+_w25
ALS Vial : 26 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040426.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.448 | 314 | 322 | 332 | rBV | 40603 | 97963 | 6.39% | 1.297% |
| 2 | 4.190 | 433 | 444 | 463 | rBV2 | 48069 | 151014 | 9.84% | 2.000% |
| 3 | 6.172 | 758 | 770 | 783 | rBV | 194700 | 495167 | 32.28% | 6.557% |
| 4 | 6.604 | 829 | 841 | 857 | rBV | 150243 | 391761 | 25.54% | 5.188% |
| 5 | 7.011 | 897 | 908 | 928 | rBV | 516029 | 1307750 | 85.25% | 17.317% |
| 6 | 8.088 | 1077 | 1085 | 1107 | rBV2 | 17716 | 64797 | 4.22% | 0.858% |
| 7 | 9.249 | 1264 | 1276 | 1299 | rBV | 591818 | 1534044 | 100.00% | 20.314% |
| 8 | 11.530 | 1639 | 1651 | 1680 | rBV | 517789 | 1316310 | 85.81% | 17.431% |
| 9 | 13.525 | 1968 | 1979 | 2004 | rBV | 380043 | 975653 | 63.60% | 12.920% |
| 10 | 15.385 | 2272 | 2285 | 2305 | rBV | 560667 | 1217270 | 79.35% | 16.119% |

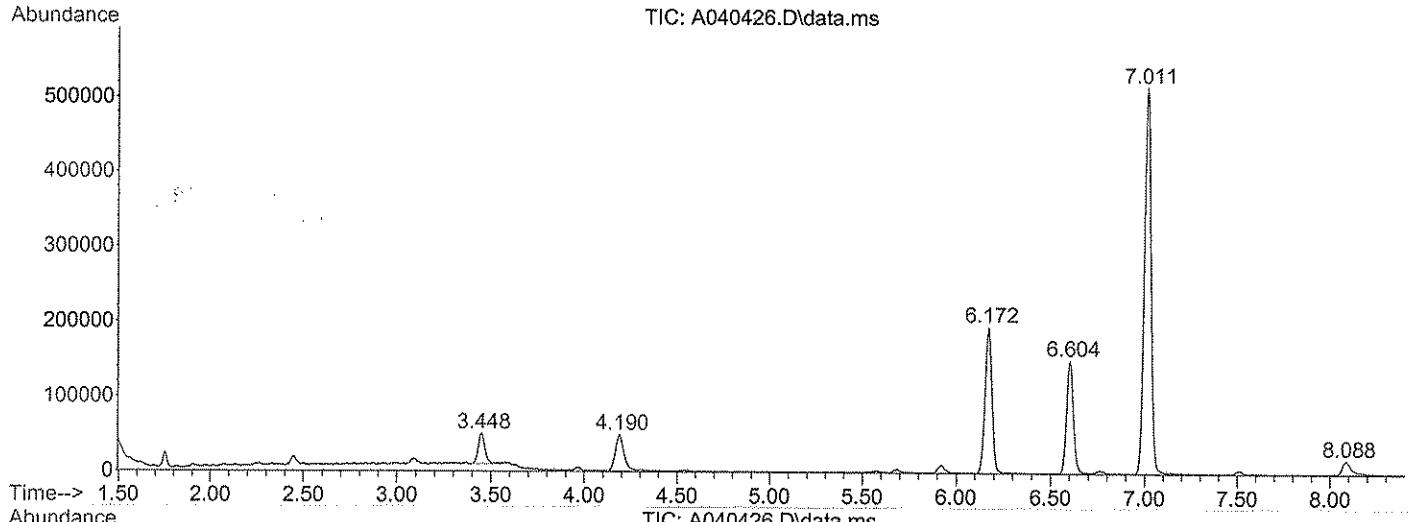
Sum of corrected areas: 7551729

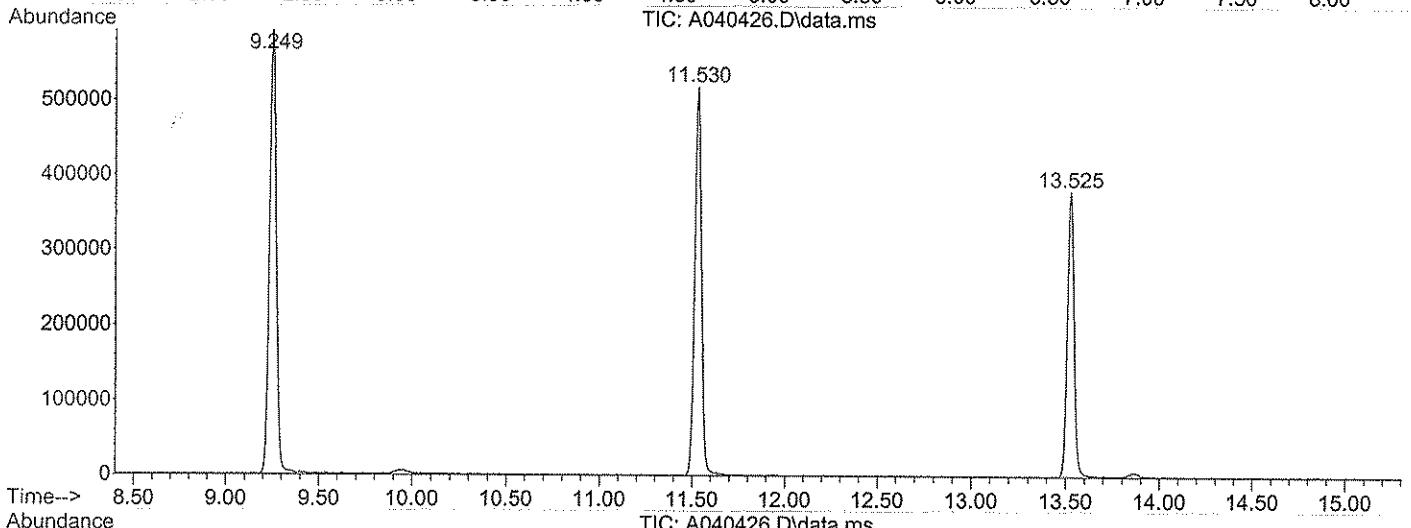
LSC Report - Integrated Chromatogram

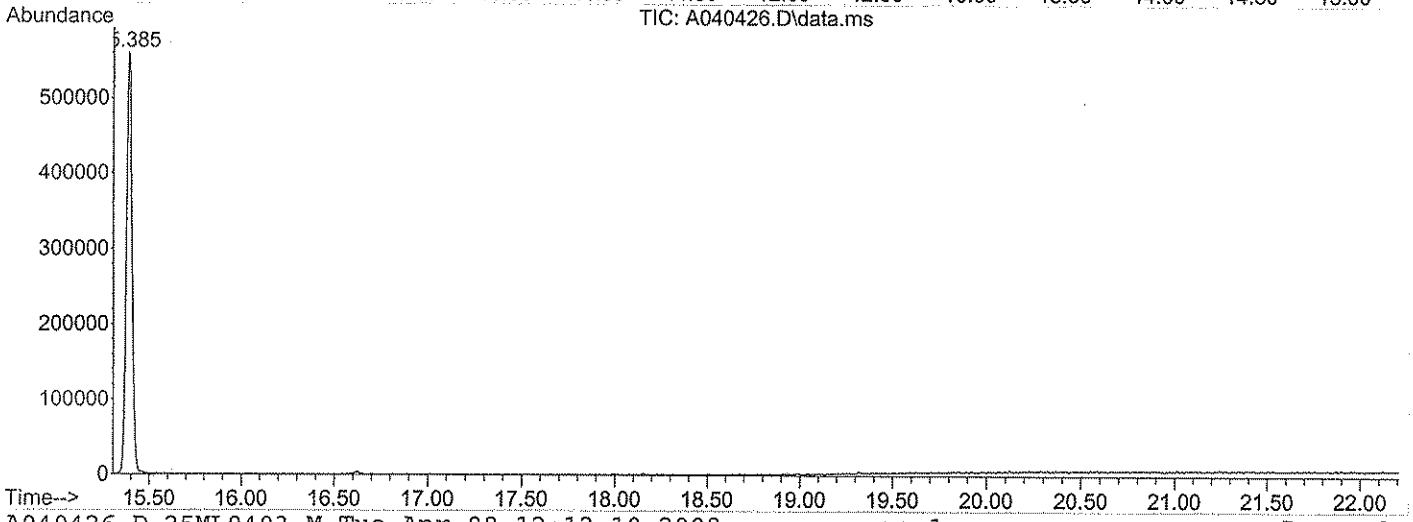
Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040426.D
Acq On : 4 Apr 2008 10:09 pm
Operator : BR
Sample : ,SAMP,ME0803B85-02A,1,
Misc : 8260+_w25
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040426.D 25ML0403.M Tue Apr 08 12:12:10 2008 voa1 Page: 2

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040426.D
Acq On : 4 Apr 2008 10:09 pm
Operator : BR
Sample : ,SAMP,ME0803B85-02A,1,
Misc : 8260+_w25
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

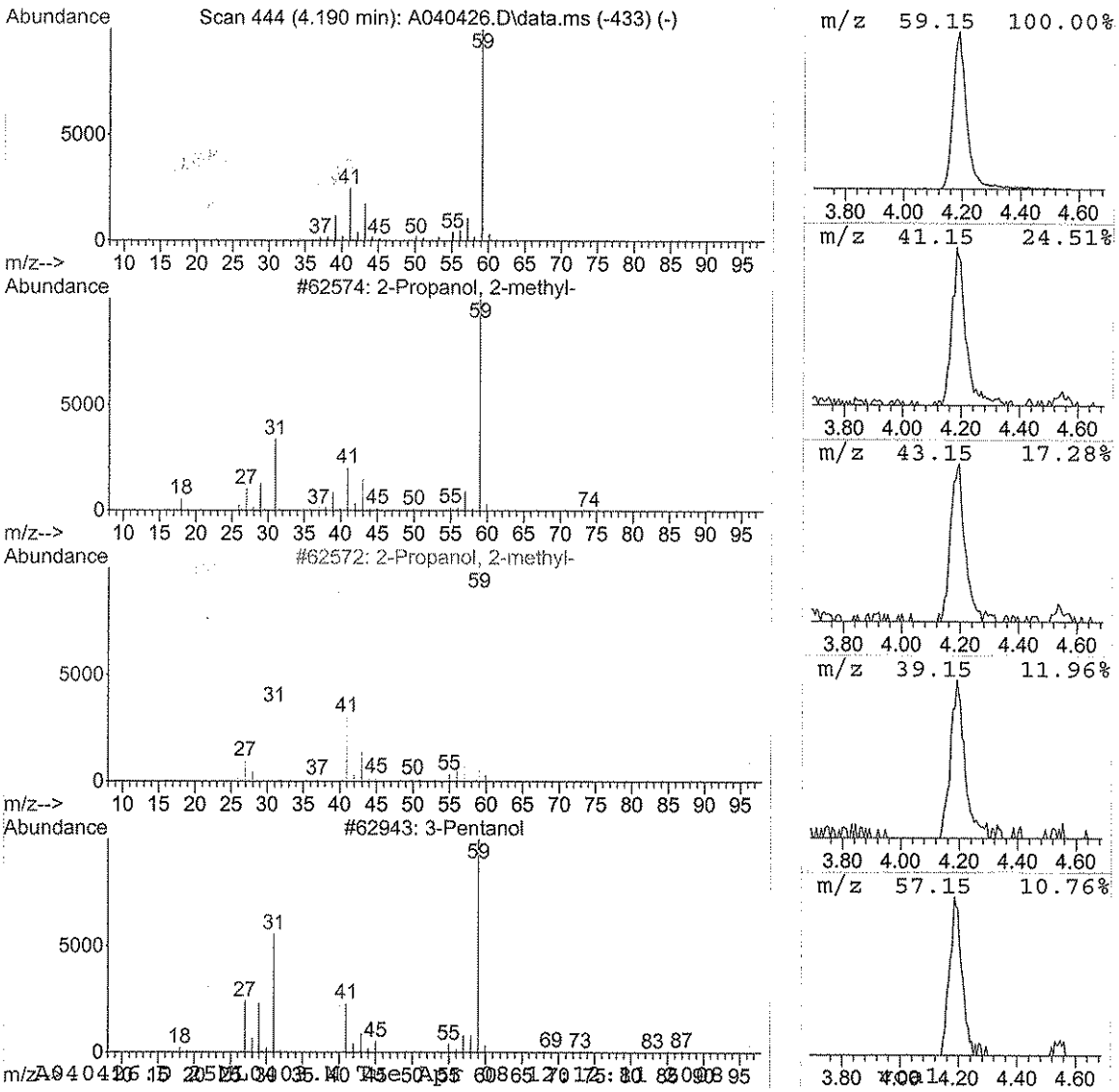
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 2-Propanol, 2-methyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.190 | 1.15 ug/L | 151014 | fluorobenzene | 7.011 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 2 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 3 | 3-Pentanol | 88 | C5H12O | 000584-02-1 | 78 |
| 4 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 5 | 3-Pentanol | 88 | C5H12O | 000584-02-1 | 72 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040427.D
Acq On : 4 Apr 2008 10:44 pm
Sample : ,SAMP,ME0803B85-03A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 05 06:11:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 523920 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 365500 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 181593 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 139320 | 10.21 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 102.10% | | | |
| 30) 1,2-dichloroethane-d4 | 6.608 | 65 | 145711 | 11.14 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.40% | | | |
| 44) toluene-d8 | 9.253 | 98 | 497316 | 11.20 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 112.00% | | | |
| 63) 4-bromofluorobenzene | 13.528 | 95 | 180635 | 9.66 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.60% | | | |
| Target Compounds | | | | | | Qvalue |
| 34) trichloroethene | 7.514 | 95 | 6302 | 0.36 | ug/L | 91 |

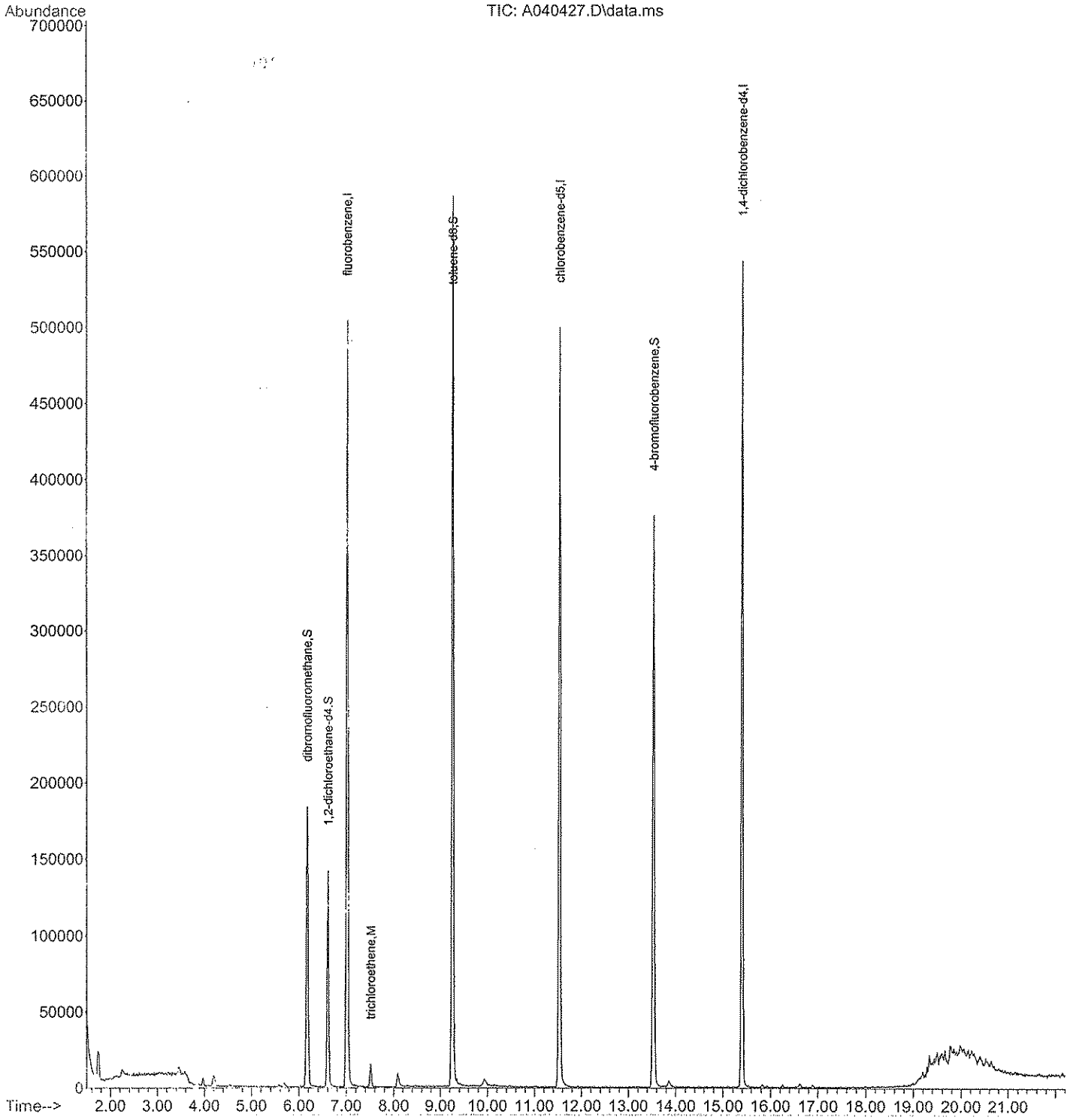
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040427.D
Acq On : 4 Apr 2008 10:44 pm
Sample : ,SAMP,ME0803B85-03A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 05 06:11:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040408\\
Data File : A040427.D
Acq On : 4 Apr 2008 10:44 pmm
Operator : BRR
Sample : ,SAMP,ME0803B85-03A,1,,
Misc : 8260+_w255
ALS Vial : 27 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

Ron Roberts 4/08/08

No Library Search Compounds Detected
**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040427.D
Acq On : 4 Apr 2008 10:44 pm
Operator : BR
Sample : ,SAMP,ME0803B85-03A,1,
Misc : 8260+_w25
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040427.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.737 | 36 | 41 | 51 | rVB5 | 19115 | 51656 | 3.52% | 0.735% |
| 2 | 6.176 | 759 | 771 | 791 | rBV | 183444 | 478914 | 32.60% | 6.813% |
| 3 | 6.608 | 830 | 842 | 863 | rVB | 141475 | 359077 | 24.44% | 5.108% |
| 4 | 7.015 | 896 | 909 | 932 | rBV | 503495 | 1257565 | 85.59% | 17.891% |
| 5 | 9.253 | 1264 | 1277 | 1291 | rBV | 585270 | 1469215 | 100.00% | 20.902% |
| 6 | 11.527 | 1639 | 1651 | 1672 | rBV | 498982 | 1268900 | 86.37% | 18.052% |
| 7 | 13.528 | 1966 | 1980 | 2000 | rBV | 375800 | 955955 | 65.07% | 13.600% |
| 8 | 15.389 | 2268 | 2286 | 2306 | rBV | 542671 | 1187885 | 80.85% | 16.899% |

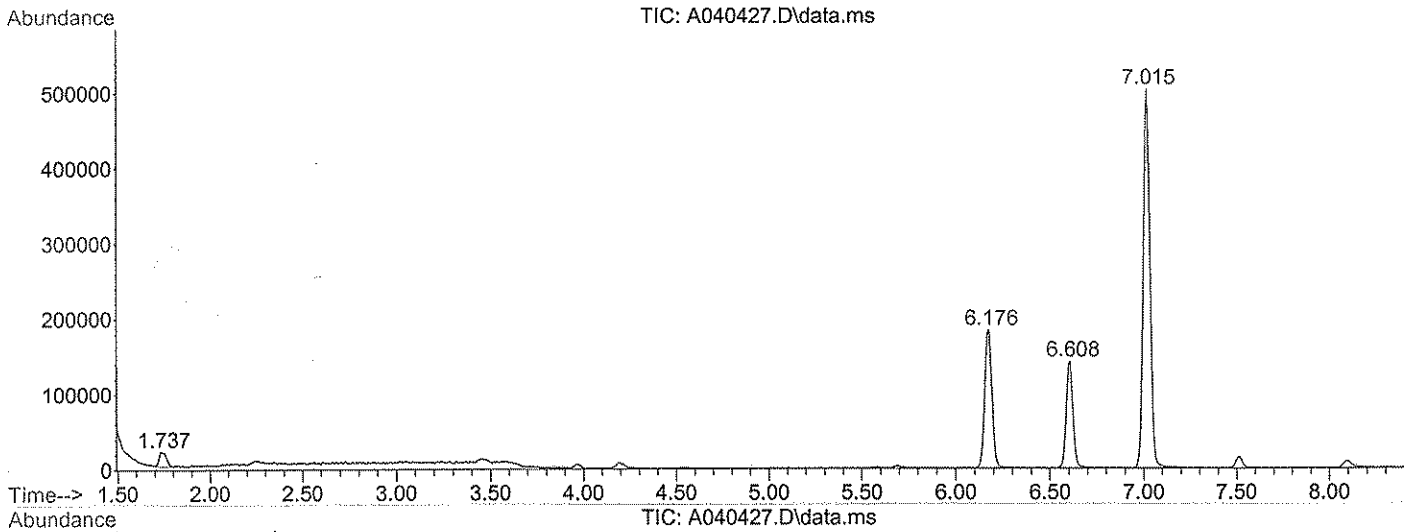
Sum of corrected areas: 7029167

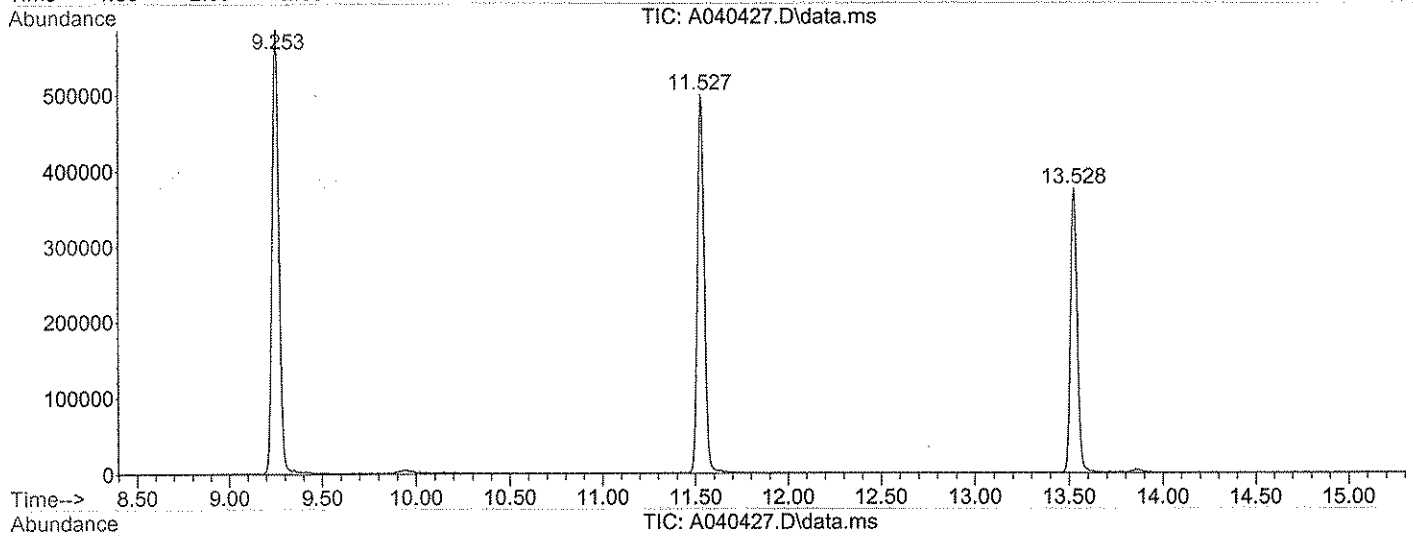
LSC Report - Integrated Chromatogram

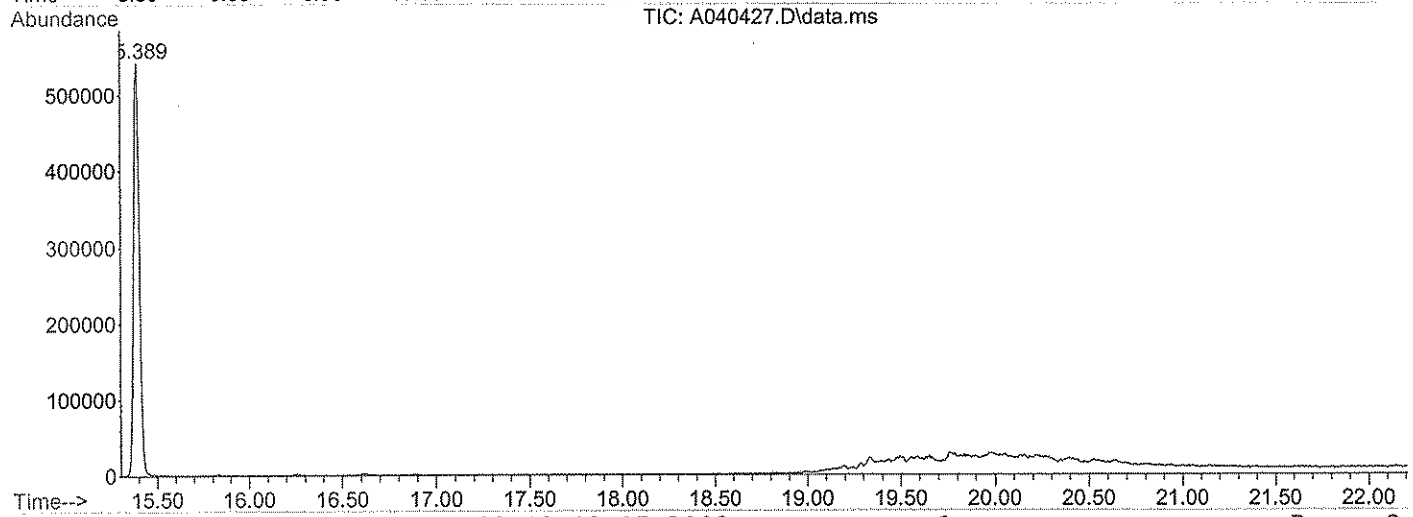
Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040427.D
Acq On : 4 Apr 2008 10:44 pm
Operator : BR
Sample : ,SAMP,ME0803B85-03A,1,
Misc : 8260+_w25
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040427.D 25ML0403.M Tue Apr 08 12:12:15 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040428.D
Acq On : 4 Apr 2008 11:19 pm
Sample : ,SAMP,ME0803B85-04A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 05 06:11:19 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 608343 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.534 | 117 | 381037 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 186033 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 141666 | 8.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 89.40% | | | |
| 30) 1,2-dichloroethane-d4 | 6.608 | 65 | 161210 | 10.61 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 106.10% | | | |
| 44) toluene-d8 | 9.253 | 98 | 531570 | 11.49 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.90% | | | |
| 63) 4-bromofluorobenzene | 13.528 | 95 | 183640 | 9.42 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 94.20% | | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.448 | 64 | 27107 | 2.14 | ug/L | 96 |
| 11) acetone | 3.476 | 43 | 4416 | 2.03 | ug/L | 86 |
| 31) benzene | 6.638 | 78 | 15771634 | 231.48 | ug/L E | 97 |
| 38) 1,2-dichloroethane | 6.638 | 62 | 205663 | 9.76 | ug/L | 88 |

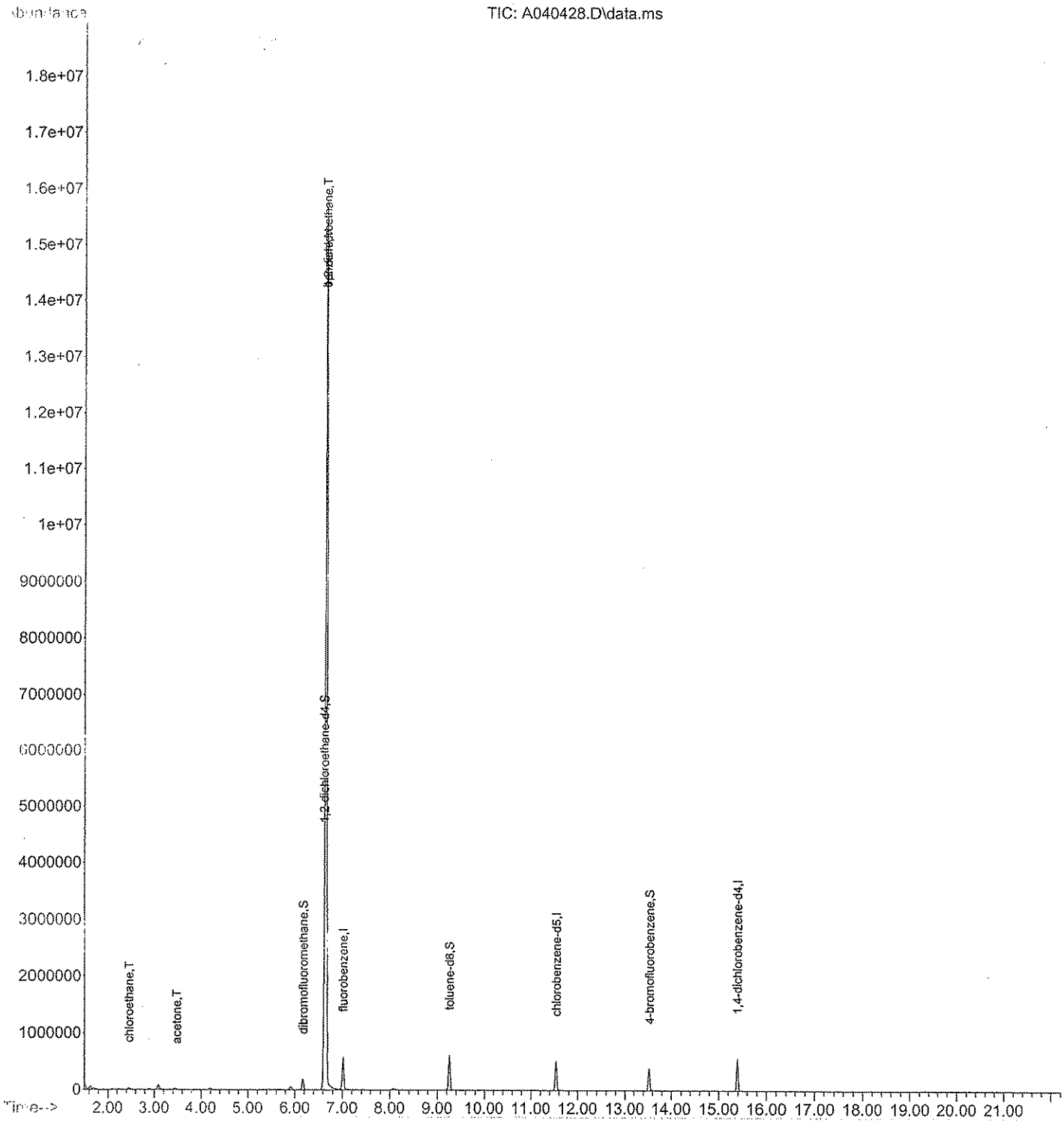
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/14

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040428.D
Acq On : 4 Apr 2008 11:19 pm
Sample : ,SAMP,ME0803B85-04A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 05 06:11:19 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040408\\
Data File : A040428.D
Acq On : 4 Apr 2008 11:19 pmm
Operator : BRR
Sample : ,SAMP,ME0803B85-04A,1,,
Misc : 8260+_w255
ALS Vial : 28 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040428.D
Acq On : 4 Apr 2008 11:19 pm
Operator : BR
Sample : ,SAMP,ME0803B85-04A,1,
Misc : 8260+_w25
ALS Vial : 28 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040428.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.638 | 832 | 847 | 899 | rBV | 15809971 | 41456468 | 100.00% | 90.438% |
| 2 | 7.015 | 899 | 909 | 939 | rVB2 | 575090 | 1505010 | 3.63% | 3.283% |
| 3 | 9.253 | 1264 | 1277 | 1306 | rBV | 613244 | 1571611 | 3.79% | 3.429% |
| 4 | 11.528 | 1641 | 1651 | 1670 | rBV | 514949 | 1306376 | 3.15% | 2.850% |

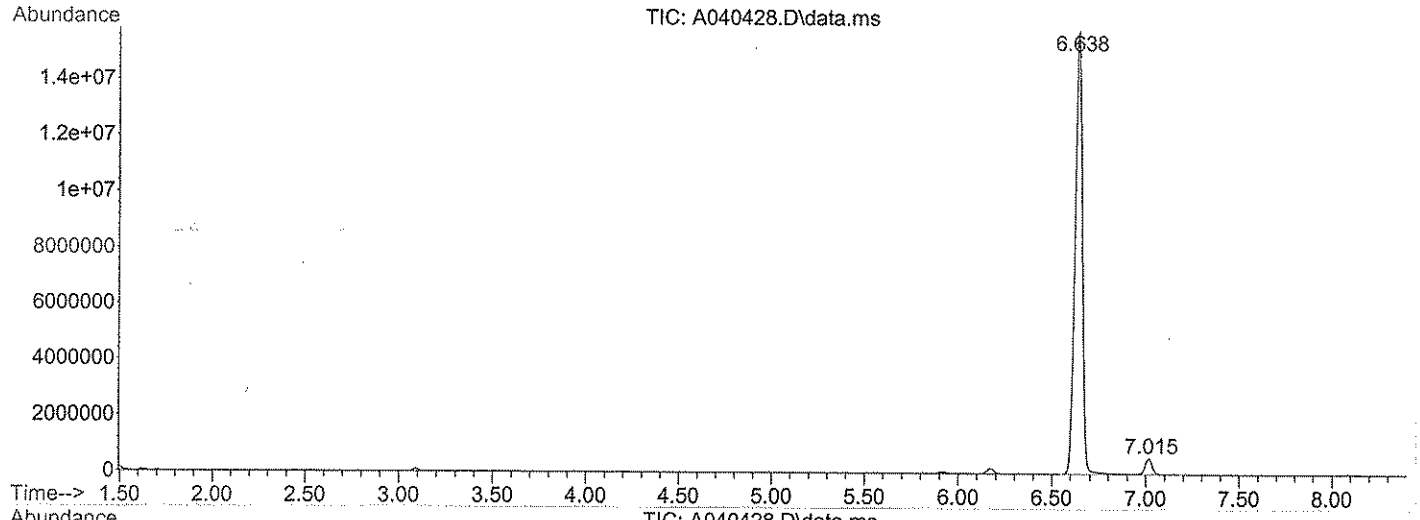
Sum of corrected areas: 45839465

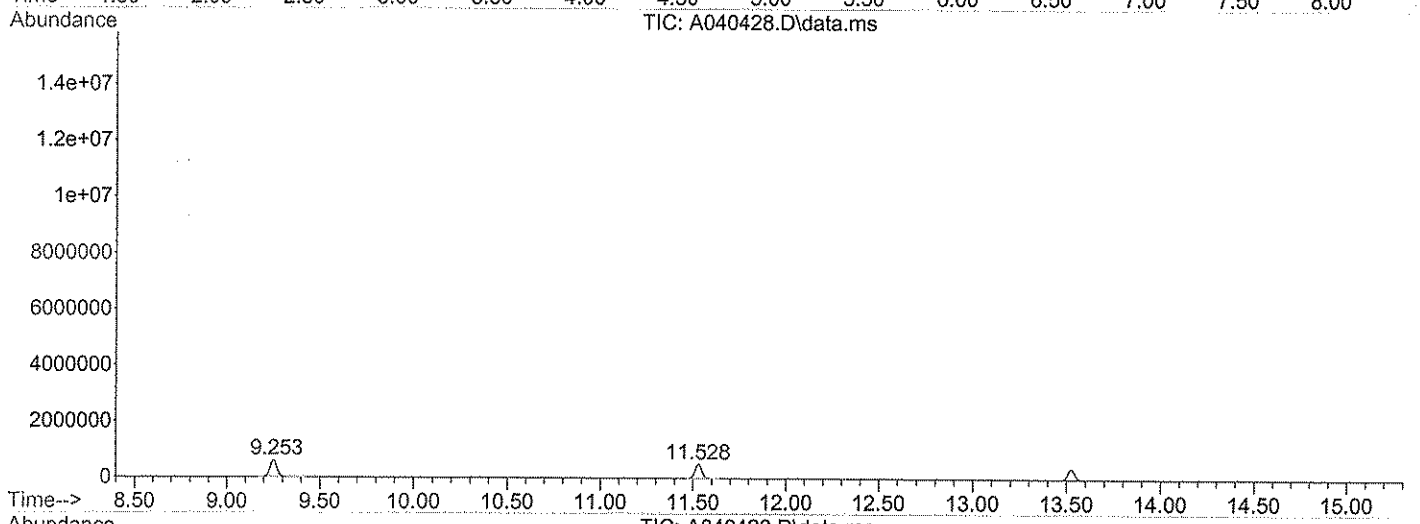
LSC Report - Integrated Chromatogram

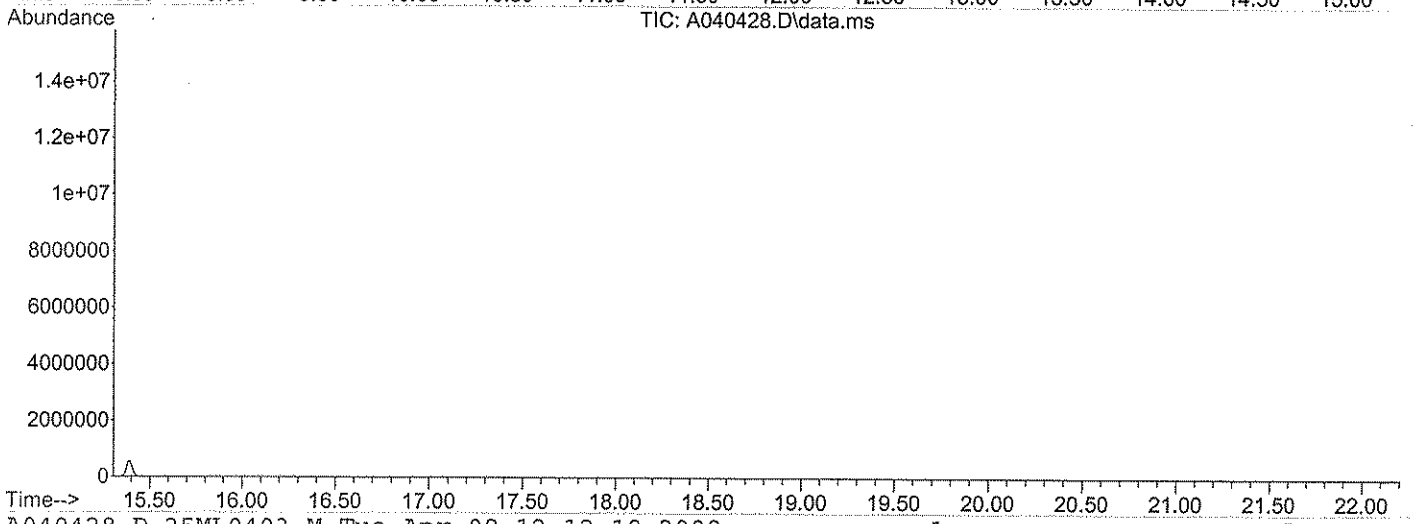
```
Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040428.D
Acq On    :  4 Apr 2008  11:19 pm
Operator  : BR
Sample    : ,SAMP,ME0803B85-04A,1,
Misc      : 8260+_w25
ALS Vial  : 28   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040508.D
Acq On : 5 Apr 2008 10:24 am
Sample : ,SAMP,ME0803B85-04A,25,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 06 18:24:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 592052 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 399770 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 201118 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.173 | 113 | 150180 | 9.74 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.40% | | |
| 30) 1,2-dichloroethane-d4 | 6.598 | 65 | 157580 | 10.66 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.60% | | |
| 44) toluene-d8 | 9.250 | 98 | 553541 | 11.40 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 114.00% | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 196892 | 9.63 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.30% | | |
| Target Compounds | | | | | | Qvalue |
| 31) benzene | 6.629 | 78 | 639340 | 9.64 | ug/L | 98 |
| 43) 4-methyl-2-pentanone | 9.256 | 43 | 4013 | 0.82 | ug/L # | 1 |

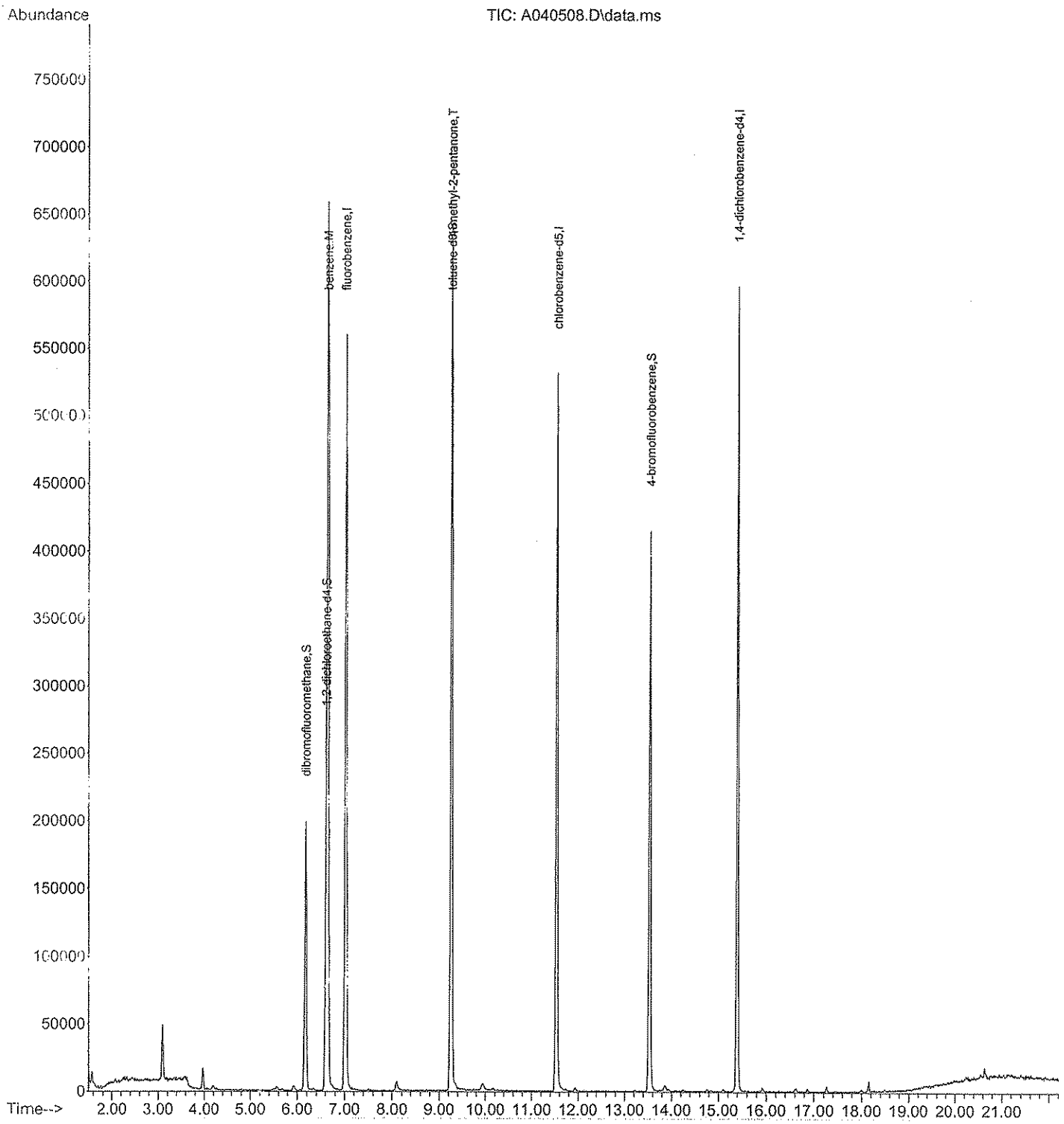
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040508.D
Acq On : 5 Apr 2008 10:24 am
Sample : ,SAMP,ME0803B85-04A,25,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 05 18:24:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040506.D
Acq On : 5 Apr 2008 9:14 am
Sample : ,SAMP,ME0803B85-05A,1,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 05 09:41:14 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 574576 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 371710 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 197116 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 148290 | 9.91 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.10% | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 152383 | 10.62 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.20% | | |
| 44) toluene-d8 | 9.247 | 98 | 522543 | 11.57 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 115.70% | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 188294 | 9.90 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 99.00% | | |
| Target Compounds | | | | | | Qvalue |
| 11) acetone | 3.476 | 43 | 9973 | 4.85 | ug/L | 96 |
| 21) cis-1,2-dichloroethene | 5.531 | 96 | 23370 | 1.33 | ug/L | 97 |
| 31) benzene | 6.632 | 78 | 177488 | 2.76 | ug/L | 99 |
| 34) trichloroethene | 7.514 | 95 | 74438 | 3.86 | ug/L | 97 |

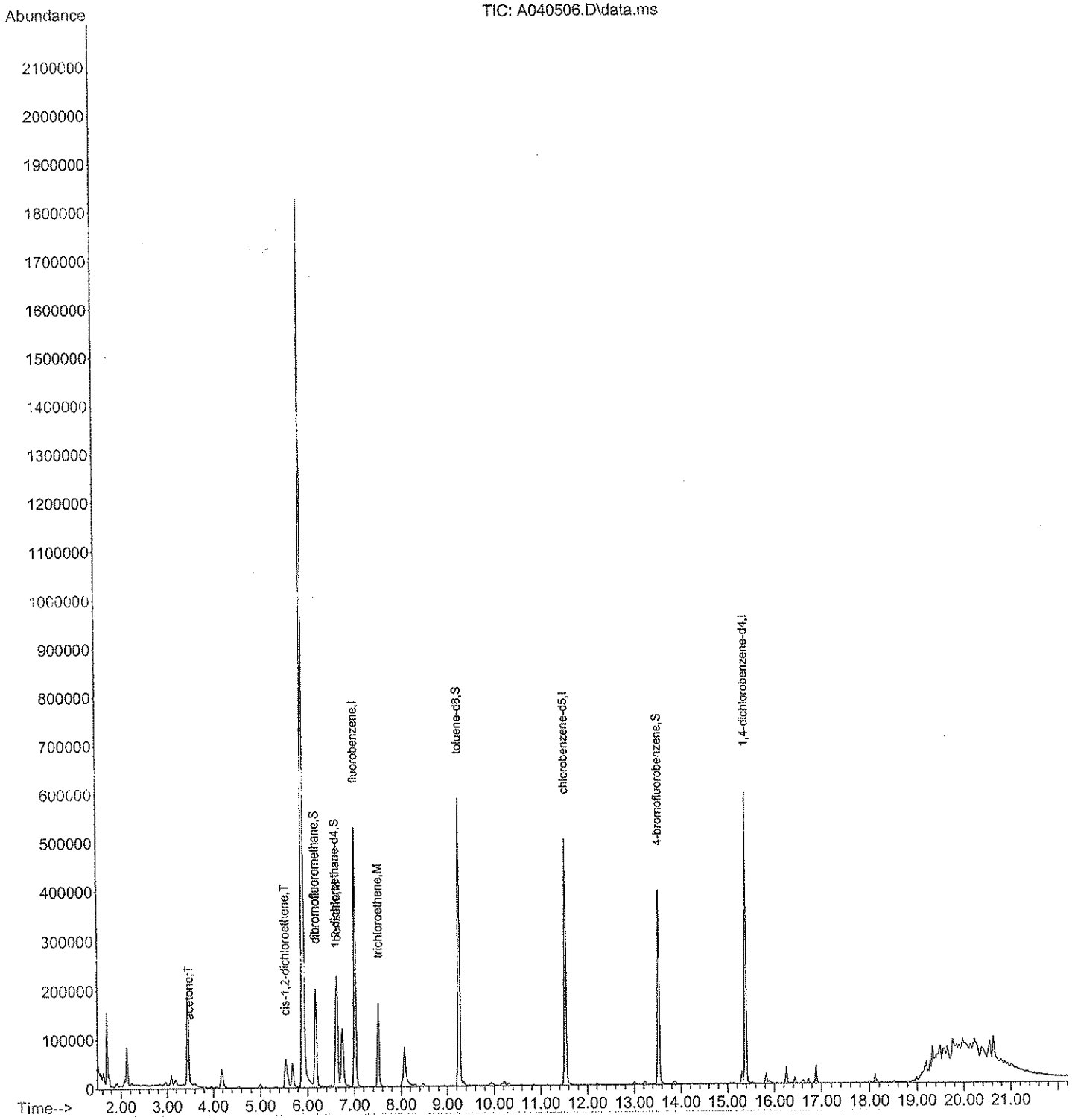
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040506.D
Acq On : 5 Apr 2008 9:14 am
Sample : ,SAMP,ME0803B85-05A,1,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 05 09:41:14 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040506.D
Acq On : 5 Apr 2008 9:14 am
Operator : BR
Sample : ,SAMP,ME0803B85-05A,1,RA,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|
| Propiolonitrile | 1.700 | 2.3 | ug/L | 308098 | 1 | 7.009 | 1358390 | 10.0 |
| Silane, fluorot... | 2.126 | 1.2 | ug/L | 164575 | 1 | 7.009 | 1358390 | 10.0 |
| Furan, tetrahydro- | 5.896 | 36.4 | ug/L | 4949200 | 1 | 7.009 | 1358390 | 10.0 |
| Amylene Hydrate | 6.741 | 2.9 | ug/L | 390527 | 1 | 7.009 | 1358390 | 10.0 |
| 1,4-Dioxane | 8.073 | 2.4 | ug/L | 331025 | 1 | 7.009 | 1358390 | 10.0 |

Peer Reviewed on 4/08/08

# LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040506.D
Acq On : 5 Apr 2008 9:14 am
Operator : BR
Sample : ,SAMP,ME0803B85-05A,1,RA,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040506.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.700 | 30 | 35 | 51 | rVB | 151789 | 308098 | 6.23% | 2.032% |
| 2 | 2.126 | 100 | 105 | 118 | rVB | 77814 | 164575 | 3.33% | 1.085% |
| 3 | 3.445 | 314 | 322 | 336 | rBV | 238724 | 544597 | 11.00% | 3.592% |
| 4 | 5.537 | 653 | 666 | 681 | rBV3 | 58088 | 217832 | 4.40% | 1.437% |
| 5 | 5.896 | 715 | 725 | 760 | rBV | 1822999 | 4949204 | 100.00% | 32.639% |
| 6 | 6.170 | 760 | 770 | 790 | rVB2 | 198690 | 528816 | 10.68% | 3.487% |
| 7 | 6.620 | 831 | 844 | 854 | rBV3 | 224550 | 830584 | 16.78% | 5.478% |
| 8 | 6.741 | 854 | 864 | 881 | rVB4 | 115513 | 390527 | 7.89% | 2.575% |
| 9 | 7.009 | 898 | 908 | 932 | rVB | 526824 | 1358387 | 27.45% | 8.958% |
| 10 | 7.514 | 978 | 991 | 1007 | rBV | 169686 | 434670 | 8.78% | 2.867% |
| 11 | 8.073 | 1066 | 1083 | 1114 | rBV3 | 78588 | 331025 | 6.69% | 2.183% |
| 12 | 9.253 | 1264 | 1277 | 1289 | rBV | 585425 | 1532696 | 30.97% | 10.108% |
| 13 | 11.527 | 1639 | 1651 | 1679 | rBV | 500665 | 1300777 | 26.28% | 8.578% |
| 14 | 13.522 | 1968 | 1979 | 1996 | rBV | 392715 | 998324 | 20.17% | 6.584% |
| 15 | 15.389 | 2278 | 2286 | 2298 | rVB | 593035 | 1273192 | 25.73% | 8.397% |

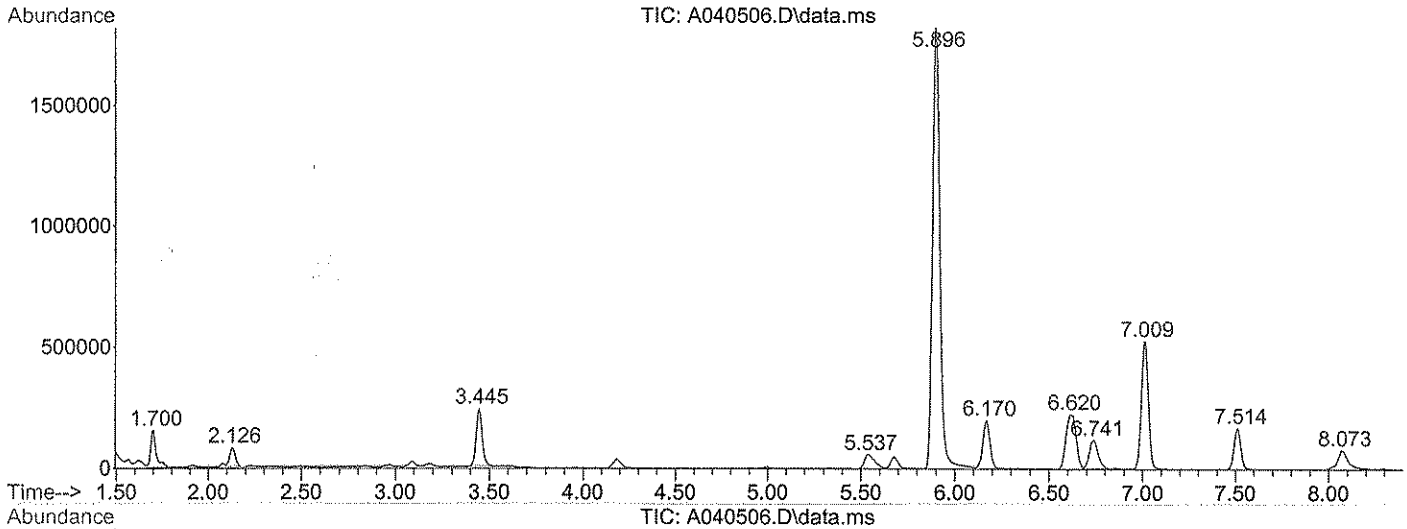
Sum of corrected areas: 15163304

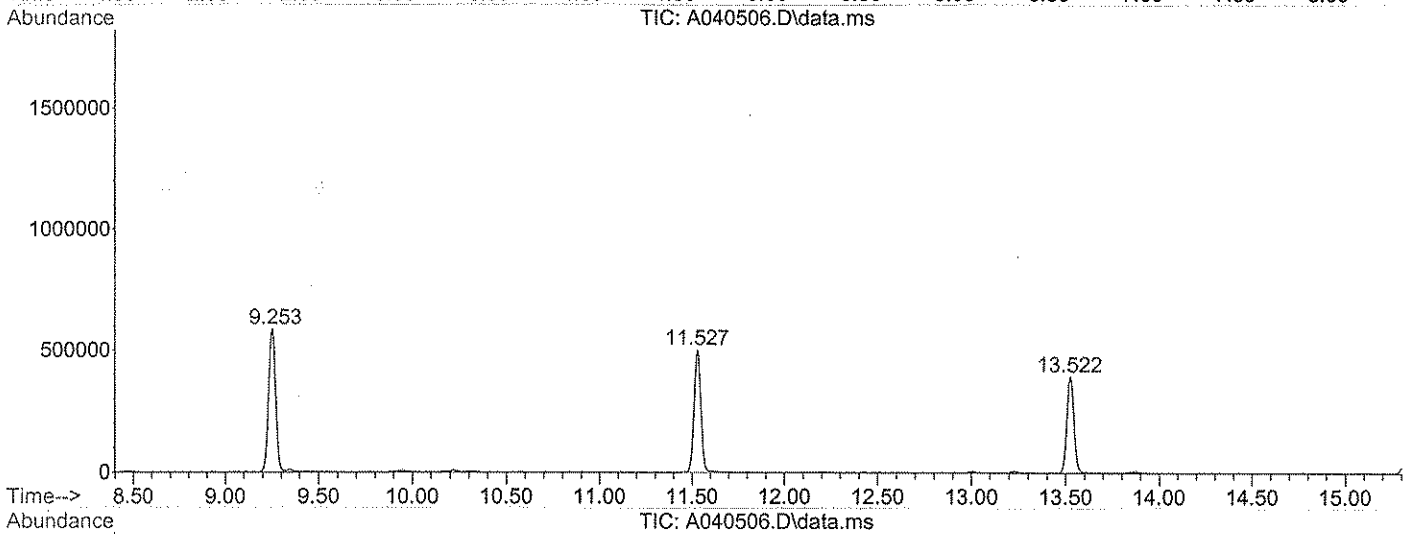
LSC Report - Integrated Chromatogram

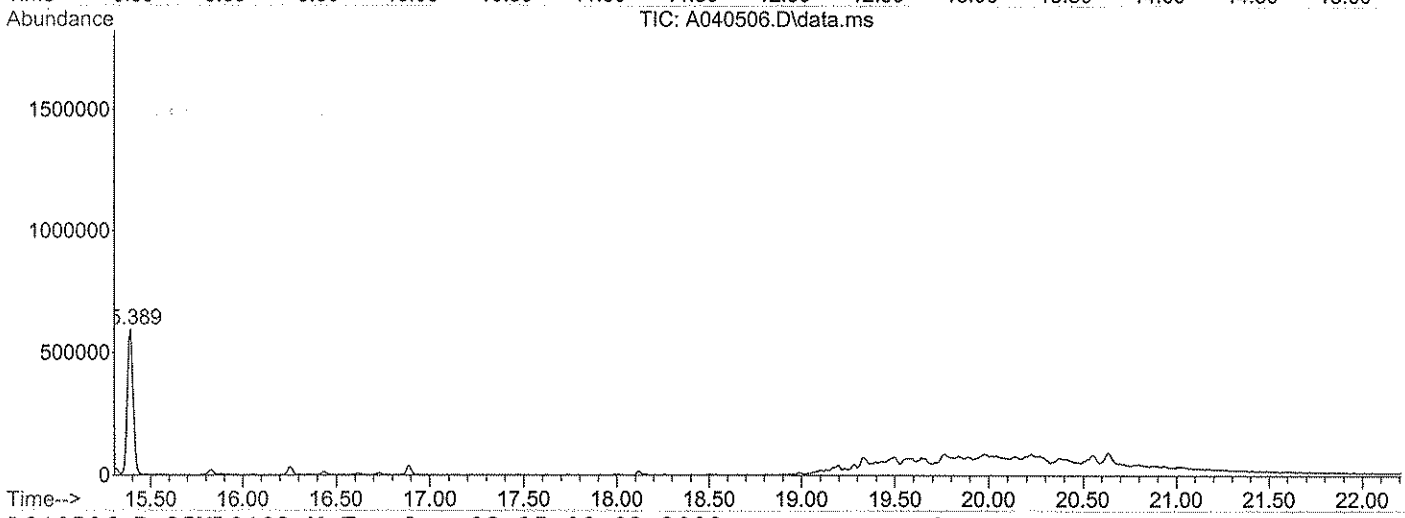
```
Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040506.D
Acq On    :  5 Apr 2008    9:14 am
Operator  : BR
Sample    : ,SAMP,ME0803B85-05A,1,RA,
Misc      : 8260+_W25
ALS Vial  : 6   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```




A040506.D 25ML0403.M Tue Apr 08 15:00:03 2008 voa1 Page: 2

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040506.D
Acq On : 5 Apr 2008 9:14 am
Operator : BR
Sample : ,SAMP,ME0803B85-05A,1,RA,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

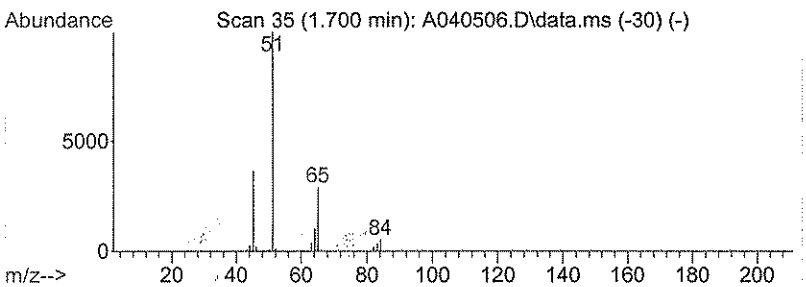
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

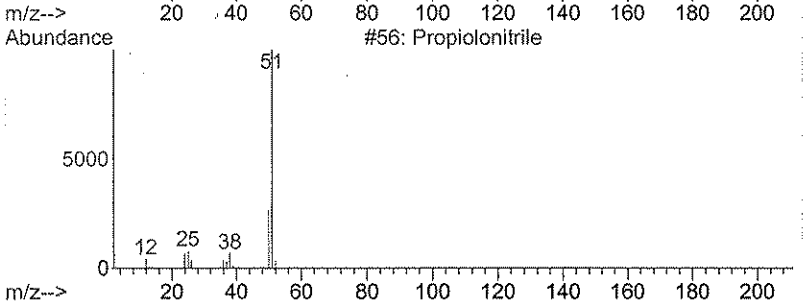
**********

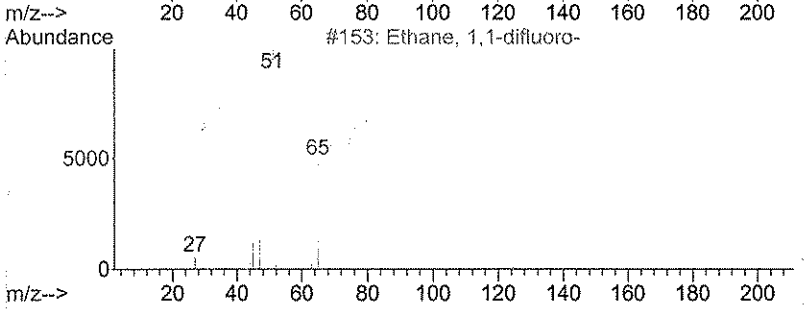
Peak Number 1 Propiolonitrile Concentration Rank 4

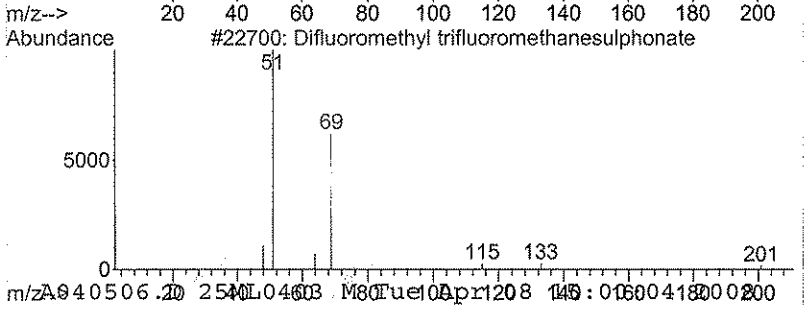
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.700 | 2.27 ug/L | 308098 | fluorobenzene | 7.009 |

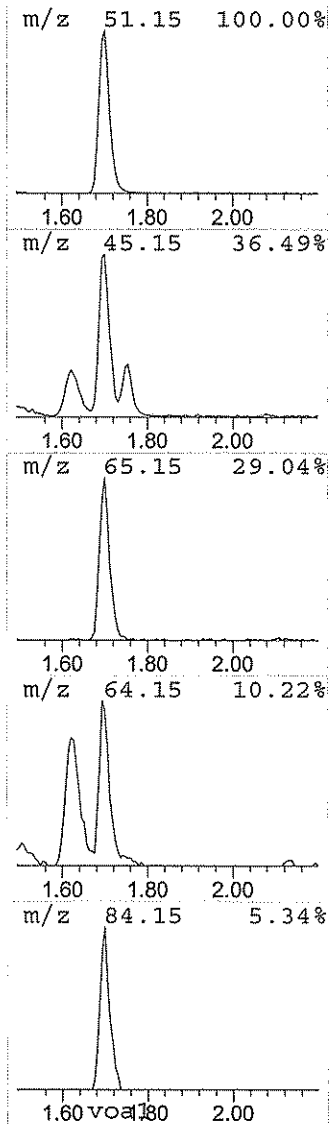
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Propiolonitrile | 51 | C3HN | 001070-71-9 | 3 |
| 2 | Ethane, 1,1-difluoro- | 66 | C2H4F2 | 000075-37-6 | 2 |
| 3 | Difluoromethyl trifluoromethanes... | 200 | C2HF5O3S | 001885-46-7 | 1 |
| 4 | Methane, chlorodifluoro- | 86 | CHClF2 | 000075-45-6 | 1 |
| 5 | Methane, chlorodifluoro- | 86 | CHClF2 | 000075-45-6 | 1 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040506.D
Acq On : 5 Apr 2008 9:14 am
Operator : BR
Sample : ,SAMP,ME0803B85-05A,1,RA,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

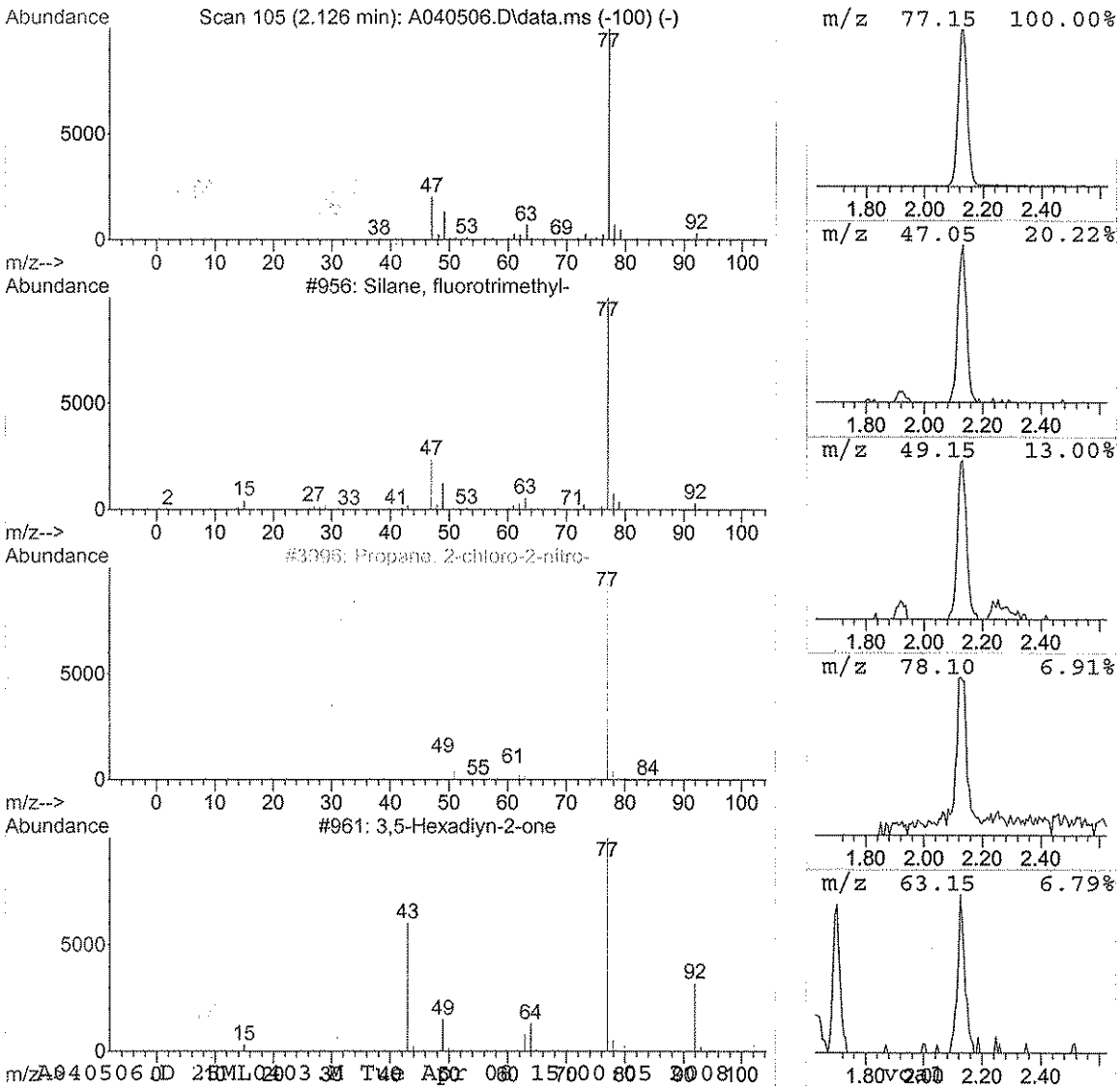
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 2 Silane, fluorotrimethyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.126 | 1.21 ug/L | 164575 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Silane, fluorotrimethyl- | 92 | C3H9FSi | 000420-56-4 | 91 |
| 2 | Propane, 2-chloro-2-nitro- | 123 | C3H6ClNO2 | 000594-71-8 | 38 |
| 3 | 3,5-Hexadiyn-2-one | 92 | C6H4O | 031097-80-0 | 9 |
| 4 | Acetyl chloride, chloro- | 112 | C2H2Cl2O | 000079-04-9 | 4 |
| 5 | Acetyl chloride, chloro- | 112 | C2H2Cl2O | 000079-04-9 | 4 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040506.D
Acq On : 5 Apr 2008 9:14 am
Operator : BR
Sample : ,SAMP,ME0803B85-05A,1,RA,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

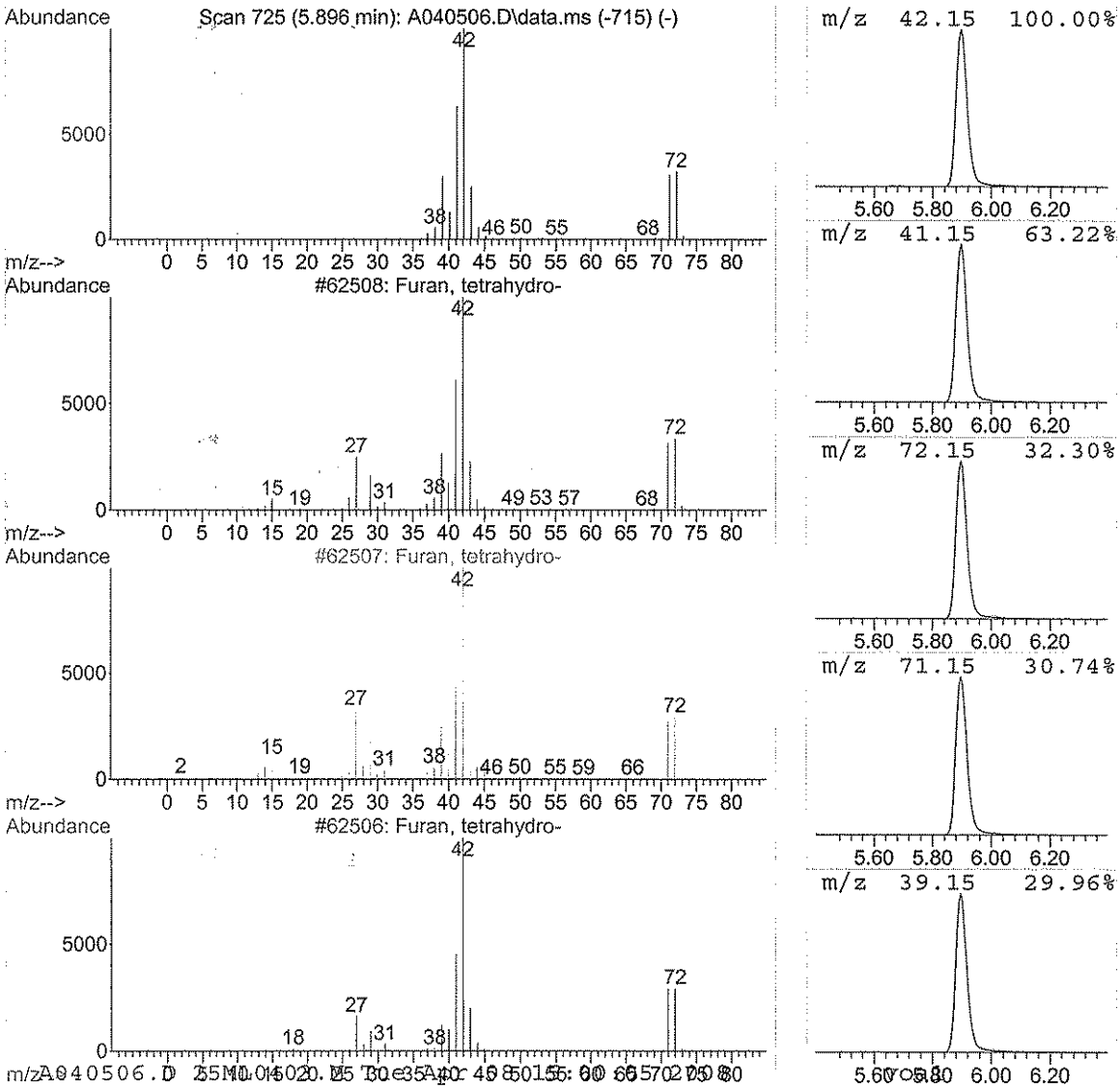
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 3 Furan, tetrahydro- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.896 | 36.43 ug/L | 4949200 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 91 |
| 2 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 3 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 4 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 5 | Oxirane, ethyl- | 72 | C4H8O | 000106-88-7 | 86 |



# Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040506.D
Acq On : 5 Apr 2008 9:14 am
Operator : BR
Sample : ,SAMP,ME0803B85-05A,1,RA,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

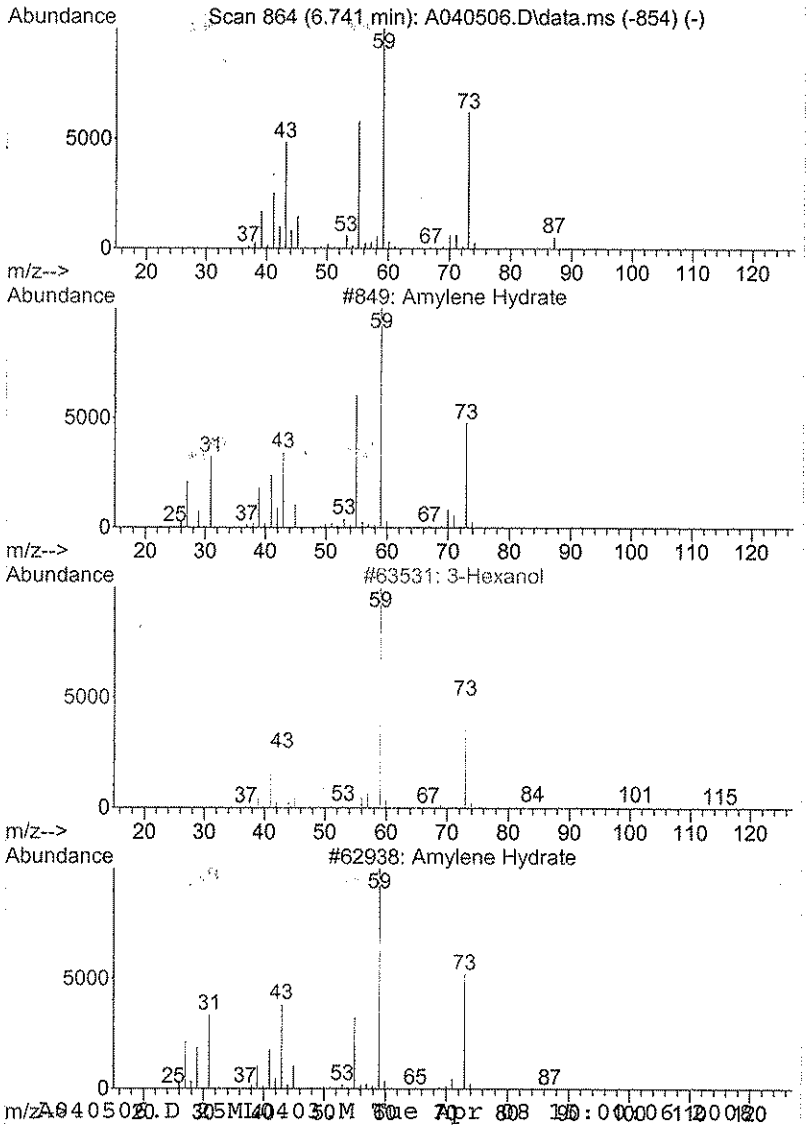
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

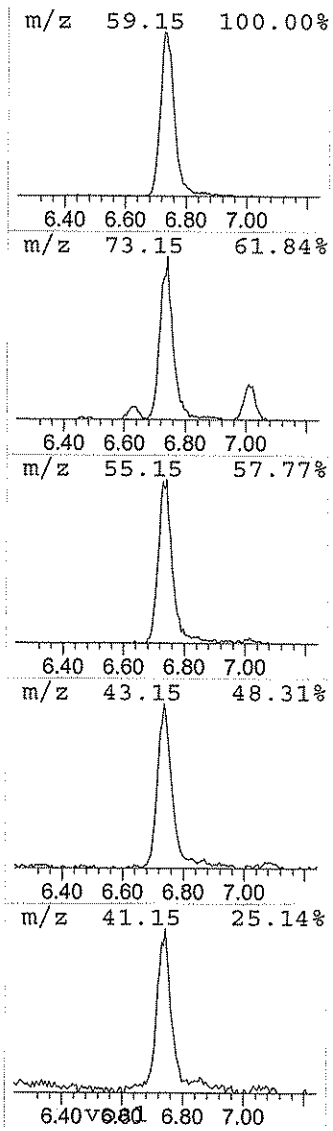
**********

Peak Number 4 Amylene Hydrate Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.741 | 2.87 ug/L | 390527 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Amylene Hydrate | 88 | C5H12O | 000075-85-4 | 78 |
| 2 | 3-Hexanol | 102 | C6H14O | 000623-37-0 | 64 |
| 3 | Amylene Hydrate | 88 | C5H12O | 000075-85-4 | 56 |
| 4 | 3-Hydroxy-3-methyl-2-butanone | 102 | C5H10O2 | 000115-22-0 | 53 |
| 5 | Amylene Hydrate | 88 | C5H12O | 000075-85-4 | 45 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040506.D
Acq On : 5 Apr 2008 9:14 am
Operator : BR
Sample : ,SAMP,ME0803B85-05A,1,RA,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

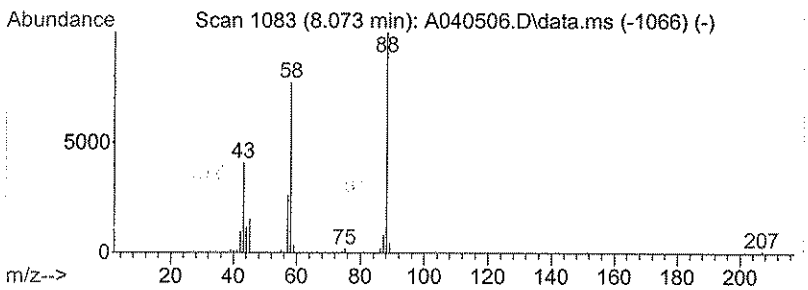
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

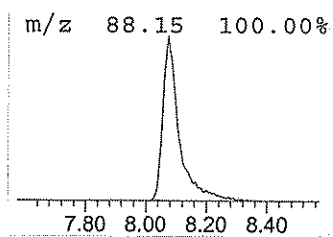
**********

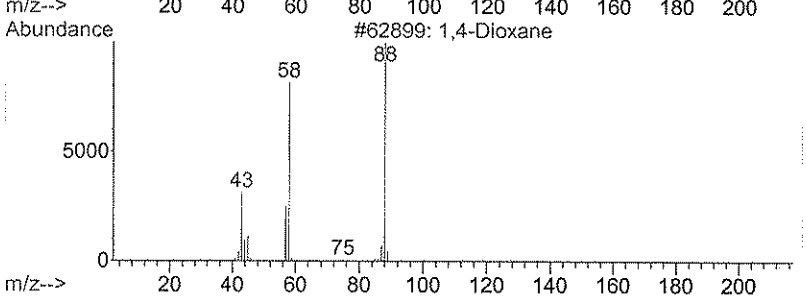
Peak Number 5 1,4-Dioxane Concentration Rank 3

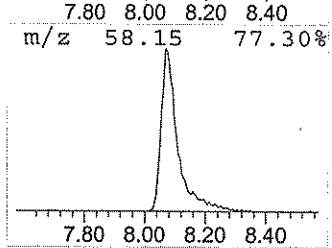
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.073 | 2.44 ug/L | 331025 | fluorobenzene | 7.009 |

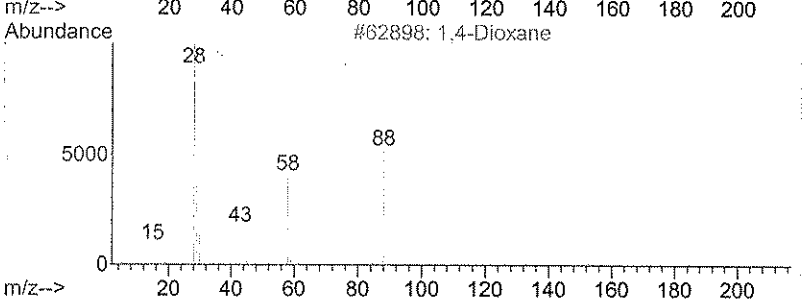
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 5 | 1-Propanamine, N-ethyl- | 87 | C5H13N | 020193-20-8 | 38 |

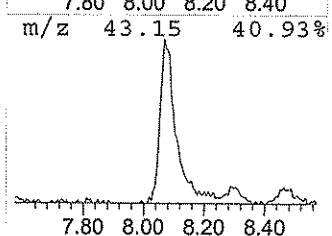


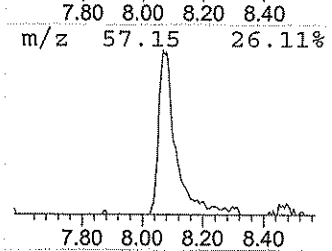



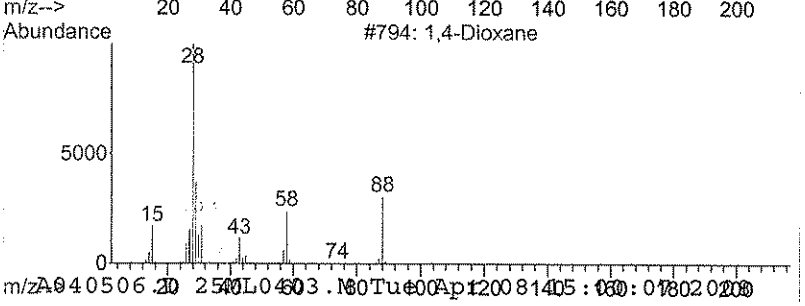



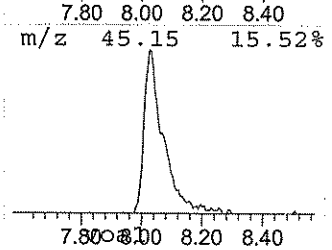



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040507.D
Acq On : 5 Apr 2008 9:49 am
Sample : ,SAMP,ME0803B85-06A,1,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 06 18:24:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 650249 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 430236 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 209349 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 177261 | 10.47 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 104.70% | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 181913 | 11.20 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.00% | | |
| 44) toluene-d8 | 9.248 | 98 | 596648 | 11.42 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 114.20% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 210119 | 9.55 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.50% | | |
| Target Compounds | | | | | | Qvalue |
| 34) trichloroethene | 7.509 | 95 | 8132 | 0.37 | ug/L | 95 |
| 37) methyl methacrylate | 8.062 | 41 | 4736 | 0.68 | ug/L # | 53 |

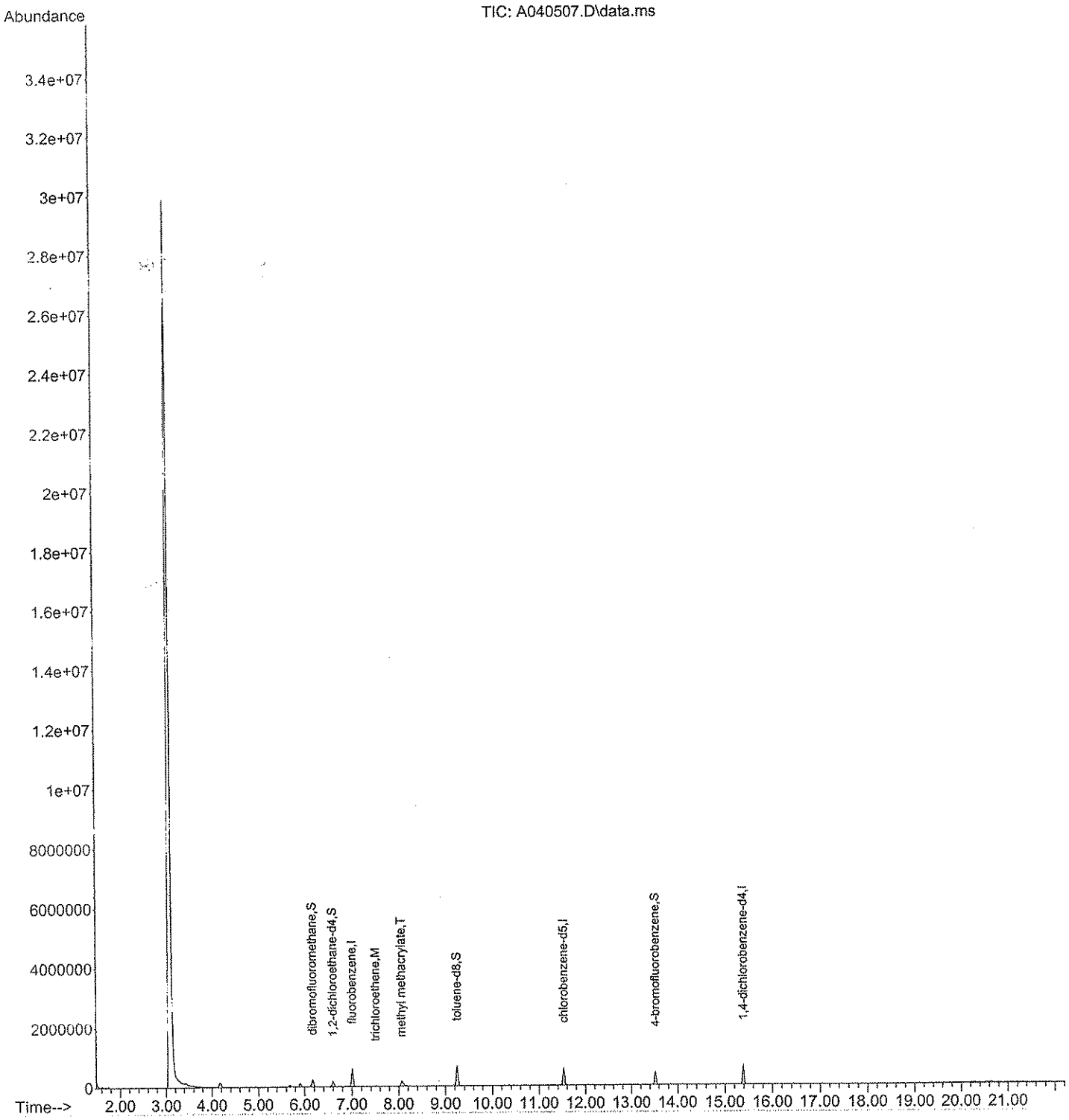
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040507.D
Acq On : 5 Apr 2008 9:49 am
Sample : ,SAMP,ME0803B85-06A,1,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 06 18:24:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040507.D
Acq On : 5 Apr 2008 9:49 am
Operator : BR
Sample : ,SAMP,ME0803B85-06A,1,RA,
Misc : 8260+_W25
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| 1) Ether | 3.063 | 10.0 | ug/L | 108066000 | 1 | 7.010 | 108066000 | 10.0 |

4/4/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040507.D
Acq On : 5 Apr 2008 9:49 am
Operator : BR
Sample : ,SAMP,ME0803B85-06A,1,RA,
Misc : 8260+_W25
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounts

Signal : TIC: A040507.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.063 | 251 | 259 | 317 | rBV | 29880141 | 108066486 | 100.00% | 100.000% |

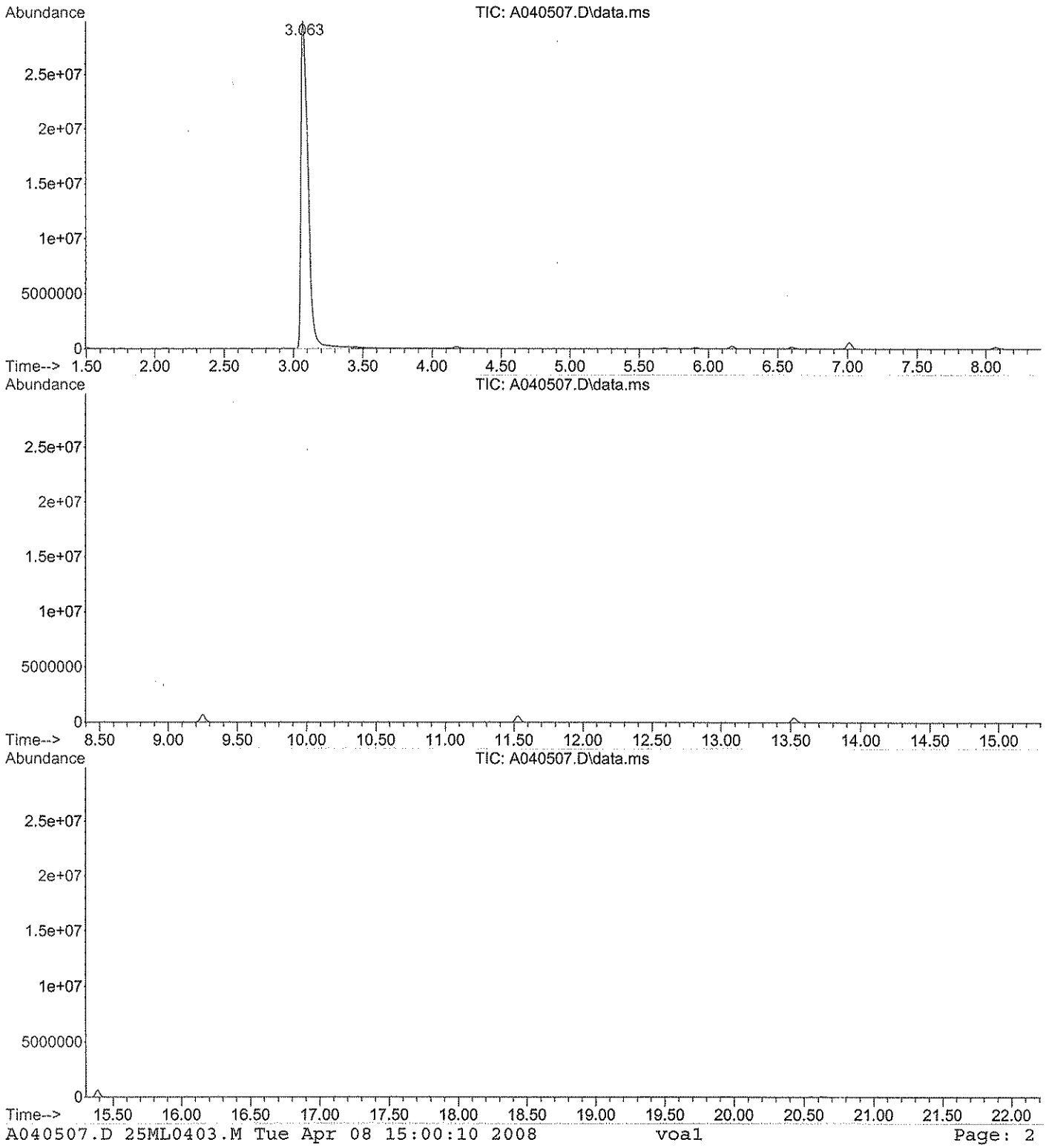
Sum of corrected areas: 108066486

LSC Report - Integrated Chromatogram

```
Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040507.D
Acq On    :  5 Apr 2008    9:49 am
Operator  : BR
Sample    : ,SAMP,ME0803B85-06A,1,RA,
Misc      : 8260+_W25
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040507.D
Acq On : 5 Apr 2008 9:49 am
Operator : BR
Sample : ,SAMP,ME0803B85-06A,1,RA,
Misc : 8260+_W25
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

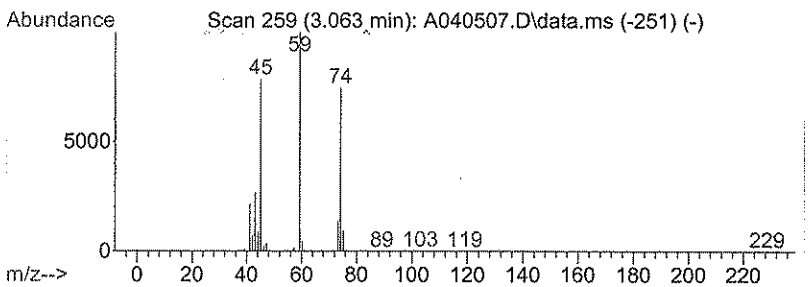
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

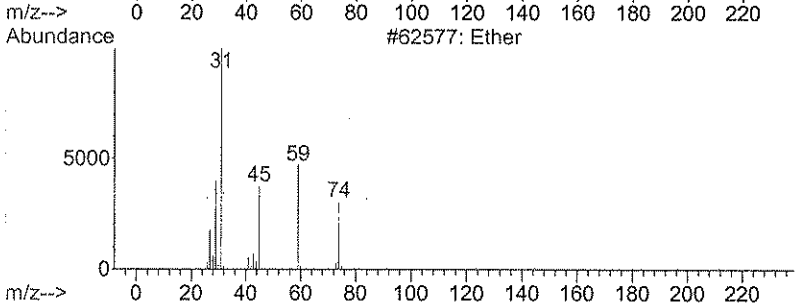
**********

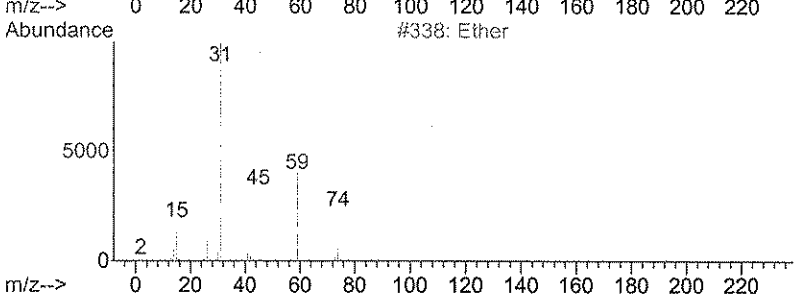
Peak Number 1 Ether Concentration Rank 1

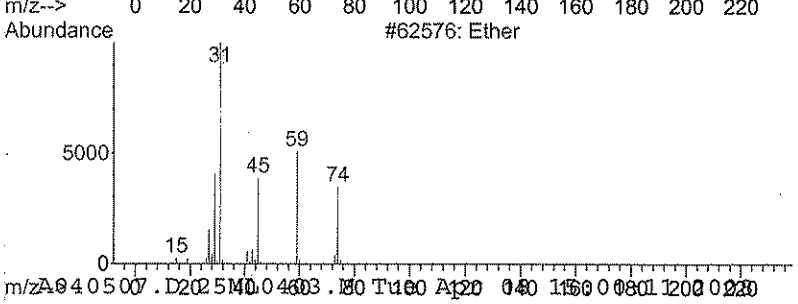
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.063 | 10.00 ug/L | 108066000 | fluorobenzene | 7.010 |

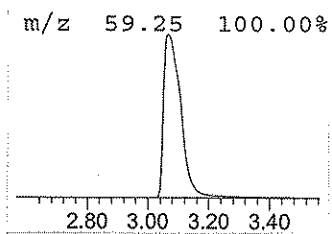
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 78 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 78 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 64 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 53 |

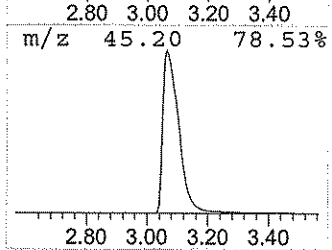


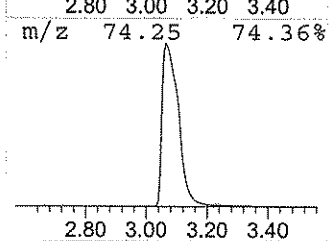



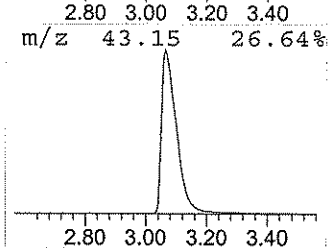



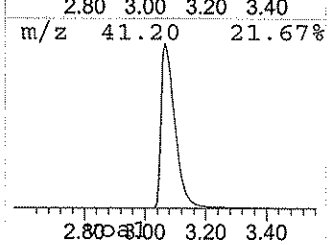




Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040431.D
Acq On : 5 Apr 2008 1:04 am
Sample : ,SAMP,ME0803B85-07A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 05 06:11:28 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 713343 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 434016 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 214541 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 177074 | 9.53 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.30% | | | |
| 30) 1,2-dichloroethane-d4 | 6.608 | 65 | 190029 | 10.67 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 106.70% | | | |
| 44) toluene-d8 | 9.247 | 98 | 610732 | 11.58 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.80% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 213680 | 9.62 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.20% | | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.448 | 64 | 3329500 | 224.54 | ug/L E | 98 |
| 13) methylene chloride | 3.962 | 84 | 46789 | 2.03 ~~ug/L~~ | E | 94 |
| 31) benzene | 6.632 | 78 | 25188416 | 315.27 | ug/L E | 89 |
| 33) 1,2-dichloroethane | 6.638 | 62 | 330846 | 13.39 | ug/L | 88 |

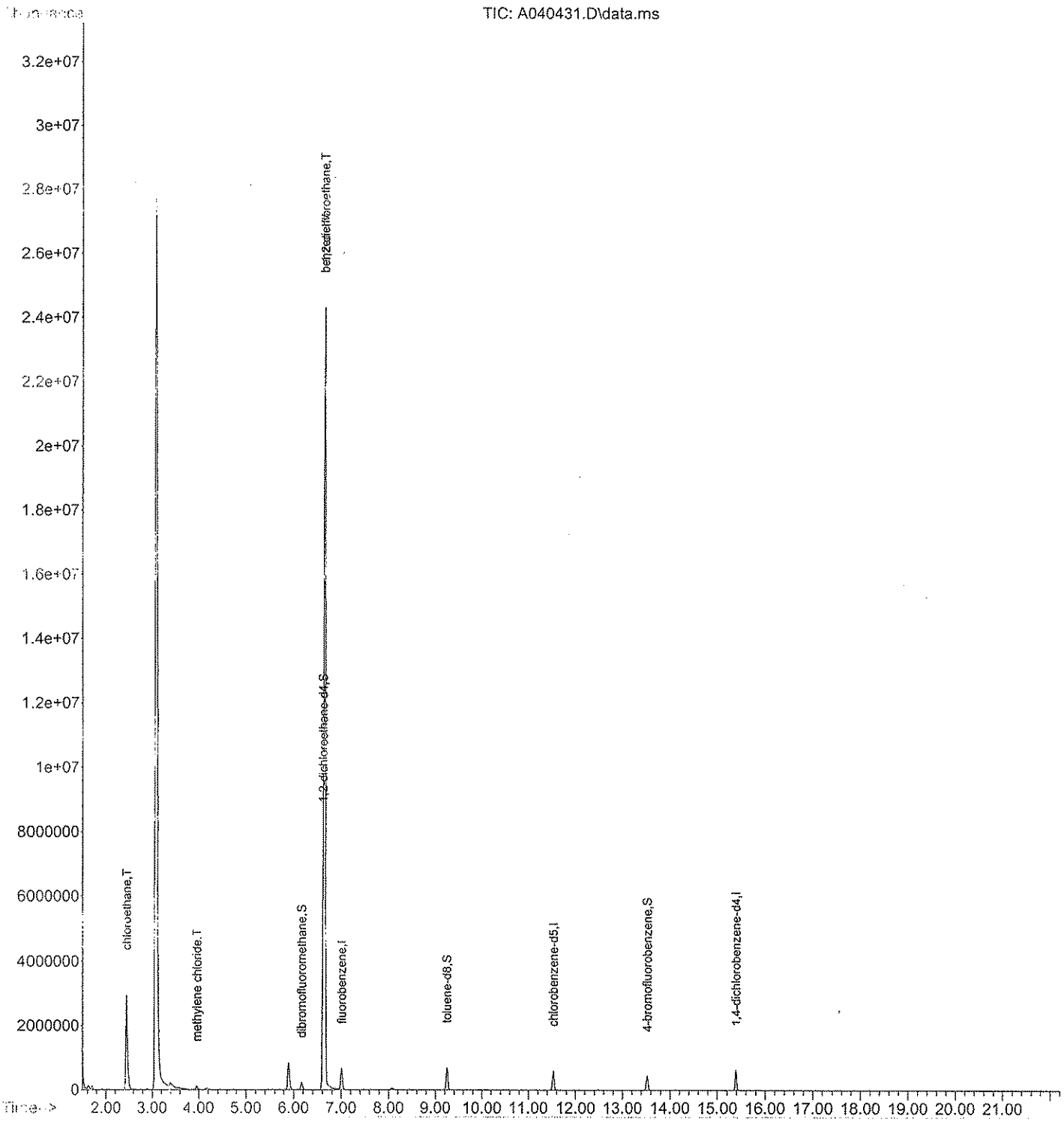
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040431.D
Acq On : 5 Apr 2008 1:04 am
Sample : ,SAMP,ME0803B85-07A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 05 06:11:28 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040431.D
Acq On : 5 Apr 2008 1:04 am
Operator : BR
Sample : ,SAMP,ME0803B85-07A,1,
Misc : 8260+_w25
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|
| Ether | 3.068 | 14.0 | ug/L | 94101500 | 1 | 7.015 | 67448600 | 10.0 |

4/08/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040431.D
Acq On : 5 Apr 2008 1:04 am
Operator : BR
Sample : ,SAMP,ME0803B85-07A,1,
Misc : 8260+_w25
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040431.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.448 | 146 | 158 | 185 | rBV | 2943948 | 7643962 | 8.12% | 4.518% |
| 2 | 3.068 | 251 | 260 | 307 | rBV | 27698693 | 94101494 | 100.00% | 55.618% |
| 3 | 6.638 | 829 | 847 | 877 | rBV | 24308703 | 67448562 | 71.68% | 39.865% |

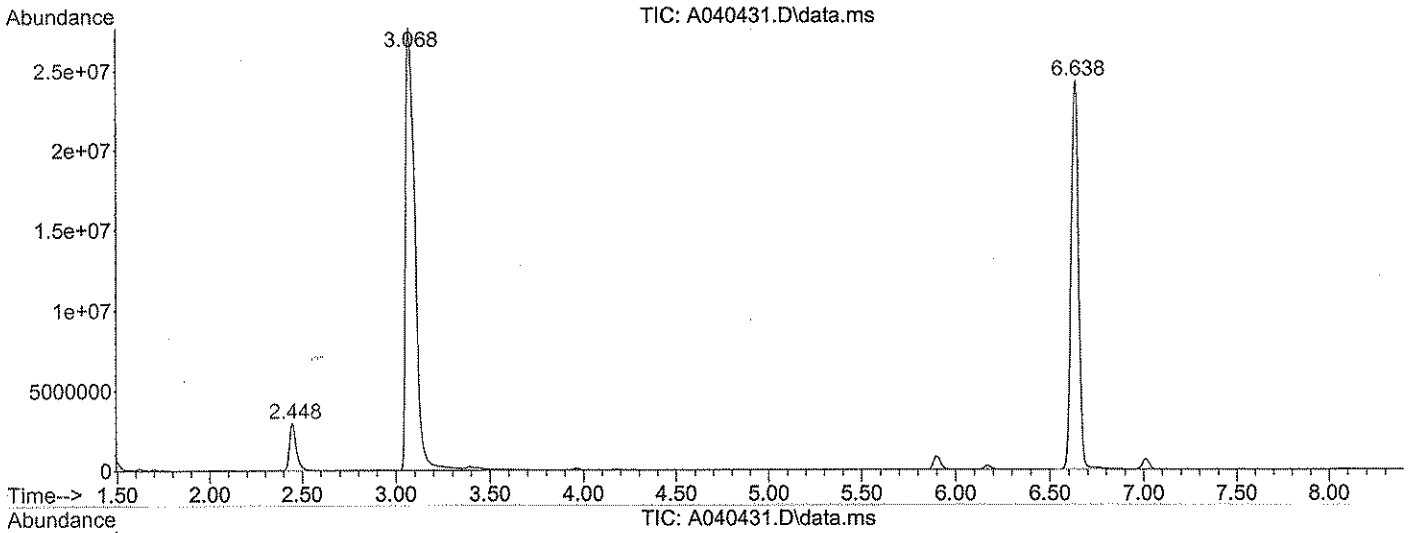
Sum of corrected areas: 169194018

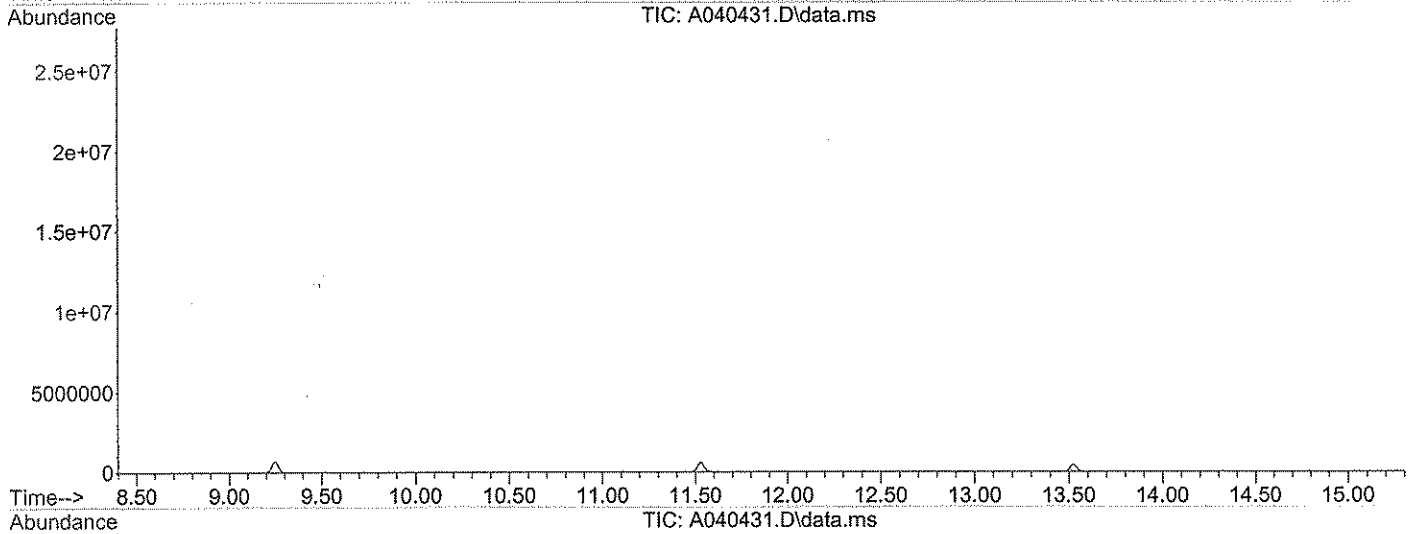
LSC Report - Integrated Chromatogram

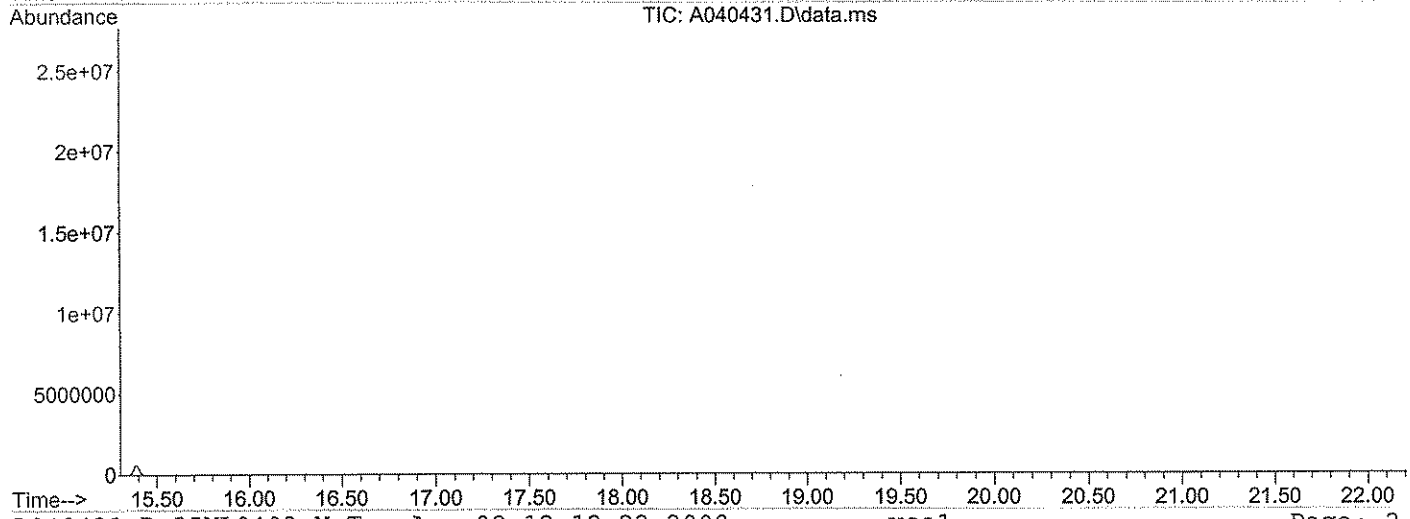
```
Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040431.D
Acq On    :  5 Apr 2008    1:04 am
Operator  : BR
Sample    : ,SAMP,ME0803B85-07A,1,
Misc      : 8260+_w25
ALS Vial  : 31   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040431.D
Acq On : 5 Apr 2008 1:04 am
Operator : BR
Sample : ,SAMP,ME0803B85-07A,1,
Misc : 8260+_w25
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

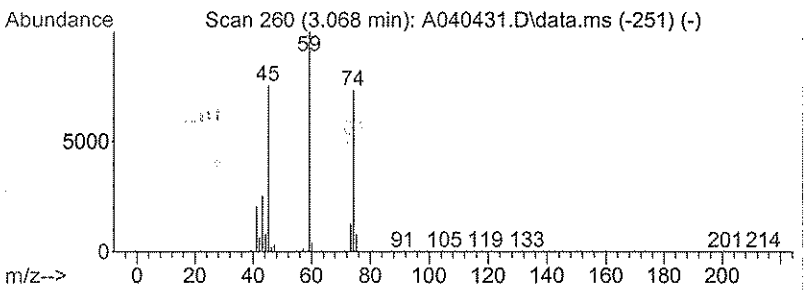
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

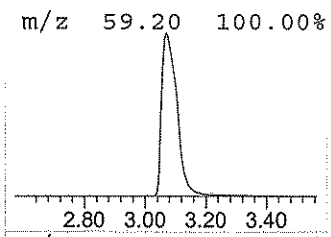
**********

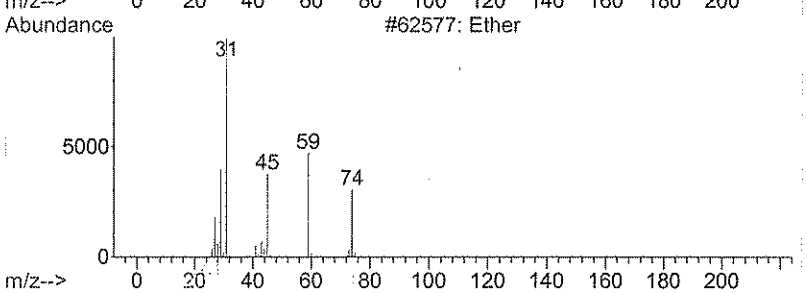
Peak Number 1 Ether Concentration Rank 1

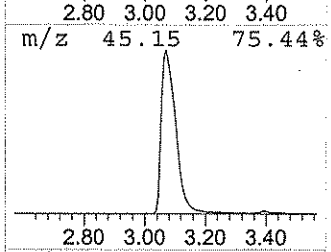
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.068 | 13.95 ug/L | 94101500 | fluorobenzene | 7.015 |

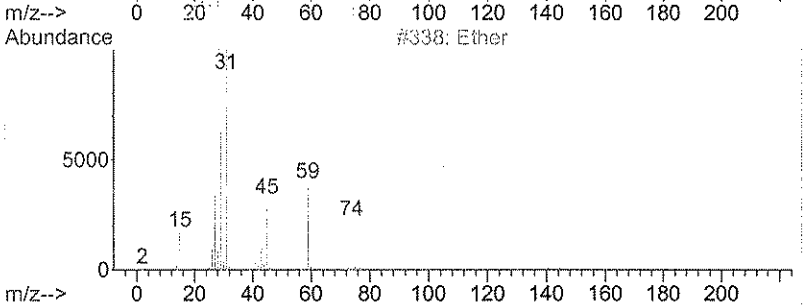
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 83 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 83 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 72 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 59 |

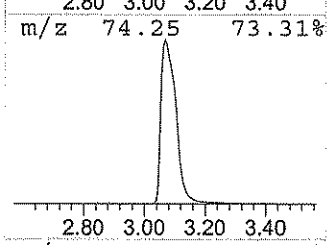


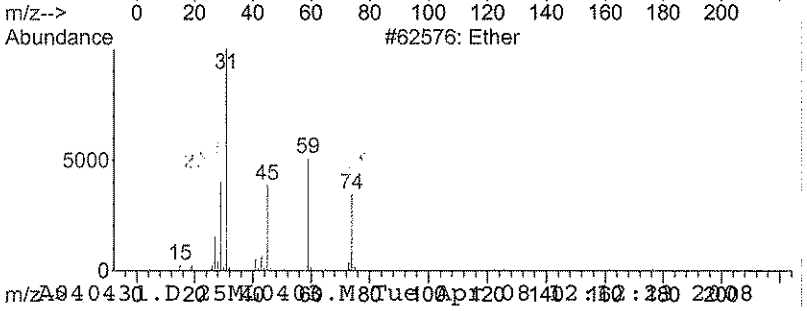



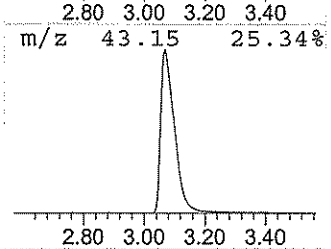



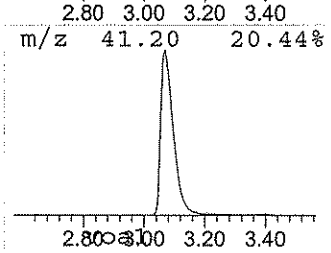



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040509.D
Acq On : 5 Apr 2008 10:59 am
Sample : ,SAMP,ME0803B85-07A,25,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 06 18:24:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 578562 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.522 | 117 | 388551 | 10.00 | ug/L | -0.01 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 190101 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.165 | 113 | 153234 | 10.17 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.70% | | |
| 30) 1,2-dichloroethane-d4 | 6.596 | 65 | 157893 | 10.93 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.30% | | |
| 44) toluene-d8 | 9.248 | 98 | 535616 | 11.35 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 113.50% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 191018 | 9.61 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.10% | | |
| Target Compounds | | | | | | Qvalue |
| 7 chloroethane | 2.437 | 64 | 115452 | 9.60 | ug/L | 97 |
| 31) benzene | 6.627 | 78 | 916933 | 14.15 | ug/L | 99 |
| 38) 1,2-dichloroethane | 6.621 | 62 | 10663 | 0.53 | ug/L | 92 |

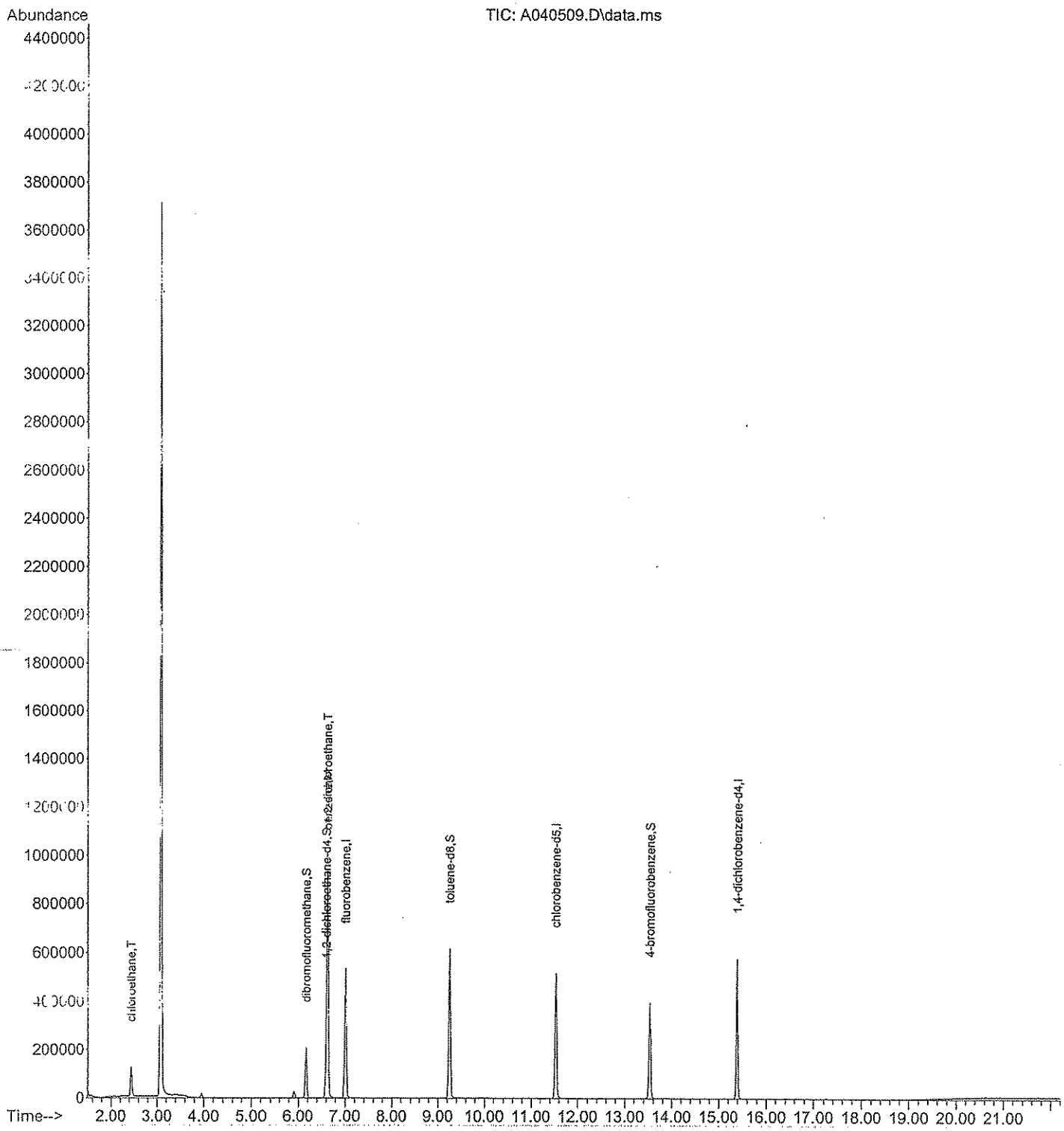
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040509.D
Acq On : 5 Apr 2008 10:59 am
Sample : ,SAMP,ME0803B85-07A,25,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 06 18:24:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040432.D
Acq On : 5 Apr 2008 1:39 am
Sample : ,SAMP,ME0803B85-08A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 05 06:11:31 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 590767 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 406005 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 202422 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.166 | 113 | 152326 | 9.90 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.00% | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 157976 | 10.71 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.10% | | | |
| 44) toluene-d8 | 9.250 | 98 | 560910 | 11.37 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.70% | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 201092 | 9.68 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.80% | | | |
| Target Compounds | | | | | | Qvalue |
| 11) acetone | 3.478 | 43 | 5832 | 2.76 | ug/L | 78 |

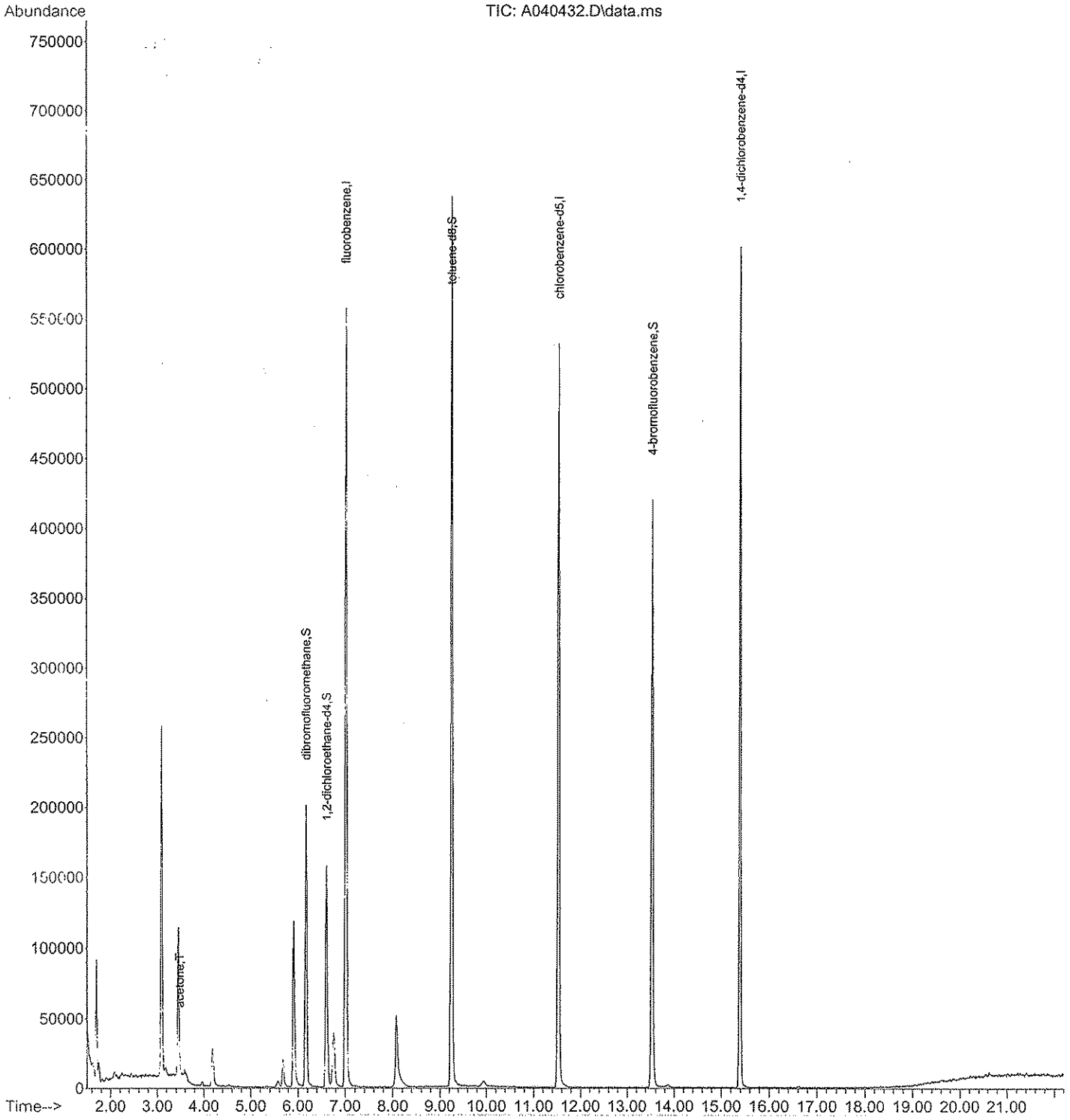
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040408\A040432.D
Acq On : 5 Apr 2008 1:39 am
Sample : ,SAMP,ME0803B85-08A,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 05 06:11:31 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040432.D
Acq On : 5 Apr 2008 1:39 am
Operator : BR
Sample : ,SAMP,ME0803B85-08A,1,
Misc : 8260+_w25
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Propiolonitrile | 1.697 | 1.0 | ug/L | 143984 | 1 | 7.012 | 1398110 | 10.0 |
| Ether | 3.089 | 3.9 | ug/L | 540681 | 1 | 7.012 | 1398110 | 10.0 |
| Furan, tetrahydro- | 5.911 | 2.3 | ug/L | 319209 | 1 | 7.012 | 1398110 | 10.0 |
| 1,4-Dioxane | 8.076 | 1.6 | ug/L | 219450 | 1 | 7.012 | 1398110 | 10.0 |

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040432.D
Acq On : 5 Apr 2008 1:39 am
Operator : BR
Sample : ,SAMP,ME0803B85-08A,1,
Misc : 8260+_w25
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040432.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.697 | 29 | 34 | 40 | rBV | 83799 | 143984 | 8.88% | 1.517% |
| 2 | 3.089 | 254 | 263 | 273 | rBV | 250421 | 540681 | 33.34% | 5.698% |
| 3 | 3.448 | 313 | 322 | 333 | rBV | 106230 | 258504 | 15.94% | 2.724% |
| 4 | 4.190 | 434 | 444 | 464 | rVB2 | 27545 | 88969 | 5.49% | 0.938% |
| 5 | 5.680 | 682 | 689 | 705 | rVB | 20328 | 56568 | 3.49% | 0.596% |
| 6 | 5.911 | 716 | 727 | 748 | rBV2 | 117962 | 319209 | 19.68% | 3.364% |
| 7 | 6.166 | 760 | 769 | 783 | rBV | 200058 | 518508 | 31.97% | 5.465% |
| 8 | 6.604 | 831 | 841 | 854 | rBV | 157234 | 438627 | 27.05% | 4.623% |
| 9 | 6.750 | 855 | 865 | 881 | rVB2 | 38287 | 132084 | 8.14% | 1.392% |
| 10 | 7.012 | 897 | 908 | 927 | rBV | 556367 | 1398105 | 86.21% | 14.735% |
| 11 | 8.076 | 1066 | 1083 | 1124 | rBV2 | 51506 | 219450 | 13.53% | 2.313% |
| 12 | 9.250 | 1264 | 1276 | 1290 | rBV | 636770 | 1621718 | 100.00% | 17.091% |
| 13 | 11.530 | 1639 | 1651 | 1680 | rBV | 531407 | 1401696 | 86.43% | 14.772% |
| 14 | 13.525 | 1968 | 1979 | 1998 | rBV | 419775 | 1045391 | 64.46% | 11.017% |
| 15 | 15.386 | 2275 | 2285 | 2299 | rBV | 601074 | 1305101 | 80.48% | 13.754% |

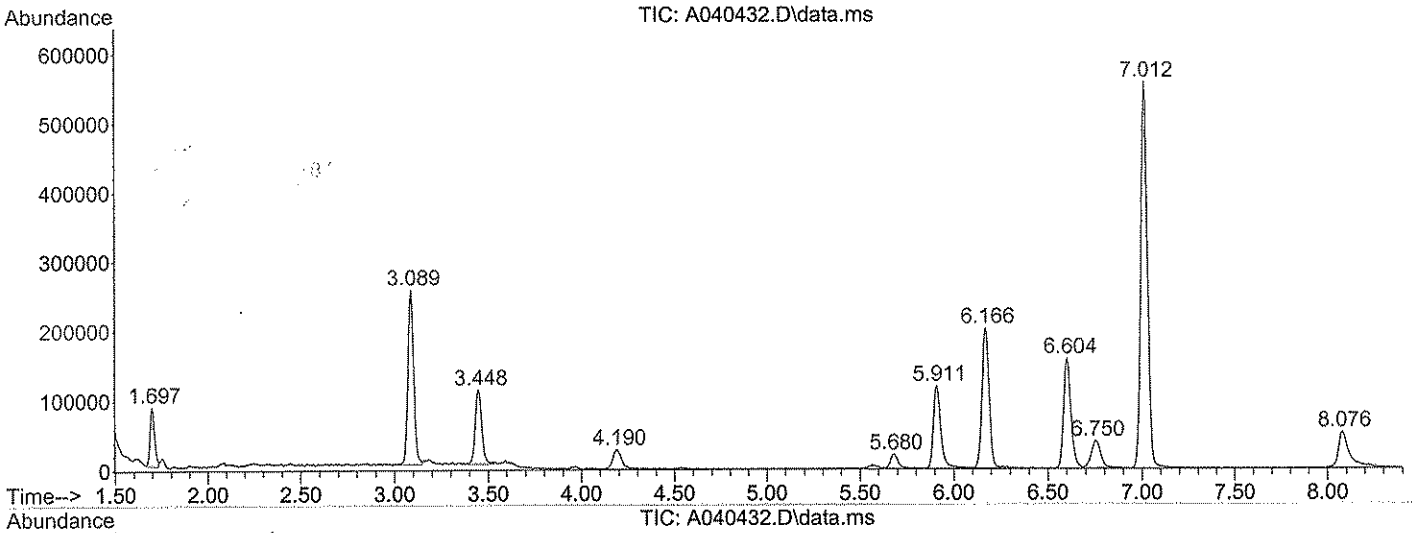
Sum of corrected areas: 9488595

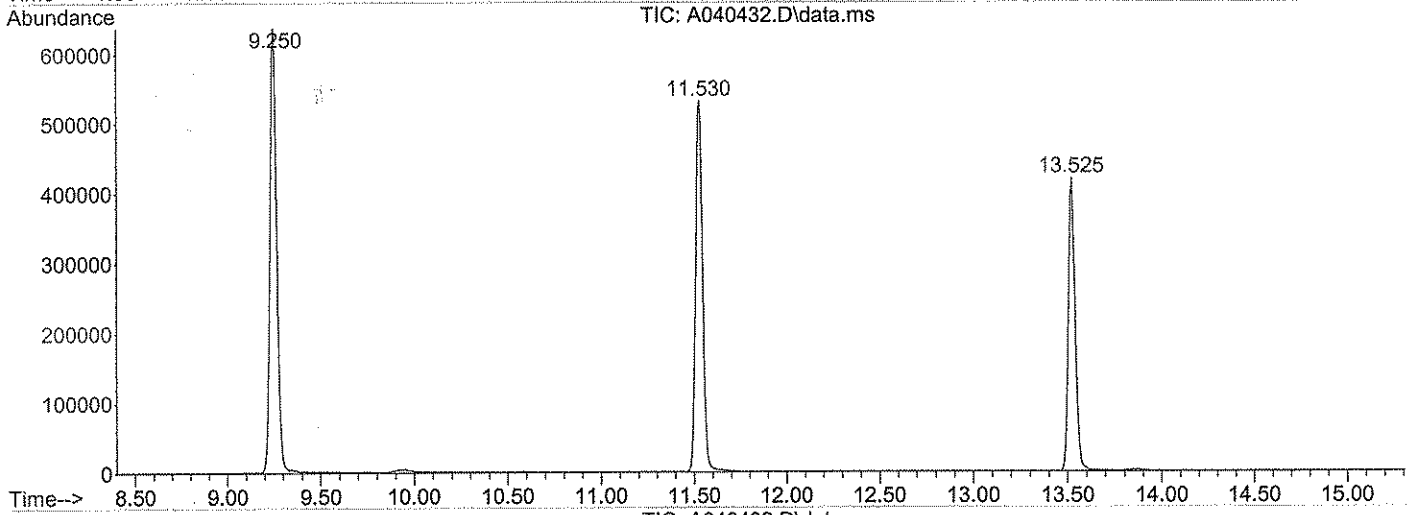
LSC Report - Integrated Chromatogram

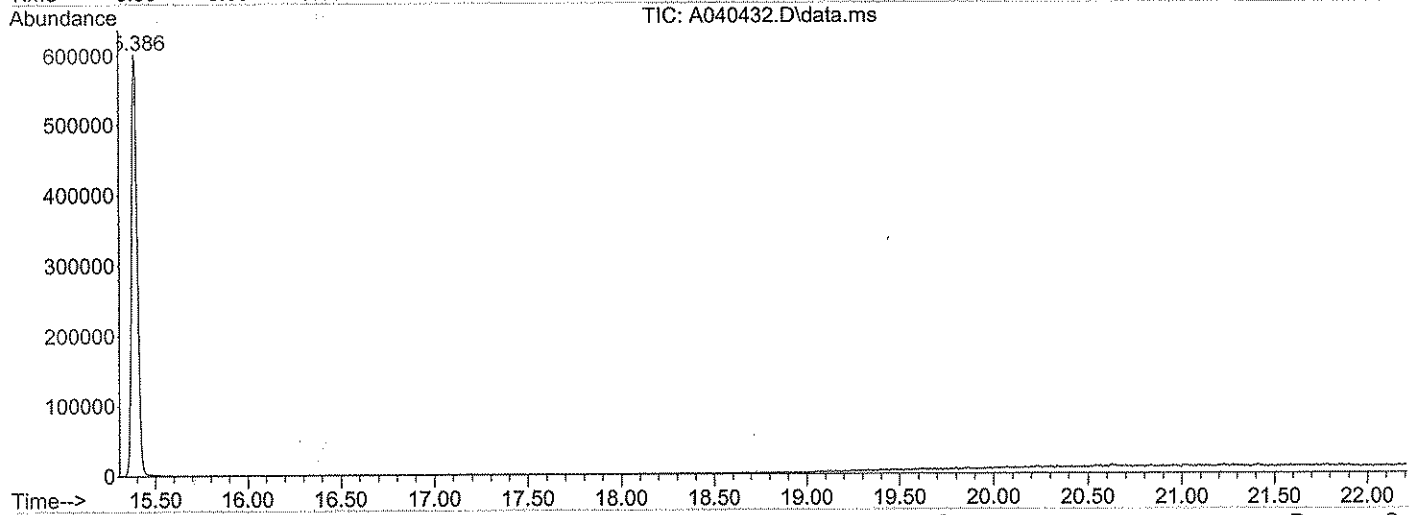
Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040432.D
Acq On : 5 Apr 2008 1:39 am
Operator : BR
Sample : ,SAMP,ME0803B85-08A,1,
Misc : 8260+_w25
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040432.D 25ML0403.M Tue Apr 08 12:12:26 2008 voa1 Page: 2

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040432.D
Acq On : 5 Apr 2008 1:39 am
Operator : BR
Sample : ,SAMP,ME0803B85-08A,1,
Misc : 8260+_w25
ALS Vial : 32 Sample Multiplier: 1

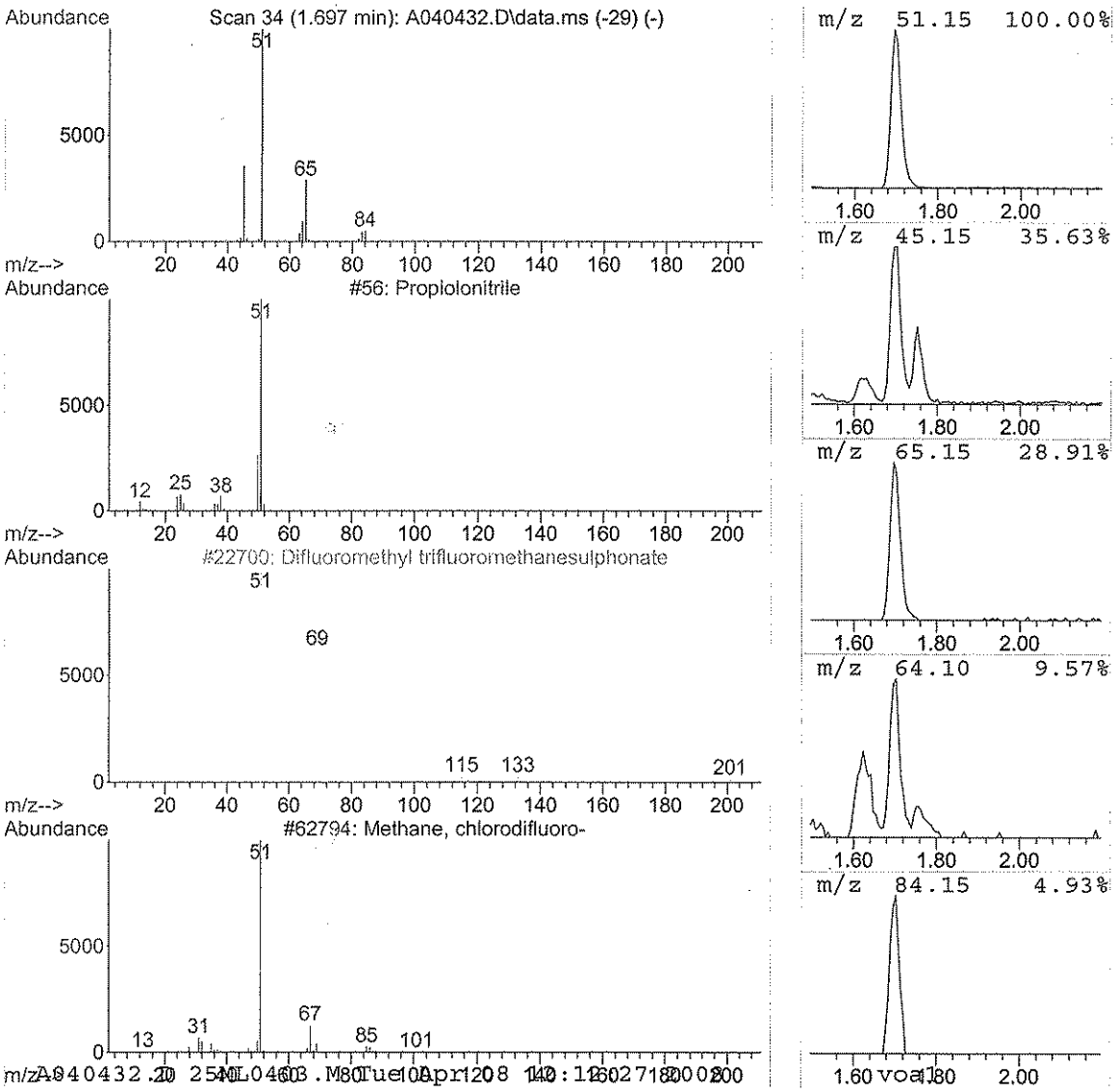
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 1 Propiolonitrile Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.697 | 1.03 ug/L | 143984 | fluorobenzene | 7.012 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Propiolonitrile | 51 | C3HN | 001070-71-9 | 3 |
| 2 | Difluoromethyl trifluoromethanes... | 200 | C2HF5O3S | 001885-46-7 | 1 |
| 3 | Methane, chlorodifluoro- | 86 | CHClF2 | 000075-45-6 | 1 |
| 4 | Ethane, 1,1-difluoro- | 66 | C2H4F2 | 000075-37-6 | 1 |
| 5 | Acetic acid, difluoro-, ethyl ester | 124 | C4H6F2O2 | 000454-31-9 | 1 |



Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040432.D
Acq On : 5 Apr 2008 1:39 am
Operator : BR
Sample : ,SAMP,ME0803B85-08A,1,
Misc : 8260+_w25
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

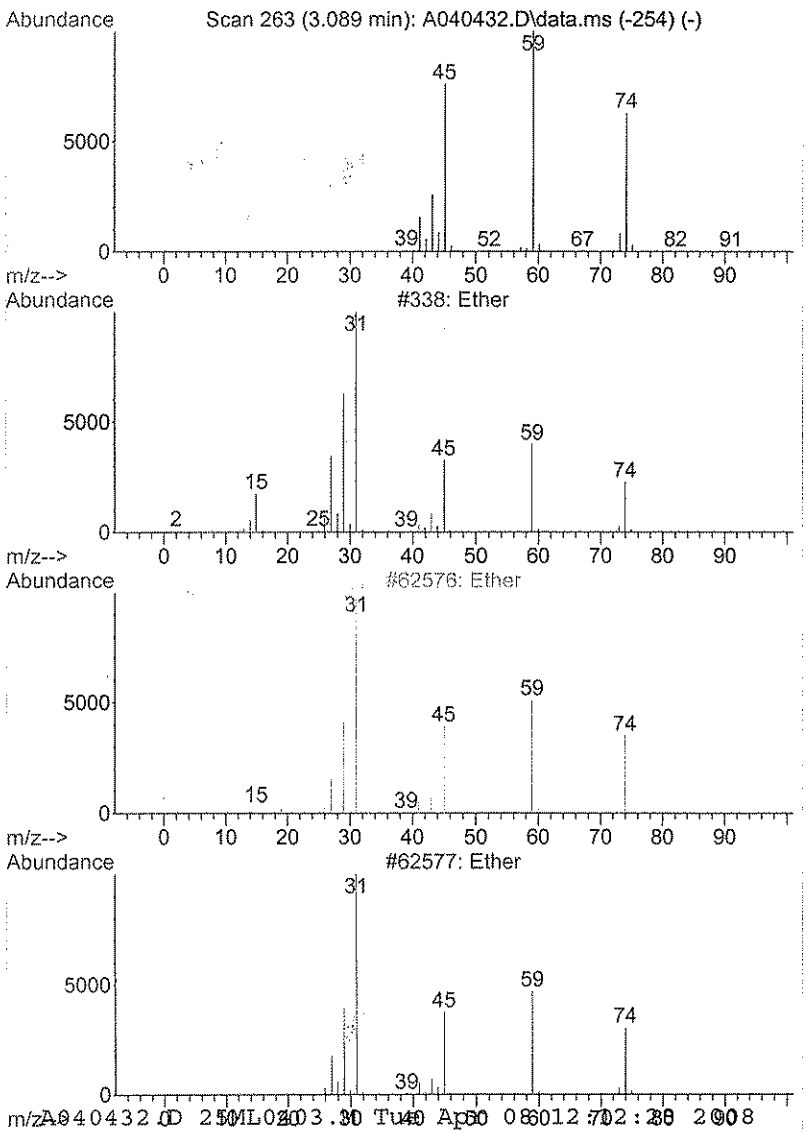
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

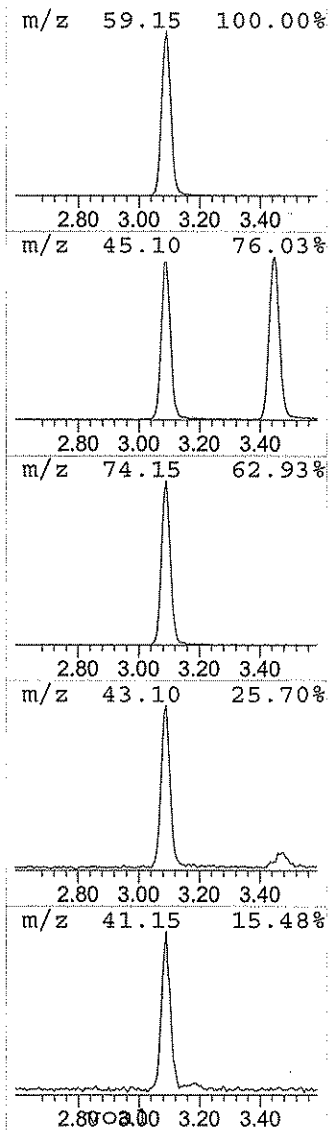
**********

Peak Number 2 Ether Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.089 | 3.87 ug/L | 540681 | fluorobenzene | 7.012 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 5 | Hydrazine, trimethyl- | 74 | C3H10N2 | 001741-01-1 | 43 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040432.D
Acq On : 5 Apr 2008 1:39 am
Operator : BR
Sample : ,SAMP,ME0803B85-08A,1,
Misc : 8260+_w25
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

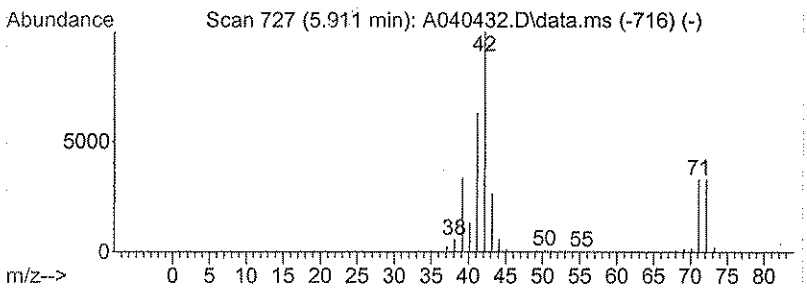
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

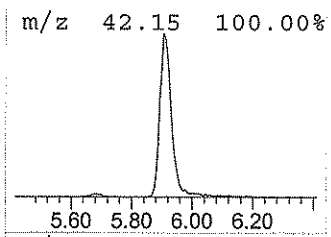
**********

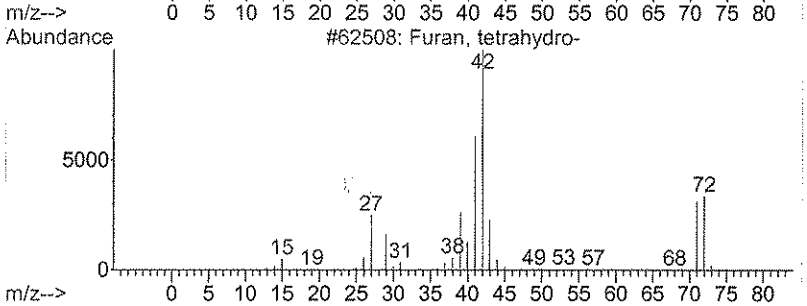
Peak Number 3 Furan, tetrahydro- Concentration Rank 2

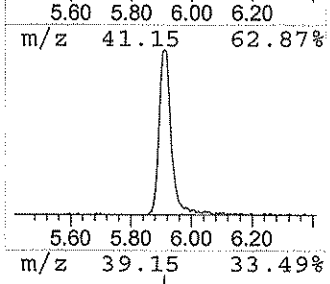
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.911 | 2.28 ug/L | 319209 | fluorobenzene | 7.012 |

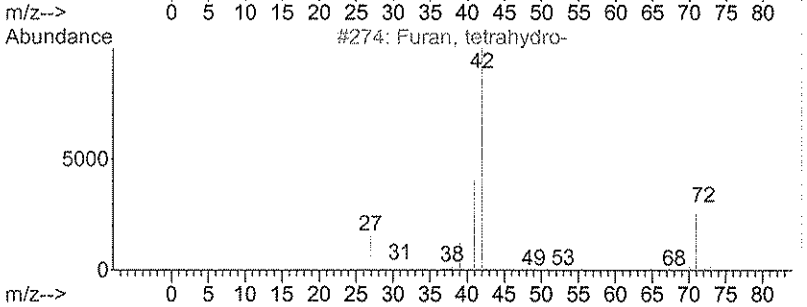
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 91 |
| 2 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 3 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 4 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 5 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |

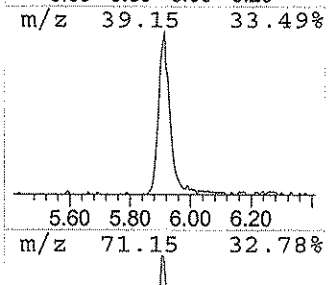


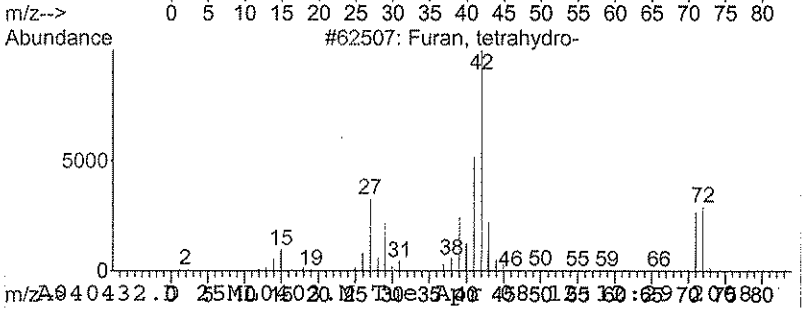



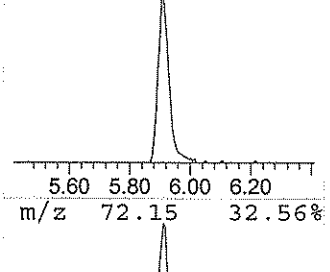



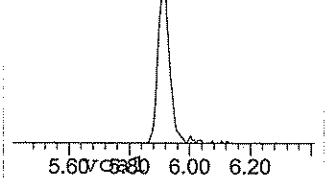



Data Path : C:\msdchem\1\DATA\A040408\
Data File : A040432.D
Acq On : 5 Apr 2008 1:39 am
Operator : BR
Sample : ,SAMP,ME0803B85-08A,1,
Misc : 8260+_w25
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

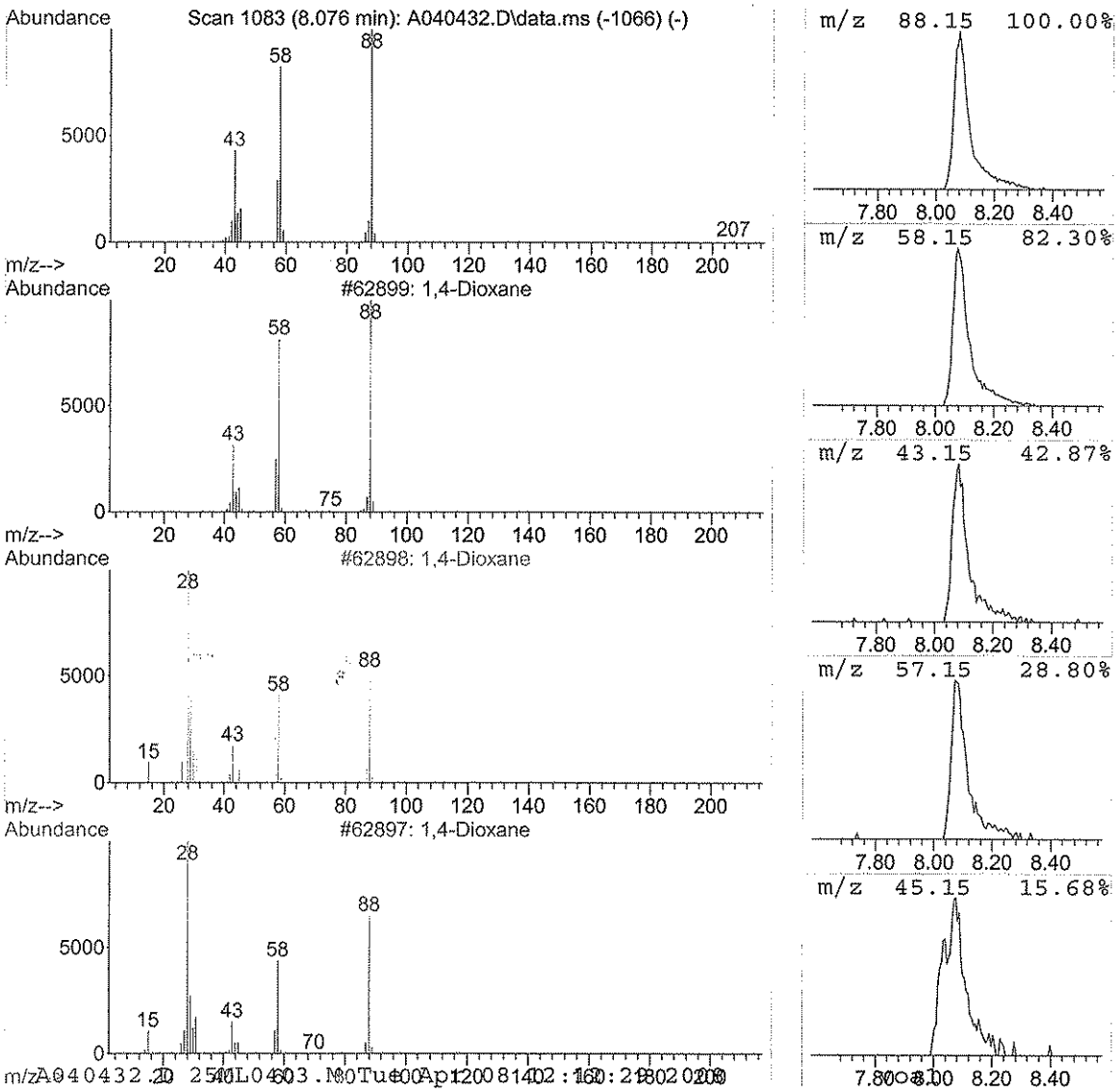
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 4 1,4-Dioxane Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.076 | 1.57 ug/L | 219450 | fluorobenzene | 7.012 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 86 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 86 |
| 5 | 1-Propanamine, N-ethyl- | 87 | C5H13N | 020193-20-8 | 43 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040512.D
Acq On : 5 Apr 2008 12:44 pm
Sample : ,SAMP,ME0803B85-09A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 06 18:24:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 712094 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 438380 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 218627 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 176315 | 9.51 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.10% | | |
| 39) 1,2-dichloroethane-d4 | 6.608 | 65 | 189059 | 10.63 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 106.30% | | |
| 44) toluene-d8 | 9.254 | 98 | 608198 | 11.42 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 114.20% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 214737 | 9.57 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.70% | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.448 | 64 | 3316328 | 224.04 | ug/L | 99 |
| 13) methylene chloride | 3.969 | 84 | 47008 | 2.05 | ug/L | 98 |
| 31) benzene | 6.632 | 78 | 25232013 | 316.37 | ug/L | 89 |
| 33) 1,2-dichloroethane | 6.639 | 62 | 331496 | 13.44 | ug/L | 90 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 6509 | 0.45 | ug/L | 98 |
| 82) hexachlorobutadiene | 18.157 | 225 | 4020 | 0.32 | ug/L | 88 |
| 83) naphthalene | 18.260 | 128 | 13492 | 0.87 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 6452 | 0.57 | ug/L | 98 |

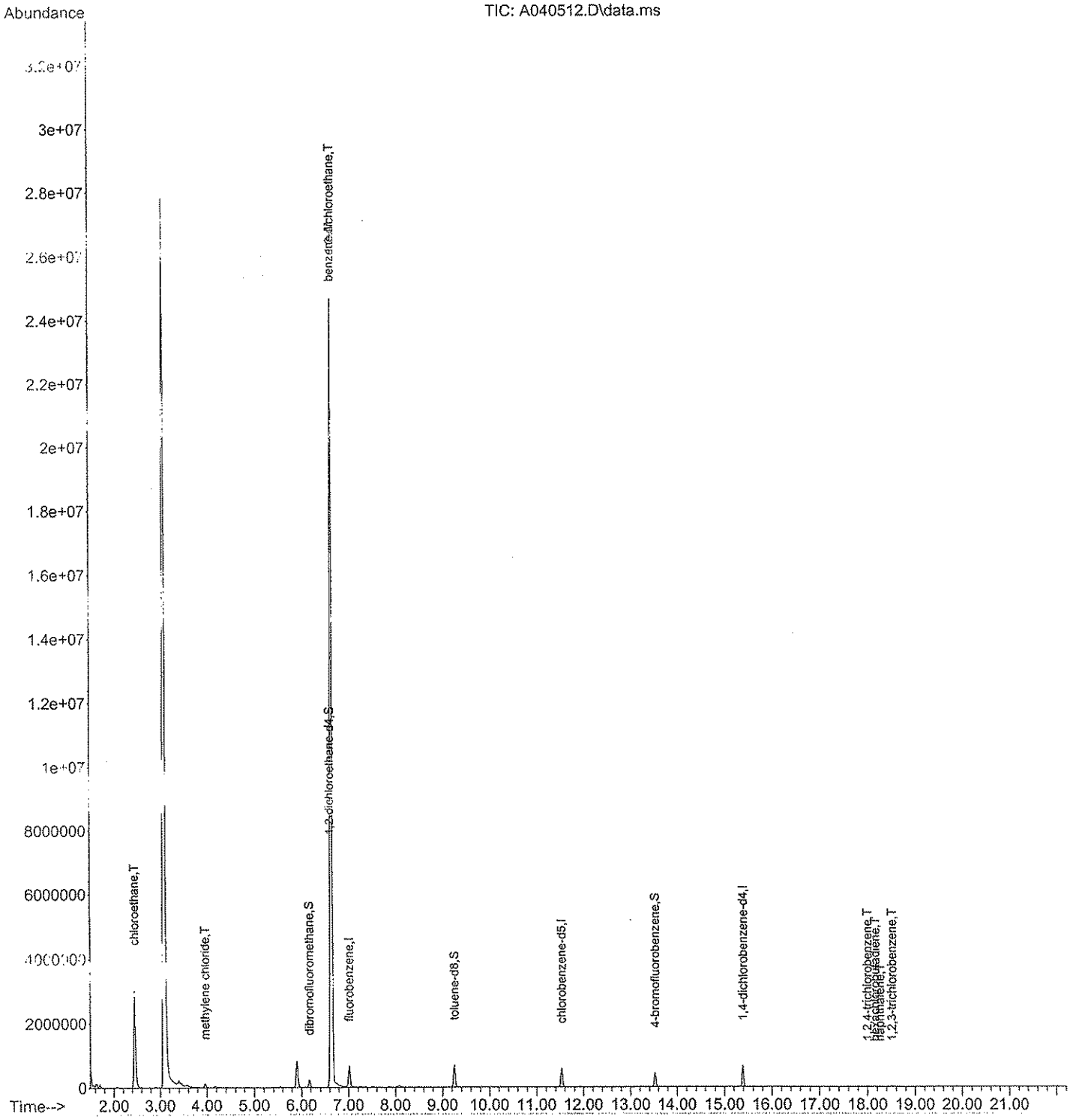
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040512.D
Acq On : 5 Apr 2008 12:44 pm
Sample : ,SAMP,ME0803B85-09A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 06 18:24:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040512.D
Acq On : 5 Apr 2008 12:44 pm
Operator : BR
Sample : ,SAMP,ME0803B85-09A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Ether | 3.069 | 13.9 | ug/L | 94308800 | 1 | 7.016 | 67662100 | 10.0 |

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040512.D
Acq On : 5 Apr 2008 12:44 pm
Operator : BR
Sample : ,SAMP,ME0803B85-09A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040512.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.448 | 146 | 158 | 193 | rBV | 3032013 | 7602637 | 8.06% | 4.483% |
| 2 | 3.069 | 250 | 260 | 308 | rBV | 27834913 | 94308807 | 100.00% | 55.615% |
| 3 | 6.639 | 832 | 847 | 878 | rBV | 24671830 | 67662078 | 71.75% | 39.901% |

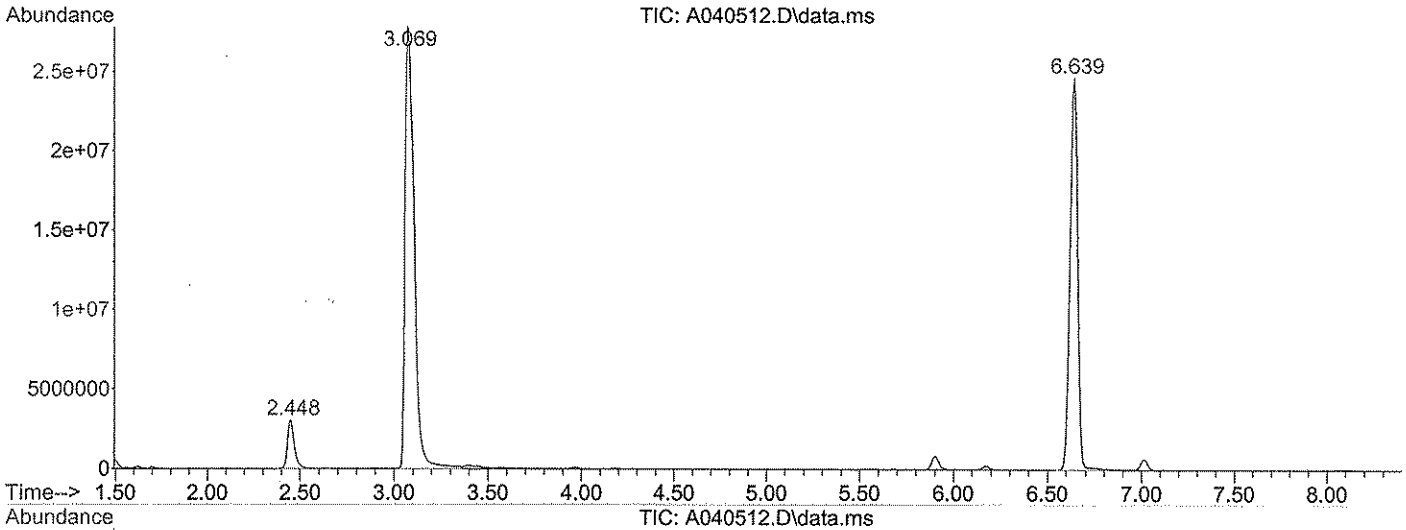
Sum of corrected areas: 169573522

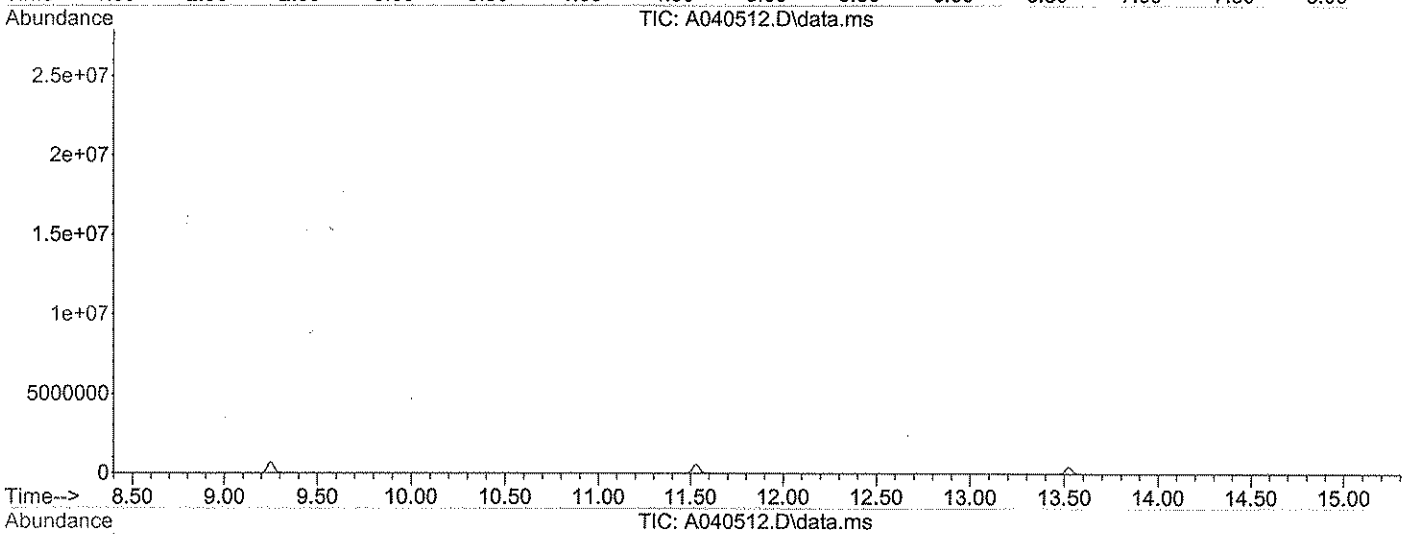
LSC Report - Integrated Chromatogram

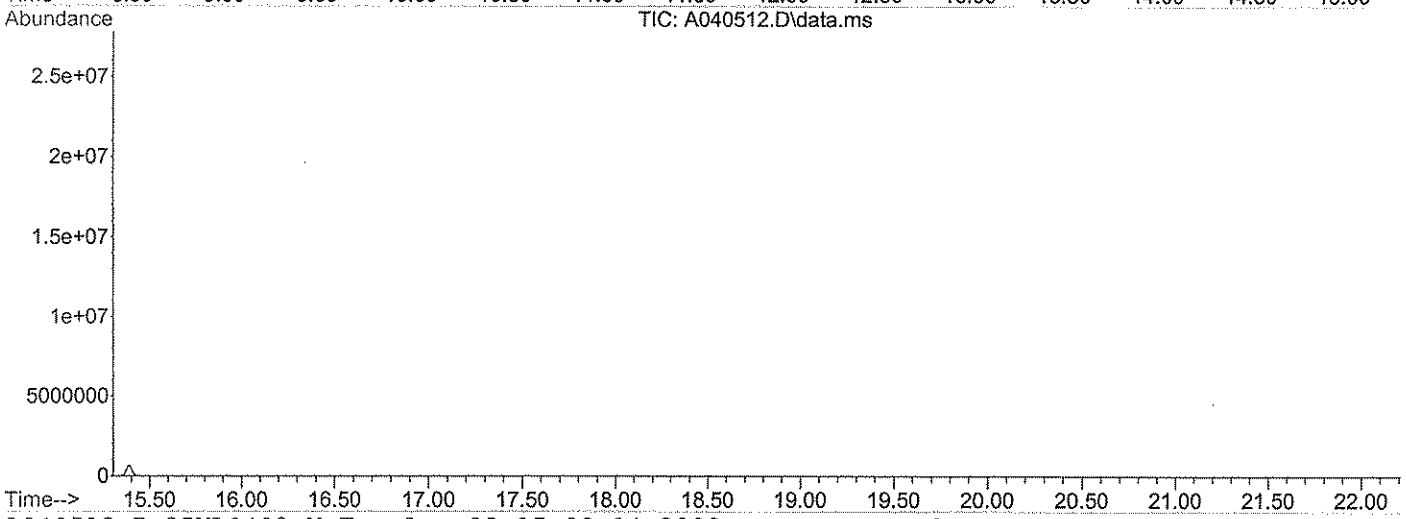
```
Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040512.D
Acq On    :  5 Apr 2008  12:44 pm
Operator  : BR
Sample    : ,SAMP,ME0803B85-09A,1,
Misc      : 8260+_W25
ALS Vial  : 12   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```



Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040512.D
Acq On : 5 Apr 2008 12:44 pm
Operator : BR
Sample : ,SAMP,ME0803B85-09A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

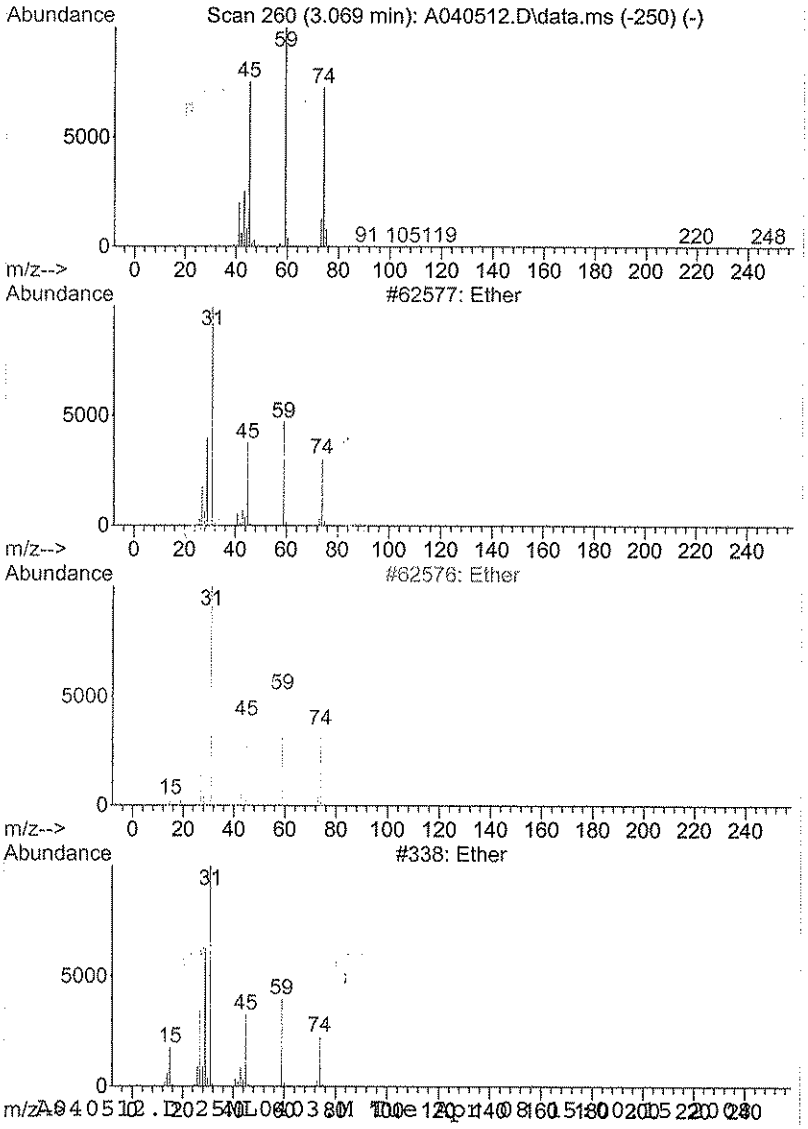
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

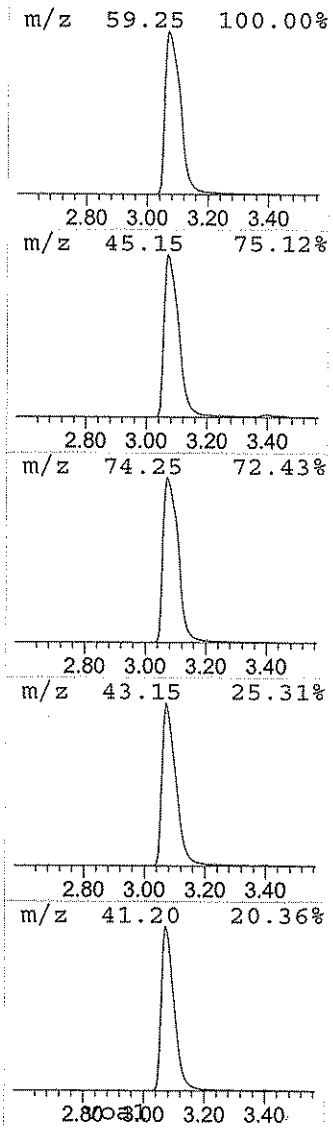
**********

Peak Number 1 Ether Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.069 | 13.94 ug/L | 94308800 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 83 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 78 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 64 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 53 |



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040513.D
Acq On : 5 Apr 2008 1:19 pm
Operator : BR
Sample : ,SAMP,ME0803B85-10A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Ether | 3.093 | 1.9 | ug/L | 264355 | 1 | 7.016 | 1389640 | 10.0 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040805.D
Acq On : 8 Apr 2008 9:30 am
Sample : ,samp,me0803b85-09a,25,ra, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 08 10:13:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 685933 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 470796 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 233470 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 178803 | 10.01 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.10% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 184568 | 10.77 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.70% | | | |
| 44) toluene-d8 | 9.247 | 98 | 655524 | 11.46 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.60% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 235464 | 9.78 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.80% | | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.442 | 64 | 133275 | 9.35 | ug/L | 96 |
| 13) methylene chloride | 3.962 | 84 | 19775 | 0.89 | ug/L | 96 |
| 31) benzene | 6.626 | 78 | 1012257 | 13.18 | ug/L | 98 |
| 33) 1,2-dichloroethane | 6.632 | 62 | 12595 | 0.53 | ug/L | 90 |
| 81) 1,2,4-trichlorobenzene | 17.992 | 180 | 5615 | 0.36 | ug/L | 93 |
| 82) hexachlorobutadiene | 18.162 | 225 | 4336 | 0.32 | ug/L | 86 |
| 83) naphthalene | 18.260 | 128 | 11441 | 0.69 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 5639 | 0.47 | ug/L | 90 |

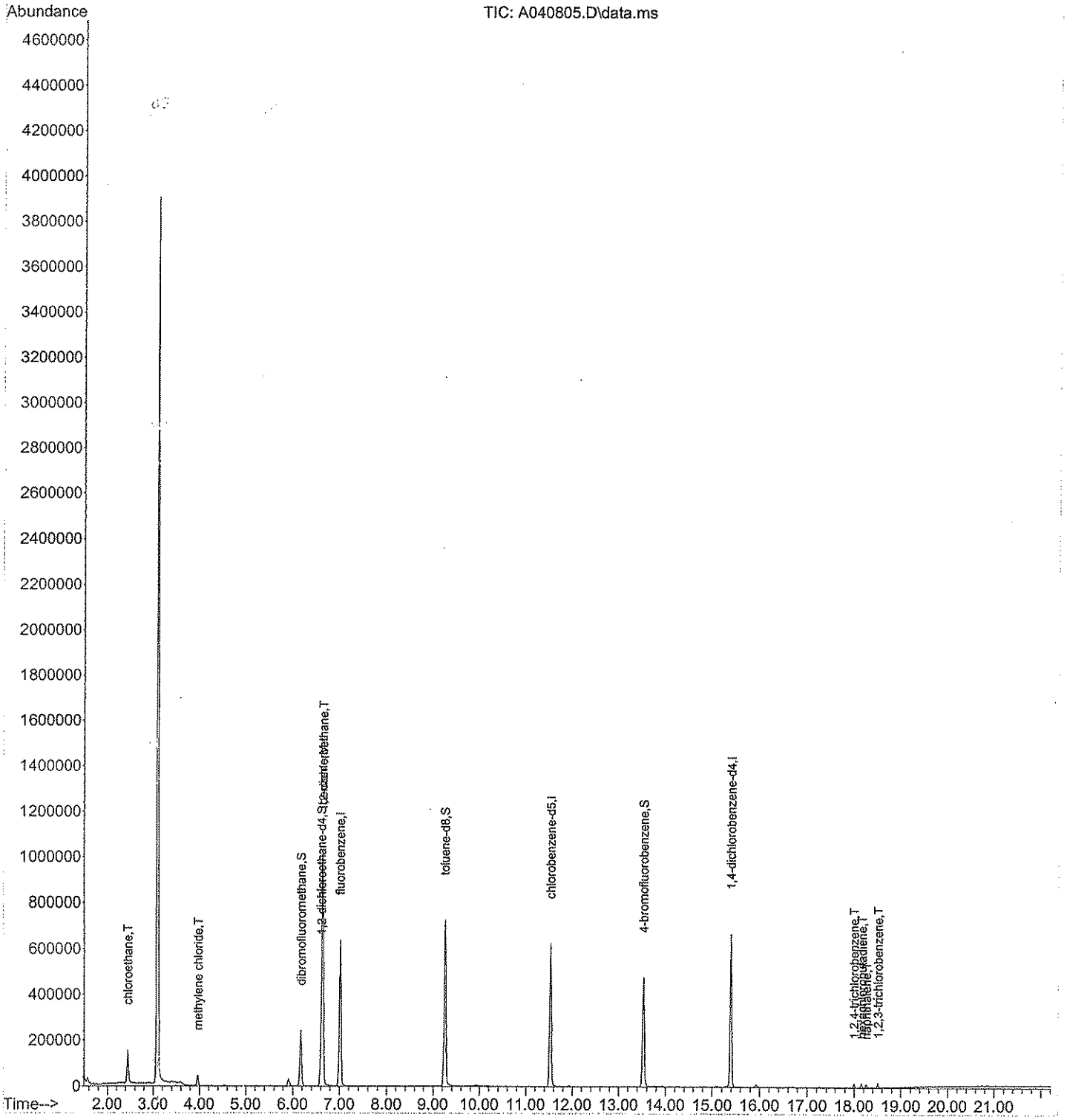
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040805.D
Acq On : 8 Apr 2008 9:30 am
Sample : ,samp,me0803b85-09a,25,ra, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 08 10:13:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040513.D
Acq On : 5 Apr 2008 1:19 pm
Smp # : SAMP,ML0303B85-10A,1, Inst : VOA1
Misc : 82604_W25
Operator : BR
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 06 18:25:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 587235 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 407826 | 10.00 | ug/L | 0.00 |
| 69 1,4-dichlorobenzene-d4 | 15.390 | 152 | 199577 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 152309 | 9.96 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.60% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 160596 | 10.95 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.50% | | | |
| 44) toluene-d8 | 9.254 | 98 | 557782 | 11.26 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 112.60% | | | |
| 63 4-bromofluorobenzene | 13.523 | 95 | 203806 | 9.77 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 11) acetone | 3.477 | 43 | 5119 | 2.43 | ~~ug/L~~ | 85 |

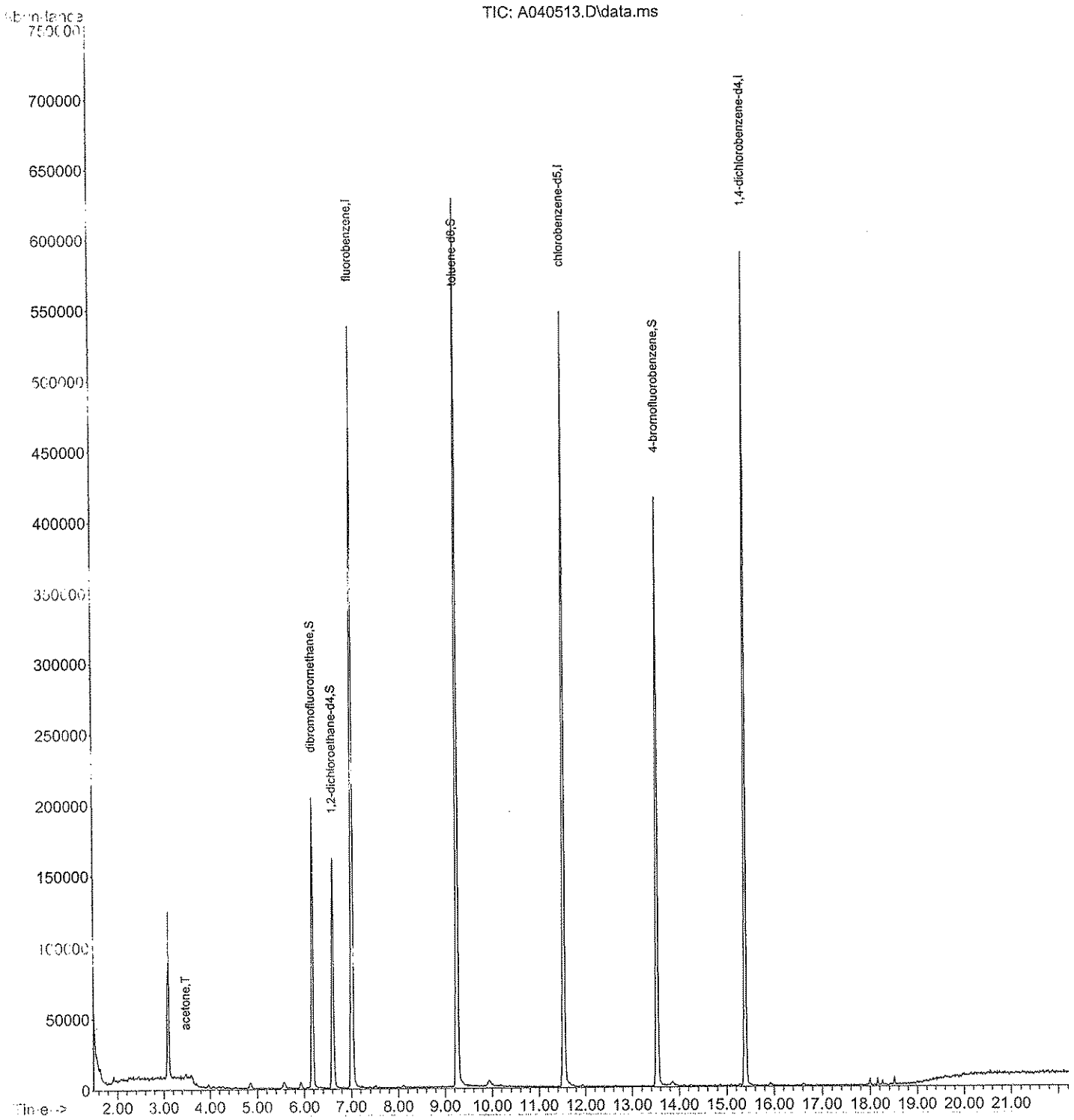
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040513.D
Acq On : 5 Apr 2008 1:19 pm
Sample : ,SAMP,ME0803B85-10A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 06 18:25:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040513.D
Acq On : 5 Apr 2008 1:19 pm
Operator : BR
Sample : ,SAMP,ME0803B85-10A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040513.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.093 | 254 | 264 | 276 | rBV | 117489 | 264355 | 16.34% | 3.296% |
| 2 | 6.171 | 759 | 770 | 785 | rBV2 | 204131 | 525437 | 32.48% | 6.551% |
| 3 | 6.602 | 331 | 841 | 856 | rBV3 | 161114 | 446909 | 27.63% | 5.572% |
| 4 | 7.016 | 897 | 909 | 931 | rBV | 537074 | 1389644 | 85.90% | 17.325% |
| 5 | 9.254 | 1265 | 1277 | 1289 | rBV | 626975 | 1617685 | 100.00% | 20.168% |
| 6 | 11.528 | 1639 | 1651 | 1670 | rBV | 546537 | 1398789 | 86.47% | 17.439% |
| 7 | 13.523 | 1960 | 1979 | 2001 | rBV2 | 415236 | 1069416 | 66.11% | 13.332% |
| 8 | 15.390 | 2274 | 2286 | 2308 | rBV | 588283 | 1308919 | 80.91% | 16.318% |

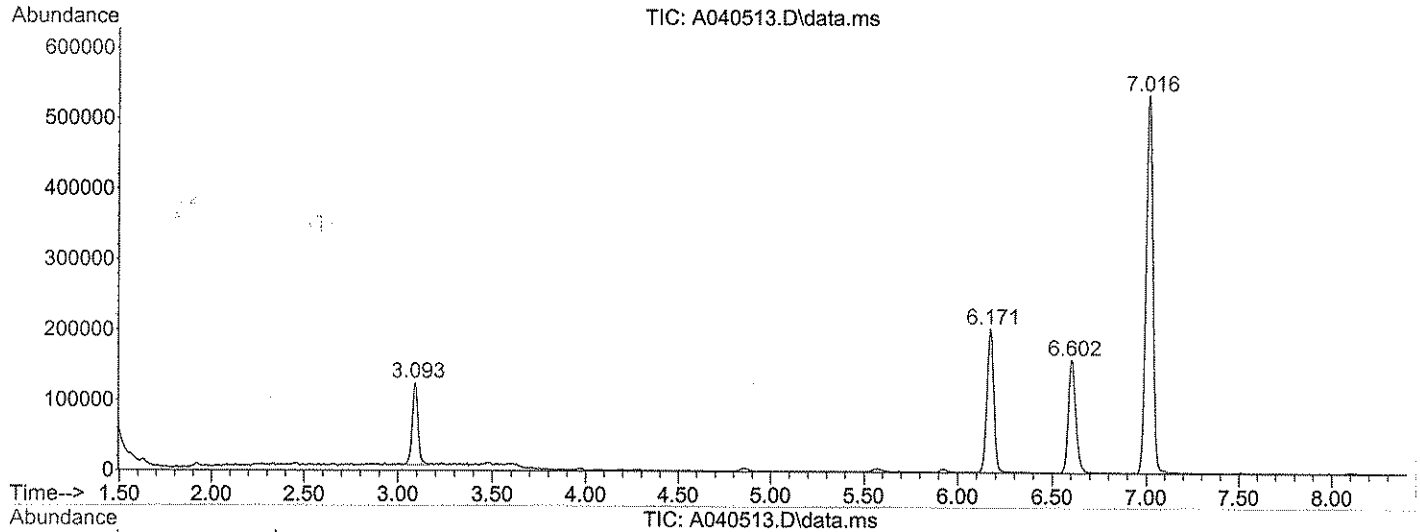
Sum of corrected areas: 8021154

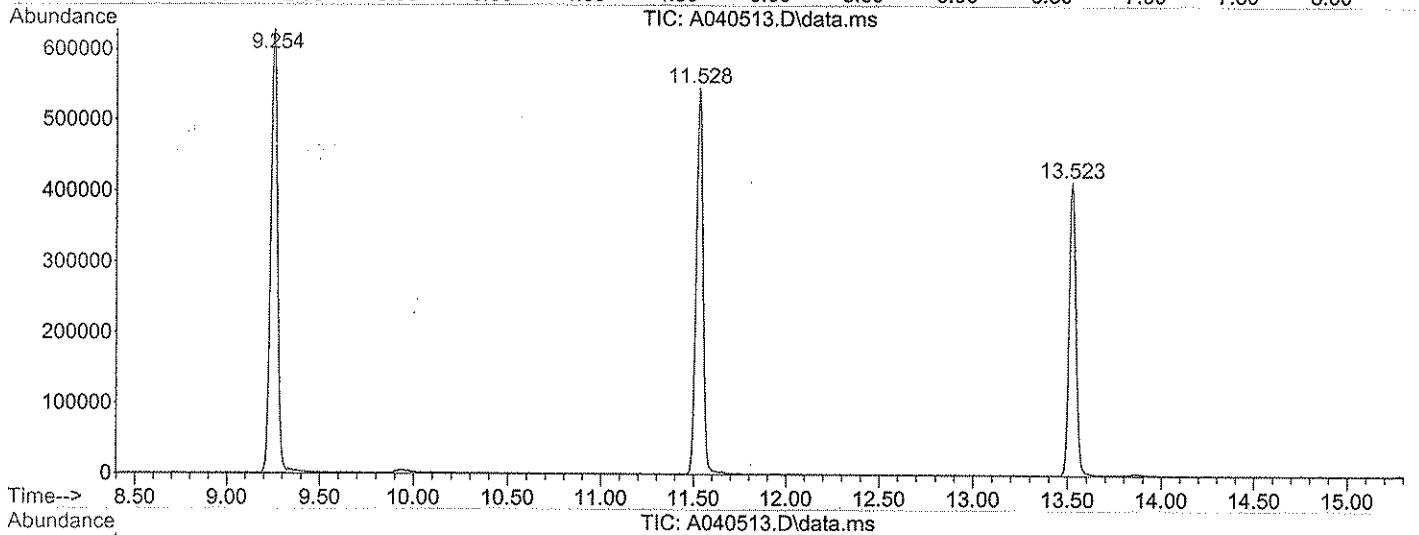
LSC Report - Integrated Chromatogram

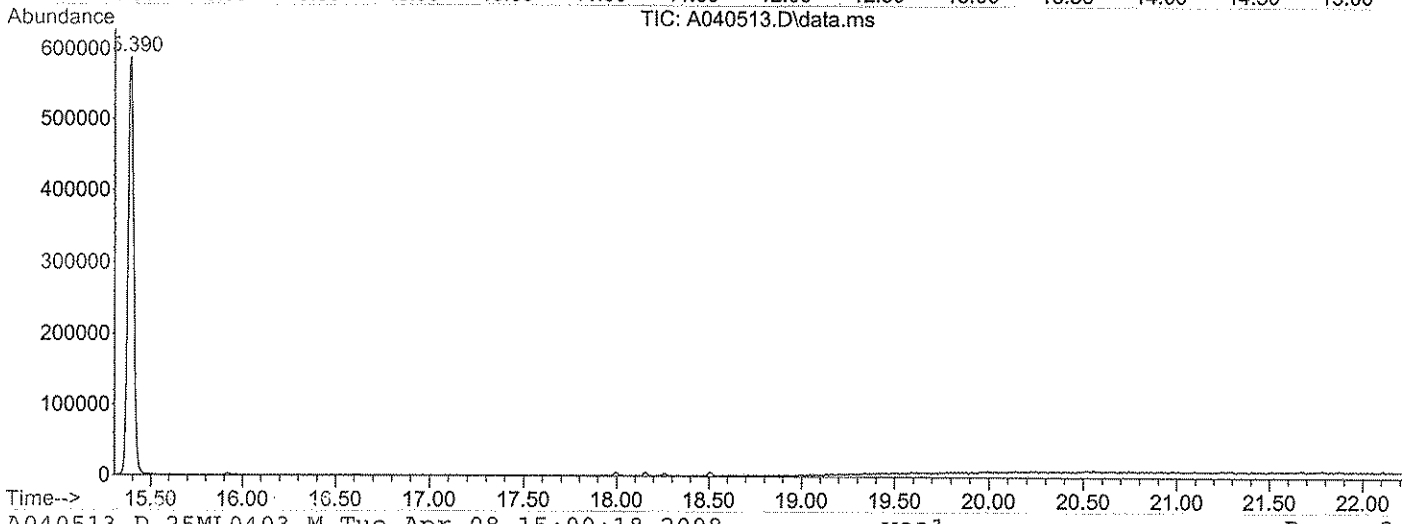
Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040513.D
Acq On : 5 Apr 2008 1:19 pm
Operator : BR
Sample : ,SAMP,ME0803B85-10A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040513.D 25ML0403.M Tue Apr 08 15:00:18 2008 voa1 Page: 2

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040513.D
Acq On : 5 Apr 2008 1:19 pm
Operator : BR
Sample : ,SAMP,ME0803B85-10A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

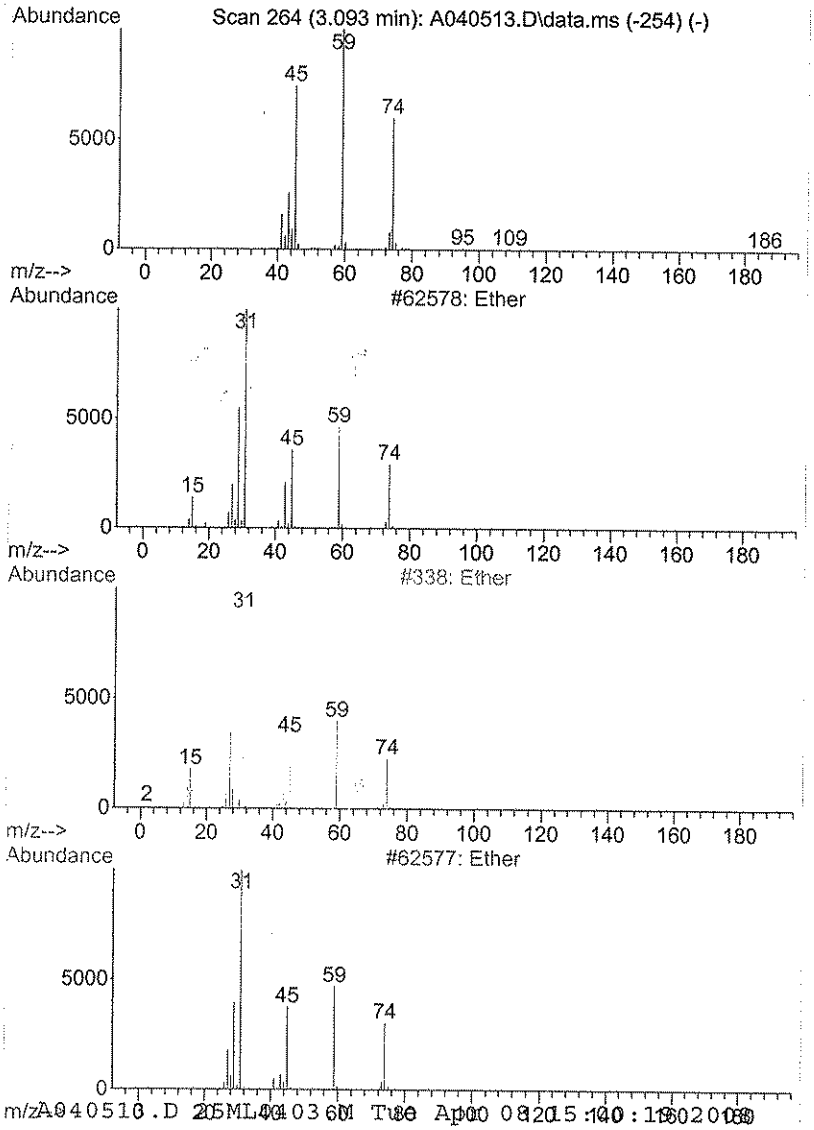
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

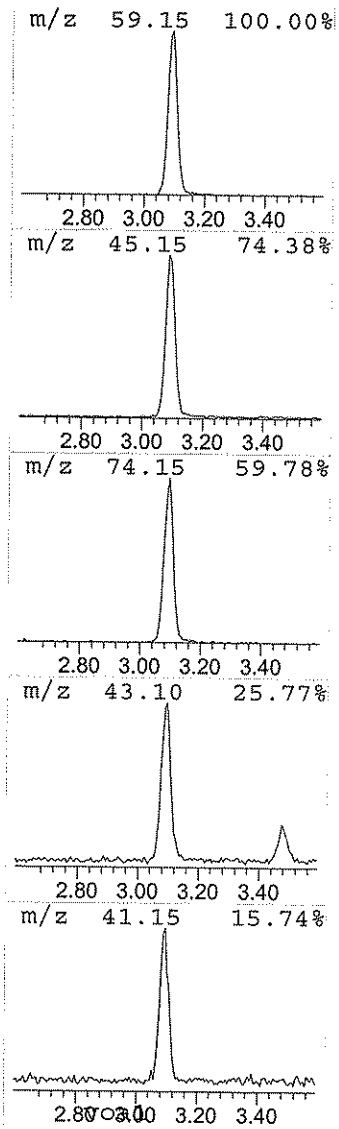
**********

Peak Number 1 Ether Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.093 | 1.90 ug/L | 264355 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 86 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 50 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040813.D
Acq On : 8 Apr 2008 2:30 pm
Sample : ,samp,me0803b85-11a,1,ra, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 08 14:53:42 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.018 | 96 | 530846 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 374134 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.392 | 152 | 188313 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.172 | 113 | 145686 | 10.54 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.40% | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 158513 | 11.96 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 119.60% | | | |
| 44) toluene-d8 | 9.250 | 98 | 514513 | 11.32 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.20% | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 185319 | 9.68 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.80% | | | |
| Target Compounds | | | | | | Qvalue |
| 11) acetone | 3.478 | 43 | 6276 | 3.30 | ug/L | 89 |
| 31) benzene | 6.635 | 78 | 192847 | 3.24 | ug/L | 95 |
| 77) methyl methacrylate | 8.088 | 41 | 2957 | 0.52 | ug/L # | 37 |

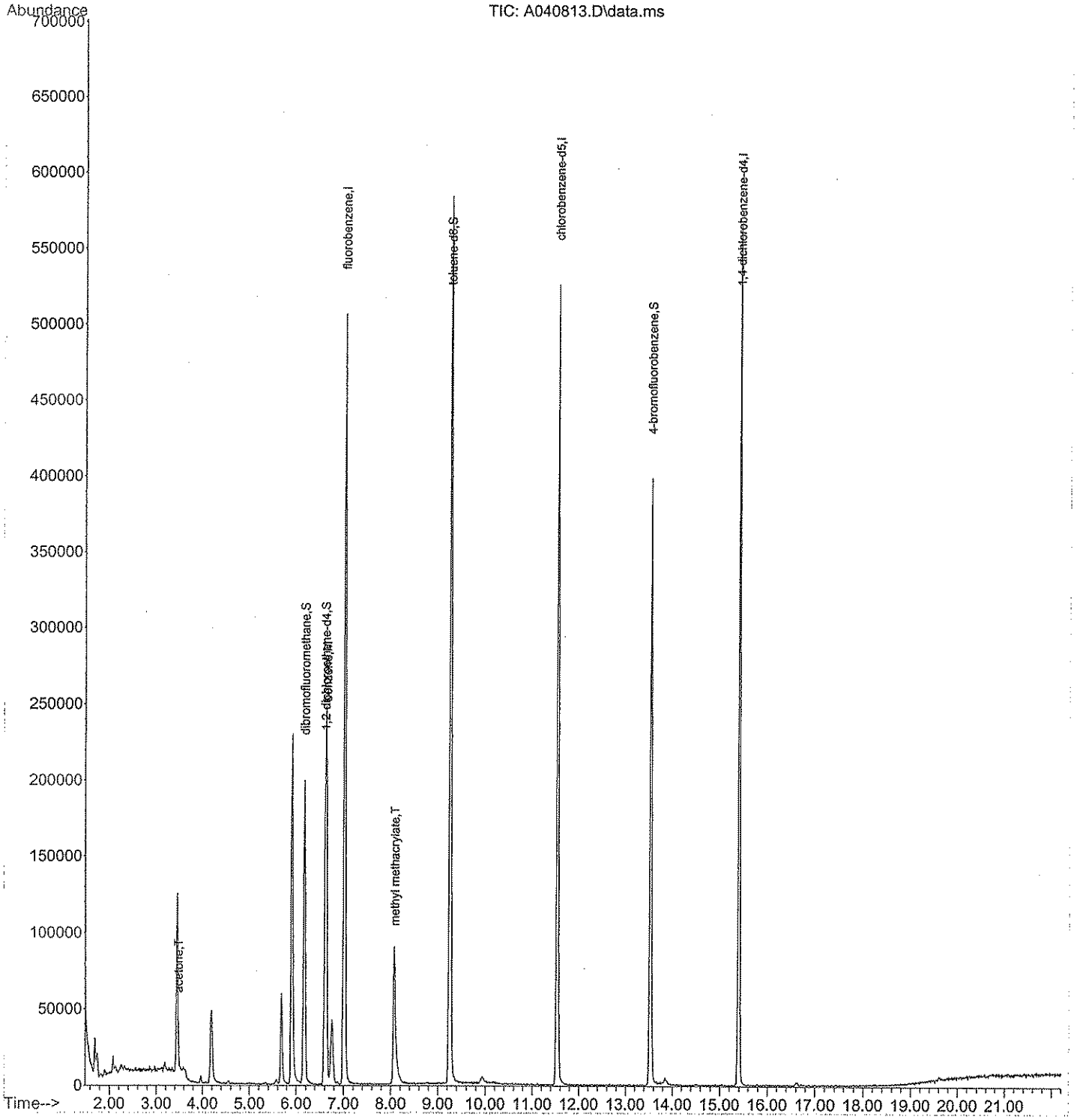
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040813.D
Acq On : 8 Apr 2008 2:30 pm
Sample : ,samp,me0803b85-11a,1,ra, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 08 14:53:42 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040813.D
Acq On : 8 Apr 2008 2:30 pm
Operator : BR
Sample : ,samp,me0803b85-11a,1,ra,
Misc : 8260+_W25
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| 2-Propanol, 2-m... | 4.190 | 1.2 | ug/L | 157624 | 1 | 7.018 | 1312460 | 10.0 |
| 1,3-Dioxolane | 5.680 | 1.2 | ug/L | 154657 | 1 | 7.018 | 1312460 | 10.0 |
| Furan, tetrahydro- | 5.911 | 4.8 | ug/L | 624153 | 1 | 7.018 | 1312460 | 10.0 |
| 2-Pentanone, 5-... | 6.756 | 1.1 | ug/L | 144348 | 1 | 7.018 | 1312460 | 10.0 |
| 1,4-Dioxane | 8.076 | 2.7 | ug/L | 350872 | 1 | 7.018 | 1312460 | 10.0 |

Raw Results

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040813.D
Acq On : 8 Apr 2008 2:30 pm
Operator : BR
Sample : ,samp,me0803b85-11a,1,ra,
Misc : 8260+_W25
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040813.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.448 | 314 | 322 | 340 | rBV | 116569 | 275974 | 18.01% | 2.884% |
| 2 | 4.190 | 433 | 444 | 462 | rBV3 | 47524 | 157624 | 10.29% | 1.647% |
| 3 | 5.680 | 681 | 689 | 707 | rBV2 | 58885 | 154657 | 10.09% | 1.616% |
| 4 | 5.911 | 718 | 727 | 757 | rBV | 229372 | 624153 | 40.74% | 6.523% |
| 5 | 6.172 | 759 | 770 | 790 | rVV | 198790 | 505569 | 33.00% | 5.283% |
| 6 | 6.622 | 831 | 844 | 856 | rBV3 | 247947 | 890866 | 58.14% | 9.310% |
| 7 | 6.756 | 856 | 866 | 882 | rVB4 | 41590 | 144348 | 9.42% | 1.508% |
| 8 | 7.012 | 897 | 908 | 929 | rBV | 506145 | 1312455 | 85.66% | 13.716% |
| 9 | 8.076 | 1067 | 1083 | 1115 | rBV | 90474 | 350872 | 22.90% | 3.667% |
| 10 | 9.250 | 1265 | 1276 | 1297 | rBV | 582481 | 1532180 | 100.00% | 16.012% |
| 11 | 11.530 | 1638 | 1651 | 1679 | rBV | 525912 | 1342707 | 87.63% | 14.032% |
| 12 | 13.525 | 1965 | 1979 | 2005 | rBV | 398230 | 1017252 | 66.39% | 10.631% |
| 13 | 15.392 | 2270 | 2286 | 2302 | rBV | 566926 | 1260476 | 82.27% | 13.172% |

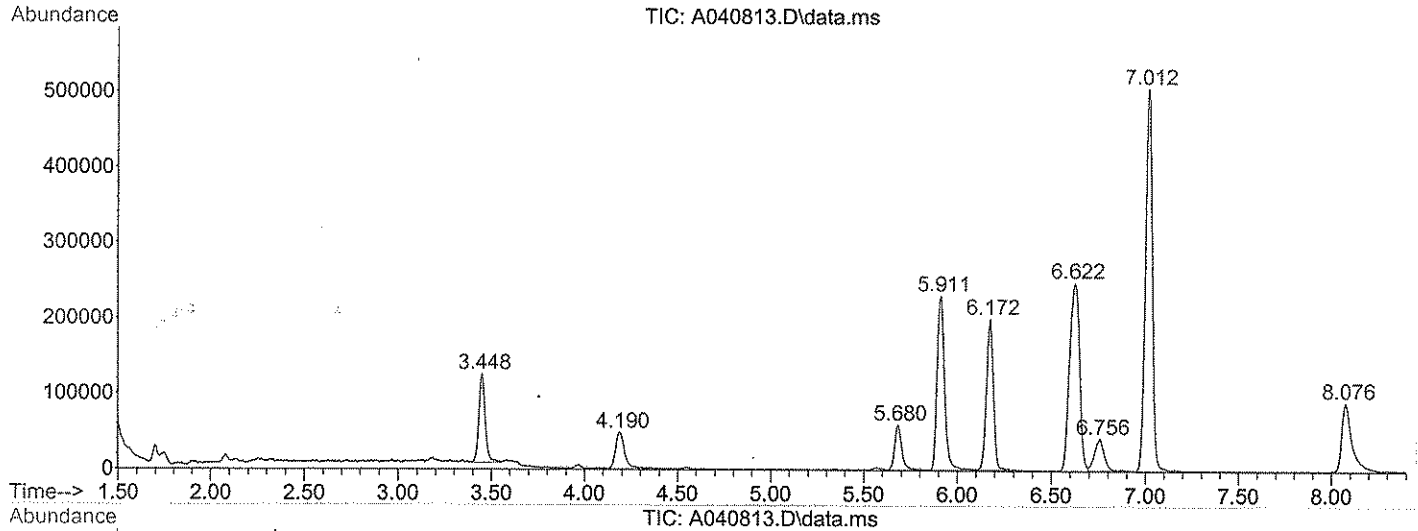
Sum of corrected areas: 9569133

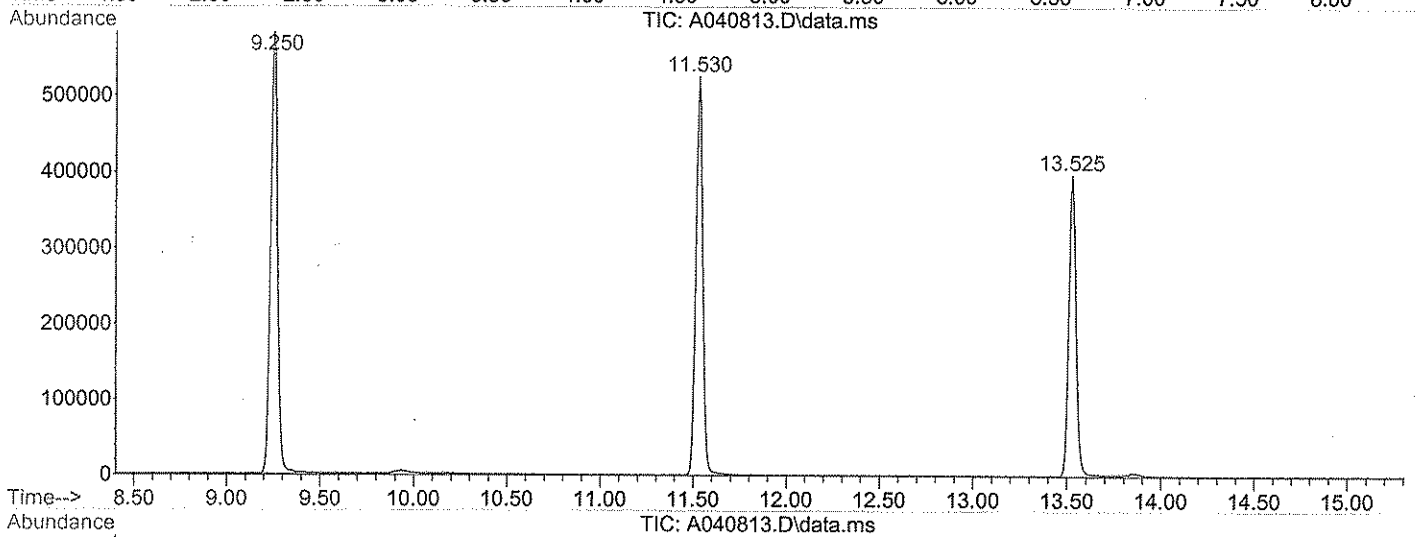
LSC Report - Integrated Chromatogram

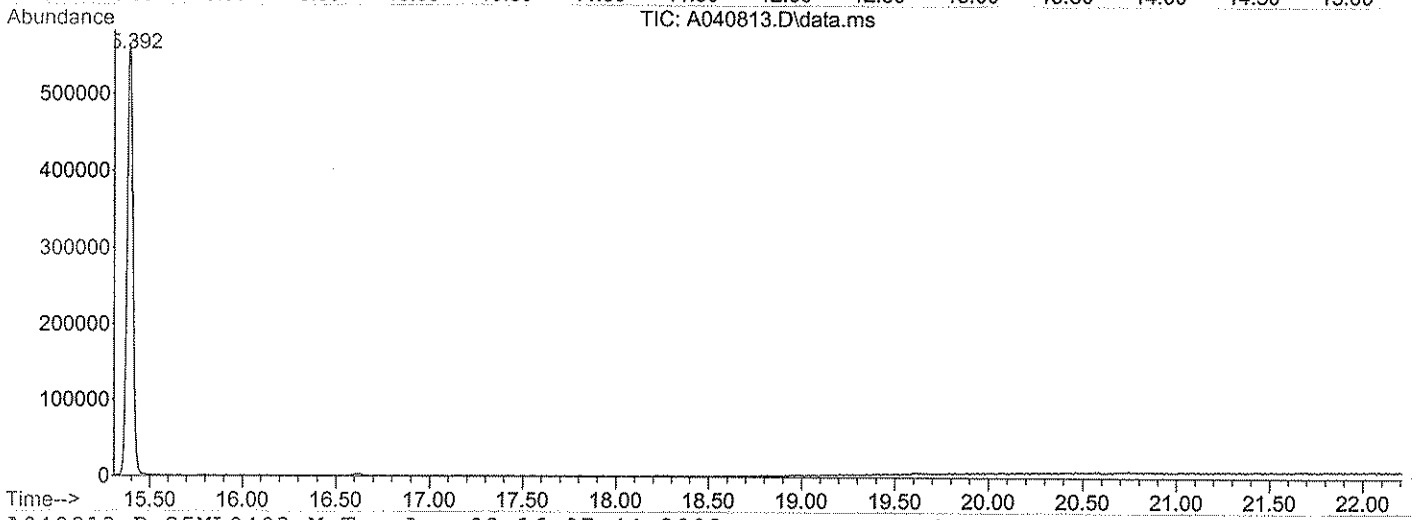
Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040813.D
Acq On : 8 Apr 2008 2:30 pm
Operator : BR
Sample : ,samp,me0803b85-11a,1,ra,
Misc : 8260+_W25
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040813.D 25ML0403.M Tue Apr 08 16:07:44 2008 voa1 Page: 2

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040813.D
Acq On : 8 Apr 2008 2:30 pm
Operator : BR
Sample : ,samp,me0803b85-11a,1,ra,
Misc : 8260+_W25
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

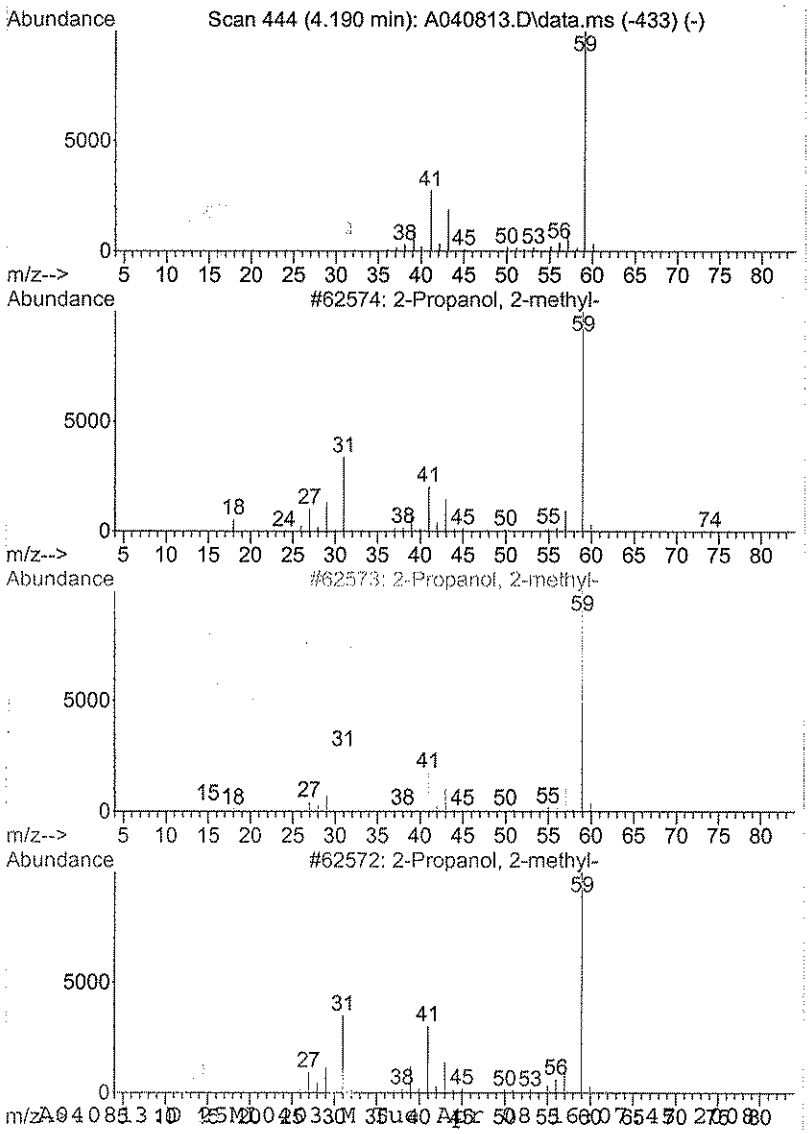
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

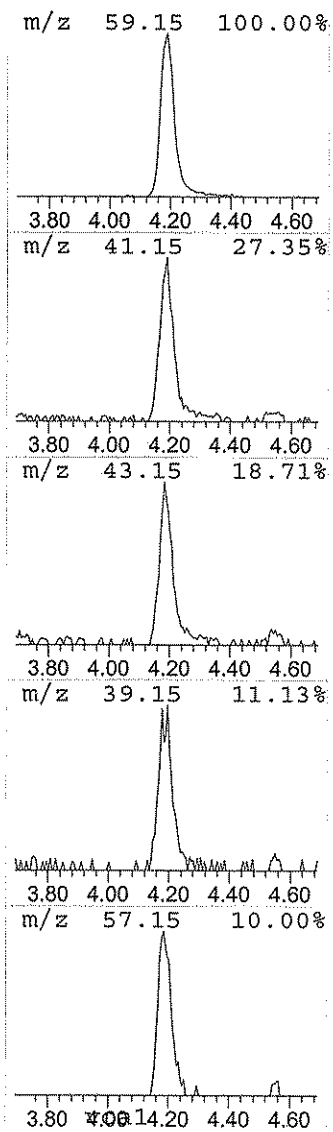
**********

Peak Number 1 2-Propanol, 2-methyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.190 | 1.20 ug/L | 157624 | fluorobenzene | 7.018 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 56 |
| 2 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 56 |
| 3 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 50 |
| 4 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 43 |
| 5 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 40 |




Page: 3

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040813.D
Acq On : 8 Apr 2008 2:30 pm
Operator : BR
Sample : ,samp,me0803b85-11a,1,ra,
Misc : 8260+_W25
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

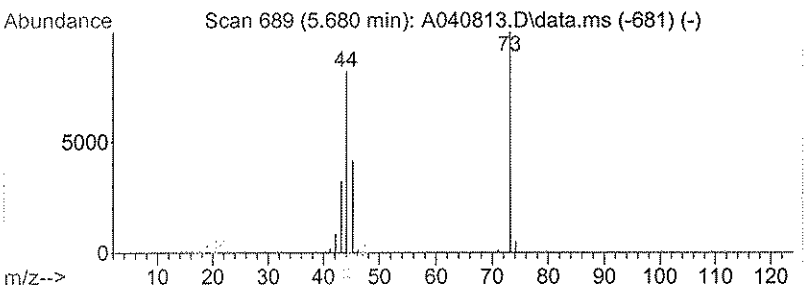
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

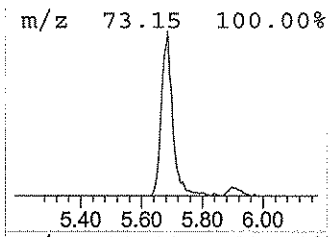
**********

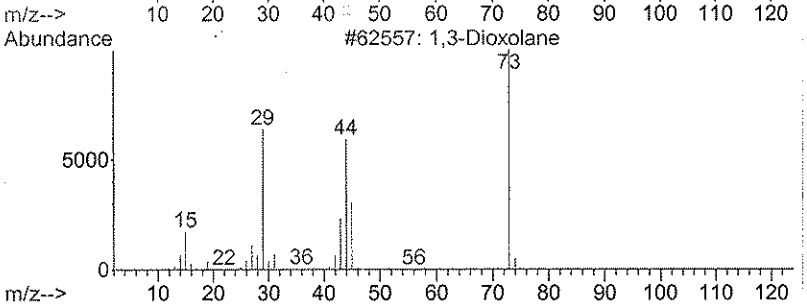
Peak Number 2 1,3-Dioxolane Concentration Rank 4

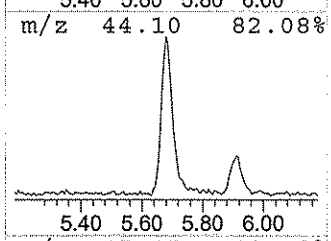
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.680 | 1.18 ug/L | 154657 | fluorobenzene | 7.018 |

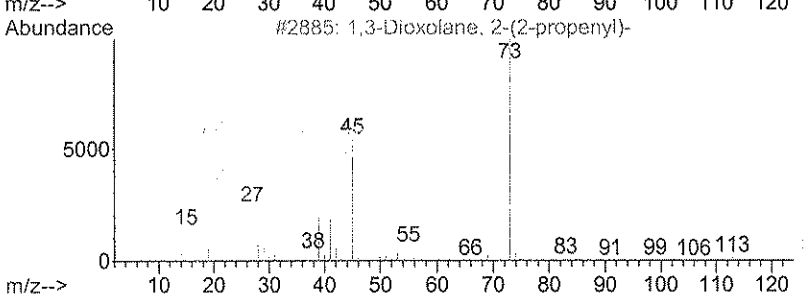
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 90 |
| 2 | 1,3-Dioxolane, 2-(2-propenyl)- | 114 | C6H10O2 | 038653-49-5 | 9 |
| 3 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 9 |
| 4 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 9 |
| 5 | Formamide, N,N-dimethyl- | 73 | C3H7NO | 000068-12-2 | 7 |

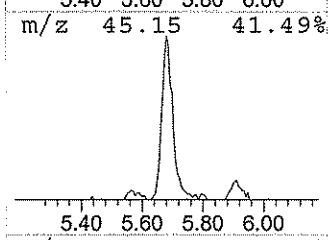


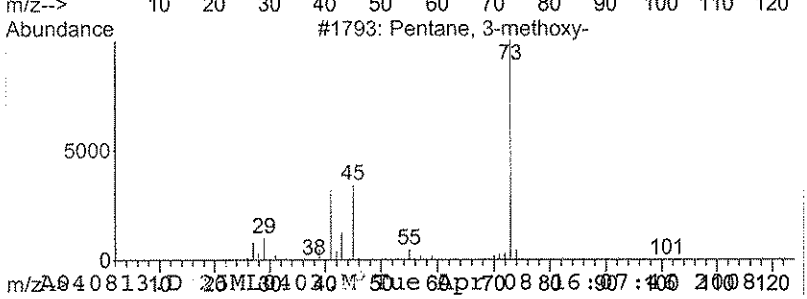



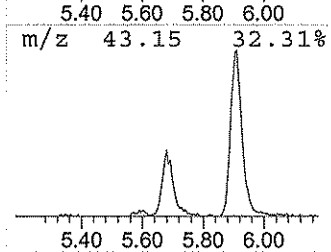



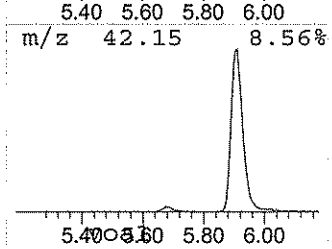



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040813.D
Acq On : 8 Apr 2008 2:30 pm
Operator : BR
Sample : ,samp,me0803b85-11a,1,ra,
Misc : 8260+_W25
ALS Vial : 14 Sample Multiplier: 1

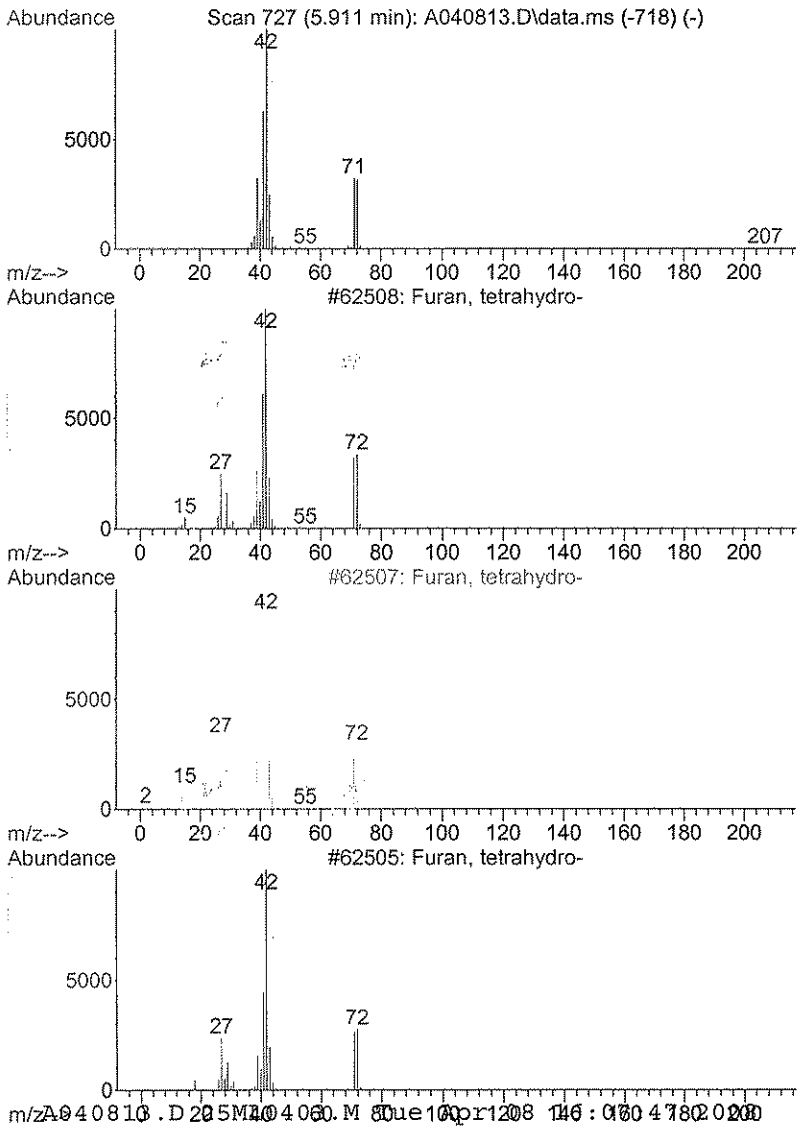
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

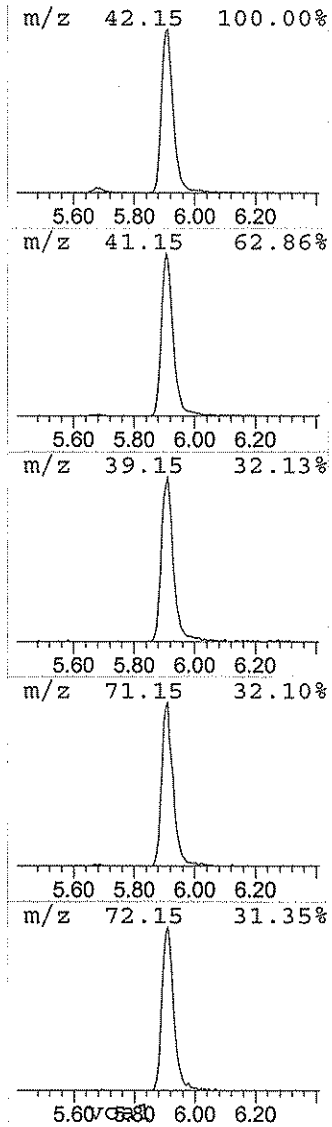
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 3 Furan, tetrahydro- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.911 | 4.76 ug/L | 624153 | fluorobenzene | 7.018 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 91 |
| 2 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 3 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 4 | Oxirane, ethyl- | 72 | C4H8O | 000106-88-7 | 86 |
| 5 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |




A040813.D 25ML0403.M Tue 08 Apr 2008 14:30:47

Page: 5

# Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040813.D
Acq On : 8 Apr 2008 2:30 pm
Operator : BR
Sample : ,samp,me0803b85-11a,1,ra,
Misc : 8260+_W25
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

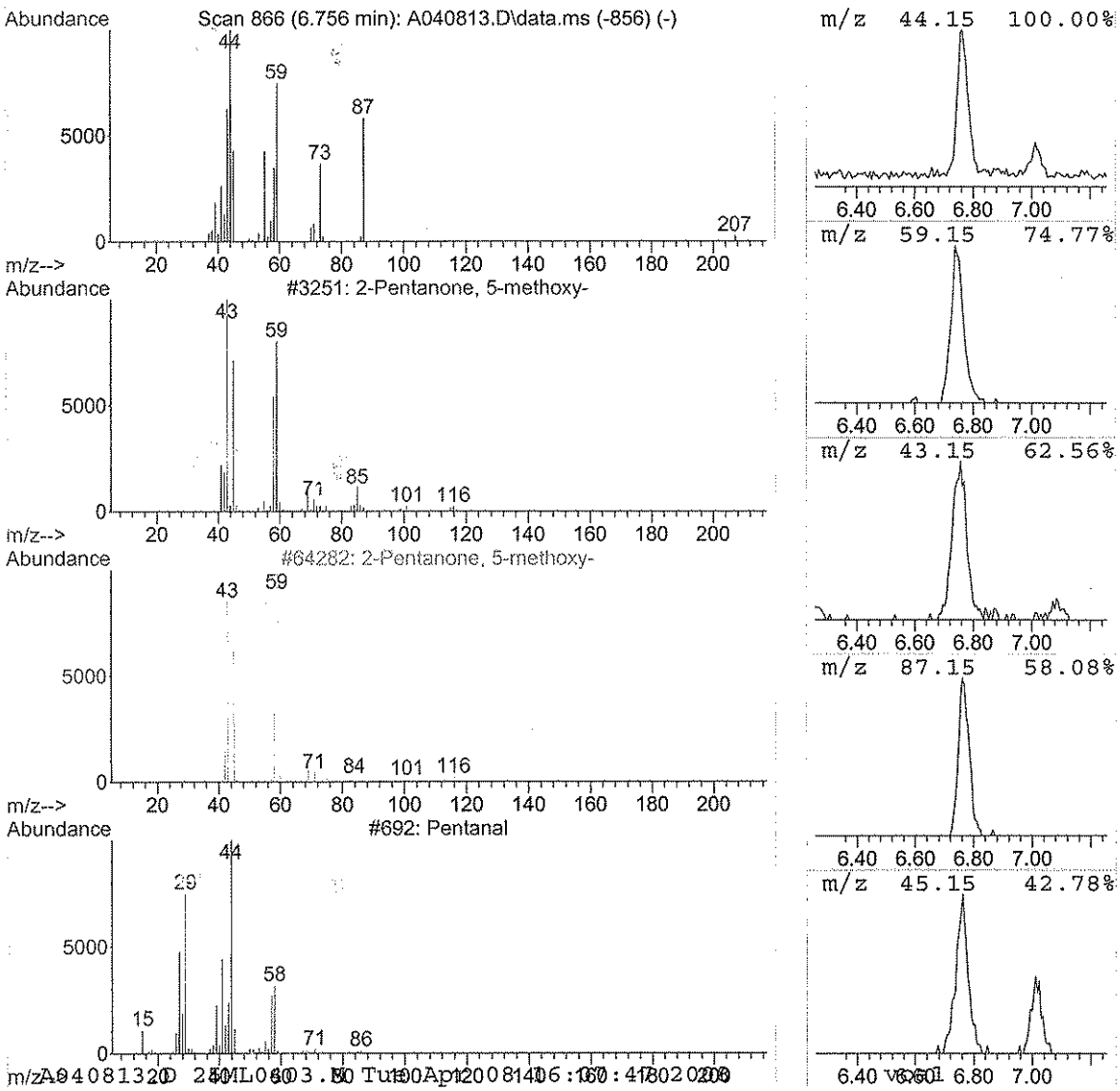
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 4 2-Pentanone, 5-methoxy- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.756 | 1.10 ug/L | 144348 | fluorobenzene | 7.018 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 5-methoxy- | 116 | C6H12O2 | 017429-04-8 | 38 |
| 2 | 2-Pentanone, 5-methoxy- | 116 | C6H12O2 | 017429-04-8 | 32 |
| 3 | Pentanal | 86 | C5H10O | 000110-62-3 | 27 |
| 4 | Amylene Hydrate | 88 | C5H12O | 000075-85-4 | 16 |
| 5 | 3-Hexanol | 102 | C6H14O | 000623-37-0 | 12 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040813.D
Acq On : 8 Apr 2008 2:30 pm
Operator : BR
Sample : ,samp,me0803b85-11a,1,ra,
Misc : 8260+_W25
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

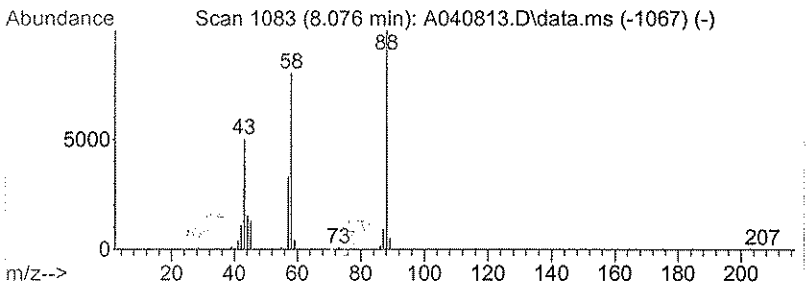
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

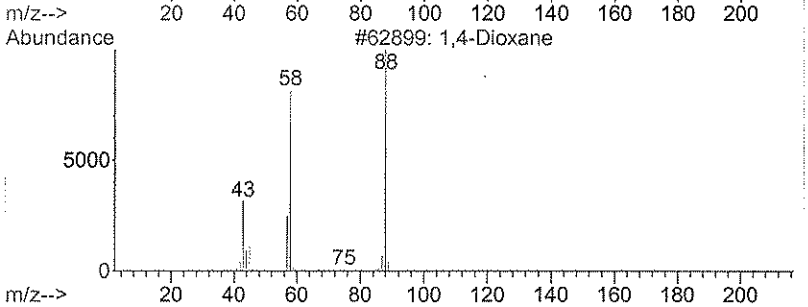
**********

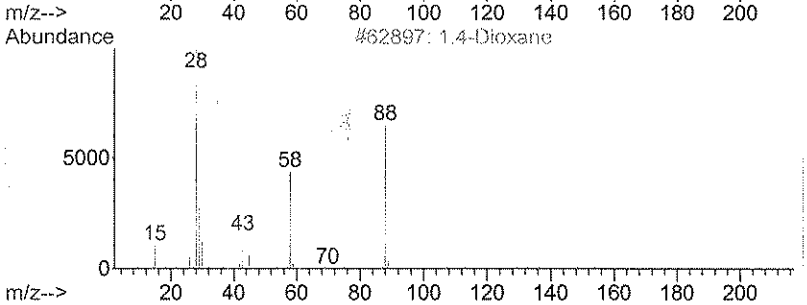
Peak Number 5 1,4-Dioxane Concentration Rank 2

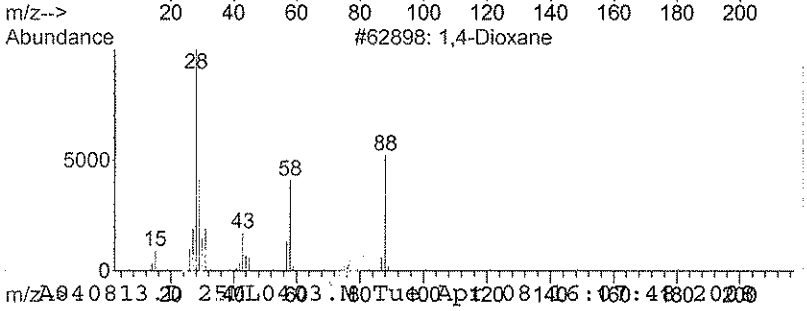
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.076 | 2.67 ug/L | 350872 | fluorobenzene | 7.018 |

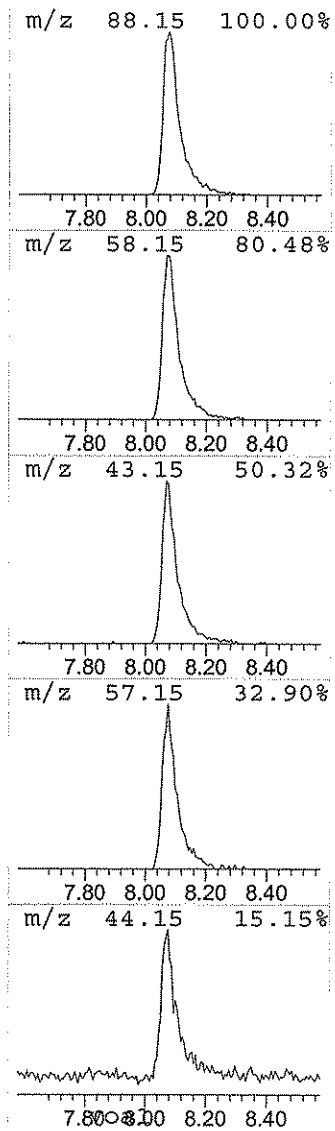
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 86 |
| 5 | 1,3,6-Trioxocane | 118 | C5H10O3 | 001779-19-7 | 45 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040515.D
Acq On : 5 Apr 2008 3:02 pm
Sample : ,SAMP,ME0803B85-12A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 06 18:25:07 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mL W ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.004 | 96 | 675978 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.523 | 117 | 439474 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 215186 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.165 | 113 | 173591 | 9.86 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.60% | | | |
| 30) 1,2-dichloroethane-d4 | 6.597 | 65 | 186141 | 11.03 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 110.30% | | | |
| 44) toluene-d8 | 9.248 | 98 | 614344 | 11.51 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.10% | | | |
| 63) 4-bromofluorobenzene | 13.524 | 95 | 216883 | 9.65 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.50% | | | |

| Target Compounds | Qvalue |
|---|---|

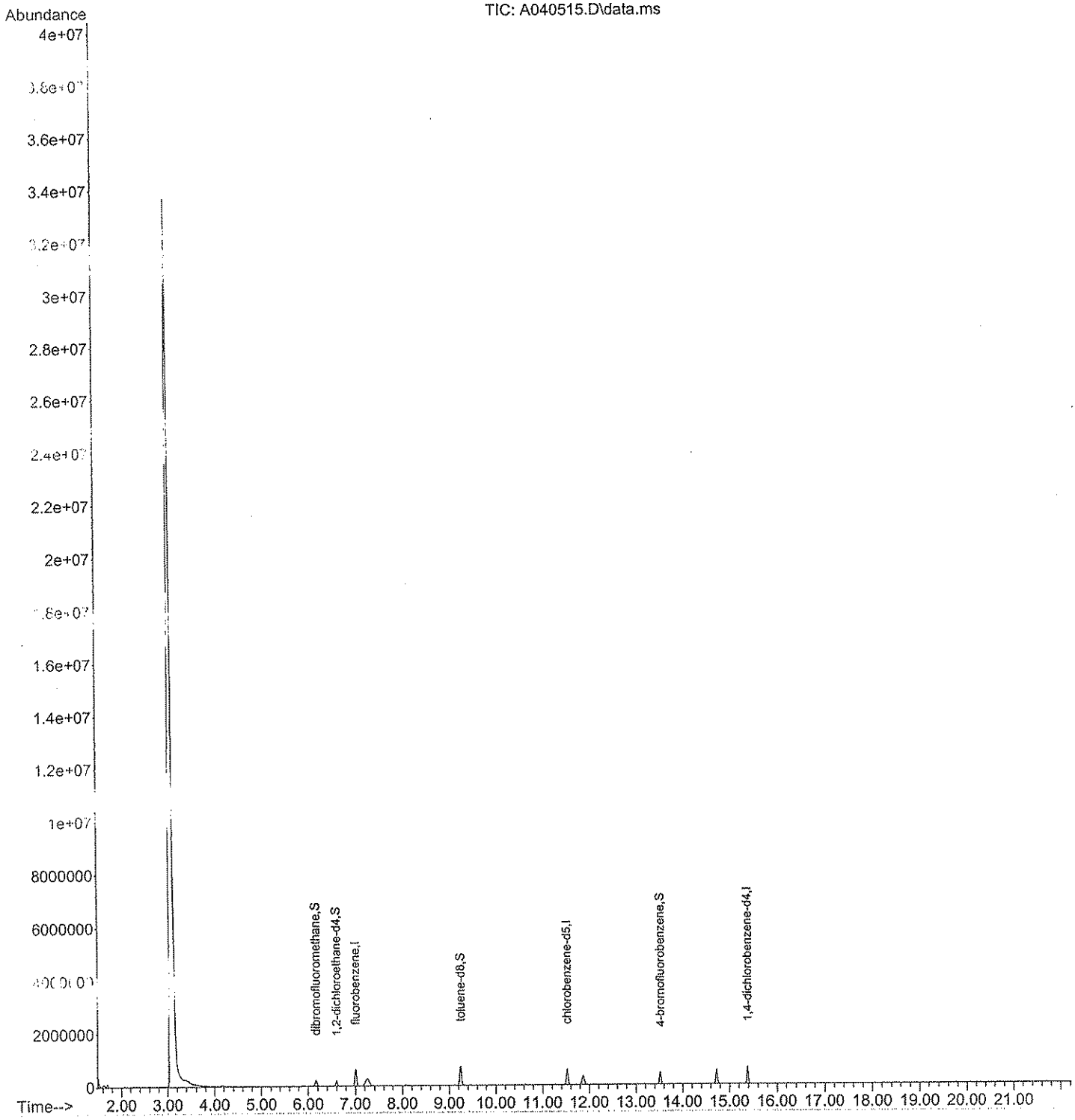
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040515.D
Acq On : 5 Apr 2008 3:02 pm
Sample : ,SAMP,ME0803B85-12A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 06 18:25:07 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040515.D
Acq On : 5 Apr 2008 3:02 pm
Operator : BR
Sample : ,SAMP,ME0803B85-12A,1,
Misc : 8260+_W25
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Ether | 3.045 | 10.0 | ug/L | 148010000 | 1 | 7.004 | 148010000 | 10.0 |

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040515.D
Acq On : 5 Apr 2008 3:02 pm
Operator : BR
Sample : ,SAMP,ME0803B85-12A,1,
Misc : 8260+_W25
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040515.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.045 | 250 | 256 | 308 | rBV | 33682549 | 148009930 | 100.00% | 100.000% |

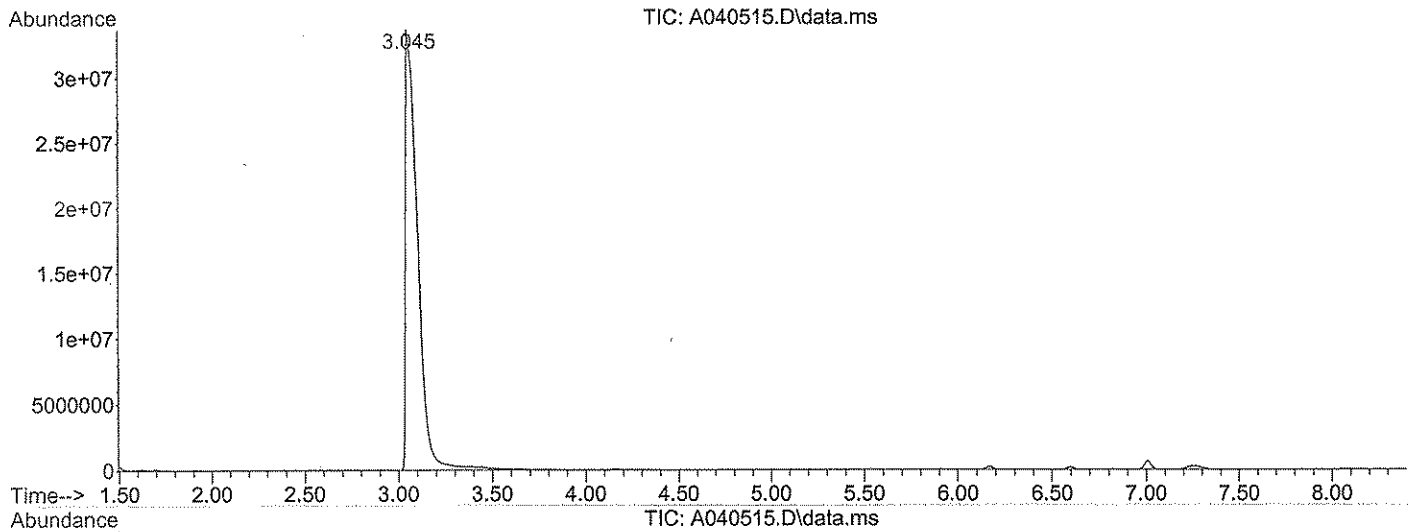
Sum of corrected areas: 148009930

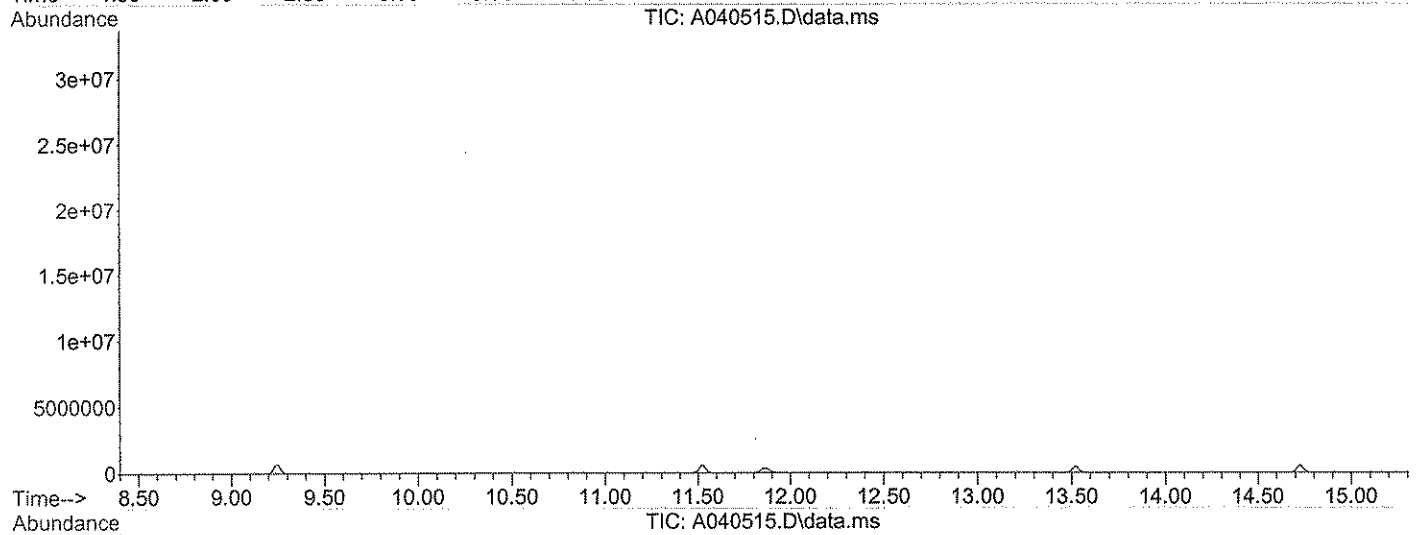
LSC Report - Integrated Chromatogram

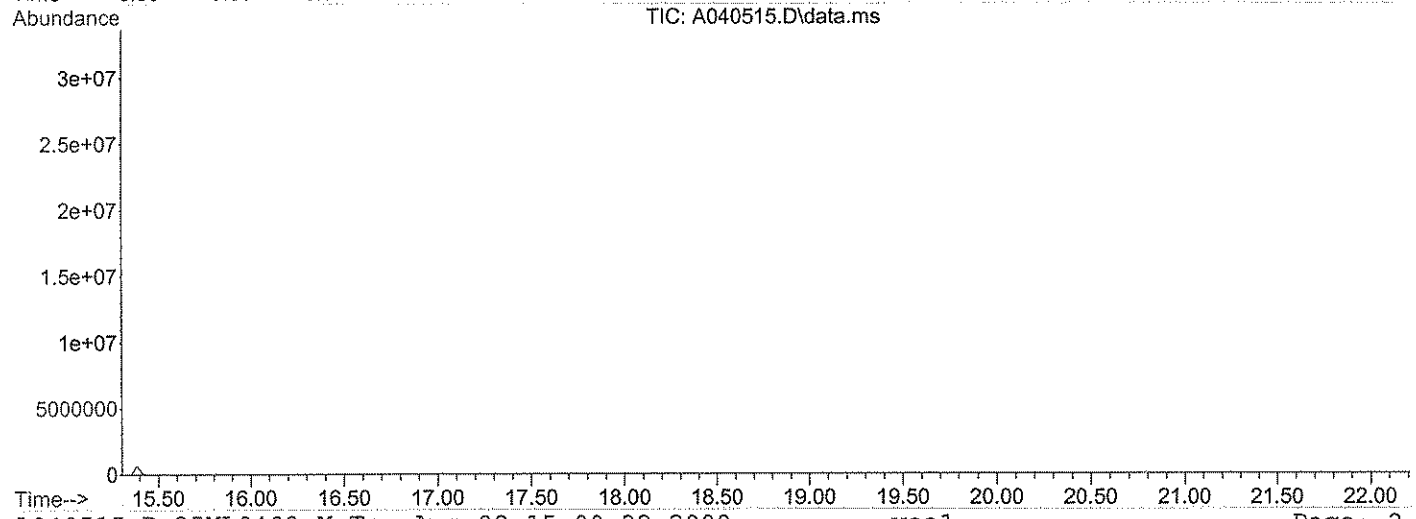
Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040515.D
Acq On : 5 Apr 2008 3:02 pm
Operator : BR
Sample : ,SAMP,ME0803B85-12A,1,
Misc : 8260+_W25
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040515.D 25ML0403.M Tue Apr 08 15:00:22 2008 voa1 Page: 2

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040515.D
Acq On : 5 Apr 2008 3:02 pm
Operator : BR
Sample : ,SAMP,ME0803B85-12A,1,
Misc : 8260+_W25
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

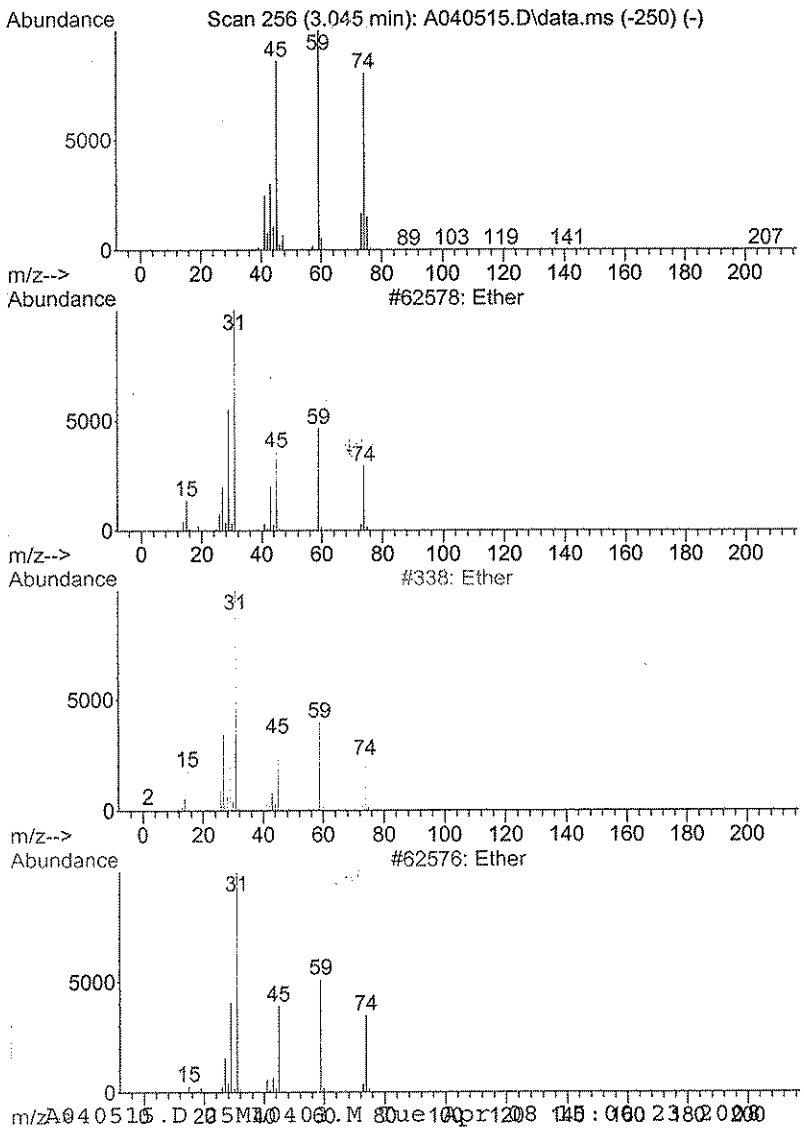
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

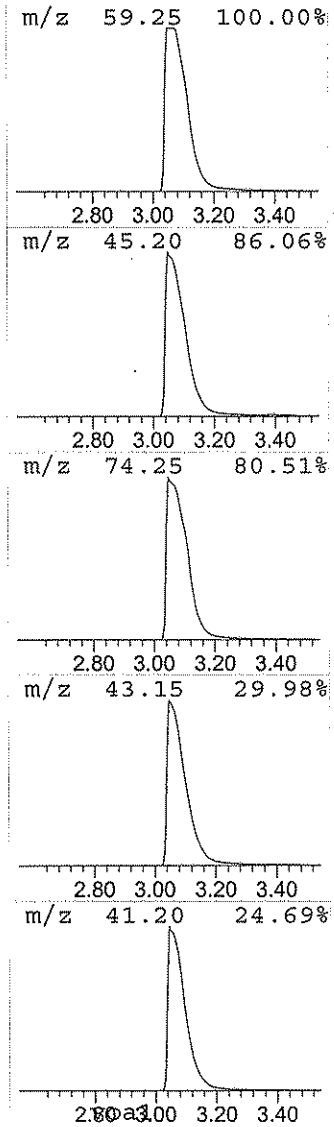
**********

Peak Number 1 Ether Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.045 | 10.00 ug/L | 148010000 | fluorobenzene | 7.004 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 78 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 78 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 78 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 72 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 50 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040516.D
Acq On : 5 Apr 2008 3:37 pm
Sample : ,SAMP,ME0803B85-13A,1, Inst : VOA1
Misc : 8260W_ALS
Operator : BR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 06 18:25:11 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 566211 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 387615 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 194500 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 148550 | 10.07 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.70% | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 154202 | 10.91 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 109.10% | | |
| 44) toluene-d8 | 9.253 | 98 | 541812 | 11.51 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 115.10% | | |
| 63) 4-bromofluorobenzene | 13.528 | 95 | 194512 | 9.81 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.10% | | |
| Target Compounds | | | | | | Qvalue |
| 11) acetone | 3.475 | 43 | 4779 | 2.36 | ug/L | 100 |
| 45) toluene | 9.356 | 92 | 10286 | 0.30 | ug/L # | 84 |

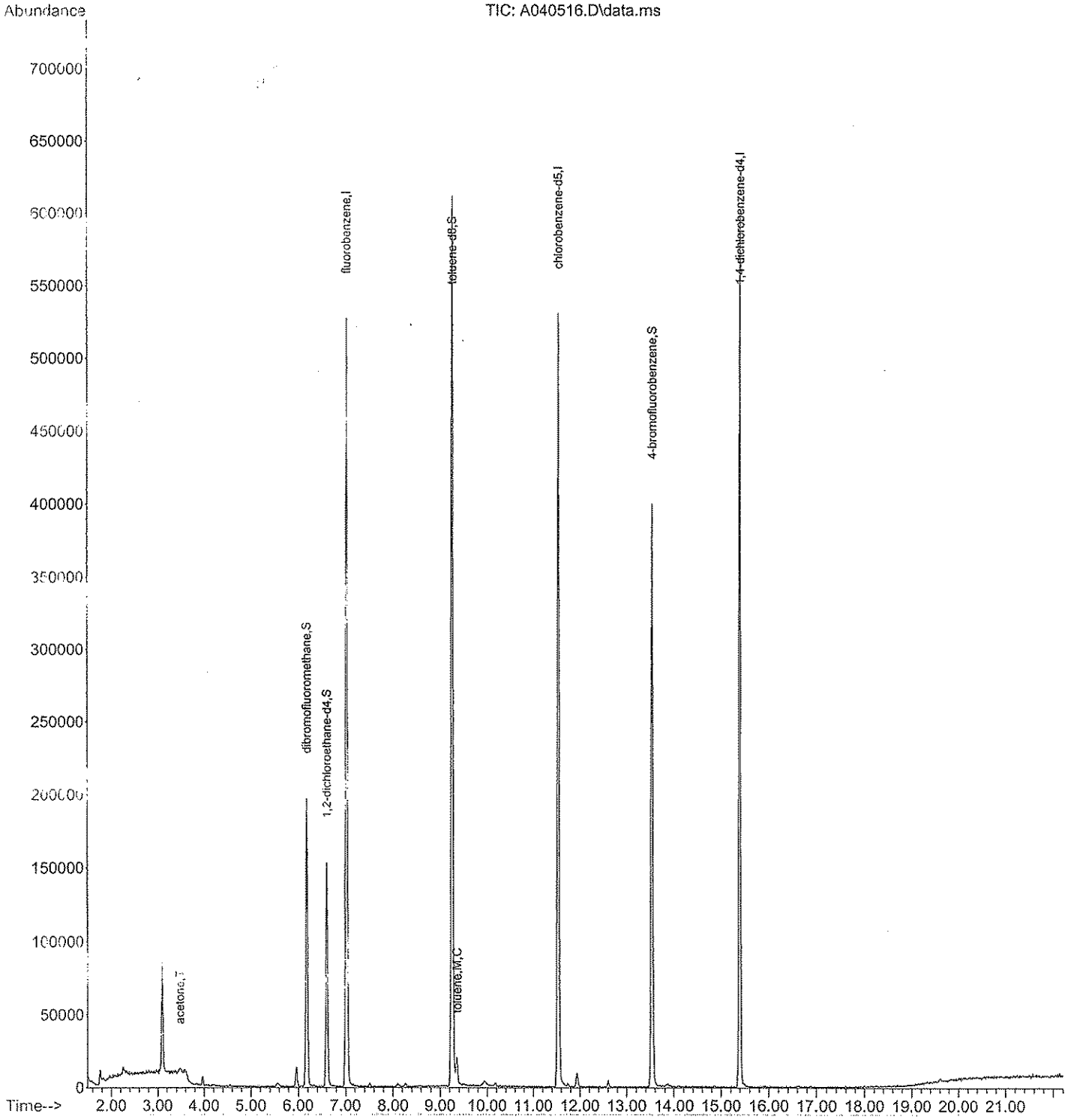
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040516.D
Acq On : 5 Apr 2008 3:37 pm
Sample : ,SAMP,ME0803B85-13A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 06 18:25:11 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040516.D 25ML0403.M Sun Apr 06 18:25:12 2008 voa1 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040516.D
Acq On : 5 Apr 2008 3:37 pm
Operator : BR
Sample : ,SAMP,ME0803B85-13A,1,
Misc : 8260+_W25
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Ether | 3.092 | 1.2 | ug/L | 167031 | 1 | 7.015 | 1343900 | 10.0 |

Raw Results
JD 4/10/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040516.D
Acq On : 5 Apr 2008 3:37 pm
Operator : BR
Sample : ,SAMP,ME0803B85-13A,1,
Misc : 8260+_W25
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040516.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.092 | 256 | 264 | 281 | rVB | 75429 | 167031 | 10.61% | 2.171% |
| 2 | 6.170 | 760 | 770 | 785 | rBV | 196405 | 508236 | 32.28% | 6.607% |
| 3 | 6.601 | 827 | 841 | 860 | rBV | 152662 | 390909 | 24.83% | 5.082% |
| 4 | 7.015 | 896 | 909 | 927 | rBV | 526715 | 1343901 | 85.37% | 17.471% |
| 5 | 9.253 | 1263 | 1277 | 1288 | rBV | 610652 | 1574244 | 100.00% | 20.466% |
| 6 | 9.344 | 1288 | 1292 | 1303 | rVB2 | 18440 | 48241 | 3.06% | 0.627% |
| 7 | 11.527 | 1639 | 1651 | 1682 | rBV | 530126 | 1363695 | 86.63% | 17.728% |
| 8 | 13.528 | 1969 | 1980 | 2001 | rBV | 399272 | 1020617 | 64.83% | 13.268% |
| 9 | 15.389 | 2273 | 2286 | 2311 | rBV | 597681 | 1275263 | 81.01% | 16.579% |

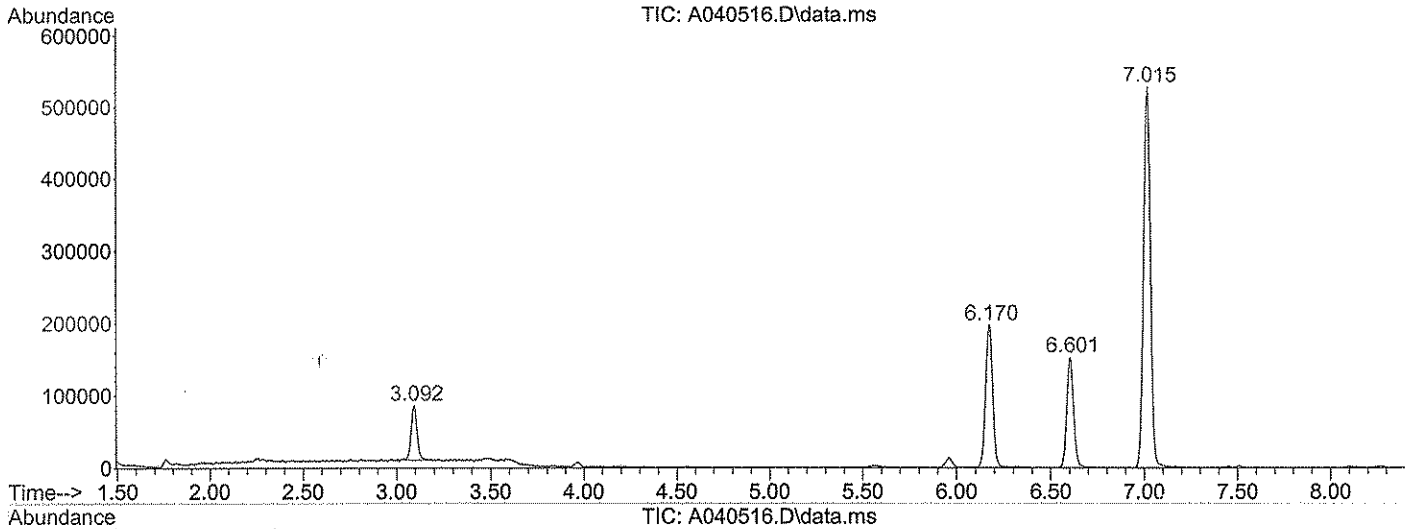
Sum of corrected areas: 7692137

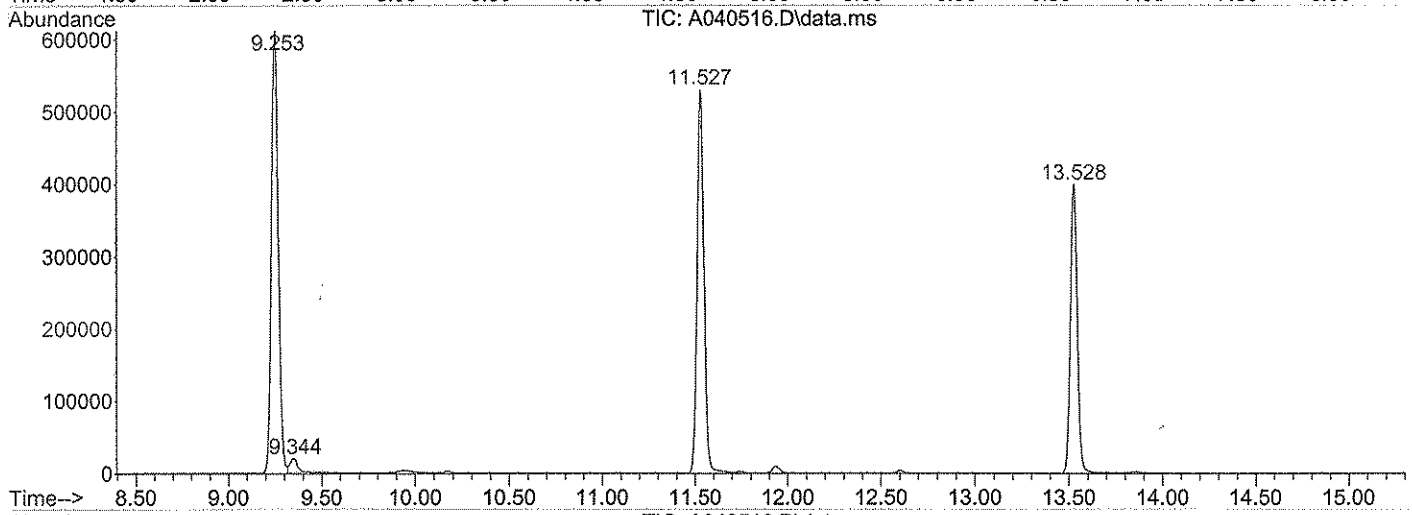
LSC Report - Integrated Chromatogram

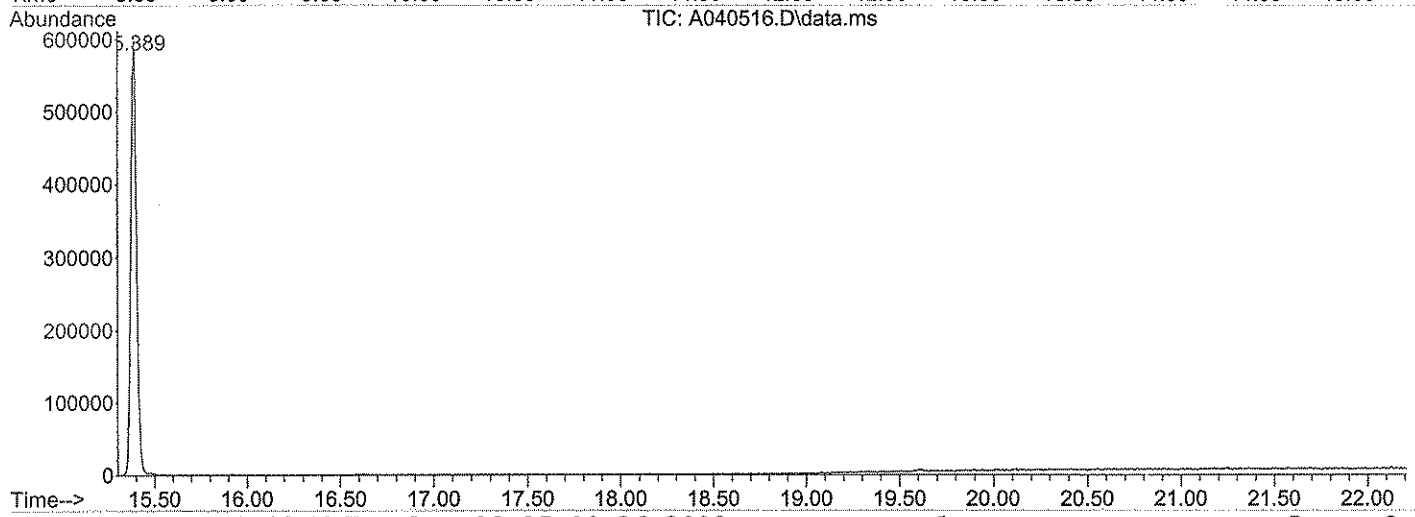
Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040516.D
Acq On : 5 Apr 2008 3:37 pm
Operator : BR
Sample : ,SAMP,ME0803B85-13A,1,
Misc : 8260+_W25
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040516.D 25ML0403.M Tue Apr 08 15:00:26 2008 voa1 Page: 2

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040516.D
Acq On : 5 Apr 2008 3:37 pm
Operator : BR
Sample : ,SAMP,ME0803B85-13A,1,
Misc : 8260+_W25
ALS Vial : 16 Sample Multiplier: 1

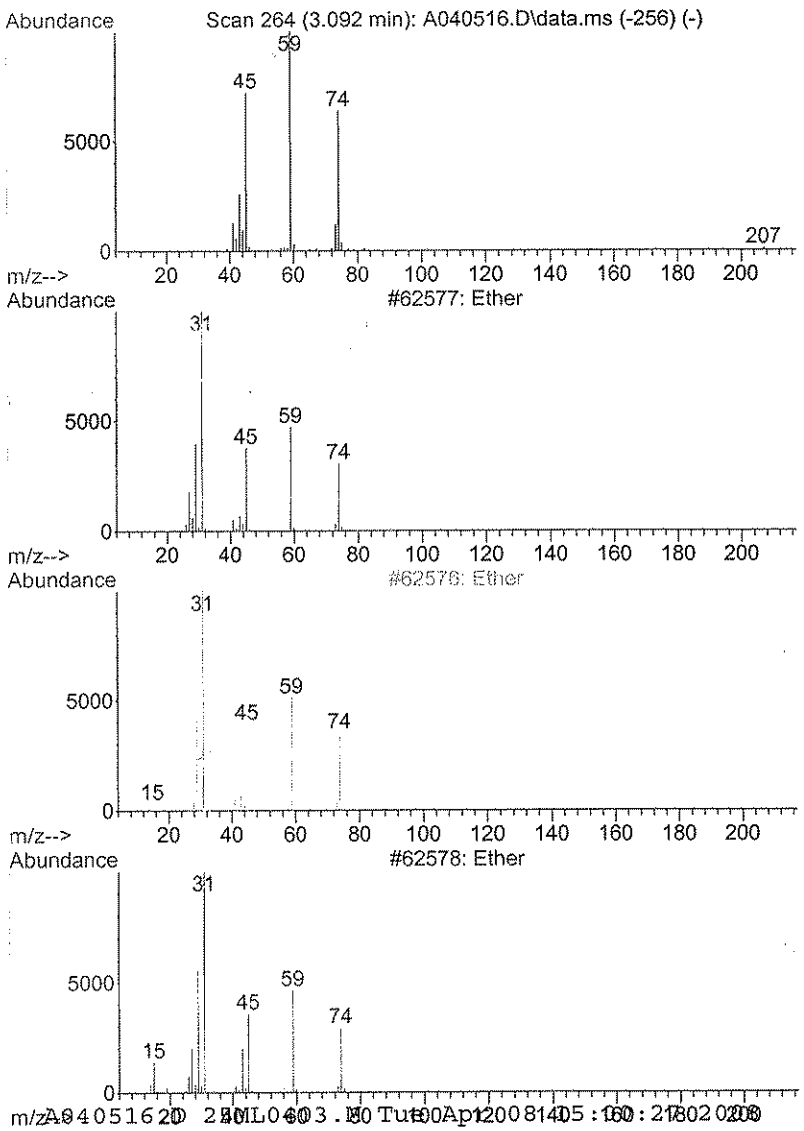
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

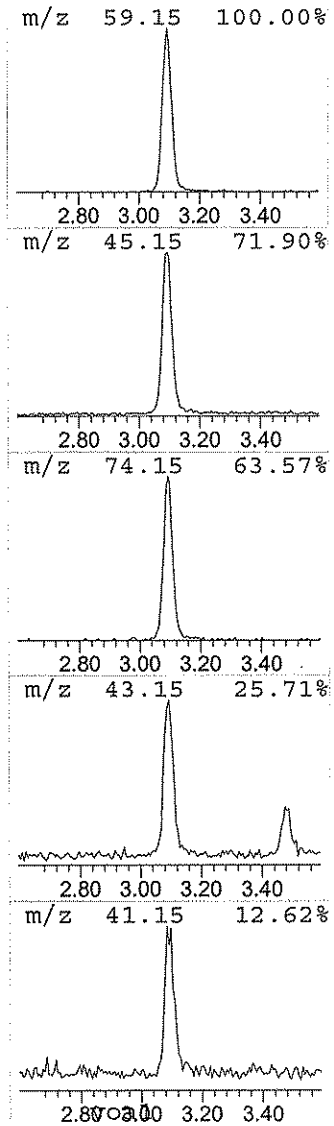
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 1 Ether Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.092 | 1.24 ug/L | 167031 | fluorobenzene | 7.015 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 86 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 83 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 83 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 56 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040517.D
Acq On : 5 Apr 2008 4:12 pm
Sample : ,SAMP,ME0803B85-14A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 06 18:25:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mL W ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 582133 | 10.00 ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 389488 | 10.00 ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 190445 | 10.00 ug/L | 0.00 |
| System Monitoring Compounds | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 145420 | 9.59 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.90% | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 152547 | 10.49 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 104.90% | |
| 44) toluene-d8 | 9.247 | 98 | 535339 | 11.32 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 113.20% | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 191678 | 9.62 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.20% | |
| Target Compounds | | | | | Qvalue |
| 4) vinyl chloride | 1.937 | 62 | 10447 | 0.51 ug/L | 88 |
| 12) acetone | 3.476 | 43 | 5556 | 2.66 ug/L | 93 |
| 20) vinyl acetate | 4.850 | 43 | 44766 | 4.65 ug/L | 80 |
| 31) benzene | 6.632 | 78 | 317531 | 4.87 ug/L | 99 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

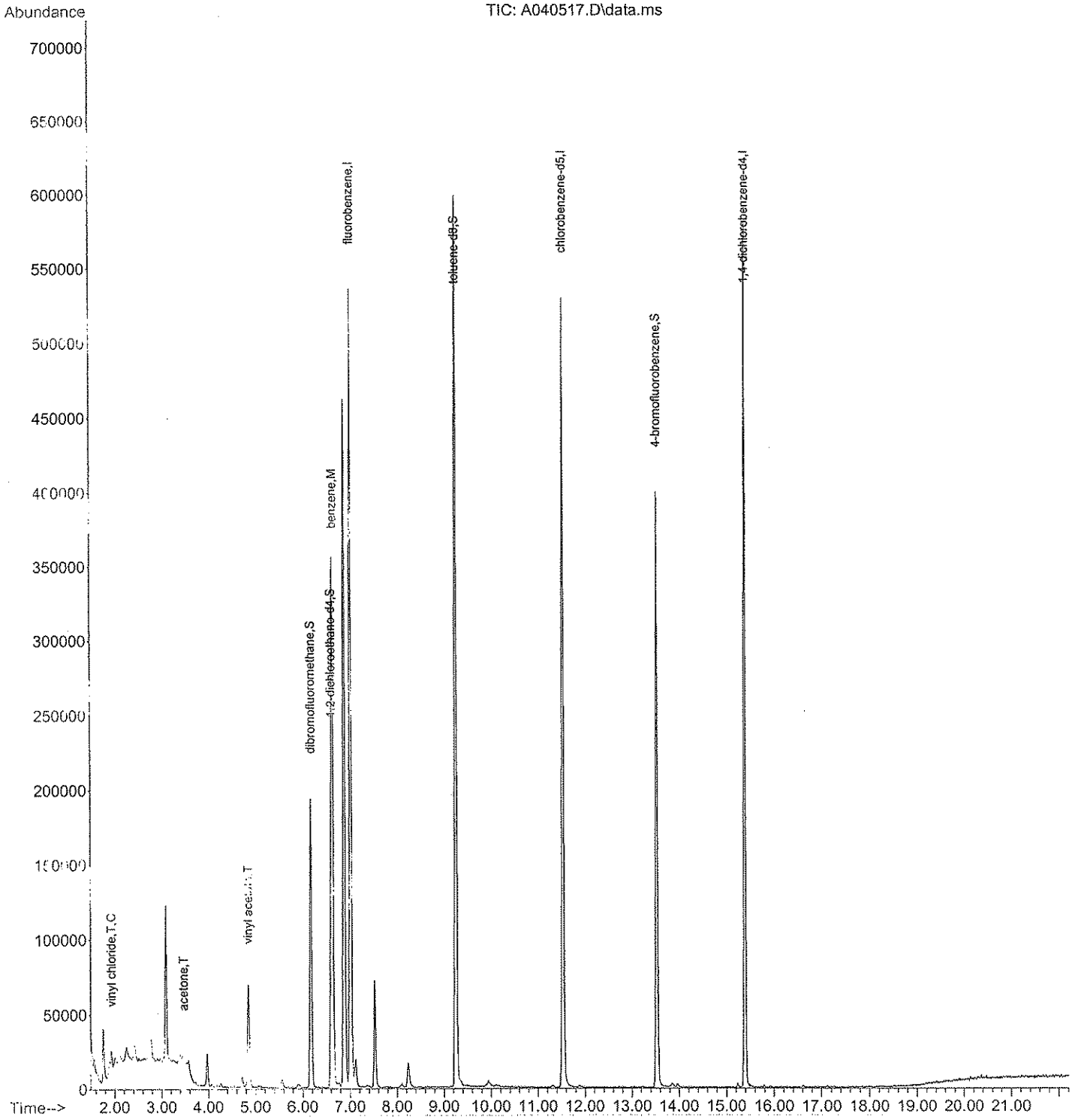
FX

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040517.D
Acq On : 5 Apr 2008 4:12 pm
Sample : ,SAMP,ME0803B85-14A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 06 18:25:15 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040517.D
Acq On : 5 Apr 2008 4:12 pm
Operator : BR
Sample : ,SAMP,ME0803B85-14A,1,
Misc : 8260+_W25
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Ether | 3.087 | 1.6 | ug/L | 221587 | 1 | 7.009 | 1386690 | 10.0 |
| Diisopropyl ether | 4.856 | 1.5 | ug/L | 205088 | 1 | 7.009 | 1386690 | 10.0 |
| Di-n-propyl ether | 6.875 | 8.8 | ug/L | 1213700 | 1 | 7.009 | 1386690 | 10.0 |
| Diethyl sulfide | 7.520 | 1.3 | ug/L | 183621 | 1 | 7.009 | 1386690 | 10.0 |

Raw Results
on 4/10/08

# LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040517.D
Acq On : 5 Apr 2008 4:12 pm
Operator : BR
Sample : ,SAMP,ME0803B85-14A,1,
Misc : 8260+_W25
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040517.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.755 | 39 | 44 | 57 | rBV | 35963 | 82025 | 5.23% | 0.796% |
| 2 | 3.087 | 257 | 263 | 273 | rVB | 103055 | 221587 | 14.12% | 2.152% |
| 3 | 3.969 | 399 | 408 | 419 | rBV | 22029 | 51309 | 3.27% | 0.498% |
| 4 | 4.856 | 541 | 554 | 568 | rVB2 | 68372 | 205088 | 13.07% | 1.991% |
| 5 | 6.170 | 759 | 770 | 788 | rVB | 193160 | 498472 | 31.76% | 4.840% |
| 6 | 6.626 | 830 | 845 | 860 | rBV3 | 355634 | 1180032 | 75.20% | 11.458% |
| 7 | 6.875 | 874 | 886 | 899 | rBV | 460521 | 1213701 | 77.34% | 11.785% |
| 8 | 7.009 | 899 | 908 | 920 | rVV | 534571 | 1386693 | 88.37% | 13.465% |
| 9 | 7.119 | 920 | 926 | 941 | rVB4 | 18637 | 53897 | 3.43% | 0.523% |
| 10 | 7.520 | 983 | 992 | 1013 | rVB | 71713 | 183621 | 11.70% | 1.783% |
| 11 | 8.232 | 1101 | 1109 | 1131 | rVB2 | 16268 | 55549 | 3.54% | 0.539% |
| 12 | 9.253 | 1264 | 1277 | 1305 | rBV | 597469 | 1569257 | 100.00% | 15.238% |
| 13 | 11.528 | 1638 | 1651 | 1673 | rBV | 528786 | 1352301 | 86.17% | 13.131% |
| 14 | 13.522 | 1969 | 1979 | 1999 | rBV | 398962 | 1004242 | 63.99% | 9.752% |
| 15 | 15.389 | 2273 | 2286 | 2300 | rBV | 580452 | 1240539 | 79.05% | 12.046% |

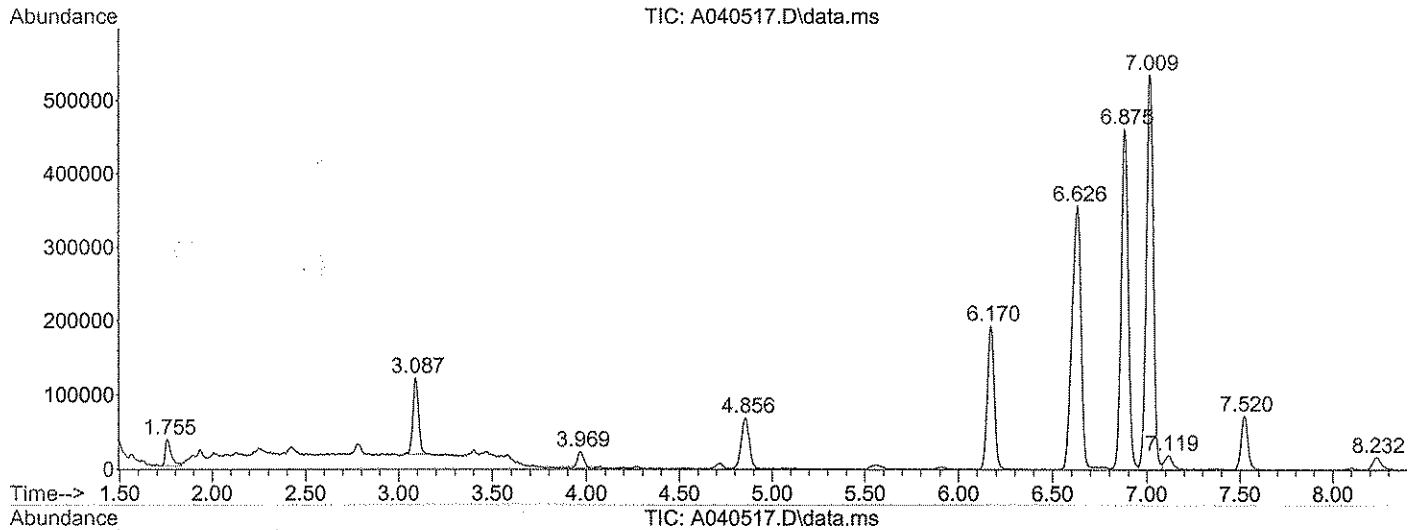
Sum of corrected areas: 10298313

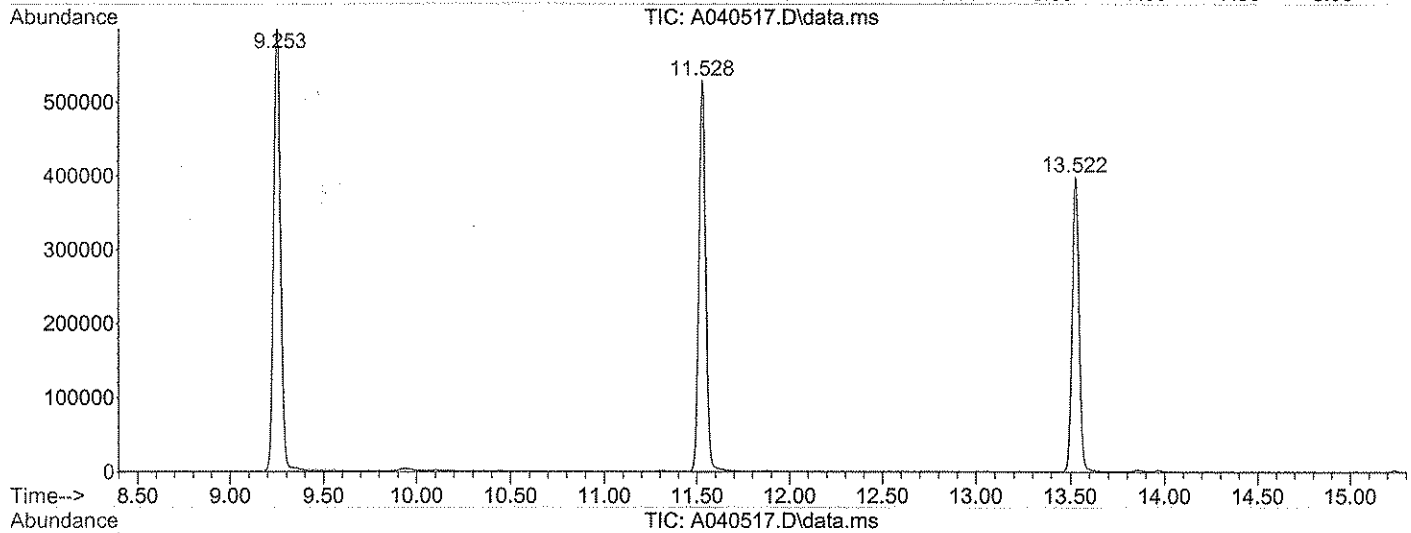
LSC Report - Integrated Chromatogram

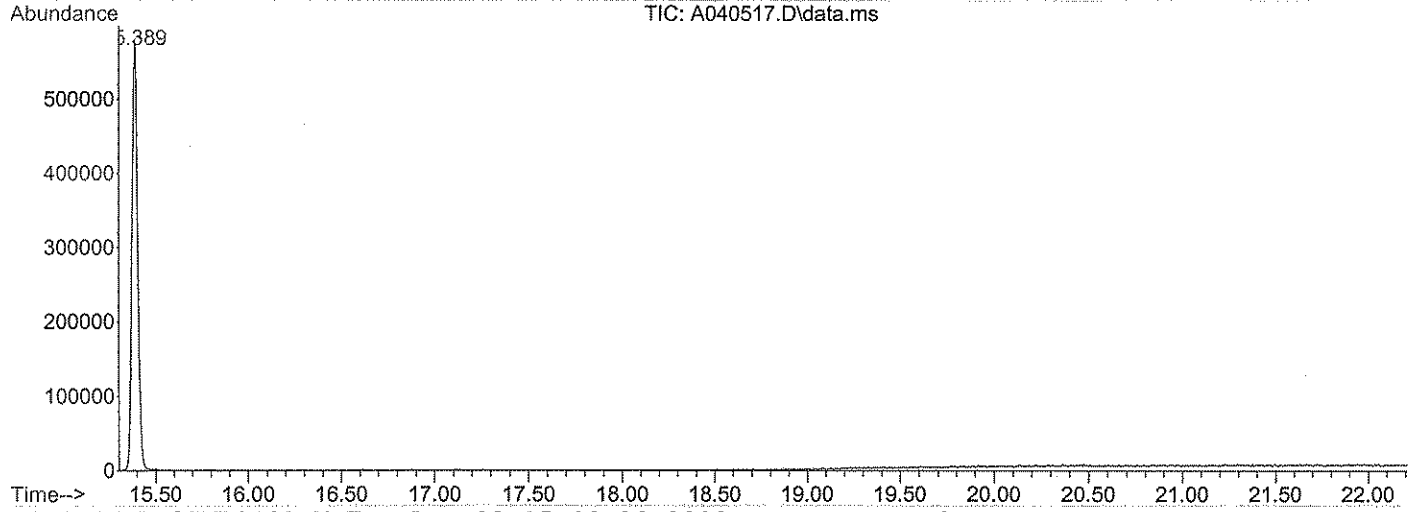
Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040517.D
Acq On : 5 Apr 2008 4:12 pm
Operator : BR
Sample : ,SAMP,ME0803B85-14A,1,
Misc : 8260+_W25
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040517.D 25ML0403.M Tue Apr 08 15:00:30 2008 voa1 Page: 2

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040517.D
Acq On : 5 Apr 2008 4:12 pm
Operator : BR
Sample : ,SAMP,ME0803B85-14A,1,
Misc : 8260+_W25
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

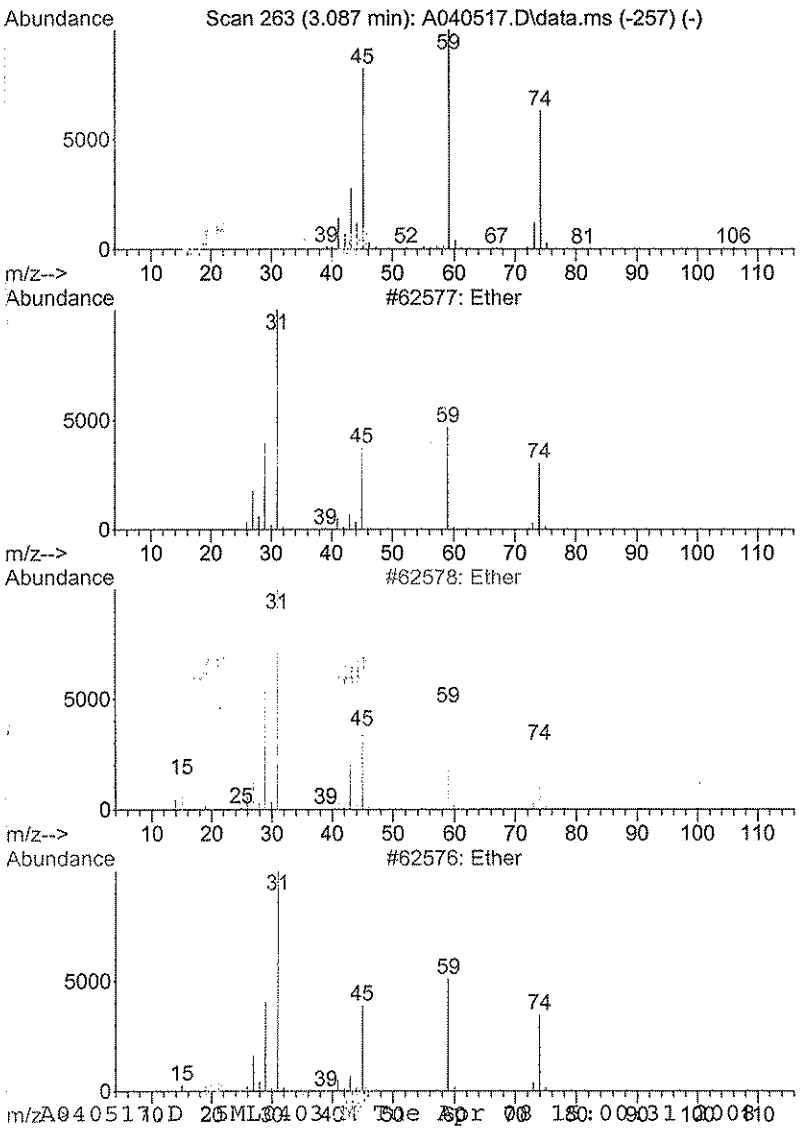
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

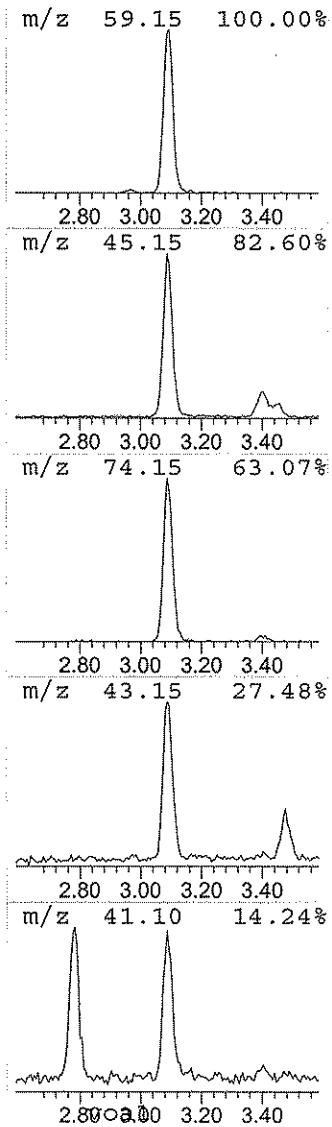
**********

Peak Number 1 Ether Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.087 | 1.60 ug/L | 221587 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 86 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 86 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 64 |
| 5 | Hydrazine, trimethyl- | 74 | C3H10N2 | 001741-01-1 | 47 |



# Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040517.D
Acq On : 5 Apr 2008 4:12 pm
Operator : BR
Sample : ,SAMP,ME0803B85-14A,1,
Misc : 8260+_W25
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

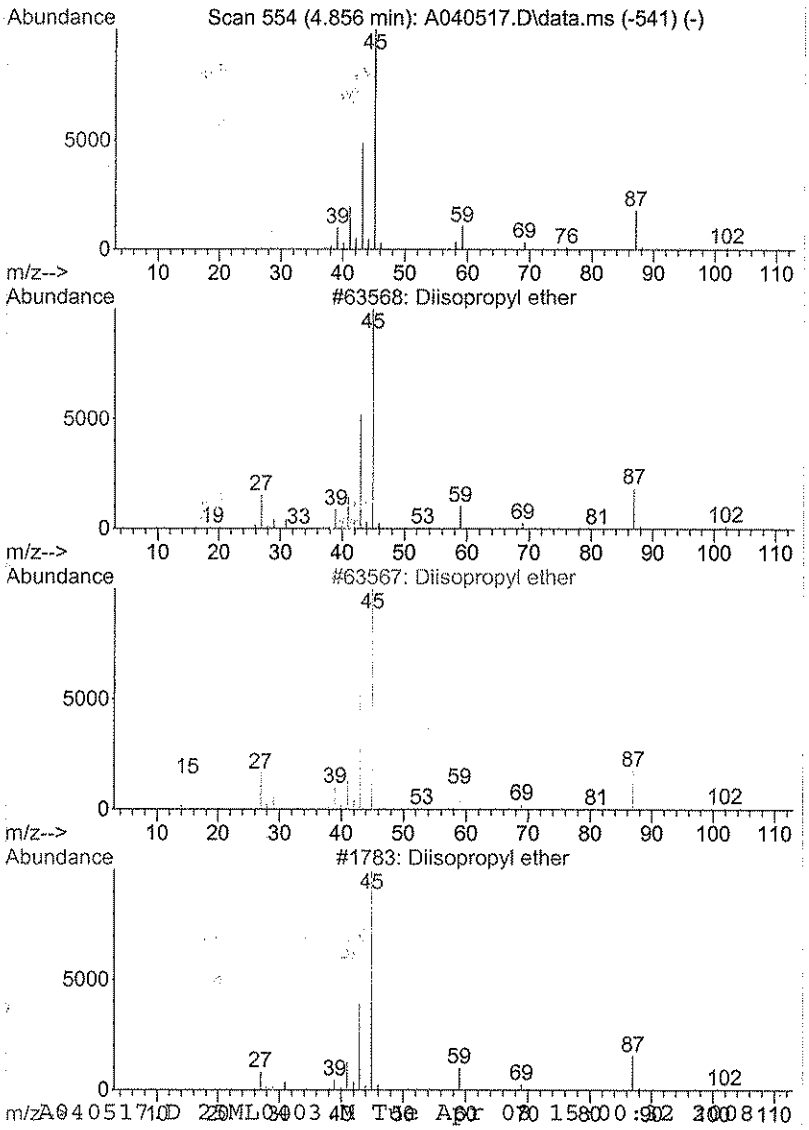
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

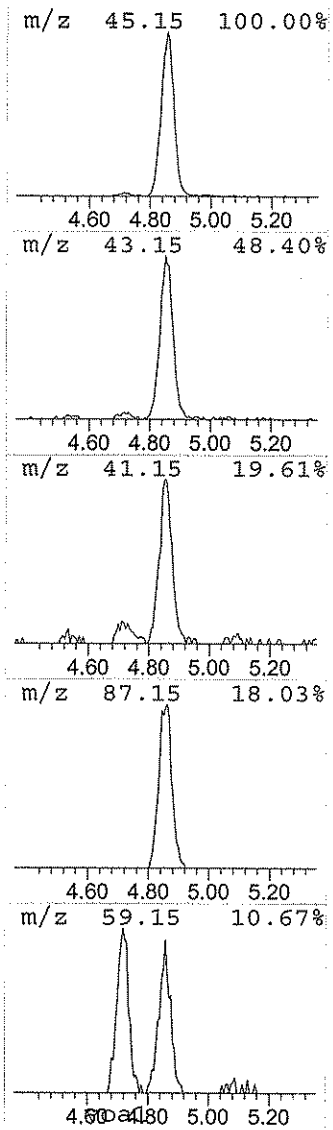
**********

Peak Number 2 Diisopropyl ether Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.856 | 1.48 ug/L | 205088 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Diisopropyl ether | 102 | C6H14O | 000108-20-3 | 91 |
| 2 | Diisopropyl ether | 102 | C6H14O | 000108-20-3 | 90 |
| 3 | Diisopropyl ether | 102 | C6H14O | 000108-20-3 | 83 |
| 4 | Diisopropyl ether | 102 | C6H14O | 000108-20-3 | 80 |
| 5 | Isopropyl Alcohol | 60 | C3H8O | 000067-63-0 | 64 |



Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040517.D
Acq On : 5 Apr 2008 4:12 pm
Operator : BR
Sample : ,SAMP,ME0803B85-14A,1,
Misc : 8260+_W25
ALS Vial : 17 Sample Multiplier: 1

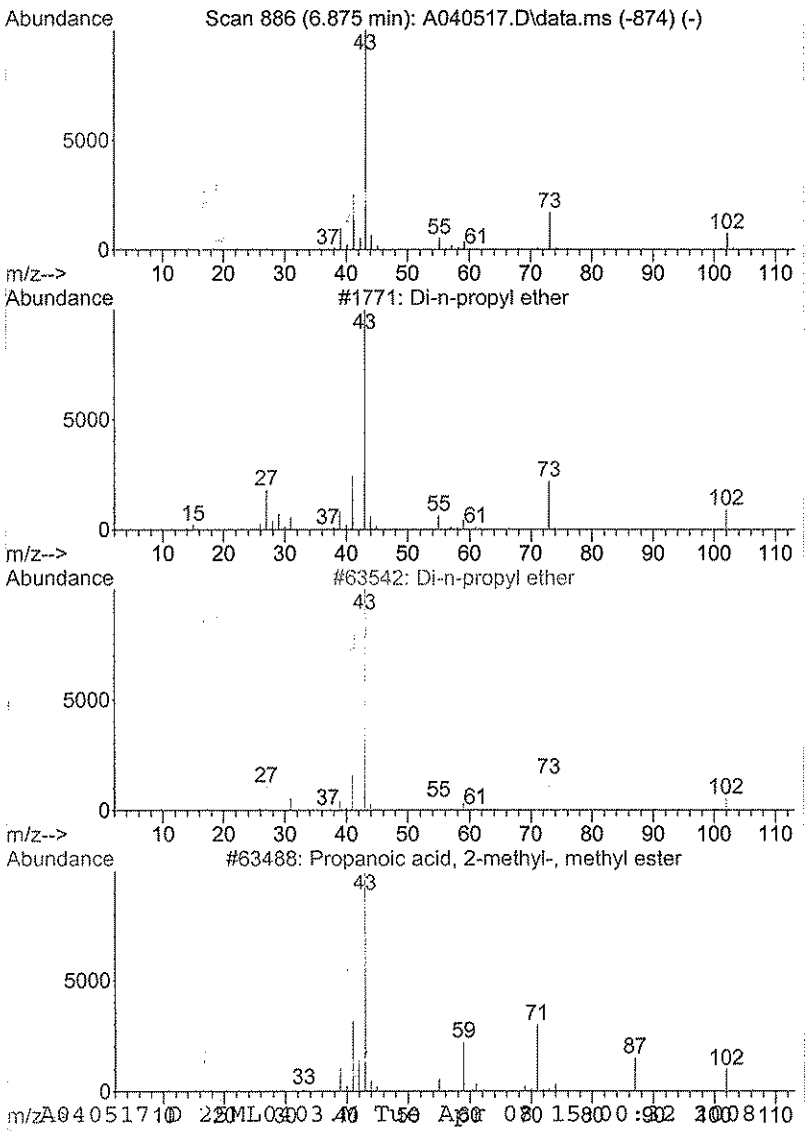
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

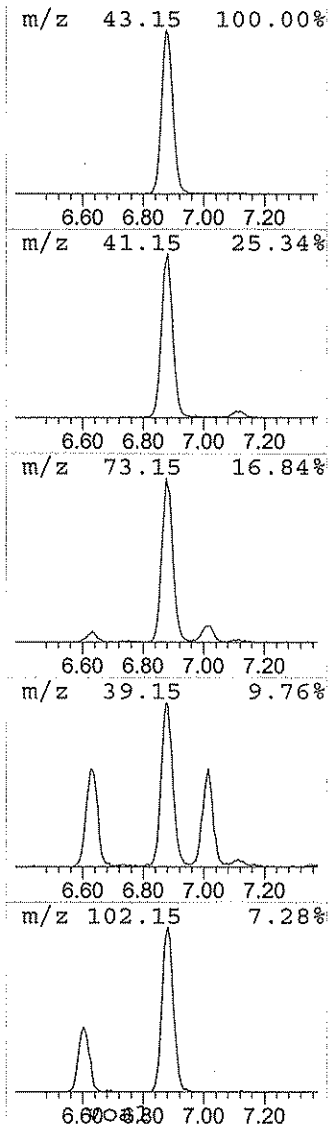
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 3 Di-n-propyl ether Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.875 | 8.75 ug/L | 1213700 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Di-n-propyl ether | 102 | C6H14O | 000111-43-3 | 72 |
| 2 | Di-n-propyl ether | 102 | C6H14O | 000111-43-3 | 49 |
| 3 | Propanoic acid, 2-methyl-, methy... | 102 | C5H10O2 | 000547-63-7 | 25 |
| 4 | Di-n-propyl ether | 102 | C6H14O | 000111-43-3 | 22 |
| 5 | Methane, dipropoxy- | 132 | C7H16O2 | 000505-84-0 | 9 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040517.D
Acq On : 5 Apr 2008 4:12 pm
Operator : BR
Sample : ,SAMP,ME0803B85-14A,1,
Misc : 8260+_W25
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

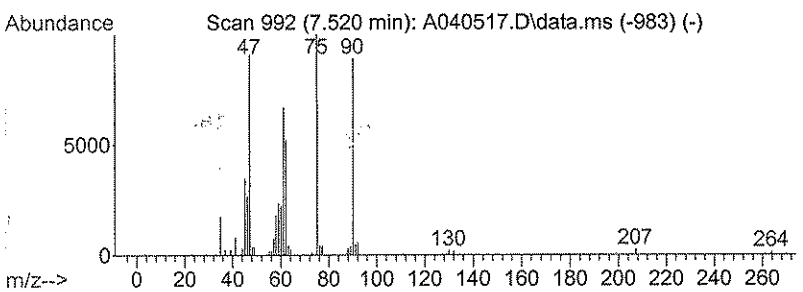
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

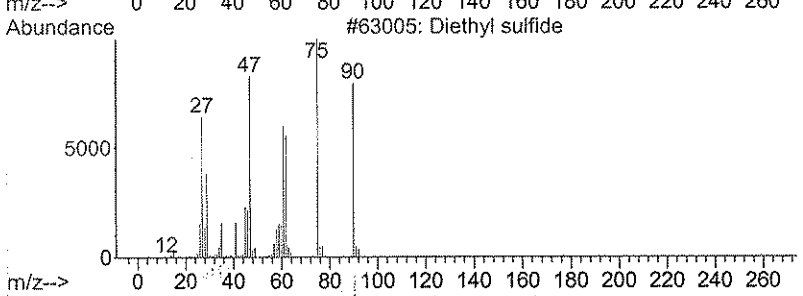
**********

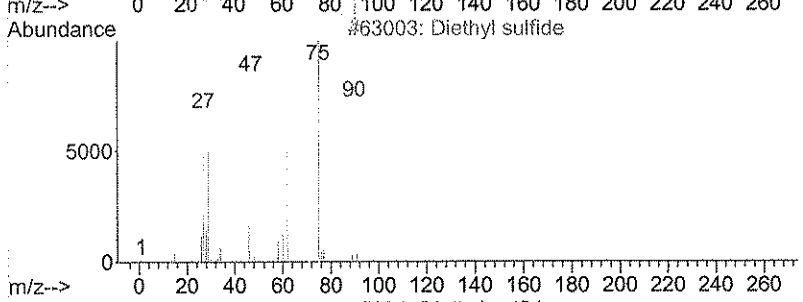
Peak Number 4 Diethyl sulfide Concentration Rank 4

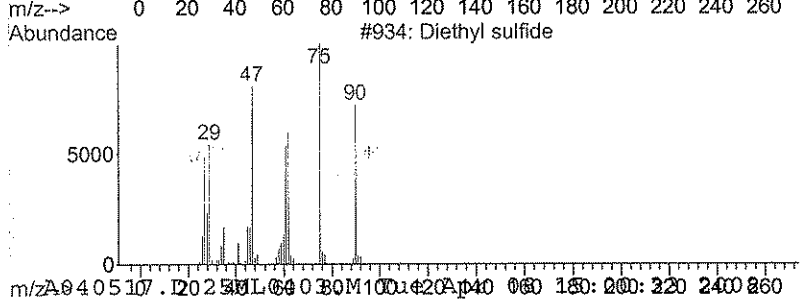
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.520 | 1.32 ug/L | 183621 | fluorobenzene | 7.009 |

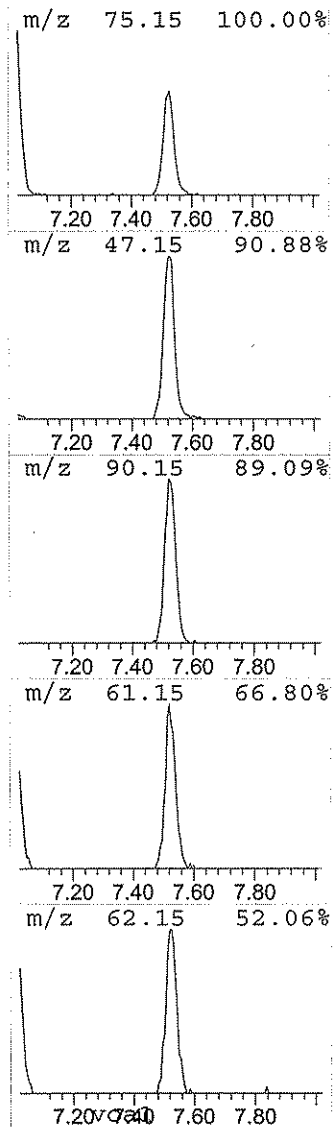
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Diethyl sulfide | 90 | C4H10S | 000352-93-2 | 97 |
| 2 | Diethyl sulfide | 90 | C4H10S | 000352-93-2 | 91 |
| 3 | Diethyl sulfide | 90 | C4H10S | 000352-93-2 | 78 |
| 4 | Diethyl sulfide | 90 | C4H10S | 000352-93-2 | 46 |
| 5 | Propane, 1-(methylthio)- | 90 | C4H10S | 003877-15-4 | 32 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040518.D
Acq On : 5 Apr 2008 4:47 pm
Sample : ,SAMP,ME0803B85-15A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 06 18:25:19 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 544179 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.529 | 117 | 373979 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 185537 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 143671 | 10.14 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.40% | | |
| 30) 1,2-dichloroethane-d4 | 6.603 | 65 | 154132 | 11.34 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 113.40% | | |
| 44) toluene-d8 | 9.248 | 98 | 507003 | 11.16 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 111.60% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 184344 | 9.63 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.30% | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.449 | 64 | 454932 | 40.22 | ug/L | 96 |
| 11) acetone | 3.477 | 43 | 4107 | 2.11 | ug/L | 98 |
| 20) vinyl acetate | 4.851 | 43 | 14346 | 1.59 | ug/L | 80 |
| 43) 4-methyl-2-pentanone | 9.254 | 43 | 3929 | 0.85 | ug/L # | 1 |

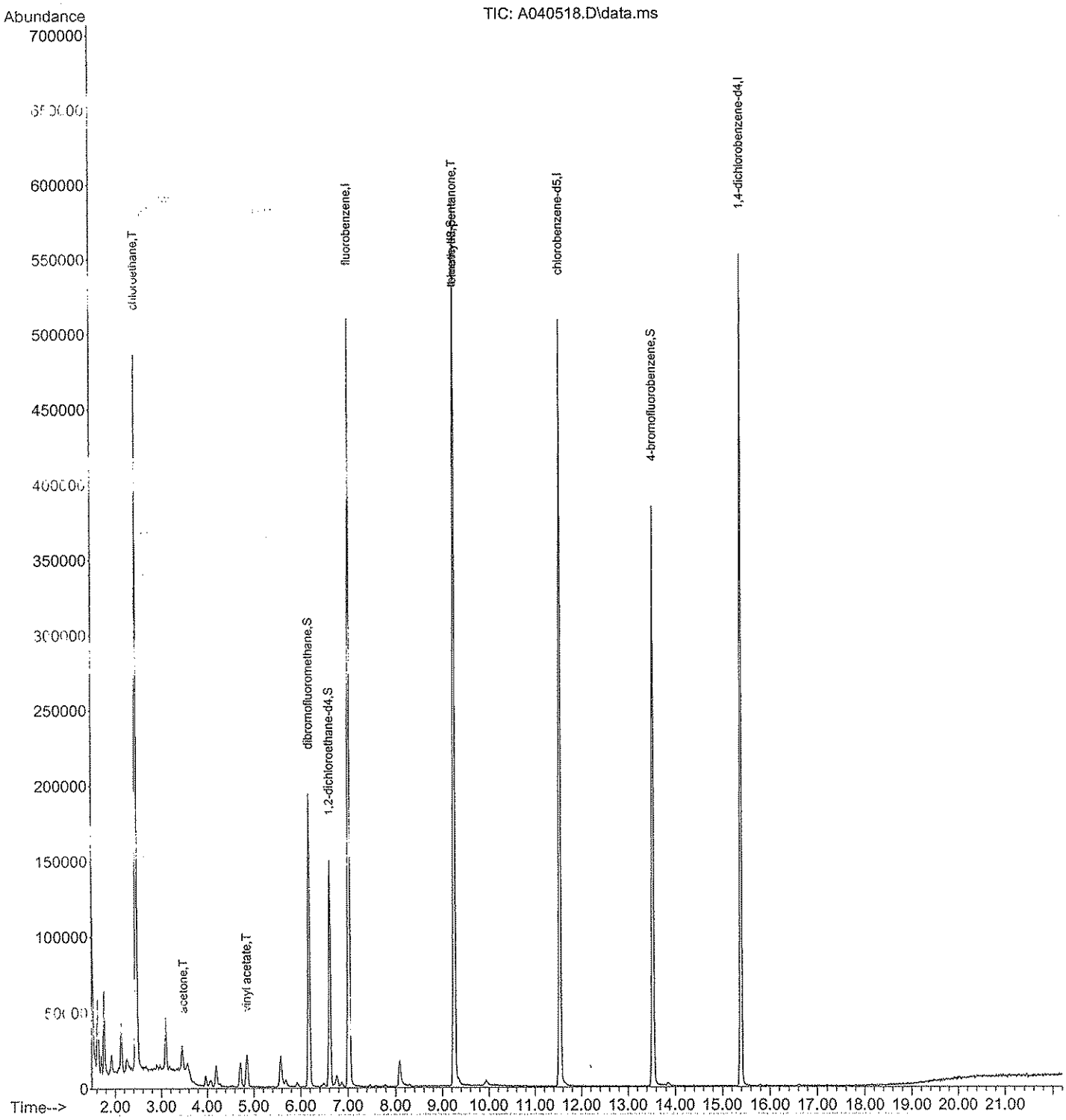
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040508\A040518.D
Acq On : 5 Apr 2008 4:47 pm
Sample : ,SAMP,ME0803B85-15A,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 06 18:25:19 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW 1CAL 04/03/08 - MISC Compounds
Last Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040508\\
Data File : A040518.D
Acq On : 5 Apr 2008 4:47 pmm
Operator : BRR
Sample : ,SAMP,ME0803B85-15A,1,,
Misc : 8260+_W255
ALS Vial : 18 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040518.D
Acq On : 5 Apr 2008 4:47 pm
Operator : BR
Sample : ,SAMP,ME0803B85-15A,1,
Misc : 8260+_W25
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040518.D\data.ms

| Peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.616 | 16 | 21 | 31 | rVB | 48426 | 116878 | 7.77% | 1.323% |
| 2 | 1.756 | 39 | 44 | 61 | rBV | 54561 | 107581 | 7.15% | 1.218% |
| 3 | 2.127 | 99 | 105 | 115 | rVB | 33949 | 76873 | 5.11% | 0.870% |
| 4 | 2.449 | 150 | 158 | 180 | rVB | 473484 | 1051579 | 69.88% | 11.902% |
| 5 | 3.094 | 257 | 264 | 274 | rVB2 | 34592 | 77308 | 5.14% | 0.875% |
| 6 | 4.724 | 521 | 532 | 544 | rVB3 | 16167 | 48675 | 3.23% | 0.551% |
| 7 | 4.857 | 544 | 554 | 567 | rBV3 | 21127 | 64573 | 4.29% | 0.731% |
| 8 | 5.575 | 655 | 672 | 685 | rBV | 20684 | 77228 | 5.13% | 0.874% |
| 9 | 6.171 | 760 | 770 | 783 | rBV | 193158 | 493131 | 32.77% | 5.582% |
| 10 | 6.603 | 832 | 841 | 853 | rBV | 148994 | 377096 | 25.06% | 4.268% |
| 11 | 7.016 | 898 | 909 | 935 | rBV | 514931 | 1308715 | 86.97% | 14.813% |
| 12 | 8.093 | 1075 | 1086 | 1096 | rBV3 | 17120 | 58176 | 3.87% | 0.658% |
| 13 | 9.248 | 1264 | 1276 | 1290 | rBV | 588139 | 1504832 | 100.00% | 17.033% |
| 14 | 11.529 | 1639 | 1651 | 1670 | rBV | 508233 | 1296148 | 86.13% | 14.671% |
| 15 | 13.523 | 1968 | 1979 | 2002 | rBV | 383945 | 970884 | 64.52% | 10.989% |
| 16 | 15.390 | 2270 | 2286 | 2301 | rBV | 551669 | 1205284 | 80.09% | 13.642% |

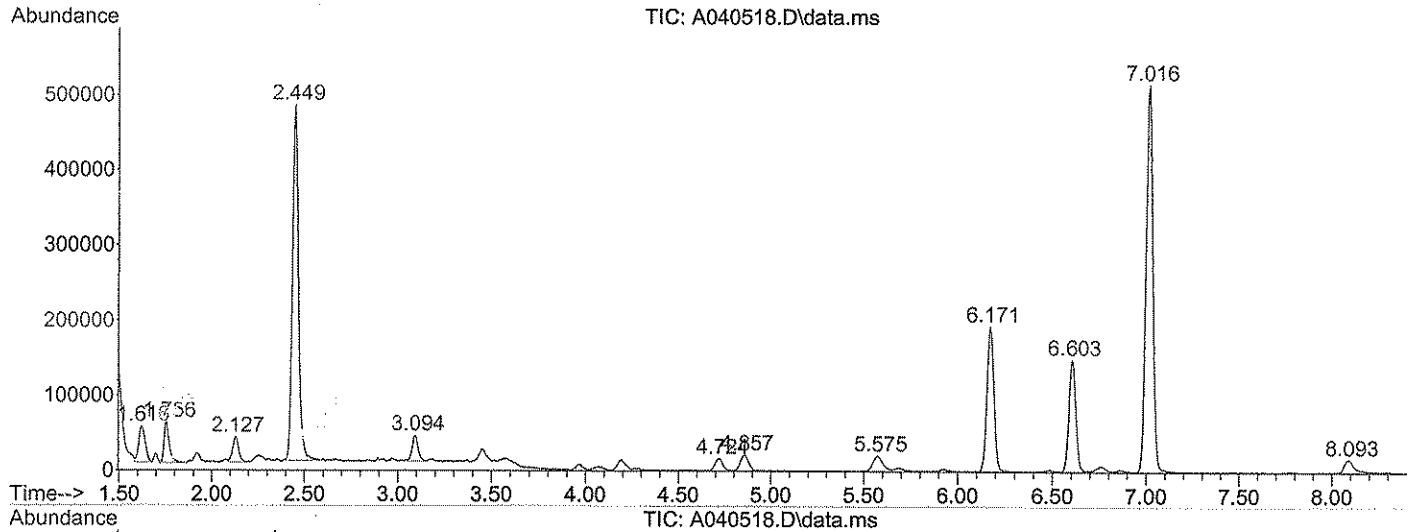
Sum of corrected areas: 8834961

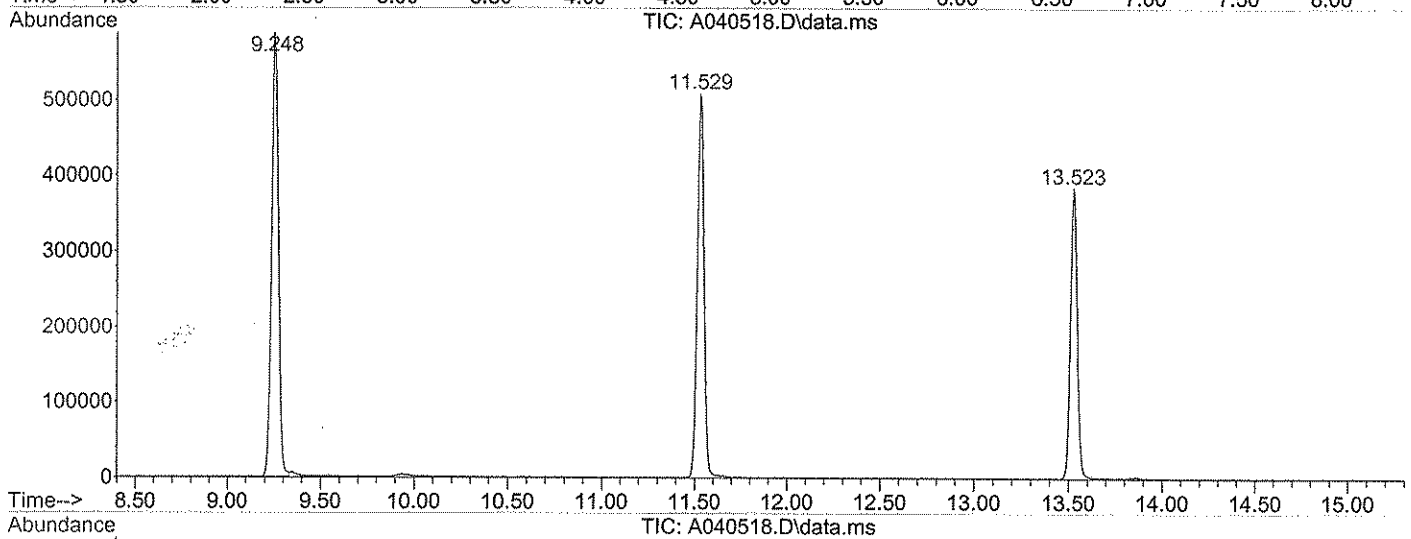
LSC Report - Integrated Chromatogram

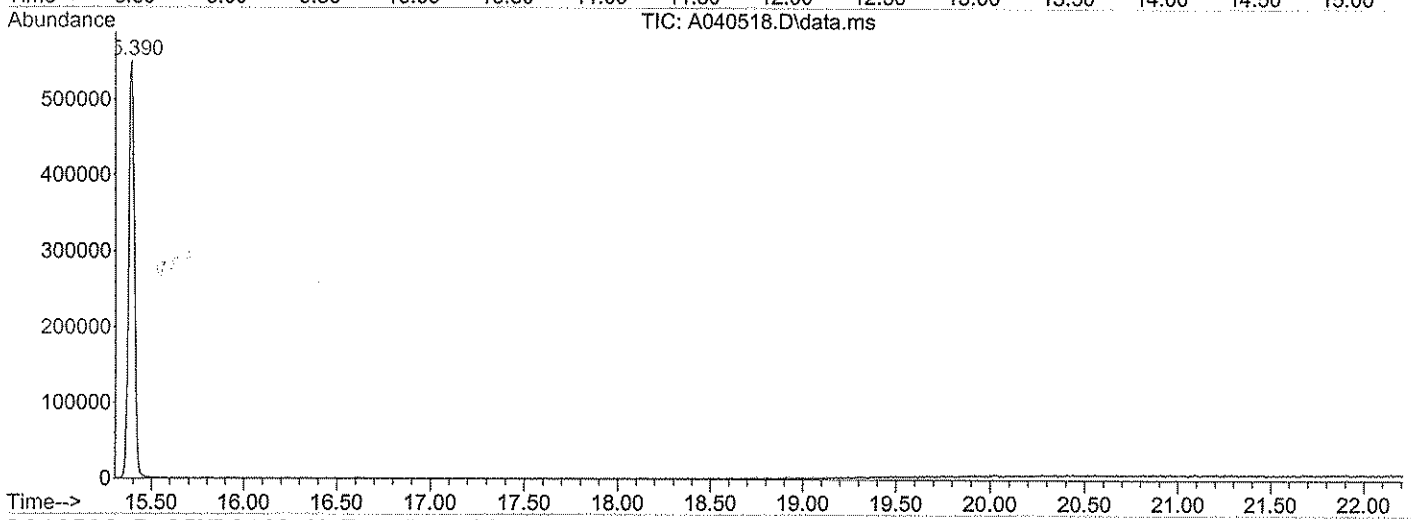
```
Data Path : C:\msdchem\1\DATA\A040508\
Data File : A040518.D
Acq On    :  5 Apr 2008    4:47 pm
Operator  : BR
Sample    : ,SAMP,ME0803B85-15A,1,
Misc      : 8260+_W25
ALS Vial  : 18   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title  : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library   : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P
```




A040518.D 25ML0403.M Tue Apr 08 15:00:37 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040807.D
Acq On : 8 Apr 2008 10:59 am
Sample : ,samp,me0803b85-15a,5,ra, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 08 12:04:51 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 609946 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 429602 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 217600 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 164310 | 10.34 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 103.40% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 177305 | 11.64 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 116.40% | | |
| 44) toluene-d8 | 9.247 | 98 | 587167 | 11.25 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.50% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 216044 | 9.83 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.30% | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.449 | 64 | 97809 | 7.71 | ug/L | 94 |
| 11) acetone | 3.482 | 43 | 8005 | 3.66 | ug/L | 93 |
| 13) methylene chloride | 3.963 | 84 | 15523 | 0.79 | ug/L | 91 |

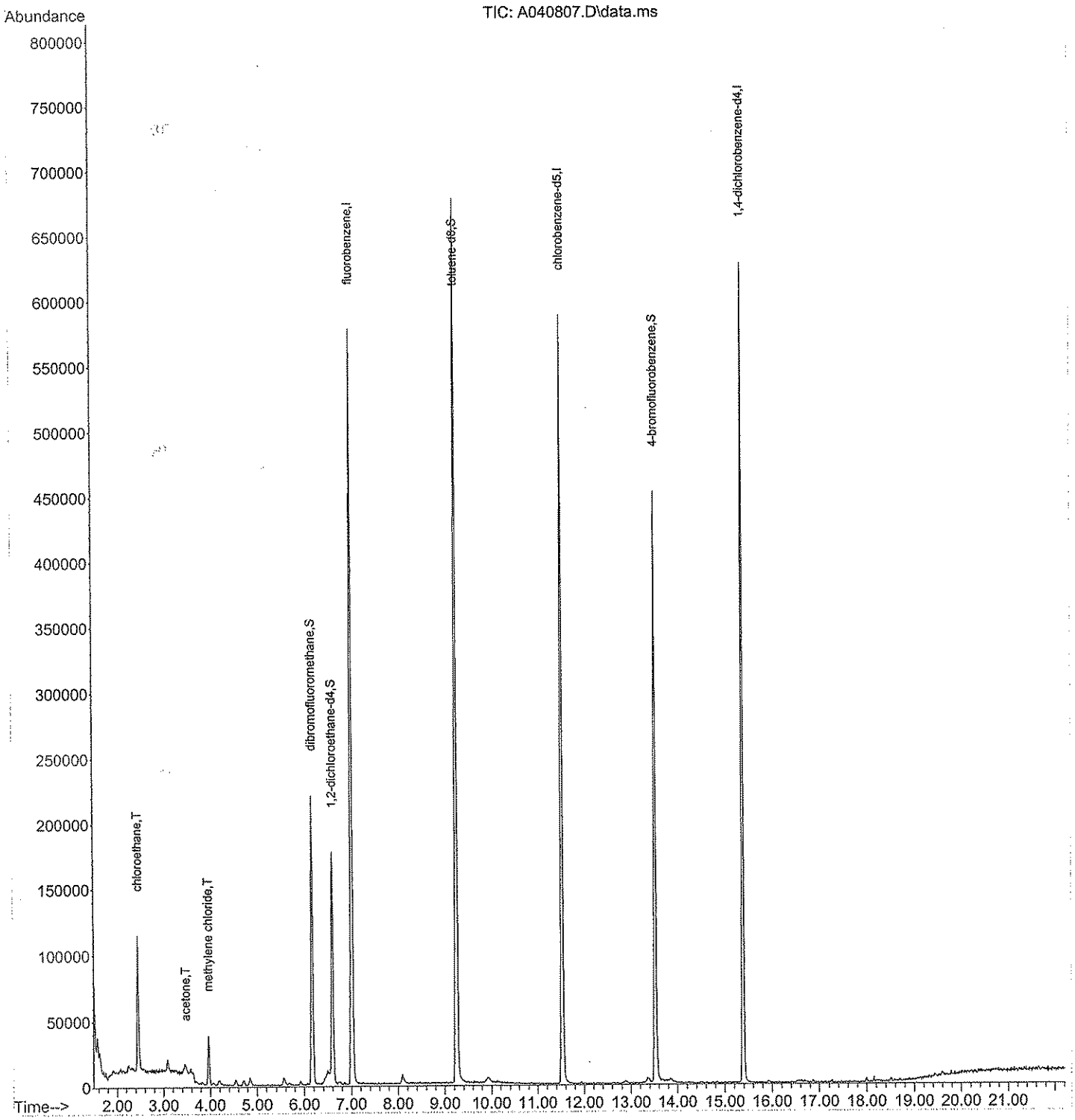
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040807.D
Acq On : 8 Apr 2008 10:59 am
Sample : ,samp,me0803b85-15a,5,ra, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 08 12:04:51 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040606.D
Acq On : 6 Apr 2008 6:13 pm
Sample : ,SAMP,ME0803B85-16A,1,
Misc : 8260+_W25
Operator : jdb
ALS Vial : 5 Sample Multiplier: 1

Inst : VOA1

Quant Time: Apr 07 09:21:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 603646 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.531 | 117 | 410425 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 204061 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 153673 | 9.78 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.80% | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 151933 | 10.08 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 100.80% | | |
| 44) toluene-d8 | 9.244 | 98 | 574460 | 11.52 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 115.20% | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 199960 | 9.52 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 95.20% | | |
| Target Compounds | | | | | | Qvalue |
| 11) acetone | 3.473 | 43 | 5172 | 2.39 | ug/L | 79 |
| 34) trichloroethene | 7.511 | 95 | 26889 | 1.33 | ug/L | 97 |
| 43) 4-methyl-2-pentanone | 9.250 | 43 | 4086 | 0.81 | ug/L # | 1 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 4617 | 0.34 | ug/L | 98 |
| 83) naphthalene | 18.257 | 128 | 8743 | 0.60 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.512 | 180 | 4601 | 0.44 | ug/L | 97 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 1423 | 0.20 | ug/L | 98 |

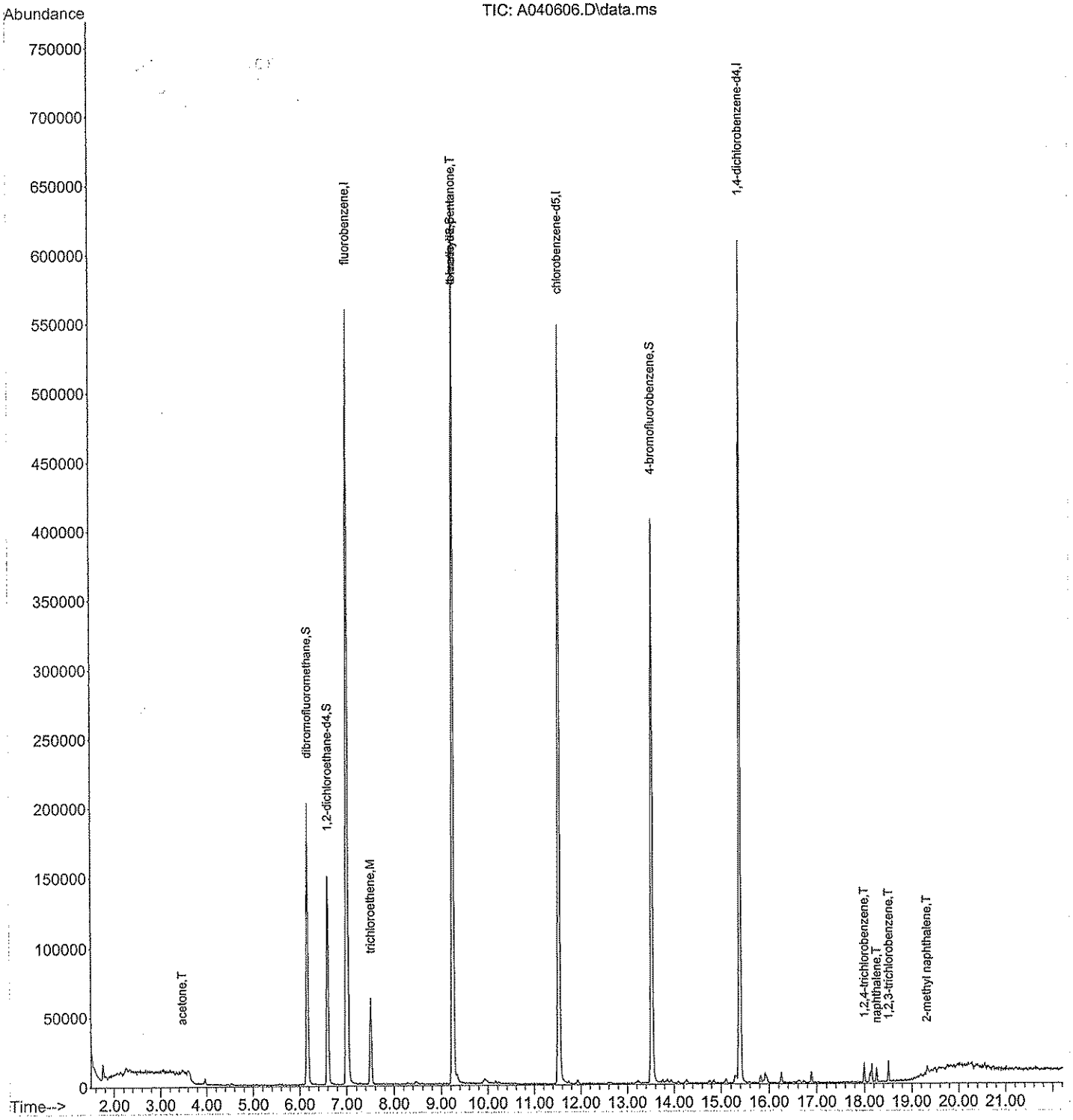
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040606.D
Acq On : 6 Apr 2008 6:13 pm
Sample : ,SAMP,ME0803B85-16A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 07 09:21:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040608\\
Data File : A040606.D
Acq On : 6 Apr 2008 6:13 pmm
Operator : jdbb
Sample : ,SAMP,ME0803B85-16A,1,,
Misc : 8260+_W255
ALS Vial : 5 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

Raw Results ok 4/10/08

No Library Search Compounds Detected

**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040606.D
Acq On : 6 Apr 2008 6:13 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-16A,1,
Misc : 8260+_W25
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040606.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.167 | 758 | 769 | 786 | rBV | 202427 | 522224 | 31.24% | 6.564% |
| 2 | 6.599 | 829 | 840 | 858 | rBV | 149730 | 385136 | 23.04% | 4.841% |
| 3 | 7.012 | 896 | 908 | 933 | rBV | 558794 | 1427986 | 85.43% | 17.948% |
| 4 | 7.511 | 980 | 990 | 1003 | rBV | 62361 | 158306 | 9.47% | 1.990% |
| 5 | 9.244 | 1261 | 1275 | 1288 | rBV | 640243 | 1671550 | 100.00% | 21.010% |
| 6 | 11.525 | 1639 | 1650 | 1680 | rBV | 547075 | 1418226 | 84.84% | 17.826% |
| 7 | 13.519 | 1967 | 1978 | 2002 | rBV2 | 406272 | 1061824 | 63.52% | 13.346% |
| 8 | 15.386 | 2277 | 2285 | 2305 | rVB | 607479 | 1310870 | 78.42% | 16.476% |

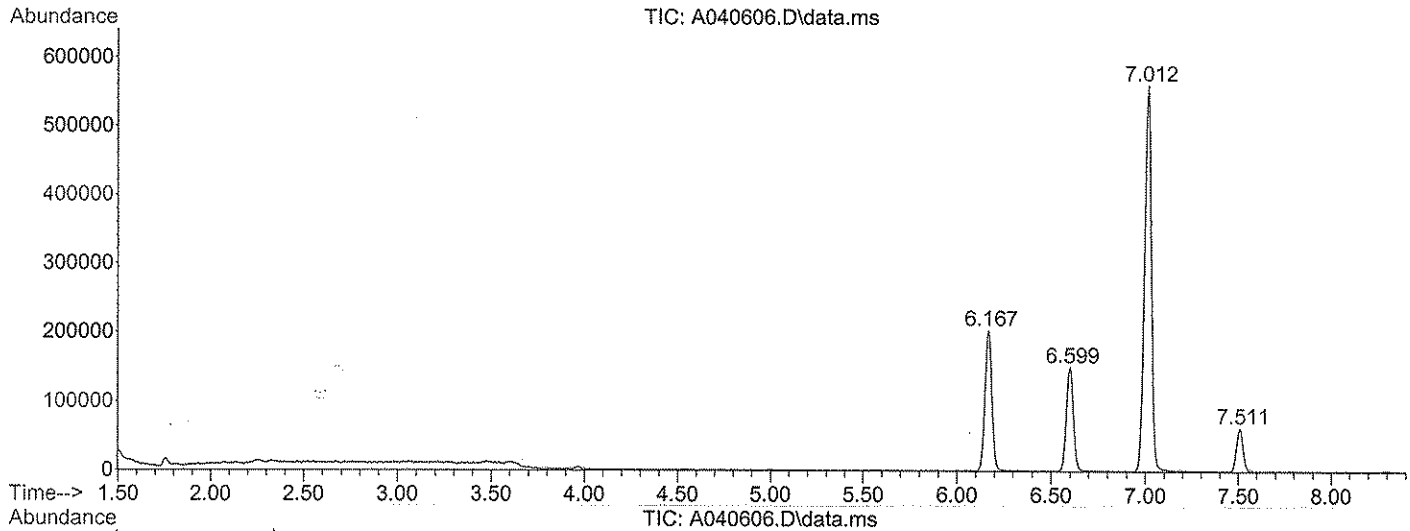
Sum of corrected areas: 7956122

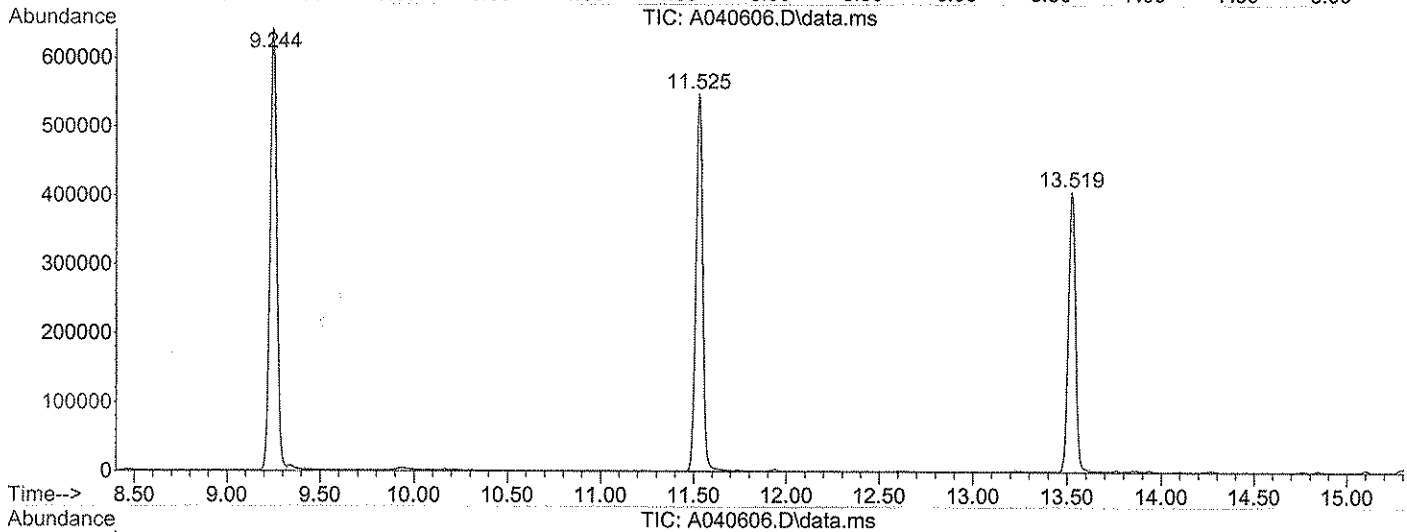
LSC Report - Integrated Chromatogram

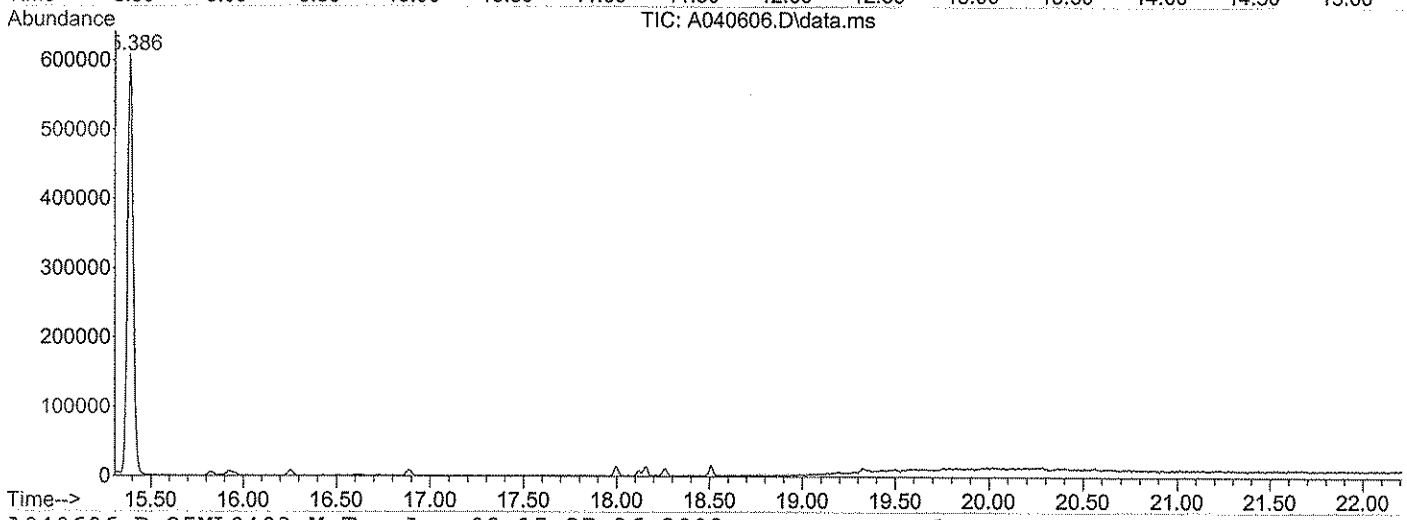
Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040606.D
Acq On : 6 Apr 2008 6:13 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-16A,1,
Misc : 8260+_W25
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040606.D 25ML0403.M Tue Apr 08 15:27:36 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040607.D
Acq On : 6 Apr 2008 6:48 pm
Sample : ,SAMP,ME0803B85-17A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 07 09:21:05 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 592539 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 397309 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 199019 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 149641 | 9.70 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.00% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 149460 | 10.10 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 101.00% | | |
| 44) toluene-d8 | 9.254 | 98 | 551779 | 11.43 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 114.30% | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 197068 | 9.70 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.00% | | |
| Target Compounds | | | | | | Qvalue |
| 4) vinyl chloride | 1.938 | 62 | 10907 | 0.52 | ug/L # | 69 |
| 11) acetone | 3.470 | 43 | 5346 | 2.52 | ug/L | 94 |
| 20) vinyl acetate | 4.857 | 43 | 42526 | 4.34 | ug/L | 80 |
| 31) benzene | 6.632 | 78 | 290782 | 4.38 | ug/L | 100 |

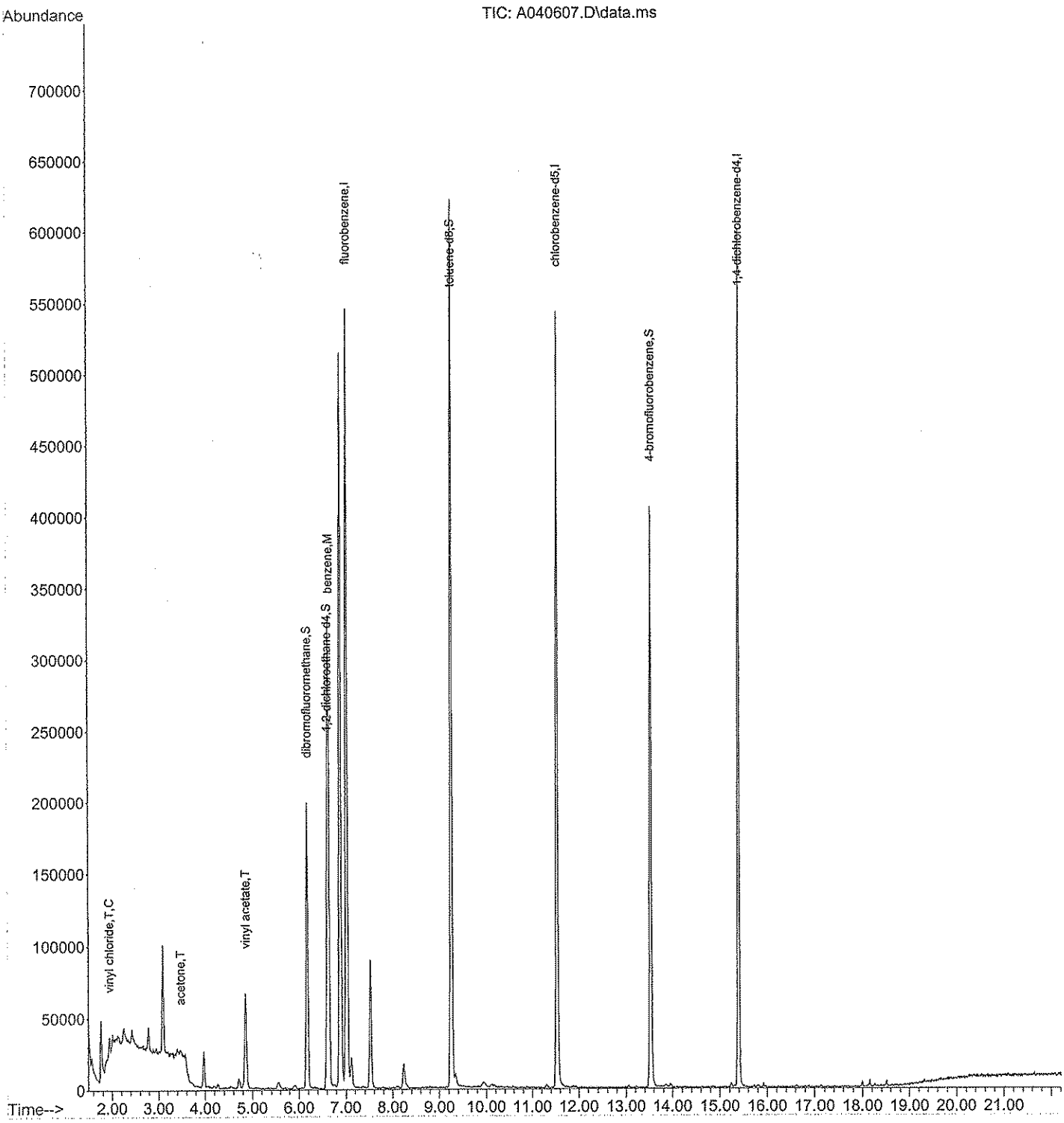
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040607.D
Acq On : 6 Apr 2008 6:48 pm
Sample : ,SAMP,ME0803B85-17A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 07 09:21:05 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040607.D
Acq On : 6 Apr 2008 6:48 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-17A,1,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|
| Ether | 3.087 | 1.2 | ug/L | 165063 | 1 | 7.016 | 1407520 | 10.0 |
| Diisopropyl ether | 4.851 | 1.4 | ug/L | 195478 | 1 | 7.016 | 1407520 | 10.0 |
| Di-n-propyl ether | 6.882 | 9.6 | ug/L | 1345280 | 1 | 7.016 | 1407520 | 10.0 |
| Diethyl sulfide | 7.520 | 1.6 | ug/L | 230221 | 1 | 7.016 | 1407520 | 10.0 |

Please Results on Hold

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040607.D
Acq On : 6 Apr 2008 6:48 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-17A,1,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040607.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.755 | 39 | 44 | 55 | rBV | 43103 | 104953 | 6.51% | 0.991% |
| 2 | 3.087 | 257 | 263 | 275 | rVB | 74944 | 165063 | 10.24% | 1.558% |
| 3 | 3.969 | 399 | 408 | 417 | rBV3 | 25282 | 60640 | 3.76% | 0.572% |
| 4 | 4.851 | 541 | 553 | 567 | rBV | 65610 | 195478 | 12.12% | 1.845% |
| 5 | 6.170 | 757 | 770 | 785 | rBV | 199014 | 510696 | 31.67% | 4.821% |
| 6 | 6.626 | 828 | 845 | 861 | rBV3 | 330587 | 1117050 | 69.27% | 10.546% |
| 7 | 6.882 | 875 | 887 | 899 | rBV | 513187 | 1345276 | 83.42% | 12.701% |
| 8 | 7.010 | 899 | 908 | 919 | rVV | 544222 | 1407522 | 87.28% | 13.288% |
| 9 | 7.113 | 920 | 925 | 939 | rVB3 | 20781 | 55976 | 3.47% | 0.528% |
| 10 | 7.520 | 983 | 992 | 1008 | rBV3 | 89016 | 230221 | 14.28% | 2.173% |
| 11 | 8.238 | 1101 | 1110 | 1129 | rVB2 | 17083 | 57659 | 3.58% | 0.544% |
| 12 | 9.254 | 1264 | 1277 | 1289 | rBV | 621626 | 1612625 | 100.00% | 15.225% |
| 13 | 11.528 | 1637 | 1651 | 1683 | rBV | 542468 | 1392669 | 86.36% | 13.148% |
| 14 | 13.523 | 1968 | 1979 | 2001 | rBV | 405624 | 1047252 | 64.94% | 9.887% |
| 15 | 15.390 | 2276 | 2286 | 2306 | rBV | 599746 | 1289183 | 79.94% | 12.171% |

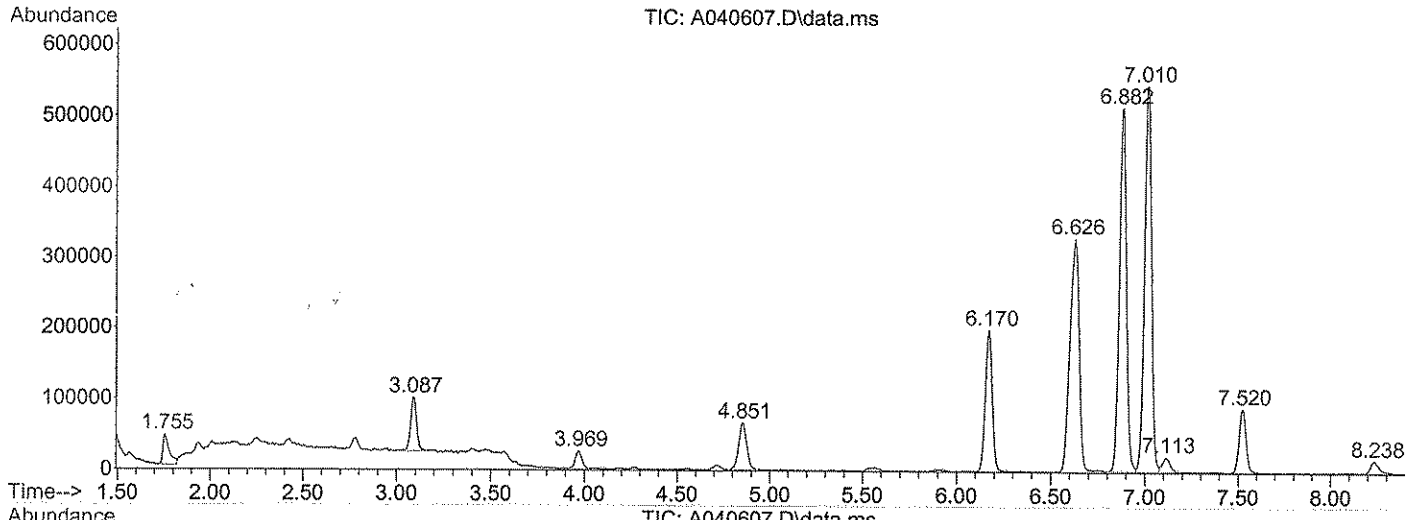
Sum of corrected areas: 10592263

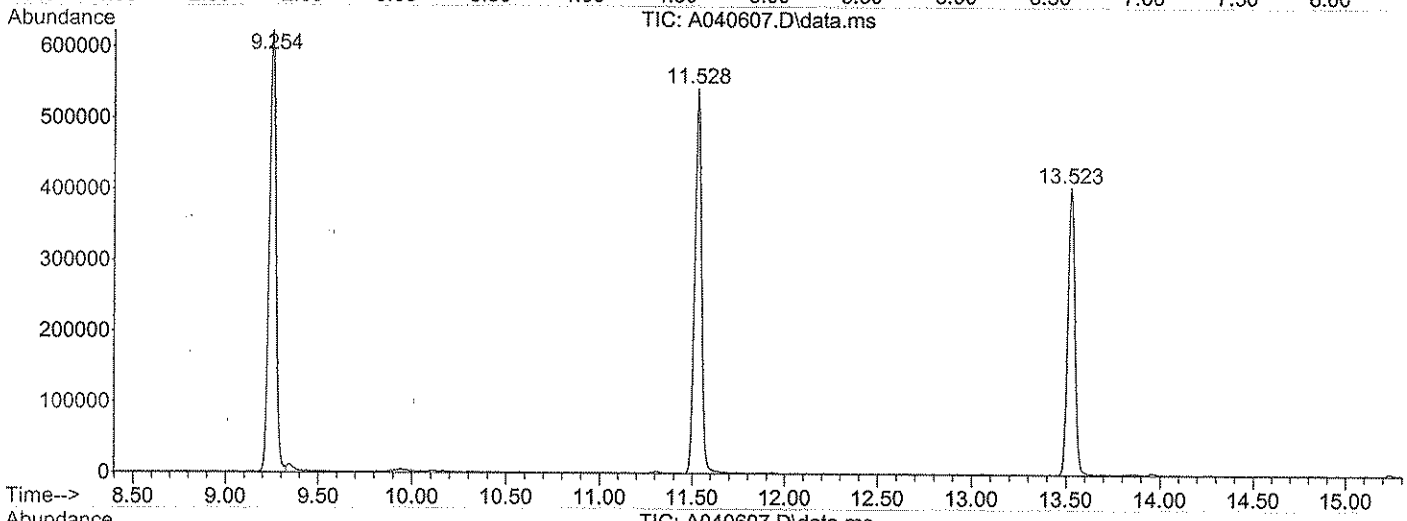
LSC Report - Integrated Chromatogram

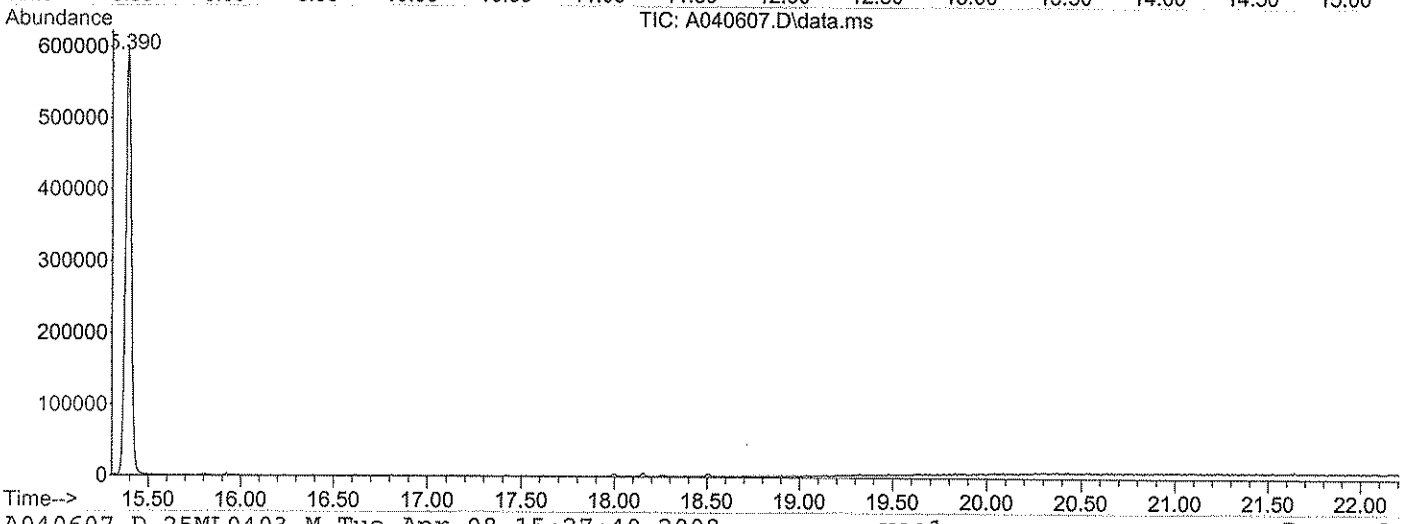
Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040607.D
Acq On : 6 Apr 2008 6:48 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-17A,1,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040607.D 25ML0403.M Tue Apr 08 15:27:40 2008 voa1 Page: 2

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040607.D
Acq On : 6 Apr 2008 6:48 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-17A,1,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

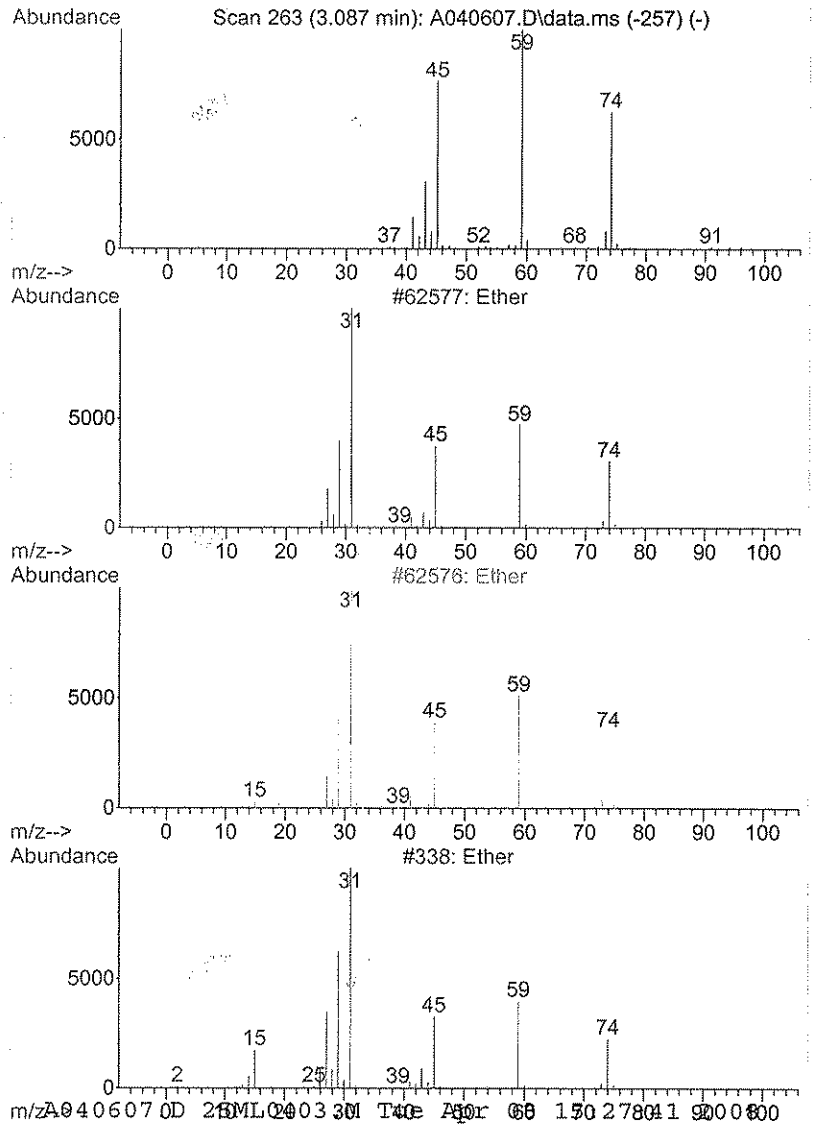
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

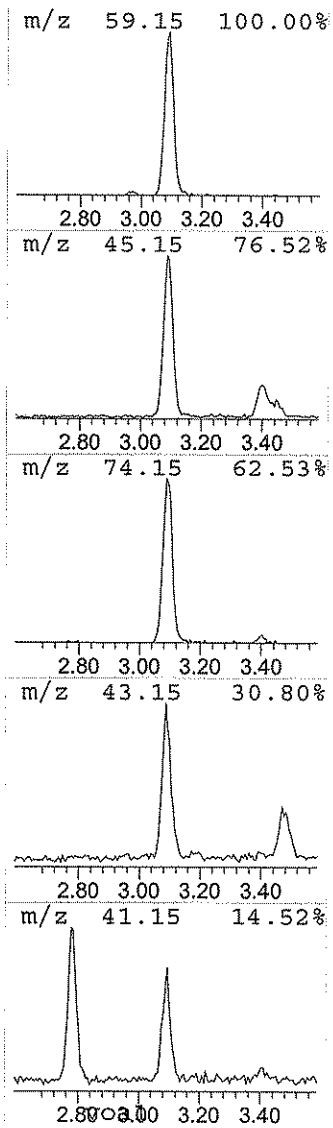
**********

Peak Number 1 Ether Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.087 | 1.17 ug/L | 165063 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 83 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 83 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 36 |



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040607.D
Acq On : 6 Apr 2008 6:48 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-17A,1,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

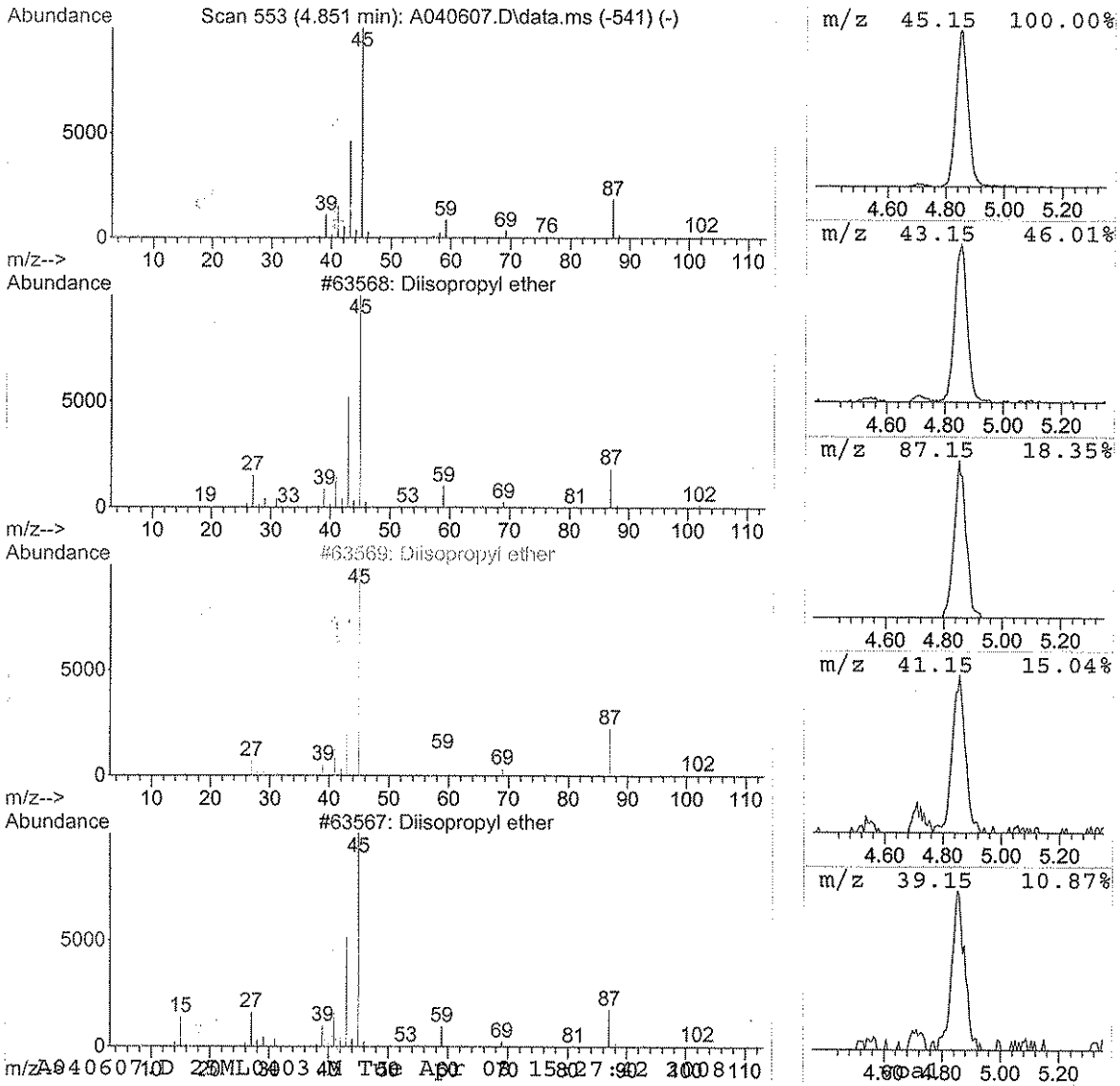
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 2 Diisopropyl ether Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.851 | 1.39 ug/L | 195478 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Diisopropyl ether | 102 | C6H14O | 000108-20-3 | 91 |
| 2 | Diisopropyl ether | 102 | C6H14O | 000108-20-3 | 90 |
| 3 | Diisopropyl ether | 102 | C6H14O | 000108-20-3 | 90 |
| 4 | Diisopropyl ether | 102 | C6H14O | 000108-20-3 | 78 |
| 5 | Isopropyl Alcohol | 60 | C3H8O | 000067-63-0 | 45 |



Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040607.D
Acq On : 6 Apr 2008 6:48 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-17A,1,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

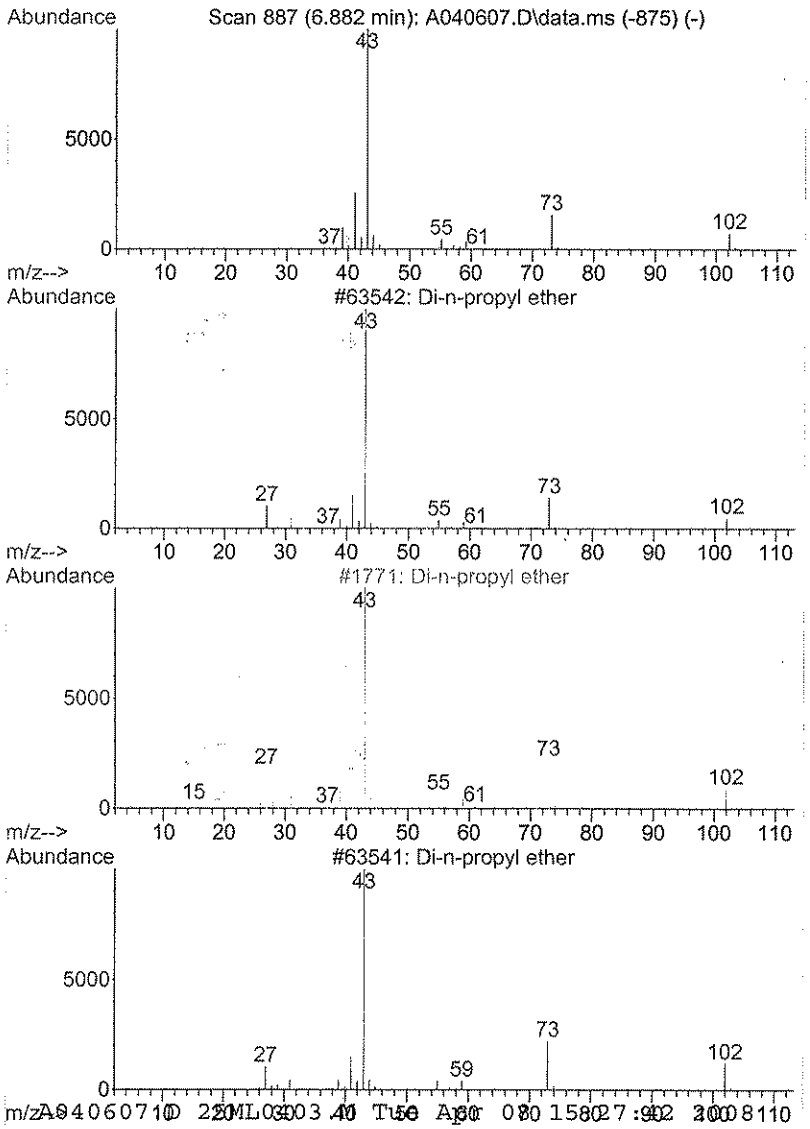
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

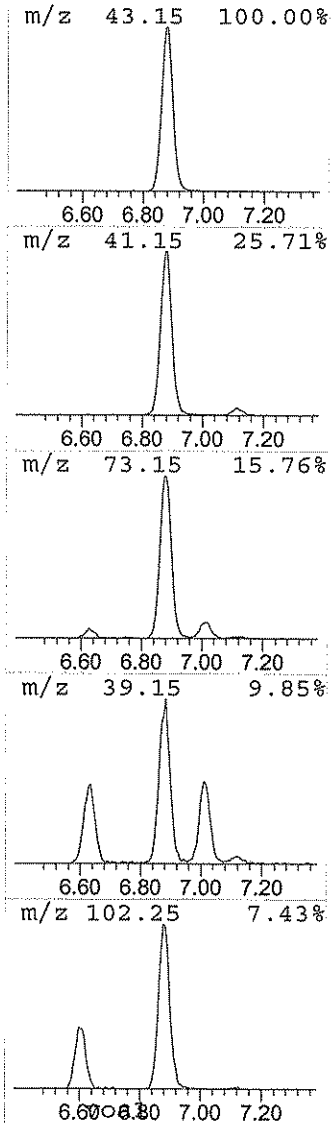
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 3 Di-n-propyl ether Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.882 | 9.56 ug/L | 1345280 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Di-n-propyl ether | 102 | C6H14O | 000111-43-3 | 80 |
| 2 | Di-n-propyl ether | 102 | C6H14O | 000111-43-3 | 72 |
| 3 | Di-n-propyl ether | 102 | C6H14O | 000111-43-3 | 50 |
| 4 | Propanoic acid, 2-methyl-, methy... | 102 | C5H10O2 | 000547-63-7 | 37 |
| 5 | n-Propyl acetate | 102 | C5H10O2 | 000109-60-4 | 9 |



Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040607.D
Acq On : 6 Apr 2008 6:48 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-17A,1,
Misc : 8260+_W25
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

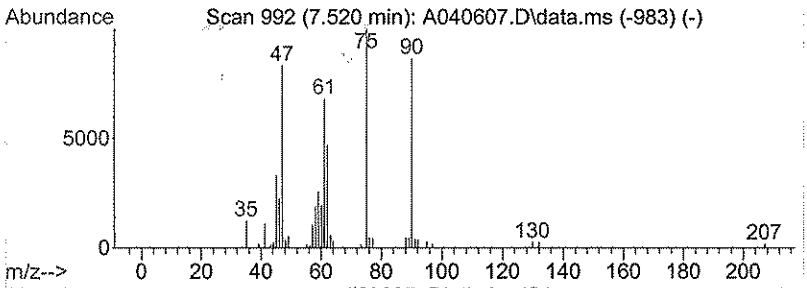
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

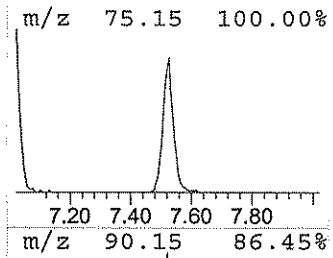
**********

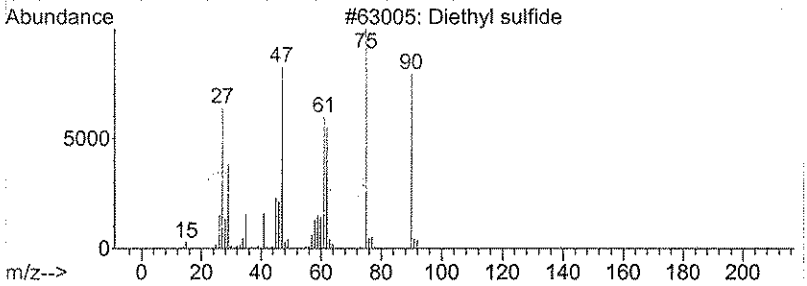
Peak Number 4 Diethyl sulfide Concentration Rank 2

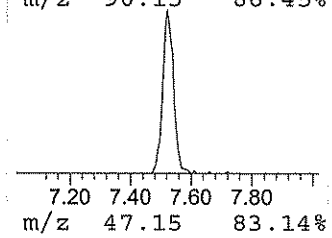
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.520 | 1.64 ug/L | 230221 | fluorobenzene | 7.016 |

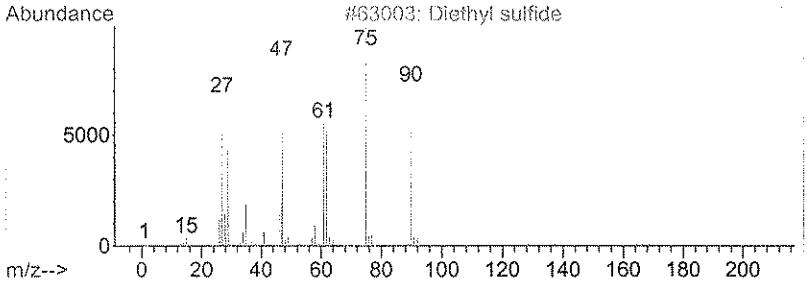
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Diethyl sulfide | 90 | C4H10S | 000352-93-2 | 97 |
| 2 | Diethyl sulfide | 90 | C4H10S | 000352-93-2 | 91 |
| 3 | Diethyl sulfide | 90 | C4H10S | 000352-93-2 | 76 |
| 4 | Diethyl sulfide | 90 | C4H10S | 000352-93-2 | 58 |
| 5 | Sulfide, ethyl propyl | 104 | C5H12S | 004110-50-3 | 25 |

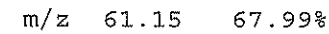


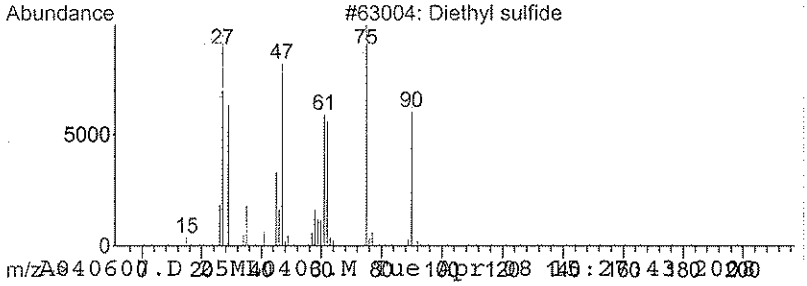



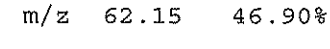



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040608.D
Acq On : 6 Apr 2008 7:23 pm
Sample : ,SAMP,ME0803B85-18A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 07 09:21:09 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 553061 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 387955 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 192262 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 145737 | 10.12 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.20% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 152759 | 11.06 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 110.60% | | | |
| 44) toluene-d8 | 9.247 | 98 | 527521 | 11.19 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.90% | | | |
| 63) 4-bromofluorobenzene | 13.528 | 95 | 191212 | 9.63 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.30% | | | |
| Target Compounds | | | | | | Qvalue |

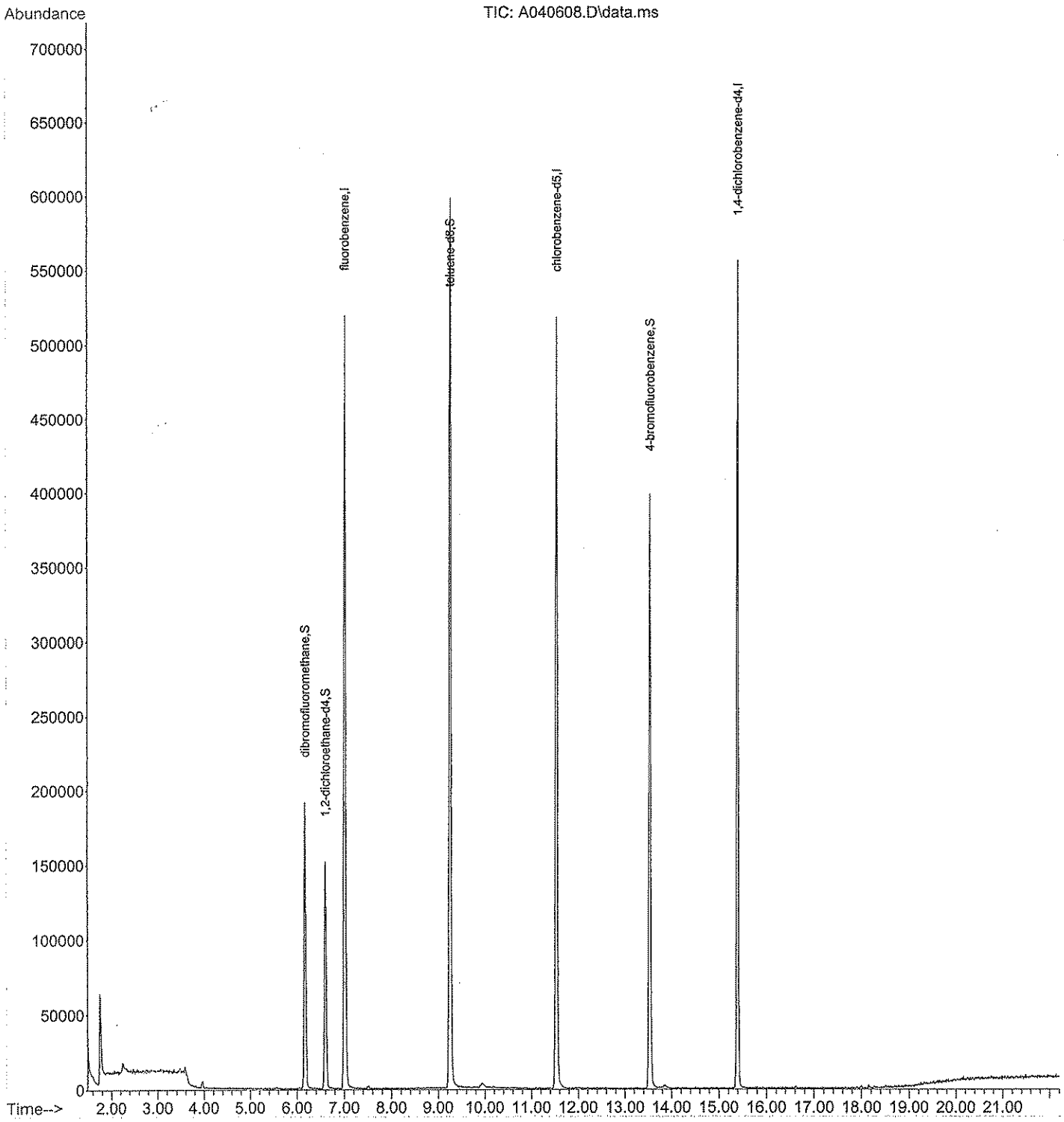
(#) = qualifier out of range (m) = manual integration (+) = signals summed

CB 4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040608.D
Acq On : 6 Apr 2008 7:23 pm
Sample : ,SAMP,ME0803B85-18A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 07 09:21:09 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040608.D
Acq On : 6 Apr 2008 7:23 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-18A,1,
Misc : 8260+_W25
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| | | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Sulfur dioxide | 1.749 | 1.3 | ug/L | 167937 | 1 | 7.009 | 1318120 | 10.0 |

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040608.D
Acq On : 6 Apr 2008 7:23 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-18A,1,
Misc : 8260+_W25
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040608.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.749 | 37 | 43 | 62 | rBV | 60349 | 167937 | 10.82% | 2.226% |
| 2 | 6.170 | 759 | 770 | 790 | rBV | 191611 | 501020 | 32.29% | 6.642% |
| 3 | 6.602 | 830 | 841 | 855 | rBV | 151581 | 379426 | 24.45% | 5.030% |
| 4 | 7.009 | 897 | 908 | 927 | rBV | 519081 | 1318118 | 84.94% | 17.475% |
| 5 | 9.247 | 1263 | 1276 | 1297 | rBV | 597450 | 1551846 | 100.00% | 20.574% |
| 6 | 11.528 | 1638 | 1651 | 1663 | rBV | 518348 | 1349408 | 86.96% | 17.890% |
| 7 | 13.522 | 1967 | 1979 | 1999 | rBV | 398518 | 1023918 | 65.98% | 13.575% |
| 8 | 15.389 | 2272 | 2286 | 2300 | rBV | 555714 | 1251252 | 80.63% | 16.588% |

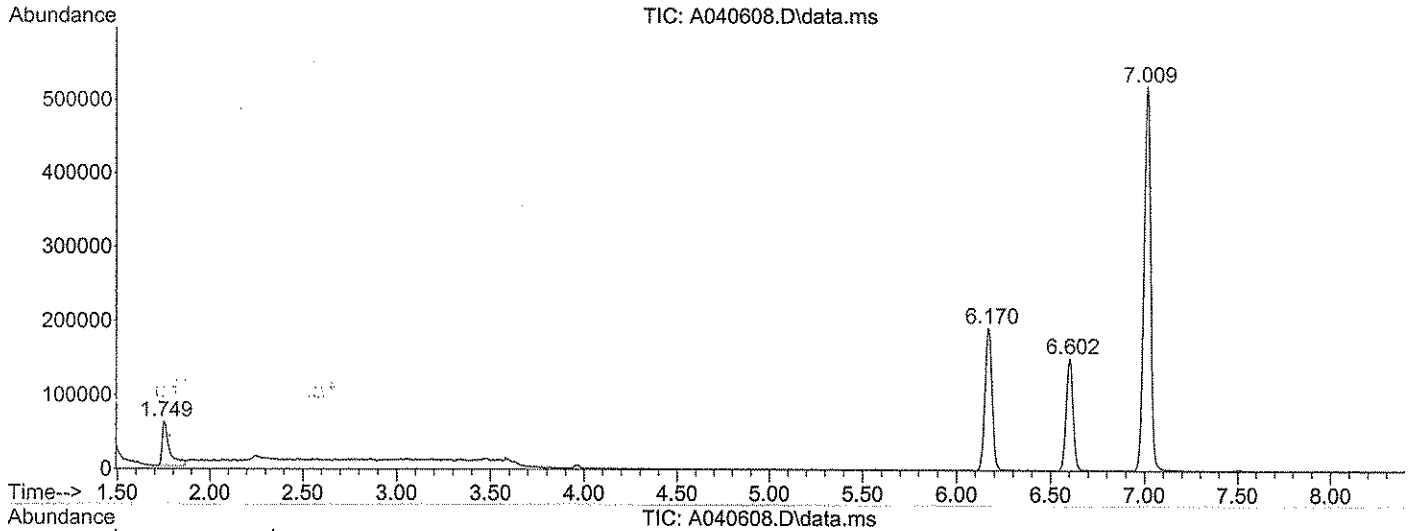
Sum of corrected areas: 7542925

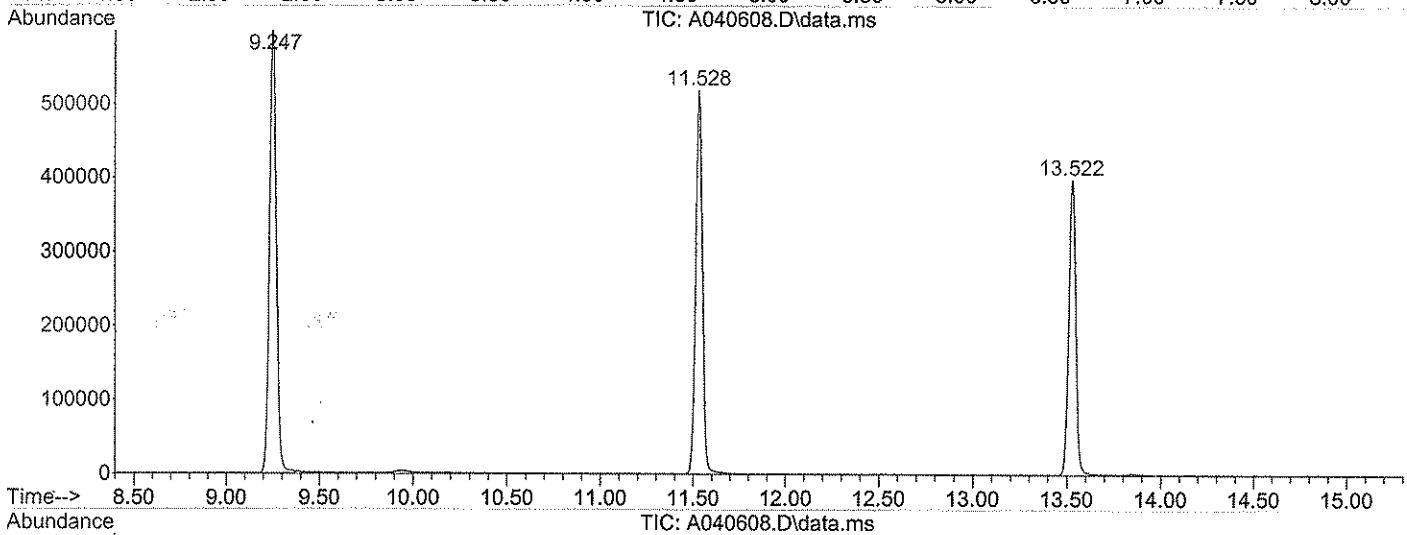
LSC Report - Integrated Chromatogram

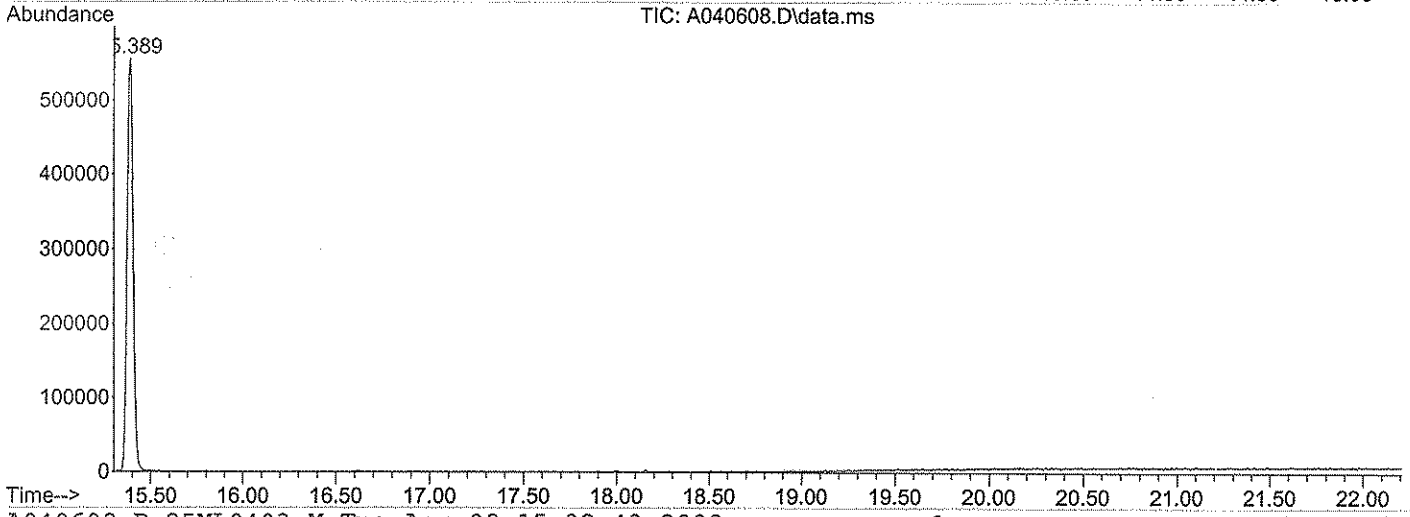
Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040608.D
Acq On : 6 Apr 2008 7:23 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-18A,1,
Misc : 8260+_W25
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040608.D 25ML0403.M Tue Apr 08 15:32:43 2008 voa1 Page: 2

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040608.D
Acq On : 6 Apr 2008 7:23 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-18A,1,
Misc : 8260+_W25
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

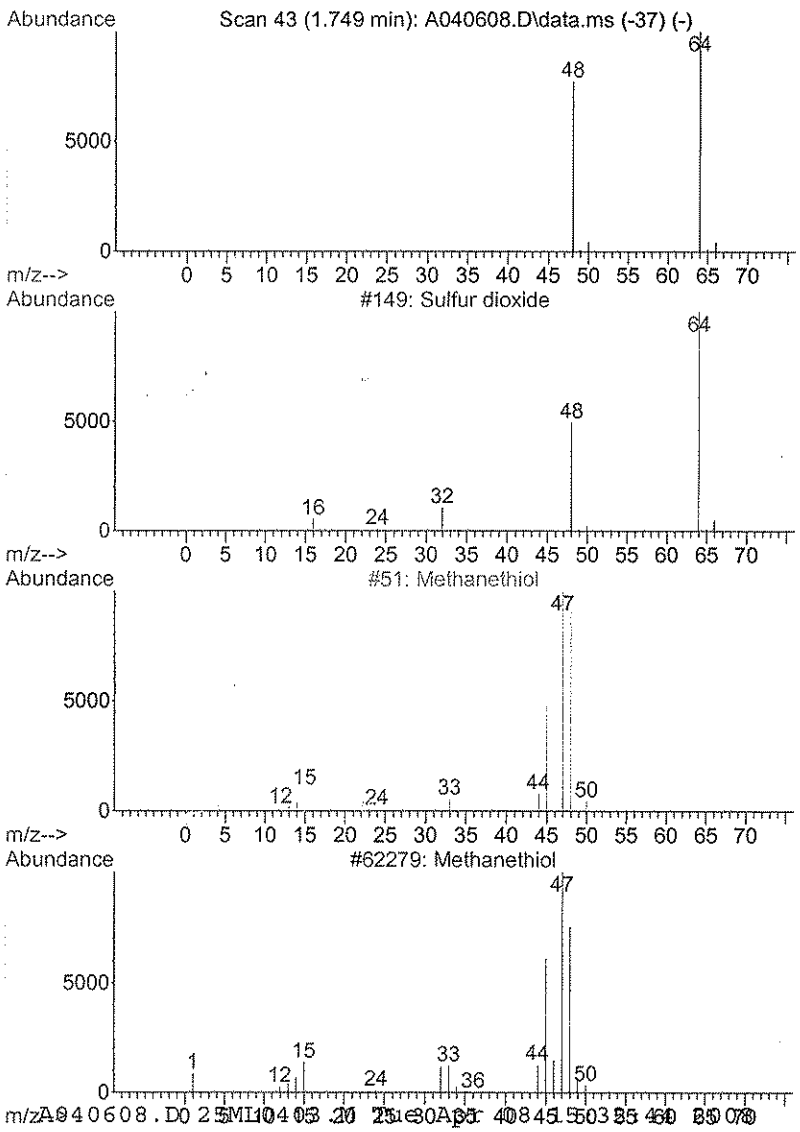
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

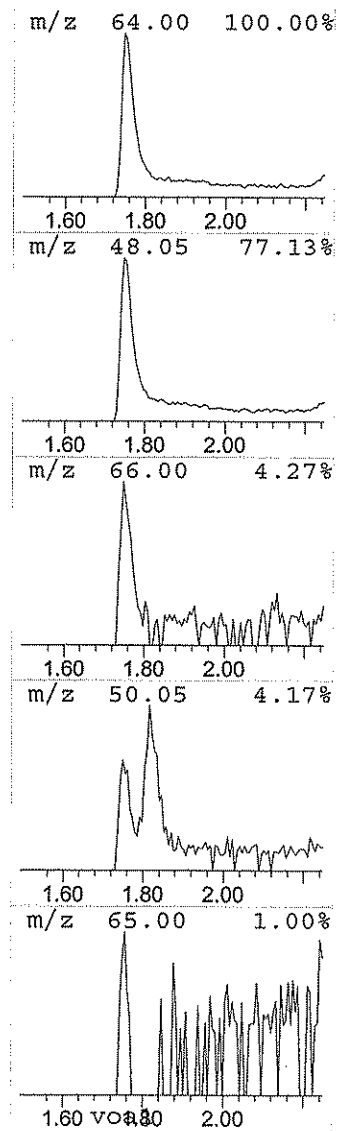
**********

Peak Number 1 Sulfur dioxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.749 | 1.27 ug/L | 167937 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Sulfur dioxide | 64 | O2S | 007446-09-5 | 83 |
| 2 | Methanethiol | 48 | CH4S | 000074-93-1 | 4 |
| 3 | Methanethiol | 48 | CH4S | 000074-93-1 | 4 |
| 4 | Phosphine, methyl- | 48 | CH5P | 000593-54-4 | 3 |
| 5 | Phosphine, methyl- | 48 | CH5P | 000593-54-4 | 3 |




A040608.D 25ML0403 Tue 30 Apr 2008 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040609.D
Acq On : 6 Apr 2008 7:58 pm
Sample : ,SAMP,ME0803B85-19A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 07 09:21:13 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 543958 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 374262 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 184373 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 144796 | 10.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 102.20% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 148808 | 10.95 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.50% | | | |
| 44) toluene-d8 | 9.247 | 98 | 513626 | 11.30 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.00% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 185748 | 9.70 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 3) chloromethane | 1.822 | 50 | 6151 | 0.34 | ug/L | 91 |
| 15) trans-1,2-dichloroethene | 4.273 | 96 | 17468 | 1.07 | ug/L | 95 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 11557 | 0.36 | ug/L | 95 |
| 43) 4-methyl-2-pentanone | 9.247 | 43 | 3712 | 0.81 | ug/L # | 1 |

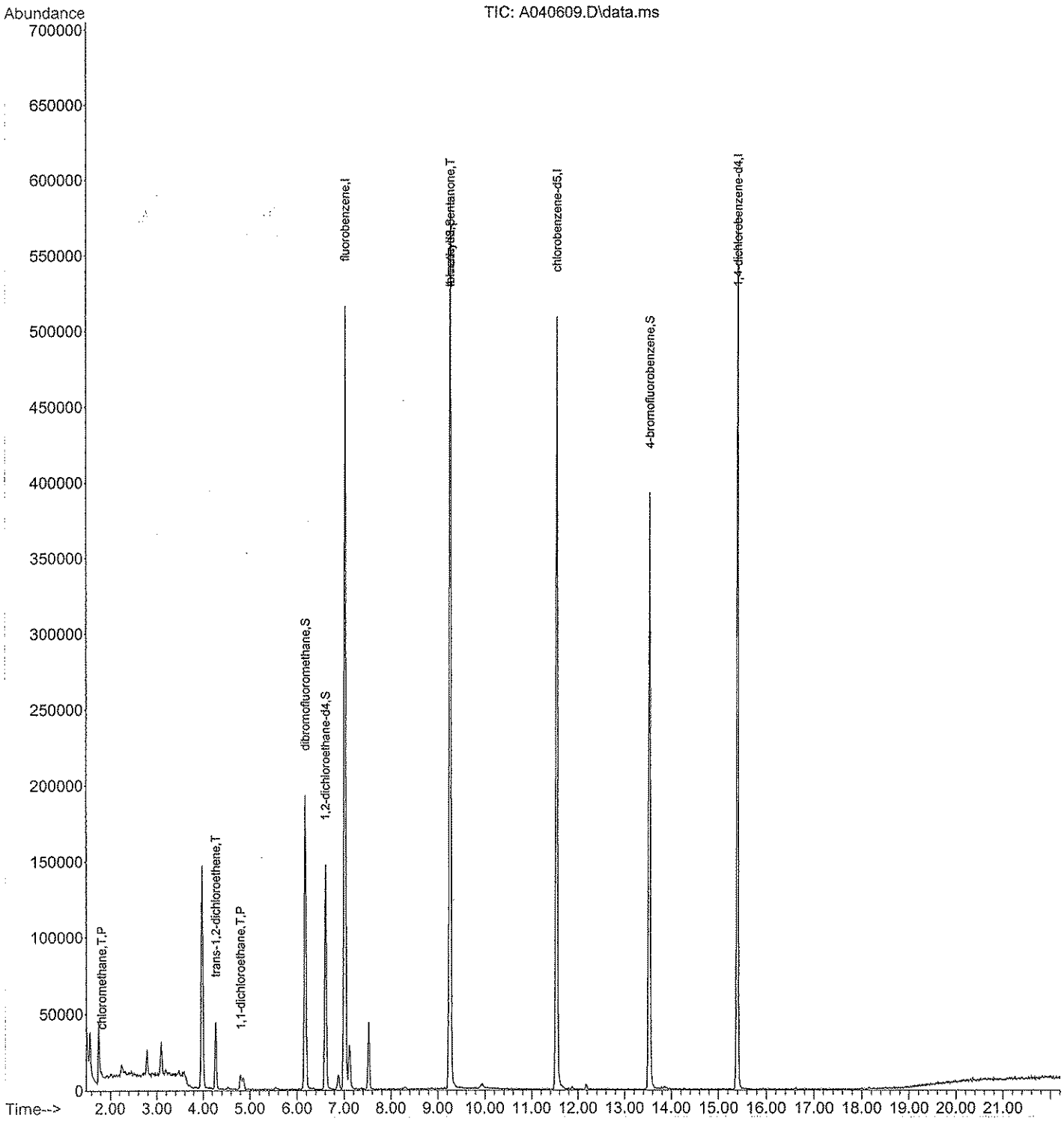
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040609.D
Acq On : 6 Apr 2008 7:58 pm
Sample : ,SAMP,ME0803B85-19A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 07 09:21:13 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040609.D 25ML0403.M Mon Apr 07 09:21:14 2008 voa1 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040609.D
Acq On : 6 Apr 2008 7:58 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-19A,1,
Misc : 8260+_W25
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Propane, 1-chloro- | 3.975 | 3.0 | ug/L | 392168 | 1 | 7.009 | 1292350 | 10.0 |

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040609.D
Acq On : 6 Apr 2008 7:58 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-19A,1,
Misc : 8260+_W25
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040609.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.567 | 9 | 13 | 33 | rVB2 | 32150 | 77018 | 5.07% | 0.951% |
| 2 | 1.755 | 39 | 44 | 64 | rBV | 39928 | 110670 | 7.28% | 1.367% |
| 3 | 3.087 | 257 | 263 | 274 | rVB | 21888 | 51558 | 3.39% | 0.637% |
| 4 | 3.975 | 398 | 409 | 425 | rBV2 | 145863 | 392168 | 25.80% | 4.843% |
| 5 | 4.273 | 449 | 458 | 470 | rBV | 43777 | 97308 | 6.40% | 1.202% |
| 6 | 6.170 | 758 | 770 | 785 | rBV | 192568 | 492198 | 32.39% | 6.079% |
| 7 | 6.602 | 830 | 841 | 854 | rBV | 146836 | 371917 | 24.47% | 4.593% |
| 8 | 7.009 | 897 | 908 | 919 | rBV | 515833 | 1292348 | 85.03% | 15.961% |
| 9 | 7.113 | 919 | 925 | 940 | rVB2 | 28098 | 81106 | 5.34% | 1.002% |
| 10 | 7.520 | 977 | 992 | 1006 | rBV2 | 43609 | 107990 | 7.11% | 1.334% |
| 11 | 9.247 | 1265 | 1276 | 1305 | rBV | 586841 | 1519812 | 100.00% | 18.770% |
| 12 | 11.528 | 1638 | 1651 | 1669 | rBV | 508810 | 1304919 | 85.86% | 16.116% |
| 13 | 13.523 | 1967 | 1979 | 2005 | rBV | 392072 | 986509 | 64.91% | 12.184% |
| 14 | 15.390 | 2271 | 2286 | 2305 | rBV | 575808 | 1211557 | 79.72% | 14.963% |

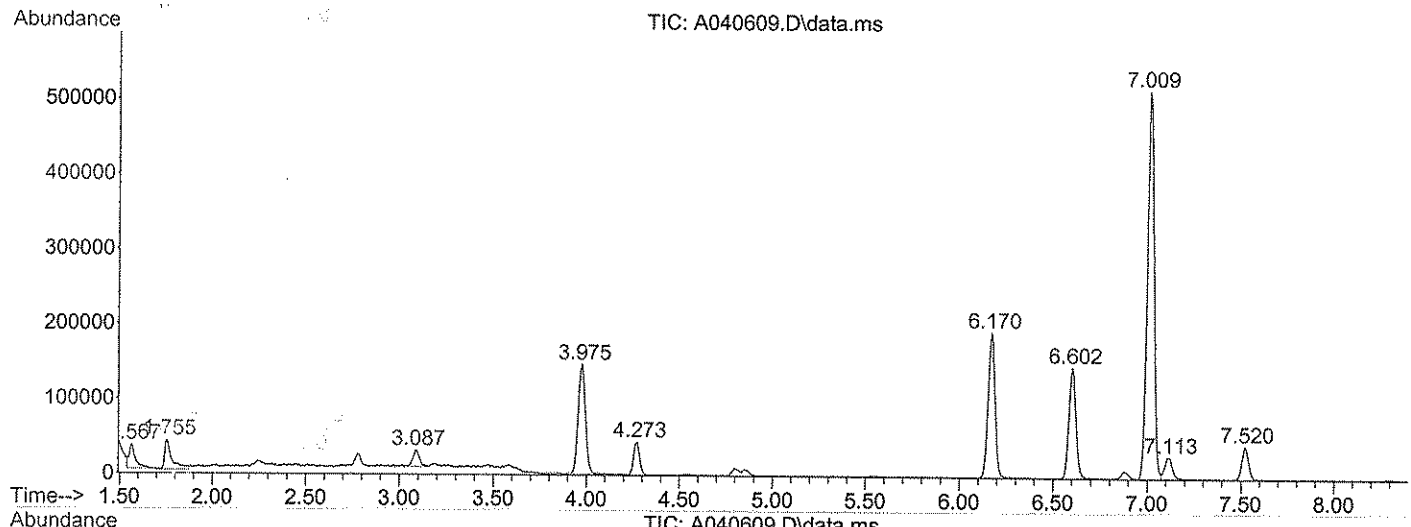
Sum of corrected areas: 8097078

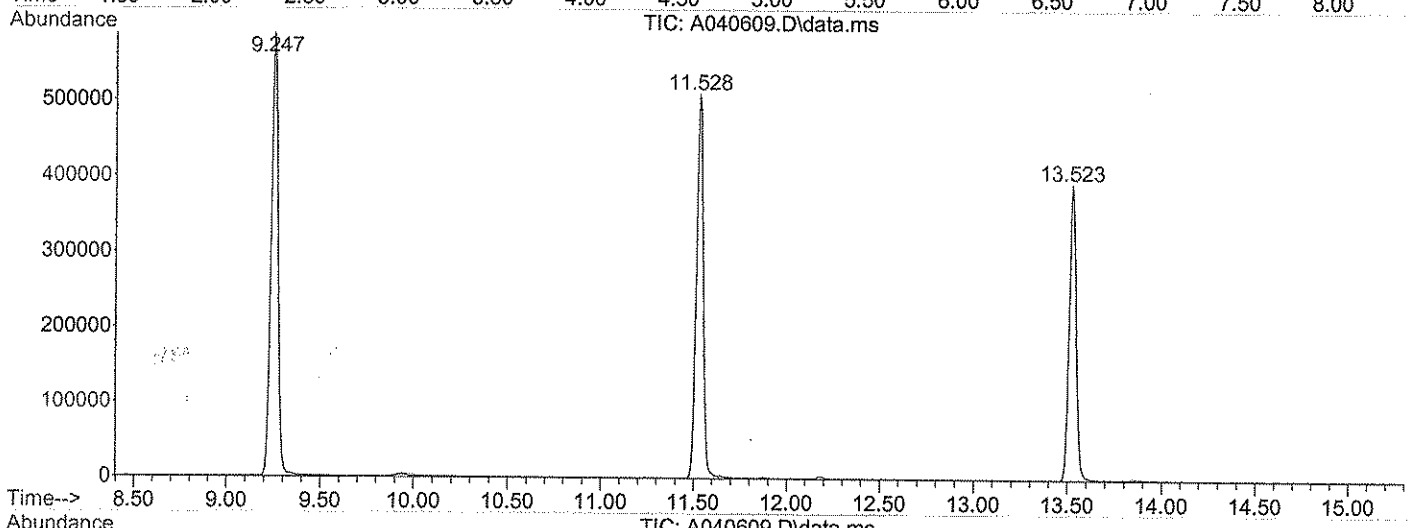
LSC Report - Integrated Chromatogram

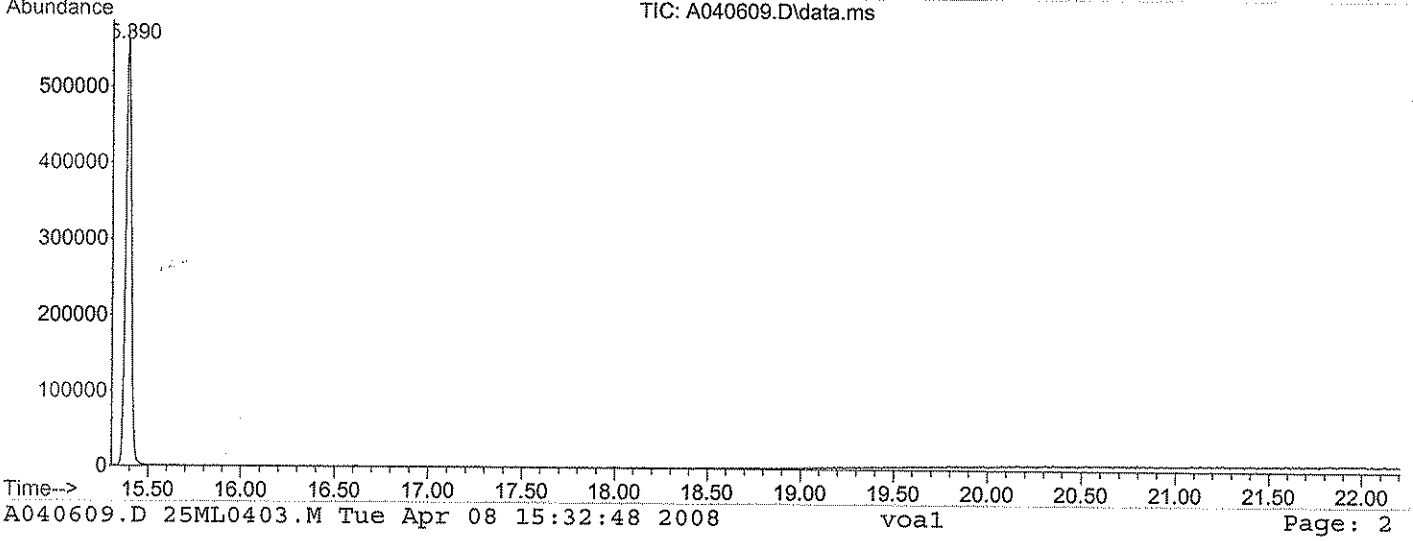
Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040609.D
Acq On : 6 Apr 2008 7:58 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-19A,1,
Misc : 8260+_W25
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040609.D 25ML0403.M Tue Apr 08 15:32:48 2008 voa1 Page: 2

Library Search Compound Report

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040609.D
Acq On : 6 Apr 2008 7:58 pm
Operator : jdb
Sample : ,SAMP,ME0803B85-19A,1,
Misc : 8260+_W25
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

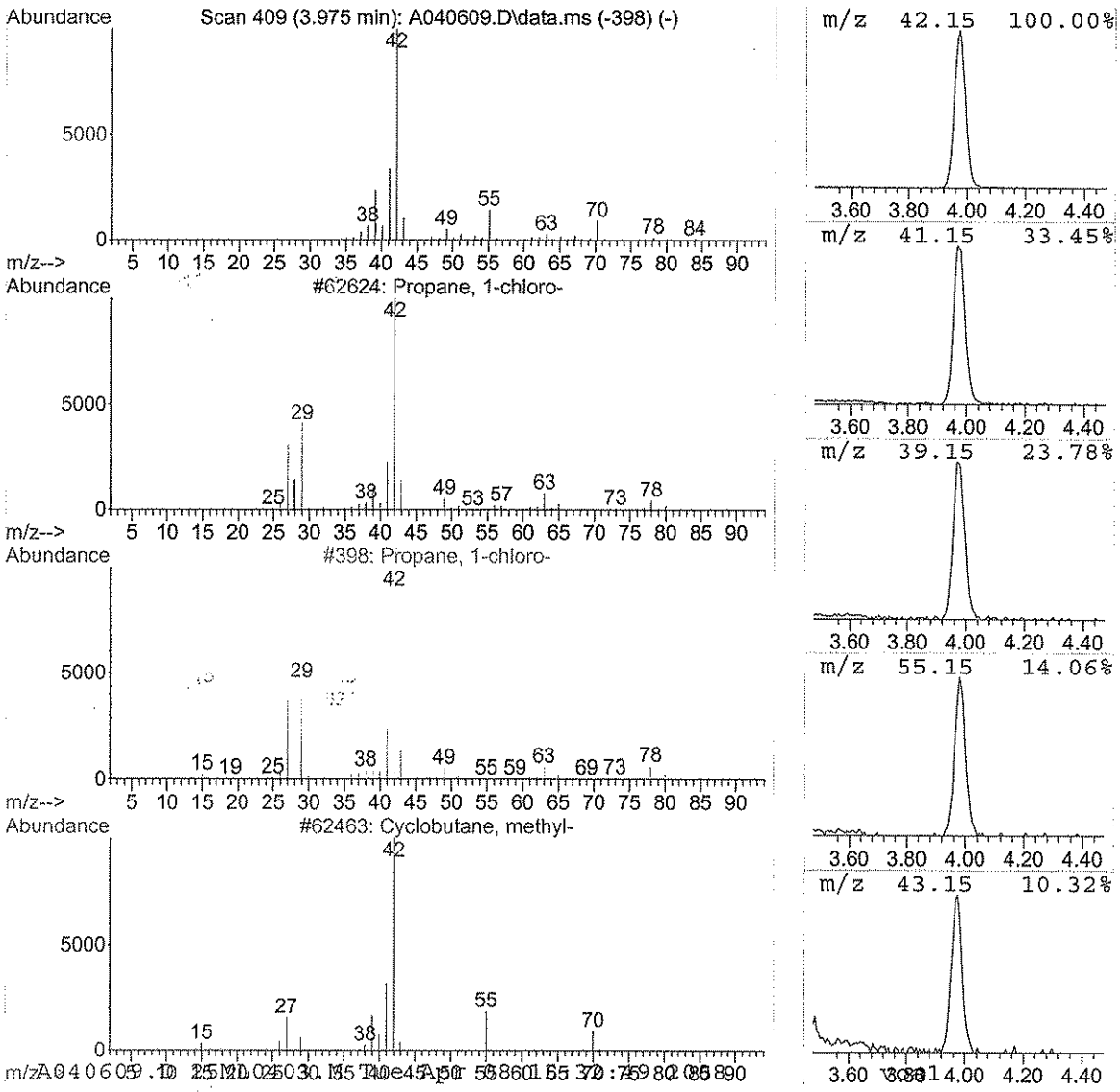
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 Propane, 1-chloro- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.975 | 3.03 ug/L | 392168 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Propane, 1-chloro- | 78 | C3H7Cl | 000540-54-5 | 78 |
| 2 | Propane, 1-chloro- | 78 | C3H7Cl | 000540-54-5 | 56 |
| 3 | Cyclobutane, methyl- | 70 | C5H10 | 000598-61-8 | 45 |
| 4 | Cyclopentane | 70 | C5H10 | 000287-92-3 | 9 |
| 5 | Cyclopropane, ethyl- | 70 | C5H10 | 001191-96-4 | 7 |



# INJECTION LOG(S)

# Injection Log

Directory: h:\a040408

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | a040401.d | 1. | ,tune,bfb tune,1, | BFB | 4 Apr 08 06:40 |
| 2 | 2 | a040402.d | 1. | ,ccv,ccv_w25 10 ppb,1, | 8260+_w25 | 4 Apr 08 07:01 |
| 3 | | a040403.d | 1. | | | |
| 4 | 4 | a040404.d | 1. | ,LCS,LCS_w25-10 PPB,1, | 8260+_w25 | 4 Apr 08 08:16 |
| 5 | 5 | a040405.d | 1. | ,SAMP,ME0804101-01B,1, | 8260_w25 | 4 Apr 08 09:17 |
| 6 | 6 | a040406.d | 1. | ,SAMP,ME0803A26-01A,1, | 8260+_w25 | 4 Apr 08 09:52 |
| 7 | 7 | a040407.d | 1. | ,SAMP,ME0803A25-01A,1, | 8260+_w25 | 4 Apr 08 10:27 |
| 8 | 8 | a040408.d | 1. | ,SAMP,ME0803A25-02A,1, | 8260+_w25 | 4 Apr 08 11:02 |
| 9 | 9 | a040409.d | 1. | ,SAMP,ME0803A25-03A,1, | 8260+_w25 | 4 Apr 08 11:37 |
| 10 | 10 | a040410.d | 1. | ,SAMP,ME0803A25-04A,1, | 8260+_w25 | 4 Apr 08 12:11 |
| 11 | 11 | a040411.d | 1. | ,SAMP,ME0803A25-05A,1, | 8260+_w25 | 4 Apr 08 12:47 |
| 12 | 12 | a040412.d | 1. | ,SAMP,ME0803B09-01A,25,RA, | 8260_w25 | 4 Apr 08 13:33 |
| 13 | 13 | a040413.d | 1. | ,SAMP,ME0803B09-02A,25,RA, | 8260_w25 | 4 Apr 08 14:08 |
| 14 | 14 | a040414.d | 1. | ,SAMP,ME0803B09-03A,1,RA, | 8260_w25 | 4 Apr 08 14:44 |
| 15 | 15 | a040415.d | 1. | ,SAMP,ME0804101-01B,1,RA, | 8260_w25 | 4 Apr 08 15:19 |
| 16 | 16 | a040416.d | 1. | ,SAMP,ME0803A25-02A,25,RA, | 8260+_w25 | 4 Apr 08 15:54 |
| 17 | 17 | a040417.d | 1. | ,SAMP,ME0803A25-05A,25,RA, | 8260+_w25 | 4 Apr 08 16:29 |
| 18 | 18 | a040418.d | 1. | ,MS,ME0803A25-05AMS,25, | 8260+_w25 | 4 Apr 08 17:04 |
| 19 | 19 | a040419.d | 1. | ,MSD,ME0803A25-05AMSD,25, | 8260+_w25 | 4 Apr 08 17:39 |
| 20 | 20 | a040420.d | 1. | ,tune,bfb tune,1, | BFB | 4 Apr 08 18:14 |
| 21 | 21 | a040421.d | 1. | ,CCV,CCV_W25 10 ppB,1, | 8260+_w25 | 4 Apr 08 18:41 |
| 22 | 22 | a040422.d | 1. | ,CCV,CCV_W25 10 ppB,1, | 8260+_w25 | 4 Apr 08 19:33 |
| 23 | 23 | a040423.d | 1. | ,SAMP,ME0803A73-01A,1, | 8260_w25 | 4 Apr 08 20:23 |
| 24 | 24 | a040424.d | 1. | ,SAMP,ME0803A73-02A,1, | 8260_w25 | 4 Apr 08 20:59 |
| 25 | 25 | a040425.d | 1. | ,SAMP,ME0803B85-01A,1, | 8260+_w25 | 4 Apr 08 21:34 |
| 26 | 26 | a040426.d | 1. | ,SAMP,ME0803B85-02A,1, | 8260+_w25 | 4 Apr 08 22:09 |
| 27 | 27 | a040427.d | 1. | ,SAMP,ME0803B85-03A,1, | 8260+_w25 | 4 Apr 08 22:44 |
| 28 | 28 | a040428.d | 1. | ,SAMP,ME0803B85-04A,1, | 8260+_w25 | 4 Apr 08 23:19 |
| 29 | 29 | a040429.d | 1. | ,SAMP,ME0803B85-05A,1, | 8260+_w25 | 4 Apr 08 23:54 |
| 30 | 30 | a040430.d | 1. | ,SAMP,ME0803B85-06A,1, | 8260+_w25 | 5 Apr 08 00:29 |
| 31 | 31 | a040431.d | 1. | ,SAMP,ME0803B85-07A,1, | 8260+_w25 | 5 Apr 08 01:04 |
| 32 | 32 | a040432.d | 1. | ,SAMP,ME0803B85-08A,1, | 8260+_w25 | 5 Apr 08 01:39 |
| 33 | 33 | a040433.d | 1. | RINSE1 | 8260+_w25 | 5 Apr 08 02:14 |
| 34 | 34 | a040434.d | 1. | RINSE2 | 8260+_w25 | 5 Apr 08 02:49 |
| 35 | 35 | a040435.d | 1. | RINSE3 | 8260+_w25 | 5 Apr 08 03:24 |

# Injection Log

Directory: h:\a040508

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | a040501.d | 1. | ,TUNE,BFB TUNE,1, | BFB | 5 Apr 08 06:13 |
| 2 | 2 | a040502.d | 1. | ,CCV,CCV_W25 10 ppB,1, | 8260_W25 | 5 Apr 08 06:38 |
| 3 | 3 | a040503.d | 1. | ,MBLK,MB_W25 4/5,1, | 8260+_W25 | 5 Apr 08 07:16 |
| 4 | 4 | a040504.d | 1. | ,LCS,LCS_W25 10 PPB,1, | 8260+_W25 | 5 Apr 08 07:51 |
| 5 | 5 | a040505.d | 1. | ,SAMP,ME0803A73-01A,1,RA, | 8260_W25 | 5 Apr 08 08:39 |
| 6 | 6 | a040506.d | 1. | ,SAMP,ME0803B85-05A,1,RA, | 8260+_W25 | 5 Apr 08 09:14 |
| 7 | 7 | a040507.d | 1. | ,SAMP,ME0803B85-06A,1,RA, | 8260+_W25 | 5 Apr 08 09:49 |
| 8 | 8 | a040508.d | 1. | ,SAMP,ME0803B85-04A,25,RA, | 8260+_W25 | 5 Apr 08 10:24 |
| 9 | 9 | a040509.d | 1. | ,SAMP,ME0803B85-07A,25,RA, | 8260+_W25 | 5 Apr 08 10:59 |
| 10 | 10 | a040510.d | 1. | ,MS,ME0803B85-07AMS,25, | 8260+_W25 | 5 Apr 08 11:34 |
| 11 | 11 | a040511.d | 1. | ,MSD,ME0803B85-07AMSD,25, | 8260+_W25 | 5 Apr 08 12:09 |
| 12 | 12 | a040512.d | 1. | ,SAMP,ME0803B85-09A,1, | 8260+_W25 | 5 Apr 08 12:44 |
| 13 | 13 | a040513.d | 1. | ,SAMP,ME0803B85-10A,1, | 8260+_W25 | 5 Apr 08 13:19 |
| 14 | | a040514.d | 1. | | | |
| 15 | 15 | a040515.d | 1. | ,SAMP,ME0803B85-12A,1, | 8260+_W25 | 5 Apr 08 15:02 |
| 16 | 16 | a040516.d | 1. | ,SAMP,ME0803B85-13A,1, | 8260+_W25 | 5 Apr 08 15:37 |
| 17 | 17 | a040517.d | 1. | ,SAMP,ME0803B85-14A,1, | 8260+_W25 | 5 Apr 08 16:12 |
| 18 | 18 | a040518.d | 1. | ,SAMP,ME0803B85-15A,1, | 8260+_W25 | 5 Apr 08 16:47 |
| 19 | | a040519.d | 1. | | | |

# Injection Log

Directory: h:\a040608

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | a040601.d | 1. | ,TUNE,BFB TUNE,1, | BFB | 6 Apr 08 13:46 |
| 2 | 2 | a040602.d | 1. | ,CCV,CCV_W25 10 ppb,1, | 8260_W25 | 6 Apr 08 15:14 |
| 3 | 2 | a040603.d | 1. | ,CCV,CCV_W25 10 ppb,1, | 8260_W25 | 6 Apr 08 15:54 |
| 4 | 3 | a040604.d | 1. | ,MBLK,MB_W25 4/6,1, | 8260+_W25 | 6 Apr 08 16:41 |
| 5 | 4 | a040605.d | 1. | ,LCS,LCS_W25 10 PPB,1, | 8260+_W25 | 6 Apr 08 17:16 |
| 6 | 5 | a040606.d | 1. | ,SAMP,ME0803B85-16A,1, | 8260+_W25 | 6 Apr 08 18:13 |
| 7 | 6 | a040607.d | 1. | ,SAMP,ME0803B85-17A,1, | 8260+_W25 | 6 Apr 08 18:48 |
| 8 | 7 | a040608.d | 1. | ,SAMP,ME0803B85-18A,1, | 8260+_W25 | 6 Apr 08 19:23 |
| 9 | 8 | a040609.d | 1. | ,SAMP,ME0803B85-19A,1, | 8260+_W25 | 6 Apr 08 19:58 |
| 10 | 9 | a040610.d | 1. | ,SAMP,ME0803C07-01A,1, | 8260+_W25 | 6 Apr 08 20:33 |
| 11 | 10 | a040611.d | 1. | ,SAMP,ME0803C07-02A,1, | 8260+_W25 | 6 Apr 08 21:08 |
| 12 | | a040612.d | 1. | | | |

# Injection Log

Directory: h:\a040808

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | a040801.d | 1. | ,TUNE,BFB TUNE,1, | BFB | 8 Apr 08 06:51 |
| 2 | 2 | a040802.d | 1. | ,CCV,CCV_W25 10 ppb,1, | 8260_W25 | 8 Apr 08 07:21 |
| 3 | 3 | a040803.d | 1. | ,MBLK,MB_W25 4/8,1, | 8260+_W25 | 8 Apr 08 08:11 |
| 4 | 4 | a040804.d | 1. | ,LCS,LCS_W25 10 PPB,1, | 8260+_W25 | 8 Apr 08 08:46 |
| 5 | 6 | a040805.d | 1. | ,samp,me0803b85-09a,25,ra, | 8260+_W25 | 8 Apr 08 09:30 |
| 6 | 7 | a040806.d | 1. | ,samp,me0803b85-11a,1,ra, | 8260+_W25 | 8 Apr 08 10:05 |
| 7 | 8 | a040807.d | 1. | ,samp,me0803b85-15a,5,ra, | 8260+_W25 | 8 Apr 08 10:59 |
| 8 | 9 | a040808.d | 1. | ,samp,me0803c07-03a,1, | 8260+_W25 | 8 Apr 08 11:34 |
| 9 | 10 | a040809.d | 1. | ,samp,me0803c07-04a,1, | 8260+_W25 | 8 Apr 08 12:09 |
| 10 | 11 | a040810.d | 1. | ,samp,me0803c07-05a,1, | 8260+_W25 | 8 Apr 08 12:44 |
| 11 | 12 | a040811.d | 1. | ,samp,me0803c07-03a,20,RA, | 8260+_W25 | 8 Apr 08 13:19 |
| 12 | 13 | a040812.d | 1. | ,samp,me0803A73-01A,1,RA, | 8260_W25 | 8 Apr 08 13:54 |
| 13 | 14 | a040813.d | 1. | ,samp,me0803b85-11a,1,ra, | 8260+_W25 | 8 Apr 08 14:30 |
| 14 | 15 | a040814.d | 1. | ,samp,me0803c07-04a,1,RA,1, | 8260+_W25 | 8 Apr 08 15:16 |
| 15 | 16 | a040815.d | 1. | ,MS,me0803c07-02AMS,1, | 8260+_W25 | 8 Apr 08 15:51 |
| 16 | 17 | a040816.d | 1. | ,MSD,me0803c07-02AMSD,1, | 8260+_W25 | 8 Apr 08 16:26 |
| 17 | 18 | a040817.d | 1. | ,samp,me0803c07-04a,10,RA,1, | 8260+_W25 | 8 Apr 08 17:01 |
| 18 | 19 | a040818.d | 1. | ,TUNE,BFB TUNE,1, | BFB | 8 Apr 08 17:38 |
| 19 | 20 | a040819.d | 1. | ,CCV,CCV_W25 10 ppb,1, | 8260_W25 | 8 Apr 08 17:59 |
| 20 | 21 | a040820.d | 1. | ,samp,me0804053-01b,1, | 624_W25 | 8 Apr 08 18:44 |
| 21 | 22 | a040821.d | 1. | ,samp,me0804107-01b,1, | 624+_W25 | 8 Apr 08 19:20 |
| 22 | 23 | a040822.d | 1. | ,samp,me0803c07-04a,1,RA, | 8260+_W25 | 8 Apr 08 19:55 |
| 23 | 24 | a040823.d | 1. | ,samp,me0804193-02a,1, | 8260_W25 | 8 Apr 08 20:30 |
| 24 | 25 | a040824.d | 1. | ,samp,me0804194-02a,1, | 8260_W25 | 8 Apr 08 21:10 |
| 25 | 26 | a040825.d | 1. | ,samp,me0804195-03a,1, | 8260_W25 | 8 Apr 08 21:49 |
| 26 | 27 | a040826.d | 1. | ,samp,me0804196-02a,1, | 8260_W25 | 8 Apr 08 22:29 |
| 27 | 28 | a040827.d | 1. | ,samp,me0804193-01a,1, | 8260_W25 | 8 Apr 08 23:04 |
| 28 | 29 | a040828.d | 1. | ms,me0804193-01ams,1, | 8260+_W25 | 8 Apr 08 23:40 |
| 29 | 30 | a040829.d | 1. | msd,me0804193-01amsd,1, | 8260+_W25 | 9 Apr 08 00:15 |
| 30 | 31 | a040830.d | 1. | ,samp,me0804194-01a,1, | 8260_W25 | 9 Apr 08 00:50 |
| 31 | 32 | a040831.d | 1. | ,samp,me0804195-01a,1, | 8260_W25 | 9 Apr 08 01:25 |
| 32 | 33 | a040832.d | 1. | ,samp,me0804195-02a,1, | 8260_W25 | 9 Apr 08 02:00 |
| 33 | 34 | a040833.d | 1. | ,samp,me0804196-01a,1, | 8260_W25 | 9 Apr 08 02:35 |
| 34 | 35 | a040834.d | 1. | ,samp,me0804340-01a,1, | 8260_W25 | 9 Apr 08 03:10 |
| 35 | 36 | a040835.d | 1. | rinse | 8260_W25 | 9 Apr 08 03:45 |
| 36 | 37 | a040836.d | 1. | rinse | 8260_W25 | 9 Apr 08 04:20 |
| 37 | 38 | a040837.d | 1. | rinse | 8260_W25 | 9 Apr 08 04:55 |

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

MWH Americas, Inc.
175 West Jackson Blvd, Suite 1900
Chicago, IL 60604-2814
ATTN: Mr. Justin Finger

May 22, 2008

SUBJECT: ACS GW Semi Annual, Data Validation

Dear Mr. Finger,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on May 8, 2008. Attachment 1 is a summary of the samples that were reviewed for each analysis.

**LDC Project # 18716:**

| SDG # | Fraction |
|---|---|
| ME0803A55, ME0803A91, ME0803B85, ME0803C07 | Volatiles, Bis(2-chloroethyl)ether, Arsenic |

The data validation was performed under EPA Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan, April 2007
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

RTC PARCC

# LDC #18716 (MWH Americas, Inc.-Chicago IL / ACS GW Semi-Annual)

| LDC | SDG# | DATE REC'D | (3) DATE DUE | VOA (8260B) | | BCEE (8270C) | | As (6010B) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix: | Water/Soil | | | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S |
| A | ME0803A55 | 05/08/08 | 05/29/08 | 10 | 0 | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | ME0803A91 | 05/08/08 | 05/29/08 | 6 | 0 | 1 | 0 | 3 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | ME0803A91 | 05/08/08 | 05/29/08 | 5 | 0 | 1 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | ME0803B85 | 05/08/08 | 05/29/08 | 19 | 0 | 2 | 0 | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | ME0803C07 | 05/08/08 | 05/29/08 | 5 | 0 | 1 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | T/LR | | | 45 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB03-31 | **Work Order / ID:** | ME0803B85-01 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 07:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: | **SW8260B** | | Prep Date/Time: | | | | Analyst: **MLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/04/08 21:34 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/04/08 21:34 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| Chloroform | A | *0.97* | 0.9 | 5.0 | J | µg/L | 1 | 04/04/08 21:34 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/04/08 21:34 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/04/08 21:34 | |
| *Surr: 4-Bromofluorobenzene* | S | 94.8 | 0 | 75.2-115 | | %REC | 1 | 04/04/08 21:34 | |

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB03-31 | **Work Order / ID:** | ME0803B85-01 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 07:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/04/08 21:34 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/04/08 21:34 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/04/08 21:34 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW54R-31 | **Work Order / ID:** | ME0803B85-02 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/04/08 22:09 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/04/08 22:09 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/04/08 22:09 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/04/08 22:09 | |
| *Surr: 4-Bromofluorobenzene* | S | 95.9 | | 0 | 75.2-115 | %REC | 1 | 04/04/08 22:09 | |

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4/30/08

Microbac®

# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW54R-31 | **Work Order / ID:** | ME0803B85-02 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 09:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/04/08 22:09 |
| *Surr: 1,2-Dichloroethane-d4* | S | 112 | 0 | 88.2-132 | | %REC | 1 | 04/04/08 22:09 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/04/08 22:09 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW55-31 | **Work Order / ID:** | ME0803B85-03 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 09:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **MLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/04/08 22:44 | MJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/04/08 22:44 | MJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/04/08 22:44 | MJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | MJ |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | MJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/04/08 22:44 | |
| *Surr: 4-Bromofluorobenzene* | S | 96.6 | 0 | 75.2-115 | | %REC | 1 | 04/04/08 22:44 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW55-31 | **Work Order / ID:** | ME0803B85-03 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 09:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 102 | 0 | 92.7-119 | | %REC | 1 | 04/04/08 22:44 |
| *Surr: 1,2-Dichloroethane-d4* | S | 111 | 0 | 88.2-132 | | %REC | 1 | 04/04/08 22:44 |
| *Surr: Toluene-d8* | S | 112 | 0 | 89.3-116 | | %REC | 1 | 04/04/08 22:44 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW56-31 | **Work Order / ID:** | ME0803B85-04 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 10:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/04/08 23:19 | UJ |
| Benzene | A | *240* | 20 | 120 | | µg/L | 25 | 04/05/08 10:24 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/04/08 23:19 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/04/08 23:19 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/04/08 23:19 | |
| *Surr: 4-Bromofluorobenzene* | S | 94.2 | 0 | 75.2-115 | | %REC | 1 | 04/04/08 23:19 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW56-31 | **Work Order / ID:** | ME0803B85-04 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 10:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 97.4 | 0 | 92.7-119 | | %REC | 25 | 04/05/08 10:24 |
| *Surr: 1,2-Dichloroethane-d4* | S | 106 | 0 | 88.2-132 | | %REC | 1 | 04/04/08 23:19 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/04/08 23:19 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW33-31
**Work Order / ID:** ME0803B85-05
**Sample Description:**
**Collection Date:** 03/28/08 11:15
**Sample Matrix:** Aqueous
**Date Received:** 03/31/08 10:45

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 09:14 | UJ |
| Benzene | A | *2.8* | 0.8 | 5.0 | J | µg/L | 1 | 04/05/08 09:14 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 09:14 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 09:14 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 09:14 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/05/08 09:14 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 09:14 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | UJ |
| cis-1,2-Dichloroethene | A | *1.3* | 0.8 | 5.0 | J | µg/L | 1 | 04/05/08 09:14 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 09:14 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 09:14 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 09:14 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| Trichloroethene | A | *3.9* | 0.9 | 5.0 | J | µg/L | 1 | 04/05/08 09:14 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 09:14 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 09:14 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 09:14 | |
| *Surr: 4-Bromofluorobenzene* | S | 99.0 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 09:14 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW33-31 | **Work Order / ID:** | ME0803B85-05 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 11:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 99.1 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 09:14 |
| *Surr: 1,2-Dichloroethane-d4* | S | 106 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 09:14 |
| *Surr: Toluene-d8* | S | 116 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 09:14 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW51-31 | **Work Order / ID:** | ME0803B85-06 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 11:25 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 09:49 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 09:49 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 09:49 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 09:49 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/05/08 09:49 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 09:49 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 09:49 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 09:49 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 09:49 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 09:49 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 09:49 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 09:49 | |
| *Surr: 4-Bromofluorobenzene* | S | 95.5 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 09:49 | |

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4/20/09

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW51-31 | **Work Order / ID:** | ME0803B85-06 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 11:25 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 105 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 09:49 |
| *Surr: 1,2-Dichloroethane-d4* | S | 112 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 09:49 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 09:49 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP03-31 | **Work Order / ID:** | ME0803B85-07 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 12:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **MLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 01:04 | UJ |
| Benzene | A | *350* | 20 | 120 | | µg/L | 25 | 04/05/08 10:59 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 01:04 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 01:04 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 01:04 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| Chloroethane | A | *240* | 58 | 250 | J | µg/L | 25 | 04/05/08 10:59 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 01:04 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 01:04 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 01:04 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 01:04 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 01:04 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 01:04 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 01:04 | |
| *Surr: 4-Bromofluorobenzene* | S | 96.2 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 01:04 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP03-31 | **Work Order / ID:** | ME0803B85-07 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 12:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 95.3 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 01:04 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 01:04 |
| *Surr: Toluene-d8* | S | 116 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 01:04 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW30-31 | **Work Order / ID:** | ME0803B85-08 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 13:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 01:39 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 01:39 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 01:39 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 01:39 | |
| *Surr: 4-Bromofluorobenzene* | S | 96.8 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 01:39 | |

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4/15/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW30-31 | **Work Order / ID:** | ME0803B85-08 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 13:15 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 99.0 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 01:39 |
| *Surr: 1,2-Dichloroethane-d4* | S | 107 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 01:39 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 01:39 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW10C-31 | **Work Order / ID:** | ME0803B85-09 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 13:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 12:44 | UJ |
| Benzene | A | *330* | 20 | 120 | | µg/L | 25 | 04/08/08 09:30 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 12:44 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 12:44 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 12:44 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| Chloroethane | A | *230* | 58 | 250 | J | µg/L | 25 | 04/08/08 09:30 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 12:44 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 12:44 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 12:44 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 12:44 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 12:44 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 12:44 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 12:44 | |
| *Surr: 4-Bromofluorobenzene* | S | 95.7 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 12:44 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW10C-31 | **Work Order / ID:** | ME0803B85-09 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 13:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 95.1 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 12:44 |
| *Surr: 1,2-Dichloroethane-d4* | S | 106 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 12:44 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 12:44 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW13-31 | **Work Order / ID:** | ME0803B85-10 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 14:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 13:19 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 13:19 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 13:19 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 13:19 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/05/08 13:19 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 13:19 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 13:19 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 13:19 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 13:19 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 13:19 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 13:19 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 13:19 | |
| *Surr: 4-Bromofluorobenzene* | S | 97.7 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 13:19 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW13-31 | **Work Order / ID:** | ME0803B85-10 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 14:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 99.6 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 13:19 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 13:19 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 13:19 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW53-31 | **Work Order / ID:** | ME0803B85-11 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 15:20 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/08/08 14:30 | UJ |
| Benzene | A | *3.2* | 0.8 | 5.0 | J | µg/L | 1 | 04/08/08 14:30 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/08/08 14:30 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/08/08 14:30 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/08/08 14:30 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/08/08 14:30 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/08/08 14:30 | |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/08/08 14:30 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/08/08 14:30 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/08/08 14:30 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/08/08 14:30 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/08/08 14:30 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/08/08 14:30 | |
| *Surr: 4-Bromofluorobenzene* | S | 96.8 | 0 | 75.2-115 | | %REC | 1 | 04/08/08 14:30 | |

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4/30/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW53-31 | **Work Order / ID:** | ME0803B85-11 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 15:20 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 105 | 0 | 92.7-119 | | %REC | 1 | 04/08/08 14:30 |
| *Surr: 1,2-Dichloroethane-d4* | S | 120 | 0 | 88.2-132 | | %REC | 1 | 04/08/08 14:30 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/08/08 14:30 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW52-31
**Work Order / ID:** ME0803B85-12
**Sample Description:**
**Collection Date:** 03/28/08 14:45
**Sample Matrix:** Aqueous
**Date Received:** 03/31/08 10:45

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 15:02 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 15:02 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 15:02 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 15:02 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/05/08 15:02 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 15:02 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 15:02 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 15:02 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 15:02 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 15:02 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 15:02 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 15:02 | |
| *Surr: 4-Bromofluorobenzene* | S | 96.5 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 15:02 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW52-31 | **Work Order / ID:** | ME0803B85-12 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 14:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 98.6 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 15:02 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 15:02 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 15:02 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB03-31 | **Work Order / ID:** | ME0803B85-13 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 15:40 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 15:37 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 15:37 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 15:37 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 15:37 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/05/08 15:37 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 15:37 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 15:37 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 15:37 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 15:37 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 15:37 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 15:37 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 15:37 | |
| *Surr: 4-Bromofluorobenzene* | S | 98.1 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 15:37 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB03-31 | **Work Order / ID:** | ME0803B85-13 |
| **Sample Description:** | | **Collection Date:** | 03/28/08 15:40 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 15:37 |
| *Surr: 1,2-Dichloroethane-d4* | S | 109 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 15:37 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 15:37 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP04-31 | **Work Order / ID:** | ME0803B85-14 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

**SEMIVOLATILE ORGANICS** Method: **SW8270C** Prep Date/Time: **04/02/08 06:22** Analyst: **BEM**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Bis(2-chloroethyl)ether | A | *4.2* | 0.93 | 10 | J | µg/L | 1 | 04/04/08 03:21 |
| *Surr: Nitrobenzene-d5* | S | 49.8 | 0 | 10-121 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: 2-Fluorobiphenyl* | S | 64.4 | 0 | 10-109 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: Terphenyl-d14* | S | 64.6 | 0 | 10-130 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: Phenol-d5* | S | 19.6 | 0 | 10-100 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: 2-Fluorophenol* | S | 26.6 | 0 | 10-84.7 | | %REC | 1 | 04/04/08 03:21 |
| *Surr: 2,4,6-Tribromophenol* | S | 76.2 | 0 | 10-120 | | %REC | 1 | 04/04/08 03:21 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **BRR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 16:12 | UJ |
| Benzene | A | *4.9* | 0.8 | 5.0 | J | µg/L | 1 | 04/05/08 16:12 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 16:12 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 16:12 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 16:12 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/05/08 16:12 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 16:12 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 16:12 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 16:12 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 16:12 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP04-31 | **Work Order / ID:** | ME0803B85-14 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 16:12 |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 16:12 |
| *Surr: 4-Bromofluorobenzene* | S | 96.2 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 16:12 |
| *Surr: Dibromofluoromethane* | S | 95.9 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 16:12 |
| *Surr: 1,2-Dichloroethane-d4* | S | 105 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 16:12 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 16:12 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW29-31 | **Work Order / ID:** | ME0803B85-15 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 09:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/05/08 16:47 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/05/08 16:47 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/05/08 16:47 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 16:47 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Chloroethane | A | *39* | 12 | 50 | J | µg/L | 5 | 04/08/08 10:59 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 16:47 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/05/08 16:47 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/05/08 16:47 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/05/08 16:47 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 16:47 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/05/08 16:47 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/05/08 16:47 | |
| *Surr: 4-Bromofluorobenzene* | S | 96.3 | 0 | 75.2-115 | | %REC | 1 | 04/05/08 16:47 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW29-31 | **Work Order / ID:** | ME0803B85-15 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 09:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **BRR** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/05/08 16:47 |
| *Surr: 1,2-Dichloroethane-d4* | S | 113 | 0 | 88.2-132 | | %REC | 1 | 04/05/08 16:47 |
| *Surr: Toluene-d8* | S | 112 | 0 | 89.3-116 | | %REC | 1 | 04/05/08 16:47 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW14-31 | **Work Order / ID:** | ME0803B85-16 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 10:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/06/08 18:13 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/06/08 18:13 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/06/08 18:13 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 18:13 | UJ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/06/08 18:13 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/06/08 18:13 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/06/08 18:13 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 18:13 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/06/08 18:13 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| Trichloroethene | A | *1.3* | 0.9 | 5.0 | J | µg/L | 1 | 04/06/08 18:13 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/06/08 18:13 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/06/08 18:13 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/06/08 18:13 | |
| *Surr: 4-Bromofluorobenzene* | S | 95.2 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 18:13 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW14-31 | **Work Order / ID:** | ME0803B85-16 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 10:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 97.8 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 18:13 |
| *Surr: 1,2-Dichloroethane-d4* | S | 101 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 18:13 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 18:13 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW09R-31
**Work Order / ID:** ME0803B85-17
**Sample Description:**
**Collection Date:** 03/29/08 10:50
**Sample Matrix:** Aqueous
**Date Received:** 03/31/08 10:45

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANICS** | Method: **SW8270C** | | | Prep Date/Time: **04/02/08 06:22** | | Analyst: **BEM** | | |
| Bis(2-chloroethyl)ether | A | *4.7* | 0.92 | 10 | J | µg/L | 1 | 04/04/08 03:47 |
| *Surr: Nitrobenzene-d5* | S | 51.9 | 0 | 10-121 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: 2-Fluorobiphenyl* | S | 70.6 | 0 | 10-109 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: Terphenyl-d14* | S | 62.4 | 0 | 10-130 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: Phenol-d5* | S | 20.9 | 0 | 10-100 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: 2-Fluorophenol* | S | 29.3 | 0 | 10-84.7 | | %REC | 1 | 04/04/08 03:47 |
| *Surr: 2,4,6-Tribromophenol* | S | 75.3 | 0 | 10-120 | | %REC | 1 | 04/04/08 03:47 |
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | Analyst: **MLT** | | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/06/08 18:48 UJ |
| Benzene | A | *4.4* | 0.8 | 5.0 | J | µg/L | 1 | 04/06/08 18:48 |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/06/08 18:48 UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 18:48 UJ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/06/08 18:48 UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/06/08 18:48 UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 18:48 UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |

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4/21/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW09R-31 | **Work Order / ID:** | ME0803B85-17 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 10:50 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/06/08 18:48 |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/06/08 18:48 |
| *Surr: 4-Bromofluorobenzene* | S | 97.0 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 18:48 |
| *Surr: Dibromofluoromethane* | S | 97.0 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 18:48 |
| *Surr: 1,2-Dichloroethane-d4* | S | 101 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 18:48 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 18:48 |

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4/20/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW37-31 | **Work Order / ID:** | ME0803B85-18 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 11:55 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/06/08 19:23 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/06/08 19:23 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/06/08 19:23 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 19:23 | UJ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/06/08 19:23 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/06/08 19:23 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/06/08 19:23 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 19:23 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/06/08 19:23 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/06/08 19:23 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/06/08 19:23 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/06/08 19:23 | |
| *Surr: 4-Bromofluorobenzene* | S | 96.3 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 19:23 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW37-31 | **Work Order / ID:** | ME0803B85-18 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 11:55 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 19:23 |
| *Surr: 1,2-Dichloroethane-d4* | S | 111 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 19:23 |
| *Surr: Toluene-d8* | S | 112 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 19:23 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW39-31 | **Work Order / ID:** | ME0803B85-19 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 13:55 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/06/08 19:58 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/06/08 19:58 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/06/08 19:58 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 19:58 | UJ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 04/06/08 19:58 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/06/08 19:58 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/06/08 19:58 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 19:58 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/06/08 19:58 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/06/08 19:58 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/06/08 19:58 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/06/08 19:58 | |
| *Surr: 4-Bromofluorobenzene* | S | 97.0 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 19:58 | |

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# ANALYTICAL RESULTS

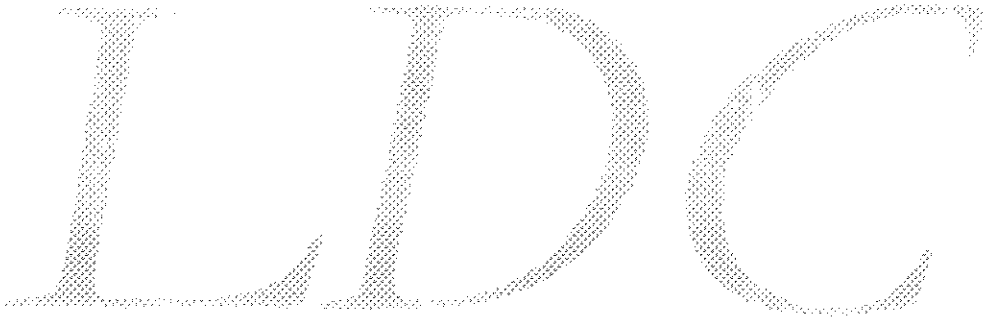
**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW39-31 | **Work Order / ID:** | ME0803B85-19 |
| **Sample Description:** | | **Collection Date:** | 03/29/08 13:55 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 10:45 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 102 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 19:58 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 19:58 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 19:58 |

**ACS GW Semi Annual**
**Data Validation Reports**
**LDC# 18716**

ME0803B85



**LDC Report#** 18716C1

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS GW Semi-Annual

**Collection Date:** March 28 through March 29, 2008

**LDC Report Date:** May 22, 2008

**Matrix:** Water

**Parameters:** Volatiles

**Validation Level:** EPA Level III

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** ME0803B85

**Sample Identification**

ACS-GW-TB03-31
ACS-GW-MW54R-31
ACS-GW-MW55-31
ACS-GW-MW56-31
ACS-GW-MW33-31
ACS-GW-MW51-31
ACS-GW-DUP03-31
ACS-GW-MW30-31
ACS-GW-MW10C-31
ACS-GW-MW13-31
ACS-GW-MW53-31
ACS-GW-MW52-31
ACS-GW-EB03-31
ACS-GW-DUP04-31
ACS-GW-MW29-31
ACS-GW-MW14-31
ACS-GW-MW09R-31
ACS-GW-MW37-31
ACS-GW-MW39-31
ACS-GW-DUP03-31MS
ACS-GW-DUP03-31MSD

## Introduction

This data review covers 21 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/3/08 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.036 (≥0.05)<br>0.008 (≥0.05)<br>0.278 (≥0.3) | All samples in SDG<br>ME0803B85 | J (all detects)<br>UJ (all non-detects) | P |

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/4/08 (A040402) | Chloromethane<br>Bromomethane | 56.2<br>51.6 | R110647-Blk | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | P |
| 4/4/08 (A040422) | Chloromethane | 52.6 | ACS-GW-TB03-31<br>ACS-GW-MW54R-31<br>ACS-GW-MW55-31<br>ACS-GW-MW56-31<br>ACS-GW-DUP03-31<br>ACS-GW-MW30-31 | J (all detects)<br>UJ (all non-detects) | A |
| 4/5/08 (A040502) | Chloromethane<br>Bromomethane<br>Methylene chloride | 48.0<br>27.4<br>27.2 | ACS-GW-MW33-31<br>ACS-GW-MW51-31<br>ACS-GW-MW10C-31<br>ACS-GW-MW13-31<br>ACS-GW-MW52-31<br>ACS-GW-EB03-31<br>ACS-GW-DUP04-31<br>ACS-GW-MW29-31<br>ACS-GW-DUP03-31MS<br>ACS-GW-DUP03-31MSD<br>R110701-Blk | J (all detects)<br>UJ (all non-detects) | P |
| 4/6/08 (A040603) | Chloromethane<br>Carbon disulfide<br>Methylene chloride | 41.3<br>28.8<br>25.7 | ACS-GW-MW14-31<br>ACS-GW-MW09R-31<br>ACS-GW-MW37-31<br>ACS-GW-MW39-31<br>R110762-Blk | J (all detects)<br>UJ (all non-detects) | A |
| 4/8/08 (A040802) | Bromomethane<br>Methylene chloride | 41.1<br>25.7 | ACS-GW-MW53-31<br>R011781-Blk | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | P |

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/3/08 (a040310) | 1,1-Dichloroethene | 31.6 | All samples in SDG ME0803B85 | J (all detects)<br>UJ (all non-detects) | A |

All of the continuing calibration RRF values were within validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/4/08 (A040402) | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.043 (≥0.05)<br>0.007 (≥0.05)<br>0.237 (≥0.3) | R110647-Blk | J (all detects)<br>UJ (all non-detects) | P |
| 4/4/08 (A040422) | Acetone<br><br>2-Butanone | 0.031 (≥0.05)<br><br>0.007 (≥0.05) | ACS-GW-TB03-31<br>ACS-GW-MW54R-31<br>ACS-GW-MW55-31<br>ACS-GW-MW56-31<br>ACS-GW-DUP03-31<br>ACS-GW-MW30-31 | J (all detects)<br>UJ (all non-detects) | A |
| 4/5/08 (A040502) | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.036 (≥0.05)<br>0.006 (≥0.05)<br>0.287 (≥0.3) | ACS-GW-MW33-31<br>ACS-GW-MW51-31<br>ACS-GW-MW10C-31<br>ACS-GW-MW13-31<br>ACS-GW-MW52-31<br>ACS-GW-EB03-31<br>ACS-GW-DUP04-31<br>ACS-GW-MW29-31<br>ACS-GW-DUP03-31MS<br>ACS-GW-DUP03-31MSD<br>R110701-Blk | J (all detects)<br>UJ (all non-detects) | P |
| 4/6/08 (A040603) | Acetone<br><br>2-Butanone | 0.030 (≥0.05)<br><br>0.007 (≥0.05) | ACS-GW-MW14-31<br>ACS-GW-MW09R-31<br>ACS-GW-MW37-31<br>ACS-GW-MW39-31<br>R110762-Blk1 | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A |
| 4/8/08 (A040802) | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.33 (≥0.05)<br>0.007 (≥0.05)<br>0.295 (≥0.3) | ACS-GW-MW53-31<br>R110781-Blk | J (all detects)<br>UJ (all non-detects) | P |

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

| Method Blank ID | Analysis Date | Compound TIC (RT in minutes) | Concentration | Associated Samples |
|---|---|---|---|---|
| R110762-Blk | 4/6/08 | 1,2,4-Trichlorobenzene | 0.33 ug/L | ACS-GW-MW14-31<br>ACS-GW-MW09R-31<br>ACS-GW-MW37-31<br>ACS-GW-MW39-31 |
| R110781-Blk | 4/8/08 | 1,2,4-Trichlorobenzene | 0.47 ug/L | ACS-GW-MW53-31 |

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

Sample ACS-GW-TB03-31was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

| Trip Blank ID | Sampling Date | Compound | Concentration | Associated Samples |
|---|---|---|---|---|
| ACS-GW-TB03-31 | 3/28/08 | Chloroform | 0.97 ug/L | ACS-GW-MW54R-31<br>ACS-GW-MW55-31<br>ACS-GW-MW56-31<br>ACS-GW-MW33-31<br>ACS-GW-MW51-31<br>ACS-GW-DUP03-31<br>ACS-GW-MW30-31<br>ACS-GW-MW10C-31<br>ACS-GW-MW13-31<br>ACS-GW-MW53-31<br>ACS-GW-MW52-31<br>ACS-GW-EB03-31<br>ACS-GW-DUP04-31<br>ACS-GW-MW29-31<br>ACS-GW-MW14-31<br>ACS-GW-MW09R-31<br>ACS-GW-MW37-31<br>ACS-GW-MW39-31<br>ACS-GW-DUP03-31MS<br>ACS-GW-DUP03-31MSD |

Sample ACS-GW-EB03-31 was identified as an equipment blank.. No volatile contaminants were found in this blank.

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

| LCS ID | Compound | %R (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| R110647 LCS | Chloromethane | 169 (34.7-130) | ACS-GW-TB03-31<br>ACS-GW-MW54R-31<br>ACS-GW-MW55-31<br>ACS-GW-MW56-31<br>ACS-GW-DUP03-31<br>ACS-GW-MW30-31<br>R110647-Blk | J (all detects) | P |
| R110781 LCS | Chloromethane | 133 (34.7-130) | ACS-GW-MW53-31<br>R1107581-Blk | J (all detects) | P |

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

All internal standard areas and retention times were within QC limits.

## XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

## XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

## XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

## XIV. System Performance

Raw data were not reviewed for this SDG.

## XV. Overall Assessment of Data

Data flags have been summarized at the end of the report if data has been qualified.

## XVI. Field Duplicates

Samples ACS-GW-DUP03-31 and ACS-GW-MW10C-31 and samples ACS-GW-DUP04-31 and ACS-GW-MW09R-31 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

| Compound | Concentration (ug/L) | | RPD |
|---|---|---|---|
| | ACS-GW-DUP03-31 | ACS-GW-MW10C-31 | |
| Benzene | 350 | 332 | 6 |
| Chloroethane | 240 | 230 | 4 |

| Compound | Concentration (ug/L) | | RPD |
|---|---|---|---|
| | ACS-GW-DUP04-31 | ACS-GW-MW09R-31 | |
| Benzene | 4.9 | 4.4 | 11 |

## ACS GW Semi-Annual
## Volatiles - Data Qualification Summary - SDG ME0803B85

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| ME0803B85 | ACS-GW-TB03-31<br>ACS-GW-MW54R-31<br>ACS-GW-MW55-31<br>ACS-GW-MW56-31<br>ACS-GW-MW33-31<br>ACS-GW-MW51-31<br>ACS-GW-DUP03-31<br>ACS-GW-MW30-31<br>ACS-GW-MW10C-31<br>ACS-GW-MW13-31<br>ACS-GW-MW53-31<br>ACS-GW-MW52-31<br>ACS-GW-EB03-31<br>ACS-GW-DUP04-31<br>ACS-GW-MW29-31<br>ACS-GW-MW14-31<br>ACS-GW-MW09R-31<br>ACS-GW-MW37-31<br>ACS-GW-MW39-31 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Initial calibration (%RRF) |
| ME0803B85 | ACS-GW-TB03-31<br>ACS-GW-MW54R-31<br>ACS-GW-MW55-31<br>ACS-GW-MW56-31<br>ACS-GW-DUP03-31<br>ACS-GW-MW30-31 | Chloromethane | J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (%D) |
| ME0803B85 | ACS-GW-MW33-31<br>ACS-GW-MW51-31<br>ACS-GW-MW10C-31<br>ACS-GW-MW13-31<br>ACS-GW-MW52-31<br>ACS-GW-EB03-31<br>ACS-GW-DUP04-31<br>ACS-GW-MW29-31 | Chloromethane<br>Bromomethane<br>Methylene chloride | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (%D) |
| ME0803B85 | ACS-GW-MW14-31<br>ACS-GW-MW09R-31<br>ACS-GW-MW37-31<br>ACS-GW-MW39-31 | Chloromethane<br>Carbon disulfide<br>Methylene chloride | J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (%D) |
| ME0803B85 | ACS-GW-MW53-31 | Bromomethane<br><br>Methylene chloride | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (%D) |

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| ME0803B85 | ACS-GW-TB03-31<br>ACS-GW-MW54R-31<br>ACS-GW-MW55-31<br>ACS-GW-MW56-31<br>ACS-GW-MW33-31<br>ACS-GW-MW51-31<br>ACS-GW-DUP03-31<br>ACS-GW-MW30-31<br>ACS-GW-MW10C-31<br>ACS-GW-MW13-31<br>ACS-GW-MW53-31<br>ACS-GW-MW52-31<br>ACS-GW-EB03-31<br>ACS-GW-DUP04-31<br>ACS-GW-MW29-31<br>ACS-GW-MW14-31<br>ACS-GW-MW09R-31<br>ACS-GW-MW37-31<br>ACS-GW-MW39-31 | 1,1-Dichloroethene | J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (ICV %D) |
| ME0803B85 | ACS-GW-TB03-31<br>ACS-GW-MW54R-31<br>ACS-GW-MW55-31<br>ACS-GW-MW56-31<br>ACS-GW-DUP03-31<br>ACS-GW-MW30-31 | Acetone<br><br>2-Butanone | J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (RRF) |
| ME0803B85 | ACS-GW-MW33-31<br>ACS-GW-MW51-31<br>ACS-GW-MW10C-31<br>ACS-GW-MW13-31<br>ACS-GW-MW52-31<br>ACS-GW-EB03-31<br>ACS-GW-DUP04-31<br>ACS-GW-MW29-31 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (RRF) |
| ME0803B85 | ACS-GW-MW14-31<br>ACS-GW-MW09R-31<br>ACS-GW-MW37-31<br>ACS-GW-MW39-31 | Acetone<br><br>2-Butanone | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (RRF) |
| ME0803B85 | ACS-GW-MW53-31 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (RRF) |
| ME0803B85 | ACS-GW-TB03-31<br>ACS-GW-MW54R-31<br>ACS-GW-MW55-31<br>ACS-GW-MW56-31<br>ACS-GW-DUP03-31<br>ACS-GW-MW30-31<br>ACS-GW-MW53-31 | Chloromethane | J (all detects) | P | Laboratory control samples (%R) |

**ACS GW Semi-Annual**
**Volatiles - Laboratory Blank Data Qualification Summary - SDG ME0803B85**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Volatiles - Field Blank Data Qualification Summary - SDG ME0803B85**

No Sample Data Qualified in this SDG

LDC #: 18716C1
SDG #: ME0803B85
Laboratory: Microbac

# VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 5/16/08
Page: 1 of 1
Reviewer: SW
2nd Reviewer: g

**METHOD:** GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 3/28-29/08 |
| II. | GC/MS Instrument performance check | A | |
| III. | Initial calibration | SW | |
| IV. | Continuing calibration/ICV | SW | ICV ≤ 25 % |
| V. | Blanks | SW | |
| VI. | Surrogate spikes | A | |
| VII. | Matrix spike/Matrix spike duplicates | A | ACS-GW-MW06-31 (from ME0803C07) |
| VIII. | Laboratory control samples | SW | LCS |
| IX. | Regional Quality Assurance and Quality Control | N | |
| X. | Internal standards | A | |
| XI. | Target compound identification | N | |
| XII. | Compound quantitation/CRQLs | N | |
| XIII. | Tentatively identified compounds (TICs) | N | |
| XIV. | System performance | N | |
| XV. | Overall assessment of data | A | |
| XVI. | Field duplicates | SW | $D_1$ = 7, 9 $D_2$ = 14, 17 |
| XVII. | Field blanks | SW | TB = 1 *EB = 13 |

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
* ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Water

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| + 1 1 | ACS-GW-TB03-31 W | + 11 1 | ACS-GW-MW53-31 | 21 Y | ACS-GW-DUP03-31MSD | − 31 1 | R110647 - Blk | 4/04 |
| − 2 1 | ACS-GW-MW54R-31 | − 12 Y | ACS-GW-MW52-31 | 22 | | − 32 Y | R110701 - Blk | 4/05 |
| − 3 1 | ACS-GW-MW55-31 | − 13 Y | ACS-GW-EB03-31 | 23 | | + 33 3 | R110762 - Blk | 4/06 |
| + 4 1/4 | ACS-GW-MW56-31 | + 14 Y | ACS-GW-DUP04-31 $D_2$ | 24 | | + 34 4 | R110781 - Blk | 4/08 |
| + 5 2 | ACS-GW-MW33-31 | + 15 3/4 | ACS-GW-MW29-31 | 25 | | 35 | | |
| − 6 2 | ACS-GW-MW51-31 | + 16 3 | ACS-GW-MW14-31 | 26 | | 36 | | |
| + 7 1/2 | ACS-GW-DUP03-31 $D_1$ | + 17 3 | ACS-GW-MW09R-31 $D_2$ | 27 | | 37 | | |
| − 8 1 | ACS-GW-MW30-31 | − 18 3 | ACS-GW-MW37-31 | 28 | | 38 | | |
| + 9 2/4 | ACS-GW-MW10C-31 $D_1$ | − 19 3 | ACS-GW-MW39-31 | 29 | | 39 | | |
| − 10 Y | ACS-GW-MW13-31 | 20 Y | ACS-GW-DUP03-31MS | 30 | | 40 | | |

(no r)

# TARGET COMPOUND WORKSHEET

## METHOD: VOA (EPA SW 846 Method 8260B)

| | | | | |
|---|---|---|---|---|
| A. Chloromethane* | U. 1,1,2-Trichloroethane | OO. 2,2-Dichloropropane | III. n-Butylbenzene | CCCC.1-Chlorohexane |
| B. Bromomethane | V. Benzene | PP. Bromochloromethane | JJJ. 1,2-Dichlorobenzene | DDDD. Isopropyl alcohol |
| C. Vinyl choride** | W. trans-1,3-Dichloropropene | QQ. 1,1-Dichloropropene | KKK. 1,2,4-Trichlorobenzene | EEEE. Acetonitrile |
| D. Chloroethane | X. Bromoform* | RR. Dibromomethane | LLL. Hexachlorobutadiene | FFFF. Acrolein |
| E. Methylene chloride | Y. 4-Methyl-2-pentanone | SS. 1,3-Dichloropropane | MMM. Naphthalene | GGGG. Acrylonitrile |
| F. Acetone | Z. 2-Hexanone | TT. 1,2-Dibromoethane | NNN. 1,2,3-Trichlorobenzene | HHHH. 1,4-Dioxane |
| G. Carbon disulfide | AA. Tetrachloroethene | UU. 1,1,1,2-Tetrachloroethane | OOO. 1,3,5-Trichlorobenzene | IIII. Isobutyl alcohol |
| H. 1,1-Dichloroethene** | BB. 1,1,2,2-Tetrachloroethane* | VV. Isopropylbenzene | PPP. trans-1,2-Dichloroethene | JJJJ. Methacrylonitrile |
| I. 1,1-Dichloroethane* | CC. Toluene** | WW. Bromobenzene | QQQ. cis-1,2-Dichloroethene | KKKK. Propionitrile |
| J. 1,2-Dichloroethene, total | DD. Chlorobenzene* | XX. 1,2,3-Trichloropropane | RRR. m,p-Xylenes | LLLL. Ethyl ether |
| K. Chloroform** | EE. Ethylbenzene** | YY. n-Propylbenzene | SSS. o-Xylene | MMMM. Benzyl chloride |
| L. 1,2-Dichloroethane | FF. Styrene | ZZ. 2-Chlorotoluene | TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane | NNNN. |
| M. 2-Butanone | GG. Xylenes, total | AAA. 1,3,5-Trimethylbenzene | UUU. 1,2-Dichlorotetrafluoroethane | OOOO. |
| N. 1,1,1-Trichloroethane | HH. Vinyl acetate | BBB. 4-Chlorotoluene | VVV. 4-Ethyltoluene | PPPP. |
| O. Carbon tetrachloride | II. 2-Chloroethylvinyl ether | CCC. tert-Butylbenzene | WWW. Ethanol | QQQQ. |
| P. Bromodichloromethane | JJ. Dichlorodifluoromethane | DDD. 1,2,4-Trimethylbenzene | XXX. Di-isopropyl ether | RRRR. |
| Q. 1,2-Dichloropropane** | KK. Trichlorofluoromethane | EEE. sec-Butylbenzene | YYY. tert-Butanol | SSSS. |
| R. cis-1,3-Dichloropropene | LL. Methyl-tert-butyl ether | FFF. 1,3-Dichlorobenzene | ZZZ. tert-Butyl alcohol | TTTT. |
| S. Trichloroethene | MM. 1,2-Dibromo-3-chloropropane | GGG. p-Isopropyltoluene | AAAA. Ethyl tert-butyl ether | UUUU. |
| T. Dibromochloromethane | NN. Methyl ethyl ketone | HHH. 1,4-Dichlorobenzene | BBBB. tert-Amyl methyl ether | VVVV. |

*** = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.**

LDC #: 18716 C1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Initial Calibration

Page: 1 of 1
Reviewer: JV6
2nd Reviewer: [illegible]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y (N) N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?_____
Y N (N/A) Did the initial calibration meet the acceptance criteria?
Y (N) N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

| # | Date | Standard ID | Compound | Finding %RSD (Limit: <30.0%) | Finding RRF (Limit: >0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 4/03/08 | ICAL | F | | 0.036 | All + Blks | J/UJ/P |
| | | | M | | 0.008 | | |
| | | | BB | | 0.278 (≥0.3) SPCC | | |

INICAL.1SB

LDC #: 18718 C1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Continuing Calibration

Page: 1 of 2
Reviewer: SVG
2nd Reviewer: [illegible]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

| # | Date | Standard ID | Compound | Finding %D (Limit: ≤25.0%) | Finding RRF (Limit: ≥0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 4/04/08 | A040402 | A (+) | 56.2 | | R110647-Blk | J/UJ/P |
| | | | B (-) | 51.6 | | | |
| | | | F | | 0.043 | | |
| | | | M | | 0.007 | | |
| | | | BB | | 0.237 (≥0.3) SPCC | | |
| | | | | | | | |
| | | | | | | | |
| | 4/04/08 | A040422 | A (+) | 52.6 | | 1-4, 7, 8 | J/UJ/A |
| | | | F | | 0.031 | | |
| | | | M | | 0.007 | | |
| | | | | | | | |
| | | | | | | | |
| | 4/05/08 | A040502 | A | 48.0 | | 5, 6, 9, 10, 12-15, | J/UJ/P |
| | | | B | 27.4 | | 20, 21, R110701-Blk | |
| | | | E | 27.2 | | | |
| | | | F | | 0.036 | | |
| | | | M | | 0.006 | | |
| | | | BB | | 0.287 (≥0.3) SPCC | | |
| | | | | | | | |
| | | | | | | | |
| | 4/06/08 | A040603 | A | 41.3 | | 16-19, R110762-Blk | J/UJ/A |
| | | | G | 28.8 | | | |
| | | | E | 25.7 | | | |
| | | | F | | 0.030 | | |
| | | | M | | 0.007 | | |
| | | | | | | | |
| | | | | | | | |

BB in A040422 = 0.311 (in)
↓ in A040603 = 0.306 ↓

CONCAL.1SB

LDC #: 18718C1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Continuing Calibration


Reviewer: JVG
2nd Reviewer: 8

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
(Y) (N) N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

| # | Date | Standard ID | Compound | Finding %D (Limit: ≤25.0%) | Finding RRF (Limit: ≥0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 4/08/08 | A040807 | B | 41.1 | | 11, R116781-Blk | J/UJ/P |
| | | | E | 25.7 | | ↓ | ↓ |
| | | | F | | 0.033 | | |
| | | | M | | 0.007 | | |
| | | | BB | | 0.295 (≥0.3) SPCC | ↓ | ↓ |
| | | | | | | | |
| | | | | | | | |
| | 4/03/08 | a040310 (ICV) | H | 31.6 | | All + Blks | J/UJ/A |

(ICV reported in ME0803A91 package)

CONCAL.1SB

LDC #: 18716C1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Blanks


Reviewer: JVC
2nd Reviewer: 8

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

**Blank analysis date:** 9/06/08
**Conc. units:** ug/L
Associated Samples: 16 - 19 (ND)

| Compound | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | R110762-Blk | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | | | | | | | | | | |
| KKK | 0.33 | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| CRQL | | | | | | | | | | |

**Blank analysis date:** 9/08/08
**Conc. units:** ug/L
Associated Samples: 11 (ND)

| Compound | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | R110781-Blk | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | | | | | | | | | | |
| kkk | 0.47 | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| CRQL | | | | | | | | | | |

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 18716C1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Field Blanks


Reviewer: JVG
2nd Reviewer: R

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y/N N/A Were target compounds detected in the field blanks?

**Blank units:** ug/L **Associated sample units:** ug/L

**Field blank type:** (circle one) Field Blank / Rinsate / Trip Blank / Other: Associated Samples: All except 1 (ND)

| Compound | Blank ID 1 | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Date | 3/28/08 | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | |
| Acetone | | | | | | | | | | | |
| Chloroform | 0.97 | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| CRQL | | | | | | | | | | | |

**Blank units:** _____ **Associated sample units:** _____

**Field blank type:** (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

| Compound | Blank ID | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Date | | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | |
| Acetone | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| CRQL | | | | | | | | | | | |

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 18716 C1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: JVB
2nd Reviewer: [illegible]

**METHOD**: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?
Y (N) N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

| # | Date | LCS/LCSD ID | Compound | LCS %R (Limits) | LCSD %R (Limits) | RPD (Limits) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|---|
| | | R110647 LCS | A | 169 (34.7-130) | ( ) | ( ) | 1-4, 7, 8, R110647-BLK | J det /P |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | R110781 LCS | A | 133 (34.7-130 | ( ) | ( ) | 11, R110781-BLK | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |

LDC #: 18716C1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Field Duplicates

Page: 1 of 1
Reviewer: JV6
2nd reviewer: J

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

| Compound | Concentration (ug/L) | | RPD |
|---|---|---|---|
| | 7 | 9 | |
| V | 350 | 330 | 6 |
| D | 240 | 230 | 4 |
| | | | |
| | | | |
| | | | |

| Compound | Concentration (ug/L) | | RPD |
|---|---|---|---|
| | 14 | 17 | |
| V | 4.9 | 4.4 | 11 |
| | | | |
| | | | |
| | | | |
| | | | |

| Compound | Concentration ( ) | | RPD |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| Compound | Concentration ( ) | | RPD |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS GW Semi-Annual

**Collection Date:** March 29, 2008

**LDC Report Date:** May 19, 2008

**Matrix:** Water

**Parameters:** Bis(2-chloroethyl) ether

**Validation Level:** EPA Level III

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** ME0803B85

**Sample Identification**

ACS-GW-DUP04-31
ACS-GW-MW09R-31

## Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Bis(2-chloroethyl) ether.

The review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05.

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No bis(2-chloroethyl) ether was found in the method blanks.

No field blanks were identified in this SDG.

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

All internal standard areas and retention times were within QC limits.

## XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

## XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

## XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

## XIV. System Performance

Raw data were not reviewed for this SDG.

## XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

## XVI. Field Duplicates

Samples ACS-GW-DUP04-31 and ACS-GW-MW09R-31 were identified as field duplicates. No bis(2-chloroethyl) ether was detected in any of the samples with the following exceptions:

| Compound | Concentration (ug/L) | | RPD |
|---|---|---|---|
| | ACS-GW-DUP04-31 | ACS-GW-MW09R-31 | |
| Bis(2-chloroethyl) ether | 4.2 | 4.7 | 11 |

**ACS GW Semi-Annual**
**Bis(2-chloroethyl) ether - Data Qualification Summary - SDG ME0803B85**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Bis(2-chloroethyl) ether - Laboratory Blank Data Qualification Summary - SDG ME0803B85**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Bis(2-chloroethyl) ether - Field Blank Data Qualification Summary - SDG ME0803B85**

No Sample Data Qualified in this SDG

LDC #: 18716C2
SDG #: ME0803B85
Laboratory: Microbac

# VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 5/16/08
Page: 1 of 1
Reviewer: SW
2nd Reviewer:

**METHOD:** GC/MS Bis(2-chloroethyl)ether (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 3/29/08 |
| II. | GC/MS Instrument performance check | A | |
| III. | Initial calibration | A | %RSD ≤ 30% |
| IV. | Continuing calibration | A | CCV ≤ 25% |
| V. | Blanks | A | |
| VI. | Surrogate spikes | A | |
| VII. | Matrix spike/Matrix spike duplicates | A | ACS-GW-MW06-31 (from ME0803C07) |
| VIII. | Laboratory control samples | A | LCS |
| IX. | Regional Quality Assurance and Quality Control | N | |
| X. | Internal standards | A | |
| XI. | Target compound identification | N | |
| XII. | Compound quantitation/CRQLs | N | |
| XIII. | Tentatively identified compounds (TICs) | N | |
| XIV. | System performance | N | |
| XV. | Overall assessment of data | A | |
| XVI. | Field duplicates | SW | D = 1, 2 |
| XVII. | Field blanks | N | |

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Water

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | ACS-GW-DUP04-31 | 11 | | 21 | | 31 | |
| 2 | ACS-GW-MW09R-31 | 12 | | 22 | | 32 | |
| 3 | BK-1-040208 | 13 | | 23 | | 33 | |
| 4 | | 14 | | 24 | | 34 | |
| 5 | | 15 | | 25 | | 35 | |
| 6 | | 16 | | 26 | | 36 | |
| 7 | | 17 | | 27 | | 37 | |
| 8 | | 18 | | 28 | | 38 | |
| 9 | | 19 | | 29 | | 39 | |
| 10 | | 20 | | 30 | | 40 | |

(no ICV)

# VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

| | | | | |
|---|---|---|---|---|
| A. Phenol** | P. Bis(2-chloroethoxy)methane | EE. 2,6-Dinitrotoluene | TT. Pentachlorophenol** | III. Benzo(a)pyrene** |
| B. Bis (2-chloroethyl) ether | Q. 2,4-Dichlorophenol** | FF. 3-Nitroaniline | UU. Phenanthrene | JJJ. Indeno(1,2,3-cd)pyrene |
| C. 2-Chlorophenol | R. 1,2,4-Trichlorobenzene | GG. Acenaphthene** | VV. Anthracene | KKK. Dibenz(a,h)anthracene |
| D. 1,3-Dichlorobenzene | S. Naphthalene | HH. 2,4-Dinitrophenol* | WW. Carbazole | LLL. Benzo(g,h,i)perylene |
| E. 1,4-Dichlorobenzene** | T. 4-Chloroaniline | II. 4-Nitrophenol* | XX. Di-n-butylphthalate | MMM. Bis(2-Chloroisopropyl)ether |
| F. 1,2-Dichlorobenzene | U. Hexachlorobutadiene** | JJ. Dibenzofuran | YY. Fluoranthene** | NNN. Aniline |
| G. 2-Methylphenol | V. 4-Chloro-3-methylphenol** | KK. 2,4-Dinitrotoluene | ZZ. Pyrene | OOO. N-Nitrosodimethylamine |
| H. 2,2'-Oxybis(1-chloropropane) | W. 2-Methylnaphthalene | LL. Diethylphthalate | AAA. Butylbenzylphthalate | PPP. Benzoic Acid |
| I. 4-Methylphenol | X. Hexachlorocyclopentadiene* | MM. 4-Chlorophenyl-phenyl ether | BBB. 3,3'-Dichlorobenzidine | QQQ. Benzyl alcohol |
| J. N-Nitroso-di-n-propylamine* | Y. 2,4,6-Trichlorophenol** | NN. Fluorene | CCC. Benzo(a)anthracene | RRR. Pyridine |
| K. Hexachloroethane | Z. 2,4,5-Trichlorophenol | OO. 4-Nitroaniline | DDD. Chrysene | SSS. Benzidine |
| L. Nitrobenzene | AA. 2-Chloronaphthalene | PP. 4,6-Dinitro-2-methylphenol | EEE. Bis(2-ethylhexyl)phthalate | TTT. |
| M. Isophorone | BB. 2-Nitroaniline | QQ. N-Nitrosodiphenylamine (1)** | FFF. Di-n-octylphthalate** | UUU. |
| N. 2-Nitrophenol** | CC. Dimethylphthalate | RR. 4-Bromophenyl-phenylether | GGG. Benzo(b)fluoranthene | VVV. |
| O. 2,4-Dimethylphenol | DD. Acenaphthylene | SS. Hexachlorobenzene | HHH. Benzo(k)fluoranthene | WWW. |

LDC #: 18716C7
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Field Duplicates

Page: 1 of 1
Reviewer: SVG
2nd reviewer:

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

| Compound | Concentration (ug/L) | | RPD |
|---|---|---|---|
| | 1 | 2 | |
| B | 4.2 | 4.7 | 11 |
| | | | |
| | | | |
| | | | |
| | | | |

| Compound | Concentration ( ) | | RPD |
|---|---|---|---|
| | | | |
| | | | |
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| Compound | Concentration ( ) | | RPD |
|---|---|---|---|
| | | | |
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| | | | |

| Compound | Concentration ( ) | | RPD |
|---|---|---|---|
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Microbac

# LEVEL IV
# QA/QC DATA PACKAGE

| | |
|---|---|
| **CLIENT:** | MWH, Inc. |
| **PROJECT:** | ACS Groundwater / Griffith, IN |
| **LAB WORKORDER:** | ME0803C07 |
| **DATE PACKAGE ISSUED:** | 04/15/08 |

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**CLIENT:** **MWH, Inc.**

**PROJECT:** **ACS Groundwater / Griffith, IN**

**LAB WORKORDER:** **ME0803C07**

**CHAIN-OF-CUSTODY:** **82597**


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# Case Narrative
# Metals Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803C07

One groundwater sample was received on 03/31/08 for analysis and reporting in accordance with our Level IV protocol. The sample was received in acceptable physical condition. The sample was analyzed for Arsenic using SW-846 Method 3010A/6010B.

The sample was collected on 03/31/08. The sample was digested and analyzed on 04/01/08. The sample was analyzed within the prescribed maximum allowable holding time.

The required instrument calibration and quality control tests were performed and the acceptance criteria met without exception.

The batch quality control tests were performed and the acceptance criteria met without exception.

Matrix evaluation was performed on the sample ACS-GW-MW06-31. The accuracy and precision criteria were met.

This Case Narrative was prepared by Allyl McCarron, QC Assistant.

# Case Narrative
# SVOA Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803C07

One groundwater sample was received on 03/31/08 for analysis and reporting in accordance with our Level IV protocol. The sample was received in acceptable physical condition. The sample was analyzed for Semi-volatile Organic Analytes using SW-846 Method 3510/8270C.

The sample was collected on 03/31/08. The sample was extracted on 04/02/08 then analyzed on 04/04/08. The sample was prepared and analyzed within the prescribed maximum allowable holding time.

The required instrument calibration was performed and the acceptance criteria met. The grand mean average approach was used to assess linearity.

Prior to analysis, the resultant mass spectra for DFTPP met all method criteria, and all samples were analyzed within 12-hour analytical sequences.

Prior to analysis, a CCV standard was analyzed and the acceptance criteria met for all CCCs and SPCCs.

The batch quality control tests were performed and the acceptance criteria met without exception.

Three acid surrogate compounds and three base/neutral surrogate compounds are spiked into each sample to evaluate the extraction and analysis efficiency. One surrogate per fraction (acid versus base/neutral) is allowed to be outside of the acceptance criteria. All environmental samples yielded acceptable surrogate recovery.

Internal standards are spiked into each CCV standard and environmental sample. All internal standard responses met the criteria established for the CCVs. The internal standard responses in the environmental samples were evaluated and deemed adequate.

Matrix evaluation was performed on the sample ACS-GW-MW06-31. The accuracy and precision criteria were met without exception.

This Case Narrative was prepared by Allyl McCarron, QC Assistant.

# Case Narrative
# VOA Analysis

Client: MWH, Inc.

Project: ACS Groundwater / Griffith, IN

Laboratory #: ME0803C07

Five groundwater samples were received on 03/31/08 for analysis and reporting in accordance with our Level IV protocol. The samples were received in acceptable physical condition. The samples were analyzed for Volatile Organic Analytes using SW-846 Method 8260B. To achieve lower reporting limits these samples were analyzed using a 25-ml sample size.

The samples were collected on 03/31/08. The samples were analyzed on 04/06/08 and 04/08/08. All samples were analyzed within the prescribed maximum allowable holding time without exception.

The required instrument calibration was performed and the acceptance criteria met with the following listed exception. The grand mean average approach was used to assess linearity.

- 1,1,2,2-Tetrachloroethane failed to meet the minimum average response criteria. This criterion is based on a 5-ml sample size. These standards were analyzed using a 25-ml purge volume. This data is typical for a 25-ml purge and considered acceptable.

Prior to analysis, the resultant mass spectra for BFB met all method criteria, and all samples were analyzed within 12-hour analytical sequences.

Prior to analysis, a CCV standard was analyzed and the acceptance criteria met for all CCCs and SPCCs {with the following exceptions}.

- 1,1,2,2-Tetrachloroethane failed to meet the minimum response criteria in A040802and A040819. This criterion is based on a 5-ml sample size. These standards were analyzed using a 25-ml purge volume. This data is typical for a 25-ml purge and considered acceptable.

The batch quality control tests were performed and the acceptance criteria met without exception.

Surrogate compounds are spiked into each sample to evaluate analysis efficiency. All samples yielded acceptable surrogate recovery.

Internal standards are spiked into each CCV standard and environmental sample. All internal standard responses met the criteria established for the CCVs. The internal standard responses in the environmental samples were evaluated and deemed adequate.

Matrix evaluation was performed on the sample ACS-GW-MW06-31. The accuracy and precision criteria were met without exception.

This Case Narrative was prepared by Allyl McCarron, QC Assistant.

April 10, 2008

Justin Finger
MWH, Inc.
175 West Jackson Boulevard, Suite 1900
Chicago, IL 60604

Work Order No.: ME0803C07

RE: ACS Groundwater / Griffith, IN

Dear Justin Finger:

Microbac Laboratories, Inc. received 5 samples on 3/31/2008 3:00:00 PM for the analyses presented in the following report.

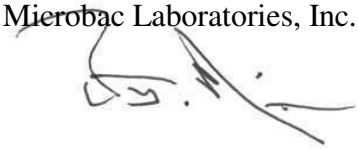
The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,
Microbac Laboratories, Inc.



Ronald J. Misiunas
Client Services Manager

Enclosures

Microbac®

# WORK ORDER SAMPLE SUMMARY

**Date:** *Thursday, April 10, 2008*

**CLIENT:** MWH, Inc.
**Project:** ACS Groundwater / Griffith, IN
**Lab Order:** ME0803C07

| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---|---|---|---|---|
| ME0803C07-01A | ACS-GW-TB04-31 | | 3/31/2008 8:00:00 AM | 3/31/2008 |
| ME0803C07-02A | ACS-GW-MW06-31 | | 3/31/2008 9:10:00 AM | 3/31/2008 |
| ME0803C07-02B | ACS-GW-MW06-31 | | 3/31/2008 9:10:00 AM | 3/31/2008 |
| ME0803C07-02C | ACS-GW-MW06-31 | | 3/31/2008 9:10:00 AM | 3/31/2008 |
| ME0803C07-03A | ACS-GW-MW48-31 | | 3/31/2008 10:30:00 AM | 3/31/2008 |
| ME0803C07-04A | ACS-GW-MW49-31 | | 3/31/2008 11:35:00 AM | 3/31/2008 |
| ME0803C07-05A | ACS-GW-EB04-31 | | 3/31/2008 1:10:00 PM | 3/31/2008 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB04-31 | **Work Order / ID:** | ME0803C07-01 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/06/08 20:33 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| Chloroform | A | ***1.1*** | 0.9 | 5.0 | J | µg/L | 1 | 04/06/08 20:33 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/06/08 20:33 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/06/08 20:33 |
| *Surr: 4-Bromofluorobenzene* | S | 96.0 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 20:33 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB04-31 | **Work Order / ID:** | ME0803C07-01 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 104 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 20:33 |
| *Surr: 1,2-Dichloroethane-d4* | S | 112 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 20:33 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 20:33 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW06-31 | **Work Order / ID:** | ME0803C07-02 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 09:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | | Prep Date/Time: **04/01/08 07:20** | Analyst: **AVC** | | |
| Arsenic | A | ***7.5*** | 2.5 | 10 | Jb | µg/L | 1 | 04/01/08 13:31 |
| **SEMIVOLATILE ORGANICS** | Method: **SW8270C** | | | | Prep Date/Time: **04/02/08 06:22** | Analyst: **BEM** | | |
| Bis(2-chloroethyl)ether | A | ***ND*** | 0.93 | 10 | | µg/L | 1 | 04/04/08 04:12 |
| *Surr: Nitrobenzene-d5* | S | 40.6 | 0 | 10-121 | | %REC | 1 | 04/04/08 04:12 |
| *Surr: 2-Fluorobiphenyl* | S | 51.9 | 0 | 10-109 | | %REC | 1 | 04/04/08 04:12 |
| *Surr: Terphenyl-d14* | S | 62.0 | 0 | 10-130 | | %REC | 1 | 04/04/08 04:12 |
| *Surr: Phenol-d5* | S | 15.2 | 0 | 10-100 | | %REC | 1 | 04/04/08 04:12 |
| *Surr: 2-Fluorophenol* | S | 21.7 | 0 | 10-84.7 | | %REC | 1 | 04/04/08 04:12 |
| *Surr: 2,4,6-Tribromophenol* | S | 67.1 | 0 | 10-120 | | %REC | 1 | 04/04/08 04:12 |
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | Analyst: **MLT** | | |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/06/08 21:08 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Chloroethane | A | ***3.1*** | 2.3 | 10 | J | µg/L | 1 | 04/06/08 21:08 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/06/08 21:08 |

# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW06-31 | **Work Order / ID:** | ME0803C07-02 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 09:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | | Prep Date/Time: | | | Analyst: **MLT** |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| *Surr: 4-Bromofluorobenzene* | S | 98.5 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 21:08 |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 21:08 |
| *Surr: 1,2-Dichloroethane-d4* | S | 113 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 21:08 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 21:08 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW48-31 | **Work Order / ID:** | ME0803C07-03 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/08/08 11:34 |
| Benzene | A | ***130*** | 16 | 100 | | µg/L | 20 | 04/08/08 13:19 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Chloroethane | A | ***8.4*** | 2.3 | 10 | J | µg/L | 1 | 04/08/08 11:34 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/08/08 11:34 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/08/08 11:34 |
| *Surr: 4-Bromofluorobenzene* | S | 98.1 | 0 | 75.2-115 | | %REC | 1 | 04/08/08 11:34 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW48-31 | **Work Order / ID:** | ME0803C07-03 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 93.4 | 0 | 92.7-119 | | %REC | 1 | 04/08/08 11:34 |
| *Surr: 1,2-Dichloroethane-d4* | S | 108 | 0 | 88.2-132 | | %REC | 1 | 04/08/08 11:34 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/08/08 11:34 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW49-31
**Work Order / ID:** ME0803C07-04
**Sample Description:**
**Collection Date:** 03/31/08 11:35
**Sample Matrix:** Aqueous
**Date Received:** 03/31/08 15:00

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/08/08 19:55 |
| Benzene | A | ***40*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/08/08 19:55 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/08/08 19:55 |
| *Surr: 4-Bromofluorobenzene* | S | 94.9 | 0 | 75.2-115 | | %REC | 1 | 04/08/08 19:55 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW49-31 | **Work Order / ID:** | ME0803C07-04 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 11:35 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 97.6 | 0 | 92.7-119 | | %REC | 1 | 04/08/08 19:55 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/08/08 19:55 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/08/08 19:55 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB04-31 | **Work Order / ID:** | ME0803C07-05 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 13:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| Acetone | A | ***ND*** | 5.8 | 50 | | µg/L | 1 | 04/08/08 12:44 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 04/08/08 12:44 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 04/08/08 12:44 |
| *Surr: 4-Bromofluorobenzene* | S | 96.0 | 0 | 75.2-115 | | %REC | 1 | 04/08/08 12:44 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB04-31 | **Work Order / ID:** | ME0803C07-05 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 13:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 104 | 0 | 92.7-119 | | %REC | 1 | 04/08/08 12:44 |
| *Surr: 1,2-Dichloroethane-d4* | S | 114 | 0 | 88.2-132 | | %REC | 1 | 04/08/08 12:44 |
| *Surr: Toluene-d8* | S | 112 | 0 | 89.3-116 | | %REC | 1 | 04/08/08 12:44 |

**FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NA | = | Not Analyzed | N/A | = | Not Applicable | | | |
| mg/L | = | Milligrams per Liter (ppm) | ug/L | = | Micrograms per Liter (ppb) | cfu | = | Colony Forming Unit |
| mg/Kg | = | Milligrams per Kilogram (ppm) | ug/Kg | = | Micrograms per Kilogram (ppb) | ng/L | = | Nanograms per Liter (ppt) |

| | | |
|---|---|---|
| U | = | Undetected |
| J | = | Analyte concentration detected between RL and MDL (Metals / Organics) |
| B | = | Detected in the associated Method Blank at a concentration above the routine PQL/RL |
| b | = | Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL |
| D | = | Surrogate recoveries are not calculated due to sample dilution |
| ND | = | Not Detected at the Reporting Limit (or the Method Detection Limit, if listed) |
| E | = | Value above quantitation range |
| H | = | Analyte was prepared and/or analyzed outside of the analytical method holding time |
| I | = | Matrix Interference |
| R | = | RPD outside accepted recovery limits |
| S | = | Spike recovery outside recovery limits |
| Surr | = | Surrogate |

DF = Dilution Factor RL = Reporting Limit ST = Sample Type MDL = Method Detection Limit

**SAMPLE TYPES**

| | | |
|---|---|---|
| A | = | Analyte |
| I | = | Internal Standard |
| S | = | Surrogate |
| T | = | Tentatively Identified Compound (TIC, concentration estimated) |

**QC SAMPLE IDENTIFICATIONS**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MBLK | = | Method Blank | ICSA | = | Interference Check Standard "A" | OPR | = | Ongoing Precision and Recovery Standard |
| DUP | = | Method Duplicate | ICSAB | = | Interference Check Standard "AB" | | | |
| LCS | = | Laboratory Control Sample | LCSD | = | Laboratory Control Sample Duplicate | | | |
| MS | = | Matrix Spike | MSD | = | Matrix Spike Duplicate | | | |
| ICB | = | Initial Calibration Blank | CCB | = | Continuing Calibration Blank | | | |
| ICV | = | Initial Calibration Verification | CCV | = | Continuing Calibration Verification | | | |
| PDS | = | Post Digestion Spike | SD | = | Serial Dilution | | | |

**CERTIFICATIONS**

*Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.*

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

**MICROBAC LOCATIONS, SERVICE CENTERS (SC) AND SATELLITE OFFICES (Sat)**

**Baltimore Division** - Baltimore, MD
**Camp Hill Division** - Camp Hill, PA
**Camp Hill Division (SC)** - Pittston, PA
**Chicagoland Division** - Merrillville, IN
**Chicagoland Division (SC)** - Indianapolis, IN
**Corona Division** - Corona, CA
**Erie Division** - Erie, PA
**Fayetteville Division** - Fayetteville, NC
**Hauser Division** - Boulder, CO
**Kentucky Division** - Louisville, KY
**Kentucky Division (Sat)** - Evansville, IN
**Kentucky Division (Sat)** - Lexington, KY
**Kentucky Division (Sat)** - Paducah, KY
**Knoxville Division** - Maryville, TN
**Massachusetts Division** - Marlborough, MA
**Microbac Corporate Office** - Wexford, PA
**Microbac NY - Cortland Office** - Cortland, NY
**Microbac NY - Waverly Office** - Waverly, NY
**New Castle Division** - New Castle, PA
**Pittsburgh Division** - Warrendale, PA
**Richmond Division** - Richmond, VA
**South Carolina Division** - New Ellenton, SC
**South Jersey Division** - Turnersville, NJ
**Southern Headquarters** - Poquoson, VA
**Southern Testing Division** - Wilson, NC
**Southern Testing Division (Sat)** - Greensboro, NC
**Venice Division** - Venice, FL

# COOLER INSPECTION

**Date:** Thursday, April 10, 2008

Client Name: ***MWH, Inc.***

Date / Time Received: ***3/31/2008 3:00:00 PM***

Work Order Number ***ME0803C07***

Received by: SPM

Checklist completed by SPM 3/31/2008 5:20:42 PM

Reviewed by RJM 4/1/2008 4:59:55 PM

Carrier name: Client Delivered

| | | | |
|---|---|---|---|
| After-Hour Arrival? | Yes ☐ | No ☑ | |
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on shippping container/cooler? | Yes ☐ | No ☐ | Not Present ☑ |
| Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☑ |
| Chain of custody present? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient client identification? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient sample collector information? | Yes ☑ | No ☐ | |
| Chain of custody included a sample description? | Yes ☑ | No ☐ | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate matrix? | Yes ☑ | No ☐ | |
| Chain of custody included date of collection? | Yes ☑ | No ☐ | |
| Chain of custody included time of collection? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate number of containers? | Yes ☑ | No ☐ | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | |
| Sample containers intact? | Yes ☑ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | |
| All samples received within holding time? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate preservatives (if preserved)? | Yes ☑ | No ☐ | |
| Samples properly preserved? | Yes ☑ | No ☐ | |

If No, adjusted by? _____ Date/Time _____

| | | | |
|---|---|---|---|
| Chain of custody included the requested analyses? | Yes ☑ | No ☐ | |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | |
| Samples received on ice? | Yes ☑ | No ☐ | |

| Container/Temp Blank temperatures | Cooler | Temp |
|---|---|---|
| | 1 | 5 ºC |

VOA vials for aqueous samples have zero headspace? No VOA vials submitted ☐ Yes ☑ No ☐

**ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.**

General Comments:

| Sample ID | Client Sample ID | Comments |
|---|---|---|
| ME0803C07-01A | ACS-GW-TB04-31 | |
| ME0803C07-02A | ACS-GW-MW06-31 | |
| ME0803C07-02B | ACS-GW-MW06-31 | |
| ME0803C07-02C | ACS-GW-MW06-31 | |
| ME0803C07-03A | ACS-GW-MW48-31 | |
| ME0803C07-04A | ACS-GW-MW49-31 | |
| ME0803C07-05A | ACS-GW-EB04-31 | |

ME0803C07 MONT. WATSON-IL-CHICAG 4/7/2008 RJM
ACS Groundwater / Griffith, IN
Justin Finger

# Microbac

Samples Submitted to:

[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664

[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

## Chain of Custody Record

Number 82597

*Instructions on back*

| | | | |
|---|---|---|---|
| Client Name MWH | Project ACS GROUNDWATER | **Turnaround Time** | **Report Type** |
| Address 175 W. JACKSON BLVD SUITE 1900 | Location GRIFFITH, IN | [X] Routine (7 working days) | [ ] Results Only [ ] Level II |
| City, State, Zip CHICAGO, IL 60604 | PO # 4050577. 0301050) | [ ] RUSH* (notify lab) | [ ] Level III [ ] Level III CLP-like |
| Contact JUSTIN FINGER | Compliance Monitoring? [ ] Yes(1) [ ] No | _____ (needed by) | [ ] Level IV [ ] Level IV CLP-like |
| Telephone # (312) 831-3447 | (1)Agency/Program | | [ ] EDD |

Sampled by (PRINT) JUSTIN FINGER/AMANDA BUTLER Sampler Signature _____ Sampler Phone # (312) 831-3447

Send Report via [X] Mail [ ] Telephone [ ] Fax (fax #) _____ [X] e-mail (address) JUSTIN.D.FINGER@MWHGLOBAL.COM

* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** **Preservative Types:** (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

| Client Sample ID | Matrix* | Grab | Composite | Filtered | Date Collected | Time Collected | No. of Containers | Requested Analyses → Preservative Types ** | VOCs + TICs | BIS(2-CHLOROETHYL) ETHER | ARSENIC | | | | | | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACS-GW-TB04-31 | GW | X | | | 3/31/08 | 0800 | 1 | 3 | X | | | | | | | | MF0803C07 1A |
| ACS-GW-MW06-31 | GW | X | | | 3/31/08 | 0910 | 18 | 3,1,U | X | X | X | | | | | | 2A-C |
| ACS-GW-MW48-31 | GW | X | | | 3/31/08 | 1030 | 3 | 3 | X | | | | | | | | 3A |
| ACS-GW-MW49-31 | GW | X | | | 3/31/08 | 1135 | 3 | 3 | X | | | | | | | | 4A |
| ACS-GW-EB04-31 | GW | X | | | 3/31/08 | 1310 | 3 | 3 | X | | | | | | | | 5A |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

**Possible Hazard Identification** [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

**Sample Disposition** [ ] Dispose as appropriate [ ] Return [ ] Archive

**Comments**

MS/MSD COLLECTED WITH SAMPLE ACS-GW-MW06-31

Sample temperature upon receipt in degrees C = _____

| Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
|---|---|---|---|
| [signature] | 3/31/08 1500 | | |
| Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
| | | | |
| Relinquished By (signature) | Date/Time | Received for Lab By (signature) | Date/Time |
| | | Scott Mccord | 3/31/08 15:00 |

rev. 11/04/04

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**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60753**

Sample ID: **MB080401-2** SampType: **MBLK** TestCode: **2007** Units: **mg/L** Prep Date: **4/1/2008 7:20:00 AM** Run ID: **ICP-2_080401A**
Client ID: **ZZZZZ** Batch ID: **60753** TestNo: **E200.7_r4.4** Analysis Date: **4/1/2008 12:52:00 PM** SeqNo: **1762360**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0047 | 0.010 | | | | | | | | | J |

Sample ID: **LCS080401-2** SampType: **LCS** TestCode: **2007** Units: **mg/L** Prep Date: **4/1/2008 7:20:00 AM** Run ID: **ICP-2_080401A**
Client ID: **ZZZZZ** Batch ID: **60753** TestNo: **E200.7_r4.4** Analysis Date: **4/1/2008 12:58:00 PM** SeqNo: **1762361**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.924 | 0.010 | 2 | 0 | 96.2 | 85 | 115 | 0 | 0 | | b |

Sample ID: **ICV** SampType: **ICV** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080401A**
Client ID: **ZZZZZ** Batch ID: **60753** TestNo: **E200.7_r4.4** Analysis Date: **4/1/2008 8:37:00 AM** SeqNo: **1762035**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.033 | 0.010 | 1 | 0 | 103 | 95 | 105 | 0 | 0 | | |

Sample ID: **ICB** SampType: **CCB** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080401A**
Client ID: **ZZZZZ** Batch ID: **60753** TestNo: **E200.7_r4.4** Analysis Date: **4/1/2008 8:43:00 AM** SeqNo: **1762036**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.005 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | J |

Sample ID: **CCB** SampType: **CCB** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080401A**
Client ID: **ZZZZZ** Batch ID: **60753** TestNo: **E200.7_r4.4** Analysis Date: **4/1/2008 12:44:00 PM** SeqNo: **1762060**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0045 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | J |

**Qualifiers:**

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R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60753**

Sample ID: **CCB** SampType: **CCB** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080401A**
Client ID: **ZZZZZ** Batch ID: **60753** TestNo: **E200.7_r4.4** Analysis Date: **4/1/2008 2:00:00 PM** SeqNo: **1762372**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0045 | 0.010 | 0 | 0 | 0 | | | 0 | 0 | | J |

Sample ID: **CCV** SampType: **CCV** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080401A**
Client ID: **ZZZZZ** Batch ID: **60753** TestNo: **E200.7_r4.4** Analysis Date: **4/1/2008 12:39:00 PM** SeqNo: **1762059**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.799 | 0.010 | 5 | 0 | 96 | 90 | 110 | 0 | 0 | | |

Sample ID: **CCV** SampType: **CCV** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080401A**
Client ID: **ZZZZZ** Batch ID: **60753** TestNo: **E200.7_r4.4** Analysis Date: **4/1/2008 1:48:00 PM** SeqNo: **1762370**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.91 | 0.010 | 5 | 0 | 98.2 | 90 | 110 | 0 | 0 | | |

Sample ID: **ICSAB** SampType: **ICSAB** TestCode: **2007** Units: **mg/L** Prep Date: Run ID: **ICP-2_080401A**
Client ID: **ZZZZZ** Batch ID: **60753** TestNo: **E200.7_r4.4** Analysis Date: **4/1/2008 8:56:00 AM** SeqNo: **1762039**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.047 | 0.010 | 1 | 0 | 105 | 80 | 120 | 0 | 0 | | |

Sample ID: **ME0803C07-02CMS** SampType: **MS** TestCode: **6010W** Units: **mg/L** Prep Date: **4/1/2008 7:20:00 AM** Run ID: **ICP-2_080401A**
Client ID: **ACS-GW-MW06-31** Batch ID: **60753** TestNo: **SW6010B** Analysis Date: **4/1/2008 1:37:00 PM** SeqNo: **1762368**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.961 | 0.010 | 2 | 0 | 98 | 75 | 125 | 0 | 0 | | b |

Sample ID: **ME0803C07-02CMS** SampType: **MSD** TestCode: **6010W** Units: **mg/L** Prep Date: **4/1/2008 7:20:00 AM** Run ID: **ICP-2_080401A**
Client ID: **ACS-GW-MW06-31** Batch ID: **60753** TestNo: **SW6010B** Analysis Date: **4/1/2008 1:43:00 PM** SeqNo: **1762369**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1.928 | 0.010 | 2 | 0 | 96.4 | 75 | 125 | 1.961 | 1.70 | 20 | b |

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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60802**

Sample ID: **bk-1-040208** SampType: **mblk** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080402A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/2/2008 5:30:00 PM** SeqNo: **1764064**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | 10 | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 10 | | | | | | | | | |
| 4-Chloro-3-methylphenol | ND | 20 | | | | | | | | | |
| 2-Chlorophenol | ND | 10 | | | | | | | | | |
| 1,4-Dichlorobenzene | 1.31 | 10 | | | | | | | | | J |
| 2,4-Dinitrotoluene | ND | 10 | | | | | | | | | |
| 4-Nitrophenol | ND | 50 | | | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 10 | | | | | | | | | |
| Pentachlorophenol | ND | 50 | | | | | | | | | |
| Phenol | ND | 10 | | | | | | | | | |
| Pyrene | ND | 10 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 10 | | | | | | | | | |
| Surr: Nitrobenzene-d5 | 46.49 | 0 | 100 | 0 | 46.5 | 10 | 121 | 0 | 0 | | |
| Surr: 2-Fluorobiphenyl | 55.87 | 0 | 100 | 0 | 55.9 | 10 | 109 | 0 | 0 | | |
| Surr: Terphenyl-d14 | 64.22 | 0 | 100 | 0 | 64.2 | 10 | 130 | 0 | 0 | | |
| Surr: Phenol-d5 | 25.16 | 0 | 150 | 0 | 16.8 | 10 | 100 | 0 | 0 | | |
| Surr: 2-Fluorophenol | 39.19 | 0 | 150 | 0 | 26.1 | 10 | 84.7 | 0 | 0 | | |
| Surr: 2,4,6-Tribromophenol | 82.92 | 0 | 150 | 0 | 55.3 | 10 | 120 | 0 | 0 | | |

Sample ID: **lcs-1-040208** SampType: **lcs** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080402A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/2/2008 6:23:00 PM** SeqNo: **1764066**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 69.2 | 10 | 100 | 0 | 69.2 | 28.6 | 88.6 | 0 | 0 | | |
| 4-Chloro-3-methylphenol | 65.38 | 20 | 100 | 0 | 65.4 | 27.2 | 97.7 | 0 | 0 | | |
| 2-Chlorophenol | 52.39 | 10 | 100 | 0 | 52.4 | 31.3 | 81.3 | 0 | 0 | | |
| 1,4-Dichlorobenzene | 52.69 | 10 | 100 | 0 | 52.7 | 20.6 | 82 | 0 | 0 | | b |
| 2,4-Dinitrotoluene | 83.76 | 10 | 100 | 0 | 83.8 | 23.5 | 95.4 | 0 | 0 | | |
| 4-Nitrophenol | 26.9 | 50 | 100 | 0 | 26.9 | 5 | 56.2 | 0 | 0 | | J |

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60802**

Sample ID: **lcs-1-040208** SampType: **lcs** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080402A**
Client ID: **ZZZZZ** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/2/2008 6:23:00 PM** SeqNo: **1764066**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N-Nitrosodi-n-propylamine | 61.86 | 10 | 100 | 0 | 61.9 | 15.9 | 119 | 0 | 0 | | |
| Pentachlorophenol | 80.17 | 50 | 100 | 0 | 80.2 | 5 | 114 | 0 | 0 | | |
| Phenol | 20.48 | 10 | 100 | 0 | 20.5 | 5 | 46.7 | 0 | 0 | | |
| Pyrene | 73.17 | 10 | 100 | 0 | 73.2 | 25.3 | 103 | 0 | 0 | | |
| 1,2,4-Trichlorobenzene | 54.2 | 10 | 100 | 0 | 54.2 | 19.7 | 80.9 | 0 | 0 | | |
| Surr: Nitrobenzene-d5 | 55.79 | 0 | 100 | 0 | 55.8 | 10 | 121 | 0 | 0 | | |
| Surr: 2-Fluorobiphenyl | 65.69 | 0 | 100 | 0 | 65.7 | 10 | 109 | 0 | 0 | | |
| Surr: Terphenyl-d14 | 74.69 | 0 | 100 | 0 | 74.7 | 10 | 130 | 0 | 0 | | |
| Surr: Phenol-d5 | 29.44 | 0 | 150 | 0 | 19.6 | 10 | 100 | 0 | 0 | | |
| Surr: 2-Fluorophenol | 43.65 | 0 | 150 | 0 | 29.1 | 10 | 84.7 | 0 | 0 | | |
| Surr: 2,4,6-Tribromophenol | 104.8 | 0 | 150 | 0 | 69.9 | 10 | 120 | 0 | 0 | | |

Sample ID: **me0803c07-02bms** SampType: **ms** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080403A**
Client ID: **ACS-GW-MW06-31** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/4/2008 4:38:00 AM** SeqNo: **1765824**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 124.8 | 21 | 212.8 | 0 | 58.7 | 14.5 | 96.6 | 0 | 0 | | |
| 4-Chloro-3-methylphenol | 127 | 43 | 212.8 | 0 | 59.7 | 9.03 | 111 | 0 | 0 | | |
| 2-Chlorophenol | 80.77 | 21 | 212.8 | 0 | 38 | 5 | 106 | 0 | 0 | | |
| 1,4-Dichlorobenzene | 82.3 | 21 | 212.8 | 0 | 38.7 | 12.1 | 93.1 | 0 | 0 | | |
| 2,4-Dinitrotoluene | 141.8 | 21 | 212.8 | 0 | 66.7 | 18.7 | 96.2 | 0 | 0 | | |
| 4-Nitrophenol | 100.2 | 21 | 212.8 | 0 | 47.1 | 5 | 95.2 | 0 | 0 | | |
| N-Nitrosodi-n-propylamine | 96.32 | 21 | 212.8 | 0 | 45.3 | 6.65 | 116 | 0 | 0 | | |
| Pentachlorophenol | 156 | 110 | 212.8 | 0 | 73.3 | 5 | 135 | 0 | 0 | | |
| Phenol | 53.11 | 21 | 212.8 | 0 | 25 | 5 | 70.4 | 0 | 0 | | |
| Pyrene | 145.5 | 21 | 212.8 | 0 | 68.4 | 14.3 | 107 | 0 | 0 | | |
| 1,2,4-Trichlorobenzene | 85.51 | 21 | 212.8 | 0 | 40.2 | 6.56 | 93.1 | 0 | 0 | | |
| Surr: Nitrobenzene-d5 | 87.72 | 0 | 212.8 | 0 | 41.2 | 10 | 121 | 0 | 0 | | |
| Surr: 2-Fluorobiphenyl | 116.7 | 0 | 212.8 | 0 | 54.9 | 10 | 109 | 0 | 0 | | |
| Surr: Terphenyl-d14 | 139.6 | 0 | 212.8 | 0 | 65.6 | 10 | 130 | 0 | 0 | | |
| Surr: Phenol-d5 | 80 | 0 | 319.1 | 0 | 25.1 | 10 | 100 | 0 | 0 | | |

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**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 60802**

Sample ID: **me0803c07-02bms** SampType: **ms** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080403A**
Client ID: **ACS-GW-MW06-31** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/4/2008 4:38:00 AM** SeqNo: **1765824**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: 2-Fluorophenol | 91.34 | 0 | 319.1 | 0 | 28.6 | 10 | 84.7 | 0 | 0 | | |
| Surr: 2,4,6-Tribromophenol | 209.6 | 0 | 319.1 | 0 | 65.7 | 10 | 120 | 0 | 0 | | |

Sample ID: **me0803c07-02bmsd** SampType: **msd** TestCode: **8270_w** Units: **µg/L** Prep Date: **4/2/2008 6:22:00 AM** Run ID: **SVOA-4_080403A**
Client ID: **ACS-GW-MW06-31** Batch ID: **60802** TestNo: **SW8270C** Analysis Date: **4/4/2008 5:03:00 AM** SeqNo: **1765825**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 136.6 | 21 | 208.3 | 0 | 65.6 | 14.5 | 96.6 | 124.8 | 9.02 | 41.3 | |
| 4-Chloro-3-methylphenol | 141.2 | 42 | 208.3 | 0 | 67.8 | 9.03 | 111 | 127 | 10.6 | 43.6 | |
| 2-Chlorophenol | 89.96 | 21 | 208.3 | 0 | 43.2 | 5 | 106 | 80.77 | 10.8 | 44.3 | |
| 1,4-Dichlorobenzene | 89.25 | 21 | 208.3 | 0 | 42.8 | 12.1 | 93.1 | 82.3 | 8.11 | 39.7 | |
| 2,4-Dinitrotoluene | 147.2 | 21 | 208.3 | 0 | 70.7 | 18.7 | 96.2 | 141.8 | 3.72 | 36.5 | |
| 4-Nitrophenol | 92.33 | 21 | 208.3 | 0 | 44.3 | 5 | 95.2 | 100.2 | 8.16 | 16.6 | |
| N-Nitrosodi-n-propylamine | 104.9 | 21 | 208.3 | 0 | 50.4 | 6.65 | 116 | 96.32 | 8.54 | 42.7 | |
| Pentachlorophenol | 158.8 | 100 | 208.3 | 0 | 76.2 | 5 | 135 | 156 | 1.80 | 29.2 | |
| Phenol | 56.71 | 21 | 208.3 | 0 | 27.2 | 5 | 70.4 | 53.11 | 6.56 | 55 | |
| Pyrene | 158.6 | 21 | 208.3 | 0 | 76.1 | 14.3 | 107 | 145.5 | 8.60 | 37.7 | |
| 1,2,4-Trichlorobenzene | 99.77 | 21 | 208.3 | 0 | 47.9 | 6.56 | 93.1 | 85.51 | 15.4 | 44.8 | |
| Surr: Nitrobenzene-d5 | 94.02 | 0 | 208.3 | 0 | 45.1 | 10 | 121 | 0 | 0 | 0 | |
| Surr: 2-Fluorobiphenyl | 128.6 | 0 | 208.3 | 0 | 61.7 | 10 | 109 | 0 | 0 | 0 | |
| Surr: Terphenyl-d14 | 146.4 | 0 | 208.3 | 0 | 70.3 | 10 | 130 | 0 | 0 | 0 | |
| Surr: Phenol-d5 | 84.17 | 0 | 312.5 | 0 | 26.9 | 10 | 100 | 0 | 0 | 0 | |
| Surr: 2-Fluorophenol | 92.15 | 0 | 312.5 | 0 | 29.5 | 10 | 84.7 | 0 | 0 | 0 | |
| Surr: 2,4,6-Tribromophenol | 227.2 | 0 | 312.5 | 0 | 72.7 | 10 | 120 | 0 | 0 | 0 | |

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**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110762**

Sample ID: **MB_W25 4/6** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080407B**
Client ID: **ZZZZZ** Batch ID: **R110762** TestNo: **SW8260B** Analysis Date: **4/6/2008 4:41:00 PM** SeqNo: **1767401**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | 5.0 | | | | | | | | | |
| Benzene | ND | 1.0 | | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | | |
| Bromomethane | ND | 2.0 | | | | | | | | | |
| 2-Butanone | ND | 2.0 | | | | | | | | | |
| Carbon Disulfide | ND | 2.0 | | | | | | | | | |
| Carbon tetrachloride | ND | 1.0 | | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | | |
| Chloromethane | ND | 2.0 | | | | | | | | | |
| Dibromochloromethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | | |
| 2-Hexanone | ND | 2.0 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 1.0 | | | | | | | | | |
| Methylene chloride | ND | 2.0 | | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | | | | | | | | | |
| Tetrachloroethene | ND | 1.0 | | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | | |

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**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110762**

Sample ID: **MB_W25 4/6** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080407B**
Client ID: **ZZZZZ** Batch ID: **R110762** TestNo: **SW8260B** Analysis Date: **4/6/2008 4:41:00 PM** SeqNo: **1767401**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | | |
| Trichloroethene | ND | 1.0 | | | | | | | | | |
| Vinyl chloride | ND | 2.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.33 | 1.0 | | | | | | | | | J |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| Total Xylenes | ND | 1.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 9.67 | 0 | 10 | 0 | 96.7 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.83 | 0 | 10 | 0 | 98.3 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.48 | 0 | 10 | 0 | 105 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.46 | 0 | 10 | 0 | 115 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080407B**
Client ID: **ZZZZZ** Batch ID: **R110762** TestNo: **SW8260B** Analysis Date: **4/6/2008 5:16:00 PM** SeqNo: **1767402**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 9.12 | 1.0 | 10 | 0 | 91.2 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 9.38 | 1.0 | 10 | 0 | 93.8 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 11.74 | 1.0 | 10 | 0 | 117 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 9.77 | 1.0 | 10 | 0 | 97.7 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 11.38 | 1.0 | 10 | 0 | 114 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 9.93 | 1.0 | 10 | 0 | 99.3 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 9.74 | 2.0 | 10 | 0 | 97.4 | 22.5 | 147 | 0 | 0 | | |
| Dibromochloromethane | 11.82 | 1.0 | 10 | 0 | 118 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 9.57 | 1.0 | 10 | 0 | 95.7 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 9.78 | 1.0 | 10 | 0 | 97.8 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 9.18 | 1.0 | 10 | 0 | 91.8 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 9.15 | 1.0 | 10 | 0 | 91.5 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 9 | 1.0 | 10 | 0 | 90 | 74.4 | 126 | 0 | 0 | | |

**Qualifiers:**
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R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110762**

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080407B**
Client ID: **ZZZZZ** Batch ID: **R110762** TestNo: **SW8260B** Analysis Date: **4/6/2008 5:16:00 PM** SeqNo: **1767402**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | 12.55 | 1.0 | 10 | 0 | 126 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 11.18 | 1.0 | 10 | 0 | 112 | 69.1 | 126 | 0 | 0 | | |
| Ethylbenzene | 11.55 | 1.0 | 10 | 0 | 116 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 8.19 | 2.0 | 10 | 0 | 81.9 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 11.22 | 1.0 | 10 | 0 | 112 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 11.15 | 1.0 | 10 | 0 | 112 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 11.25 | 1.0 | 10 | 0 | 112 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 9.73 | 1.0 | 10 | 0 | 97.3 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 10.66 | 1.0 | 10 | 0 | 107 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 8.78 | 1.0 | 10 | 0 | 87.8 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 7.36 | 2.0 | 10 | 0 | 73.6 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.42 | 0 | 10 | 0 | 104 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.02 | 0 | 10 | 0 | 100 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.52 | 0 | 10 | 0 | 105 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.49 | 0 | 10 | 0 | 115 | 89.3 | 116 | 0 | 0 | | |

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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **MB_W25 4/8** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 8:11:00 AM** SeqNo: **1767434**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | 5.0 | | | | | | | | | |
| Benzene | ND | 1.0 | | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | | |
| Bromomethane | ND | 2.0 | | | | | | | | | |
| 2-Butanone | ND | 2.0 | | | | | | | | | |
| Carbon Disulfide | ND | 2.0 | | | | | | | | | |
| Carbon tetrachloride | ND | 1.0 | | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | | |
| Chloromethane | ND | 2.0 | | | | | | | | | |
| Dibromochloromethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | | |
| 2-Hexanone | ND | 2.0 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 1.0 | | | | | | | | | |
| Methylene chloride | ND | 2.0 | | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | | | | | | | | | |
| Tetrachloroethene | ND | 1.0 | | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | | |

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**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **MB_W25 4/8** SampType: **MBLK** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 8:11:00 AM** SeqNo: **1767434**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | 1.0 | | | | | | | | | |
| Vinyl chloride | ND | 2.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.47 | 1.0 | | | | | | | | | J |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | | |
| Total Xylenes | ND | 1.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 9.47 | 0 | 10 | 0 | 94.7 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.83 | 0 | 10 | 0 | 98.3 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.39 | 0 | 10 | 0 | 104 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.43 | 0 | 10 | 0 | 114 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 8:46:00 AM** SeqNo: **1767435**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8.08 | 1.0 | 10 | 0 | 80.8 | 75.4 | 121 | 0 | 0 | | |
| Bromodichloromethane | 8.43 | 1.0 | 10 | 0 | 84.3 | 69.4 | 121 | 0 | 0 | | |
| Bromoform | 10.52 | 1.0 | 10 | 0 | 105 | 60 | 131 | 0 | 0 | | |
| Carbon tetrachloride | 8.8 | 1.0 | 10 | 0 | 88 | 65.5 | 134 | 0 | 0 | | |
| Chlorobenzene | 10.04 | 1.0 | 10 | 0 | 100 | 81.1 | 120 | 0 | 0 | | |
| Chloroform | 8.97 | 1.0 | 10 | 0 | 89.7 | 74.1 | 123 | 0 | 0 | | |
| Chloromethane | 13.26 | 2.0 | 10 | 0 | 133 | 22.5 | 147 | 0 | 0 | | |
| Dibromochloromethane | 10.41 | 1.0 | 10 | 0 | 104 | 68.6 | 123 | 0 | 0 | | |
| 1,1-Dichloroethane | 8.56 | 1.0 | 10 | 0 | 85.6 | 77 | 132 | 0 | 0 | | |
| 1,2-Dichloroethane | 8.72 | 1.0 | 10 | 0 | 87.2 | 68 | 127 | 0 | 0 | | |
| 1,1-Dichloroethene | 8.34 | 1.0 | 10 | 0 | 83.4 | 47.5 | 153 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 8.21 | 1.0 | 10 | 0 | 82.1 | 64.5 | 143 | 0 | 0 | | |
| 1,2-Dichloropropane | 7.96 | 1.0 | 10 | 0 | 79.6 | 74.4 | 126 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 11.06 | 1.0 | 10 | 0 | 111 | 71.8 | 131 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 9.94 | 1.0 | 10 | 0 | 99.4 | 69.1 | 126 | 0 | 0 | | |

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**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **LCS_W25 10 PPB** SampType: **LCS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ZZZZZ** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 8:46:00 AM** SeqNo: **1767435**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 10.29 | 1.0 | 10 | 0 | 103 | 73.6 | 125 | 0 | 0 | | |
| Methylene chloride | 7.83 | 2.0 | 10 | 0 | 78.3 | 37.6 | 136 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 9.93 | 1.0 | 10 | 0 | 99.3 | 69.8 | 123 | 0 | 0 | | |
| Tetrachloroethene | 10.3 | 1.0 | 10 | 0 | 103 | 70.1 | 134 | 0 | 0 | | |
| Toluene | 10.03 | 1.0 | 10 | 0 | 100 | 76.4 | 123 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 8.81 | 1.0 | 10 | 0 | 88.1 | 70.8 | 131 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 9.82 | 1.0 | 10 | 0 | 98.2 | 67.6 | 127 | 0 | 0 | | |
| Trichloroethene | 8.11 | 1.0 | 10 | 0 | 81.1 | 69.9 | 127 | 0 | 0 | | |
| Vinyl chloride | 9.55 | 2.0 | 10 | 0 | 95.5 | 37.1 | 149 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.17 | 0 | 10 | 0 | 102 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 9.92 | 0 | 10 | 0 | 99.2 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 10.58 | 0 | 10 | 0 | 106 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.4 | 0 | 10 | 0 | 114 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **me0803c07-02AMS** SampType: **MS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ACS-GW-MW06-31** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 3:51:00 PM** SeqNo: **1767567**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8.62 | 1.0 | 10 | 0 | 86.2 | 60.6 | 130 | 0 | 0 | | |
| Bromodichloromethane | 9.01 | 1.0 | 10 | 0 | 90.1 | 65.8 | 126 | 0 | 0 | | |
| Bromoform | 10.93 | 1.0 | 10 | 0 | 109 | 40.5 | 146 | 0 | 0 | | |
| Bromomethane | 9.94 | 2.0 | 10 | 0 | 99.4 | 0 | 243 | 0 | 0 | | |
| Carbon tetrachloride | 9.68 | 1.0 | 10 | 0 | 96.8 | 47.2 | 149 | 0 | 0 | | |
| Chlorobenzene | 10.34 | 1.0 | 10 | 0 | 103 | 75.6 | 127 | 0 | 0 | | |
| Chloroethane | 14.33 | 2.0 | 10 | 3.08 | 112 | 0 | 357 | 0 | 0 | | |
| Chloroform | 9.32 | 1.0 | 10 | 0 | 93.2 | 71.2 | 120 | 0 | 0 | | |
| Chloromethane | 14.4 | 2.0 | 10 | 0 | 144 | 10.8 | 155 | 0 | 0 | | |
| Dibromochloromethane | 10.78 | 1.0 | 10 | 0 | 108 | 60.1 | 136 | 0 | 0 | | |
| 1,1-Dichloroethane | 9.1 | 1.0 | 10 | 0 | 91 | 68 | 119 | 0 | 0 | | |
| 1,2-Dichloroethane | 9.52 | 1.0 | 10 | 0 | 95.2 | 67.7 | 133 | 0 | 0 | | |
| 1,1-Dichloroethene | 9.12 | 1.0 | 10 | 0 | 91.2 | 50.1 | 125 | 0 | 0 | | |

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**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **me0803c07-02AMS** SampType: **MS** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ACS-GW-MW06-31** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 3:51:00 PM** SeqNo: **1767567**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 8.58 | 1.0 | 10 | 0 | 85.8 | 56.9 | 132 | 0 | 0 | | |
| 1,2-Dichloropropane | 8.06 | 1.0 | 10 | 0 | 80.6 | 71.4 | 125 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 11.22 | 1.0 | 10 | 0 | 112 | 69.9 | 130 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 10.02 | 1.0 | 10 | 0 | 100 | 66.9 | 134 | 0 | 0 | | |
| Ethylbenzene | 10.73 | 1.0 | 10 | 0 | 107 | 60.6 | 144 | 0 | 0 | | |
| Methylene chloride | 7.76 | 2.0 | 10 | 0 | 77.6 | 55.4 | 130 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 10.2 | 1.0 | 10 | 0 | 102 | 46.8 | 168 | 0 | 0 | | |
| Tetrachloroethene | 10.22 | 1.0 | 10 | 0 | 102 | 60.1 | 144 | 0 | 0 | | |
| Toluene | 10.18 | 1.0 | 10 | 0 | 102 | 69.7 | 130 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 9.4 | 1.0 | 10 | 0 | 94 | 63 | 136 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 10.02 | 1.0 | 10 | 0 | 100 | 40.6 | 165 | 0 | 0 | | |
| Trichloroethene | 8.27 | 1.0 | 10 | 0 | 82.7 | 48.6 | 139 | 0 | 0 | | |
| Vinyl chloride | 10.36 | 2.0 | 10 | 0 | 104 | 33 | 151 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 10.67 | 0 | 10 | 0 | 107 | 75.2 | 115 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 10.32 | 0 | 10 | 0 | 103 | 92.7 | 119 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 11.51 | 0 | 10 | 0 | 115 | 88.2 | 132 | 0 | 0 | | |
| Surr: Toluene-d8 | 11.37 | 0 | 10 | 0 | 114 | 89.3 | 116 | 0 | 0 | | |

Sample ID: **me0803c07-02AMSD** SampType: **MSD** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ACS-GW-MW06-31** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 4:26:00 PM** SeqNo: **1767568**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8.38 | 1.0 | 10 | 0 | 83.8 | 60.6 | 130 | 8.62 | 2.82 | 23.7 | |
| Bromodichloromethane | 8.8 | 1.0 | 10 | 0 | 88 | 65.8 | 126 | 9.01 | 2.36 | 28.4 | |
| Bromoform | 10.74 | 1.0 | 10 | 0 | 107 | 40.5 | 146 | 10.93 | 1.75 | 28.8 | |
| Bromomethane | 11.65 | 2.0 | 10 | 0 | 116 | 0 | 243 | 9.94 | 15.8 | 52.8 | |
| Carbon tetrachloride | 9.47 | 1.0 | 10 | 0 | 94.7 | 47.2 | 149 | 9.68 | 2.19 | 31.1 | |
| Chlorobenzene | 10.4 | 1.0 | 10 | 0 | 104 | 75.6 | 127 | 10.34 | 0.579 | 23 | |
| Chloroethane | 14.89 | 2.0 | 10 | 3.08 | 118 | 0 | 357 | 14.33 | 3.83 | 29.3 | |
| Chloroform | 9.31 | 1.0 | 10 | 0 | 93.1 | 71.2 | 120 | 9.32 | 0.107 | 25 | |
| Chloromethane | 15.19 | 2.0 | 10 | 0 | 152 | 10.8 | 155 | 14.4 | 5.34 | 90.9 | |

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b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0803C07
**Project:** ACS Groundwater / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R110781**

Sample ID: **me0803c07-02AMSD** SampType: **MSD** TestCode: **8260+_W25** Units: **µg/L** Prep Date: Run ID: **VOA-1_080408B**
Client ID: **ACS-GW-MW06-31** Batch ID: **R110781** TestNo: **SW8260B** Analysis Date: **4/8/2008 4:26:00 PM** SeqNo: **1767568**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dibromochloromethane | 10.61 | 1.0 | 10 | 0 | 106 | 60.1 | 136 | 10.78 | 1.59 | 27.1 | |
| 1,1-Dichloroethane | 9.25 | 1.0 | 10 | 0 | 92.5 | 68 | 119 | 9.1 | 1.63 | 14.2 | |
| 1,2-Dichloroethane | 9.4 | 1.0 | 10 | 0 | 94 | 67.7 | 133 | 9.52 | 1.27 | 23.3 | |
| 1,1-Dichloroethene | 9.16 | 1.0 | 10 | 0 | 91.6 | 50.1 | 125 | 9.12 | 0.438 | 31 | |
| trans-1,2-Dichloroethene | 8.49 | 1.0 | 10 | 0 | 84.9 | 56.9 | 132 | 8.58 | 1.05 | 66.1 | |
| 1,2-Dichloropropane | 8.1 | 1.0 | 10 | 0 | 81 | 71.4 | 125 | 8.06 | 0.495 | 26 | |
| trans-1,3-Dichloropropene | 11.19 | 1.0 | 10 | 0 | 112 | 69.9 | 130 | 11.22 | 0.268 | 27.9 | |
| cis-1,3-Dichloropropene | 9.9 | 1.0 | 10 | 0 | 99 | 66.9 | 134 | 10.02 | 1.20 | 28.7 | |
| Ethylbenzene | 10.73 | 1.0 | 10 | 0 | 107 | 60.6 | 144 | 10.73 | 0 | 25.2 | |
| Methylene chloride | 8.17 | 2.0 | 10 | 0 | 81.7 | 55.4 | 130 | 7.76 | 5.15 | 28.7 | |
| 1,1,2,2-Tetrachloroethane | 10.24 | 1.0 | 10 | 0 | 102 | 46.8 | 168 | 10.2 | 0.391 | 22.3 | |
| Tetrachloroethene | 10.45 | 1.0 | 10 | 0 | 104 | 60.1 | 144 | 10.22 | 2.23 | 29.7 | |
| Toluene | 10.29 | 1.0 | 10 | 0 | 103 | 69.7 | 130 | 10.18 | 1.07 | 25.4 | |
| 1,1,1-Trichloroethane | 9.48 | 1.0 | 10 | 0 | 94.8 | 63 | 136 | 9.4 | 0.847 | 29 | |
| 1,1,2-Trichloroethane | 9.88 | 1.0 | 10 | 0 | 98.8 | 40.6 | 165 | 10.02 | 1.41 | 25.9 | |
| Trichloroethene | 8.42 | 1.0 | 10 | 0 | 84.2 | 48.6 | 139 | 8.27 | 1.80 | 26.9 | |
| Vinyl chloride | 10.97 | 2.0 | 10 | 0 | 110 | 33 | 151 | 10.36 | 5.72 | 31.2 | |
| Surr: 4-Bromofluorobenzene | 10.72 | 0 | 10 | 0 | 107 | 75.2 | 115 | 0 | 0 | 0 | |
| Surr: Dibromofluoromethane | 10.34 | 0 | 10 | 0 | 103 | 92.7 | 119 | 0 | 0 | 0 | |
| Surr: 1,2-Dichloroethane-d4 | 11.44 | 0 | 10 | 0 | 114 | 88.2 | 132 | 0 | 0 | 0 | |
| Surr: Toluene-d8 | 11.39 | 0 | 10 | 0 | 114 | 89.3 | 116 | 0 | 0 | 0 | |

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# ICP
# DATA

# RAW DATA

Method: MTHD08 Sample Name: Blank Operator:
Comment:
Run Time: 04/01/08 08:21 Type: Std Mode: IR Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0009 | .0003 | .0007 | .0002 |
| Stddev | .0001 | .0000 | .0001 | .0000 |
| %RSD | 15.09 | 1.085 | 7.738 | 3.745 |
| #1 | -.0010 | .0003 | .0007 | .0002 |
| #2 | -.0008 | .0003 | .0008 | .0002 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0012 | .0049 | .0028 | .0024 |
| Stddev | .0001 | .0007 | .0013 | .0009 |
| %RSD | 9.174 | 15.15 | 46.93 | 36.57 |
| #1 | .0013 | .0054 | .0038 | .0030 |
| #2 | .0011 | .0044 | .0019 | .0018 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0050 | .0153 | .0012 | .0004 |
| Stddev | .0007 | .0011 | .0002 | .0004 |
| %RSD | 13.36 | 7.161 | 15.02 | 90.25 |
| #1 | -.0045 | .0145 | .0013 | .0007 |
| #2 | -.0055 | .0160 | .0011 | .0002 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0014 | .0015 | .0008 | .0003 |
| Stddev | .0001 | .0002 | .0000 | .0003 |
| %RSD | 7.465 | 13.71 | 2.908 | 100.5 |
| #1 | .0015 | .0014 | .0009 | .0006 |
| #2 | .0014 | .0017 | .0008 | .0001 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0021 | .0047 | .0024 | .0010 |
| Stddev | .0003 | .0012 | .0002 | .0001 |
| %RSD | 12.60 | 25.36 | 7.869 | 9.979 |
| #1 | .0023 | .0055 | .0025 | .0009 |
| #2 | .0019 | .0038 | .0023 | .0011 |

Sample Name: Blank Run Time: 04/01/08 08:21

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0002 | .0032 | .0038 | -.0608 |
| Stddev | .0001 | .0003 | .0016 | .0007 |
| %RSD | 31.83 | 10.02 | 41.93 | 1.095 |
| #1 | -.0001 | .0035 | .0049 | -.0603 |
| #2 | -.0002 | .0030 | .0027 | -.0612 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0003 | -.0010 | .0009 | .0006 |
| Stddev | .0000 | .0002 | .0000 | .0001 |
| %RSD | 7.709 | 20.37 | 4.010 | 9.787 |
| #1 | .0003 | -.0009 | .0009 | .0005 |
| #2 | .0002 | -.0012 | .0009 | .0006 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.0003 | .0006 | .0120 | .0257 |
| Stddev | .0002 | .0000 | .0029 | .0069 |
| %RSD | 62.79 | 2.023 | 23.93 | 26.68 |
| #1 | -.0001 | .0006 | .0140 | .0306 |
| #2 | -.0004 | .0006 | .0100 | .0209 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0004 | -.0008 | .0000 | .0004 |
| Stddev | .0001 | .0001 | .000 | .0003 |
| %RSD | 33.48 | 17.79 | 629.4 | 69.86 |
| #1 | .0003 | -.0008 | .0001 | .0006 |
| #2 | .0005 | -.0007 | -.0002 | .0002 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0001 | .0000 | -.0189 | .2487 |
| Stddev | .0001 | .0000 | .0236 | .0141 |
| %RSD | 48.15 | 141.4 | 124.8 | 5.682 |
| #1 | .0001 | .0000 | -.0022 | .2387 |
| #2 | .0002 | .0000 | -.0355 | .2587 |

Sample Name: Blank Run Time: 04/01/08 08:21

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | Cts/S | Cts/S | Cts/S |
| Avg | .0777 | .0013 | .0021 |
| Stddev | .0000 | .0000 | .0000 |
| %RSD | .0001 | 3.736 | 1.398 |
| | | | |
| #1 | .0777 | .0013 | .0021 |
| #2 | .0777 | .0013 | .0022 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.627 | 132.37 |
| Stddev | .797 | 1.44 |
| %RSD | 1.1449 | 1.0856 |
| | | |
| #1 | 70.191 | 133.38 |
| #2 | 69.063 | 131.35 |

Method: MTHD08 Sample Name: std. 5 Operator:
Comment:
Run Time: 04/01/08 08:26 Type: Std Mode: IR Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0145 | .0704 | .0842 | .1046 |
| Stddev | .0003 | .0001 | .0007 | .0001 |
| %RSD | 1.912 | .1335 | .8727 | .0489 |
| #1 | .0143 | .0704 | .0837 | .1046 |
| #2 | .0147 | .0705 | .0848 | .1046 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .3971 | 1.597 | 4.699 | 8.319 |
| Stddev | .0007 | .001 | .009 | .000 |
| %RSD | .1712 | .0317 | .1870 | .0021 |
| #1 | .3976 | 1.598 | 4.693 | 8.319 |
| #2 | .3966 | 1.597 | 4.705 | 8.319 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.269 | .0444 | 1.370 | 3.091 |
| Stddev | .001 | .0017 | .001 | .014 |
| %RSD | .0886 | 3.768 | .0990 | .4483 |
| #1 | 1.270 | .0432 | 1.371 | 3.101 |
| #2 | 1.269 | .0456 | 1.369 | 3.081 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.685 | .8083 | .3765 | .3693 |
| Stddev | .008 | .0014 | .0015 | .0002 |
| %RSD | .4481 | .1708 | .3886 | .0636 |
| #1 | 1.691 | .8093 | .3775 | .3691 |
| #2 | 1.680 | .8073 | .3755 | .3694 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .9885 | 4.218 | .8263 | .6356 |
| Stddev | .0024 | .011 | .0039 | .0031 |
| %RSD | .2402 | .2631 | .4705 | .4808 |
| #1 | .9902 | 4.210 | .8236 | .6334 |
| #2 | .9868 | 4.226 | .8291 | .6377 |

Sample Name: std. 5 Run Time: 04/01/08 08:26

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .1344 | .8658 | .8661 | 6.248 |
| Stddev | .0004 | .0035 | .0026 | .023 |
| %RSD | .2900 | .4038 | .3005 | .3610 |
| #1 | .1341 | .8682 | .8643 | 6.232 |
| #2 | .1347 | .8633 | .8680 | 6.264 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .3911 | 1.342 | .1854 | .2311 |
| Stddev | .0006 | .005 | .0002 | .0003 |
| %RSD | .1479 | .3943 | .1199 | .1291 |
| #1 | .3907 | 1.346 | .1852 | .2309 |
| #2 | .3915 | 1.338 | .1856 | .2313 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .1990 | .0871 | .4198 | 1.055 |
| Stddev | .0000 | .0001 | .0012 | .002 |
| %RSD | .0077 | .1165 | .2852 | .1444 |
| #1 | .1990 | .0872 | .4206 | 1.054 |
| #2 | .1990 | .0871 | .4189 | 1.056 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0378 | 2.355 | .6740 | .0654 |
| Stddev | .0001 | .010 | .0025 | .0002 |
| %RSD | .2967 | .4080 | .3746 | .2953 |
| #1 | .0379 | 2.348 | .6722 | .0653 |
| #2 | .0377 | 2.362 | .6758 | .0655 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0787 | .0372 | -12.19 | 24.10 |
| Stddev | .0006 | .0002 | .01 | .08 |
| %RSD | .7660 | .4056 | .0645 | .3454 |
| #1 | .0791 | .0373 | -12.19 | 24.04 |
| #2 | .0783 | .0371 | -12.20 | 24.15 |

Sample Name: std. 5 Run Time: 04/01/08 08:26

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | Cts/S | Cts/S | Cts/S |
| Avg | 13.78 | .3302 | .8241 |
| Stddev | .05 | .0002 | .0030 |
| %RSD | .3304 | .0500 | .3610 |
| | | | |
| #1 | 13.75 | .3304 | .8262 |
| #2 | 13.81 | .3301 | .8220 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 68.886 | 129.07 |
| Stddev | .046 | .19 |
| %RSD | .06612 | .15073 |
| | | |
| #1 | 68.853 | 129.21 |
| #2 | 68.918 | 128.94 |

Method: MTHD08 Sample Name: std. 10 Operator:
Comment:
Run Time: 04/01/08 08:30 Type: Std Mode: IR Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0292 | .1339 | .1590 | .2091 |
| Stddev | .0016 | .0092 | .0107 | .0036 |
| %RSD | 5.396 | 6.867 | 6.722 | 1.729 |
| #1 | .0303 | .1404 | .1665 | .2117 |
| #2 | .0281 | .1274 | .1514 | .2066 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .8017 | 3.193 | 9.321 | 15.33 |
| Stddev | .0132 | .058 | .200 | .97 |
| %RSD | 1.652 | 1.799 | 2.147 | 6.343 |
| #1 | .8111 | 3.234 | 9.463 | 16.02 |
| #2 | .7924 | 3.153 | 9.180 | 14.64 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2.531 | .0758 | 2.700 | 6.132 |
| Stddev | .051 | .0004 | .053 | .111 |
| %RSD | 2.015 | .5040 | 1.982 | 1.811 |
| #1 | 2.567 | .0761 | 2.737 | 6.210 |
| #2 | 2.495 | .0755 | 2.662 | 6.053 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3.363 | 1.618 | .7542 | .7410 |
| Stddev | .070 | .034 | .0164 | .0233 |
| %RSD | 2.086 | 2.071 | 2.177 | 3.140 |
| #1 | 3.413 | 1.642 | .7658 | .7575 |
| #2 | 3.314 | 1.595 | .7425 | .7246 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.966 | 8.434 | 1.525 | 1.265 |
| Stddev | .042 | .224 | .097 | .038 |
| %RSD | 2.114 | 2.654 | 6.368 | 2.977 |
| #1 | 1.996 | 8.592 | 1.593 | 1.291 |
| #2 | 1.937 | 8.276 | 1.456 | 1.238 |

Sample Name: std. 10 Run Time: 04/01/08 08:30

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .2745 | 1.745 | 1.734 | 12.40 |
| Stddev | .0078 | .035 | .034 | .62 |
| %RSD | 2.838 | 2.018 | 1.978 | 4.985 |
| #1 | .2800 | 1.770 | 1.758 | 12.84 |
| #2 | .2690 | 1.720 | 1.710 | 11.96 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .7784 | 2.685 | .3736 | .4672 |
| Stddev | .0172 | .054 | .0073 | .0102 |
| %RSD | 2.207 | 1.998 | 1.953 | 2.180 |
| #1 | .7905 | 2.723 | .3787 | .4744 |
| #2 | .7662 | 2.647 | .3684 | .4600 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .3988 | .1714 | .8359 | 2.106 |
| Stddev | .0065 | .0033 | .0165 | .040 |
| %RSD | 1.624 | 1.915 | 1.974 | 1.879 |
| #1 | .4033 | .1737 | .8476 | 2.134 |
| #2 | .3942 | .1691 | .8243 | 2.078 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0768 | 4.634 | 1.286 | .1300 |
| Stddev | .0012 | .255 | .079 | .0019 |
| %RSD | 1.558 | 5.494 | 6.129 | 1.472 |
| #1 | .0776 | 4.814 | 1.342 | .1313 |
| #2 | .0760 | 4.454 | 1.231 | .1286 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .1587 | .0715 | -24.08 | 47.30 |
| Stddev | .0028 | .0039 | .12 | .36 |
| %RSD | 1.771 | 5.484 | .5117 | .7651 |
| #1 | .1607 | .0743 | -24.17 | 47.55 |
| #2 | .1567 | .0688 | -24.00 | 47.04 |

Sample Name: std. 10 Run Time: 04/01/08 08:30

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | Cts/S | Cts/S | Cts/S |
| Avg | 27.09 | .6536 | 1.649 |
| Stddev | .34 | .0133 | .035 |
| %RSD | 1.255 | 2.028 | 2.114 |
| | | | |
| #1 | 27.33 | .6630 | 1.674 |
| #2 | 26.85 | .6442 | 1.624 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 67.705 | 133.18 |
| Stddev | 1.378 | 7.11 |
| %RSD | 2.0350 | 5.3356 |
| | | |
| #1 | 66.731 | 128.16 |
| #2 | 68.680 | 138.21 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ag3280 | 0.0303 | -0.0009 | 0.9999408 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -3.8182e-050 | 0 | | -0.00087997 |
| std. 10 | 1 | 0.99236 | -0.00764 | -0.764 | 0.029184 |
| std. 5 | 0.5 | 0.50764 | 0.00764 | 1.53 | 0.0145 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Al3944 | 0.0136 | 0.0003 | 0.9997348 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000809110 | 0 | | 0.00031875 |
| std. 5 | 5 | 5.1664 | 0.166 | 3.33 | 0.070425 |
| std. 10 | 10 | 9.8473 | -0.153 | -1.53 | 0.13393 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Al3961 | 0.0161 | 0.0007 | 0.9996670 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000905870 | 0 | | 0.00071324 |
| std. 10 | 10 | 9.8188 | -0.181 | -1.81 | 0.15899 |
| std. 5 | 5 | 5.1812 | 0.181 | 3.62 | 0.084237 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| As1890 | 0.0209 | 0.0002 | 0.9999999 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 1.4983e-050 | 0 | | 0.00023125 |
| std. 10 | 10 | 10.002 | 0.0024 | 0.024 | 0.20915 |
| std. 5 | 5 | 4.9967 | -0.0033 | -0.0659 | 0.10459 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| B_2089 | 0.0798 | 0.0012 | 0.9999865 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000182640 | 0 | | 0.0012037 |
| std. 10 | 10 | 10.037 | 0.0365 | 0.365 | 0.80175 |
| std. 5 | 5 | 4.9635 | -0.0365 | -0.731 | 0.3971 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| B_2496 | 0.3187 | 0.0049 | 0.9999998 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 2.0114e-050 | 0 | | 0.0049168 |
| std. 10 | 10 | 10.004 | 0.00402 | 0.0402 | 3.1933 |
| std. 5 | 5 | 4.996 | -0.00402 | -0.0805 | 1.5972 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ba2335 | 0.9343 | 0.0030 | 0.9999930 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000131640 | 0 | | 0.0028279 |
| std. 10 | 10 | 9.974 | -0.026 | -0.26 | 9.3213 |
| std. 5 | 5 | 5.0265 | 0 | | 4.699 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ba4554 | 1.5760 | 0.0046 | 0.9992294 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.00137850 | | 0 | 0.0023941 |
| std. 10 | 10 | 9.7243 | -0.276 | -2.76 | 15.33 |
| std. 5 | 5 | 5.2757 | 0.276 | 5.51 | 8.3193 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Be2348 | 10.1455 | -0.0050 | 0.9999970 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -2.158e-060 | | 0 | -0.0049806 |
| std. 10 | 0.25 | 0.24992 | -8.16e-05 | -0.0326 | 2.5306 |
| std. 5 | 0.125 | 0.12561 | 0.000607 | 0.485 | 1.2694 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ca1840 | 0.0060 | 0.0152 | 0.9998387 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000630430 | | 0 | 0.015252 |
| std. 10 | 10 | 10.126 | 0.126 | 1.26 | 0.075817 |
| std. 5 | 5 | 4.8739 | -0.126 | -2.52 | 0.044401 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cd2144 | 0.2711 | 0.0013 | 0.9999775 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000235510 | | 0 | 0.0011874 |
| std. 10 | 10 | 9.9533 | -0.0467 | -0.467 | 2.6996 |
| std. 5 | 5 | 5.0473 | 0.0473 | 0.947 | 1.3696 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cd2265 | 0.6146 | 0.0005 | 0.9999924 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000136980 | | 0 | 0.00044437 |
| std. 10 | 10 | 9.9751 | -0.0249 | -0.249 | 6.1315 |
| std. 5 | 5 | 5.0286 | 0.0286 | 0.573 | 3.0913 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Co2286 | 0.3364 | 0.0015 | 0.9999996 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -3.1104e-050 | | 0 | 0.001443 |
| std. 10 | 10 | 9.994 | -0.00597 | -0.0597 | 3.3632 |
| std. 5 | 5 | 5.0063 | 0.00635 | 0.127 | 1.6855 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cr2061 | 0.1616 | 0.0015 | 0.9999995 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 3.4303e-050 | | 0 | 0.0015246 |
| std. 10 | 10 | 10.006 | 0 | | ..6184 |

| | | | | | |
|---|---|---|---|---|---|
| std. 5 | 5 | 4.9929 | -0.00709 | -0.142 | 0.8083 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cu2247 | 0.0752 | 0.0008 | 0.9999992 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 4.462e-05 | 0 | 0 | 0.00083732 |
| std. 10 | 10 | 10.012 | 0.0119 | 0.119 | 0.75416 |
| std. 5 | 5 | 4.9926 | -0.00742 | -0.148 | 0.37649 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Cu3247 | 0.0740 | 0.0003 | 0.9999983 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 6.4503e-050 | | 0 | 0.00033294 |
| std. 10 | 10 | 10.012 | 0.0124 | 0.124 | 0.74104 |
| std. 5 | 5 | 4.9868 | -0.0132 | -0.264 | 0.36925 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Fe2404 | 0.1967 | 0.0022 | 0.9999979 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -7.212e-050 | | 0 | 0.002136 |
| std. 10 | 10 | 9.9856 | -0.0144 | -0.144 | 1.9664 |
| std. 5 | 5 | 5.0144 | 0.0144 | 0.288 | 0.98851 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Fe2599 | 0.8428 | 0.0047 | 1.0000000 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 5.3663e-060 | | 0 | 0.004683 |
| std. 10 | 10 | 10.001 | 0.00107 | 0.0107 | 8.434 |
| std. 5 | 5 | 4.9989 | -0.00107 | -0.0215 | 4.218 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| K_7664 | 0.0156 | 0.0026 | 0.9992750 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.01337 | 0 | 0 | 0.0023844 |
| std. 10 | 100 | 97.326 | -2.67 | -2.67 | 1.5246 |
| std. 5 | 50 | 52.674 | 2.67 | 5.35 | 0.82633 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mg2802 | 0.1266 | 0.0010 | 0.9999980 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -6.9361e-050 | | 0 | 0.0010211 |
| std. 10 | 10 | 9.9861 | -0.0139 | -0.139 | 1.2648 |
| std. 5 | 5 | 5.0139 | 0.0139 | 0.277 | 0.63556 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mg2852 | 0.0273 | -0.0002 | 0.9999551 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.0003324 | 0 | 0 | -0.00018371 |
| std. 10 | 10 | 10.066 | 0.0665 | 0.665 | 0.27448 |
| std. 5 | 5 | 4.9335 | -0.0665 | -1.33 | 0.13442 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mn2576 | 1.7360 | 0.0032 | 0.9999899 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 1.5796e-050 | | 0 | 0.0032363 |
| std. 10 | 1 | 1.0032 | 0.00321 | 0.321 | 1.7447 |
| std. 5 | 0.5 | 0.49687 | -0.00313 | -0.627 | 0.86575 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Mo2020 | 0.1729 | 0.0038 | 0.9999988 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 5.4139e-050 | | 0 | 0.0037715 |
| std. 10 | 10 | 10.011 | 0.0108 | 0.108 | 1.7341 |
| std. 5 | 5 | 4.9892 | -0.0108 | -0.217 | 0.86614 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Na5889 | 0.1251 | -0.0605 | 0.9999825 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.00207330 | | 0 | -0.060772 |
| std. 10 | 100 | 99.585 | -0.415 | -0.415 | 12.4 |
| std. 5 | 50 | 50.415 | 0.415 | 0.829 | 6.2478 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ni2216 | 0.0779 | 0.0003 | 0.9999976 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -7.6801e-050 | | 0 | 0.00025511 |
| std. 10 | 10 | 9.9846 | -0.0154 | -0.154 | 0.77837 |
| std. 5 | 5 | 5.0154 | 0.0154 | 0.307 | 0.39111 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ni2316 | 0.2686 | -0.0010 | 1.0000000 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -4.6918e-060 | | 0 | -0.0010261 |
| std. 10 | 10 | 9.9991 | -0.000938 | -0.00938 | 2.6847 |
| std. 5 | 5 | 5.0009 | 0.000939 | 0.0188 | 1.3422 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Pb2203 | 0.0371 | 0.0009 | 0.9999892 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000163590 | | 0 | 0.00087713 |
| std. 5 | 5 | 4.9681 | -0.0319 | -0.638 | 0.1854 |
| std. 10 | 10 | 10.034 | 0 | | ).37358 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sb2068 | 0.0465 | 0.0006 | 0.9999834 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000202550 | 0 | | 0.00058654 |
| std. 10 | 10 | 10.041 | 0.0405 | 0.405 | 0.46721 |
| std. 5 | 5 | 4.9595 | -0.0405 | -0.81 | 0.23107 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sb2175 | 0.0399 | -0.0003 | 0.9999998 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 2.1521e-050 | 0 | | -0.00025614 |
| std. 10 | 10 | 10.004 | 0.0043 | 0.043 | 0.39876 |
| std. 5 | 5 | 4.9957 | -0.0043 | -0.0861 | 0.19899 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Se1960 | 0.0171 | 0.0006 | 0.9999808 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000217460 | 0 | | 0.00063415 |
| std. 10 | 10 | 9.9577 | -0.0423 | -0.423 | 0.17137 |
| std. 5 | 5 | 5.0441 | 0.0441 | 0.882 | 0.087123 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Si2124 | 0.0821 | 0.0120 | 0.9999883 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000169580 | 0 | | 0.011991 |
| std. 10 | 10 | 10.034 | 0.0339 | 0.339 | 0.83592 |
| std. 5 | 5 | 4.9661 | -0.0339 | -0.678 | 0.41977 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Si2516 | 0.2073 | 0.0257 | 0.9999874 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000176010 | 0 | | 0.025707 |
| std. 10 | 10 | 10.035 | 0.0352 | 0.352 | 2.106 |
| std. 5 | 5 | 4.9648 | -0.0352 | -0.704 | 1.0549 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sn1899 | 0.0076 | 0.0004 | 0.9999542 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000335880 | 0 | | 0.00038356 |
| std. 10 | 10 | 10.071 | 0.0709 | 0.709 | 0.076797 |
| std. 5 | 5 | 4.9347 | -0.0653 | -1.31 | 0.037824 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Sr4077 | 4.6530 | -0.0006 | 0.9999694 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -2.7474e-050 | 0 | | -0.00075415 |
| std. 10 | 1 | 0.99604 | - | | .6339 |

| | | | | | |
|---|---|---|---|---|---|
| std. 5 | 0.5 | 0.50626 | 0.00626 | 1.25 | 2.355 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Ti3349 | 0.1307 | 0.0001 | 0.9997483 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000787450 | 0 | | -4.3422e-05 |
| std. 10 | 10 | 9.8425 | -0.157 | -1.57 | 1.2863 |
| std. 5 | 5 | 5.1575 | 0.157 | 3.15 | 0.67403 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Tl1908 | 0.0130 | 0.0004 | 0.9999984 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -6.2751e-050 | 0 | | 0.00038133 |
| std. 10 | 10 | 9.9874 | -0.0126 | -0.126 | 0.12995 |
| std. 5 | 5 | 5.0126 | 0.0126 | 0.251 | 0.065412 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Tl1908 | 0.0158 | 0.0001 | 0.9999900 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 0.000157070 | 0 | | 0.00014396 |
| std. 10 | 10 | 10.031 | 0.0314 | 0.314 | 0.15872 |
| std. 5 | 5 | 4.9686 | -0.0314 | -0.628 | 0.078688 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| V_2924 | 0.0072 | 0.0000 | 0.9998355 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000636680 | 0 | | 2.4971e-05 |
| std. 10 | 10 | 9.8728 | -0.127 | -1.27 | 0.071524 |
| std. 5 | 5 | 5.1274 | 0.127 | 2.55 | 0.03716 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| V_3093 | -2.4158 | -0.0193 | -0.9999846 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000194590 | 0 | | -0.018874 |
| std. 5 | 5 | 5.0389 | 0.0389 | 0.778 | -12.192 |
| std. 10 | 10 | 9.9611 | -0.0389 | -0.389 | -24.083 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| V_3102 | 4.7263 | 0.2498 | 0.9999792 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Found | Difference Conc | % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000226460 | 0 | | 0.24869 |
| std. 5 | 5 | 5.0453 | 0.0453 | 0.906 | 24.095 |
| std. 10 | 10 | 9.9547 | -0.0453 | -0.453 | 47.298 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| V_3110 | 2.7143 | 0.0784 | 0.9999768 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Concentration Found | Difference Conc | Difference % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.000239180 | 0 | 0 | 0.077716 |
| std. 5 | 5 | 5.0478 | 0.0478 | 0.957 | 13.78 |
| std. 10 | 10 | 9.9522 | -0.0478 | -0.478 | 27.092 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Zn2062 | 0.0654 | 0.0013 | 0.9999918 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Concentration Found | Difference Conc | Difference % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | -0.00014190 | 0 | 0 | 0.0013003 |
| std. 10 | 10 | 9.9724 | -0.0276 | -0.276 | 0.65361 |
| std. 5 | 5 | 5.0288 | 0.0288 | 0.576 | 0.33024 |

| El Name | Slope | Y-int | Correlation | Date Stdized |
|---|---|---|---|---|
| Zn2062 | 0.1646 | 0.0021 | 0.9999996 | 04/01/08 08:35:11 |

| Standard Name | Concentration Stated | Concentration Found | Difference Conc | Difference % | Signal (S)IR |
|---|---|---|---|---|---|
| Blank | 0 | 3.0917e-050 | 0 | 0 | 0.0021337 |
| std. 10 | 10 | 10.004 | 0.00418 | 0.0418 | 1.6491 |
| std. 5 | 5 | 4.9928 | -0.00718 | -0.144 | 0.82406 |

Method: MTHD08 Sample Name: ICV Operator:
Comment:
Run Time: 04/01/08 08:37 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2520 | 2.081 | 2.054 | 1.033 |
| Stddev | .0109 | .054 | .034 | .007 |
| %RSD | 4.327 | 2.595 | 1.668 | .6763 |
| #1 | .2443 | 2.043 | 2.030 | 1.028 |
| #2 | .2597 | 2.120 | 2.079 | 1.038 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.025 | 1.013 | 2.071 | 2.202 |
| Stddev | .006 | .003 | .007 | .046 |
| %RSD | .5510 | .2924 | .3624 | 2.071 |
| #1 | 1.021 | 1.011 | 2.066 | 2.170 |
| #2 | 1.029 | 1.015 | 2.076 | 2.235 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0510 | 5.269 | .5253 | .5182 |
| Stddev | .0001 | .155 | .0006 | .0012 |
| %RSD | .1613 | 2.952 | .1087 | .2235 |
| #1 | .0510 | 5.159 | .5257 | .5174 |
| #2 | .0511 | 5.379 | .5249 | .5190 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5175 | .2019 | .2582 | .2387 |
| Stddev | .0012 | .0004 | .0017 | .0100 |
| %RSD | .2305 | .2131 | .6567 | 4.195 |
| #1 | .5183 | .2022 | .2570 | .2317 |
| #2 | .5166 | .2016 | .2594 | .2458 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.027 | 1.032 | 5.312 | 5.084 |
| Stddev | .001 | .004 | .154 | .037 |
| %RSD | .0844 | .4257 | 2.897 | .7216 |
| #1 | 1.027 | 1.029 | 5.203 | 5.058 |
| #2 | 1.026 | 1.035 | 5.421 | 5.110 |

Sample Name: ICV Run Time: 04/01/08 08:37

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.090 | .5065 | 1.013 | 11.36 |
| Stddev | .055 | .0005 | .004 | .28 |
| %RSD | 1.073 | .1002 | .3456 | 2.477 |
| #1 | 5.051 | .5062 | 1.015 | 11.16 |
| #2 | 5.128 | .5069 | 1.010 | 11.56 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .5086 | .5162 | .9774 | .9942 |
| Stddev | .0009 | .0010 | .0180 | .0026 |
| %RSD | .1779 | .1959 | 1.846 | .2582 |
| #1 | .5080 | .5155 | .9646 | .9924 |
| #2 | .5093 | .5170 | .9902 | .9960 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.014 | 1.031 | .9928 | .9989 |
| Stddev | .007 | .028 | .0007 | .0012 |
| %RSD | .6545 | 2.690 | .0697 | .1183 |
| #1 | 1.010 | 1.012 | .9923 | .9980 |
| #2 | 1.019 | 1.051 | .9933 | .9997 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .9469 | .2224 | 1.013 | .9982 |
| Stddev | .0457 | .0051 | .018 | .0152 |
| %RSD | 4.828 | 2.273 | 1.796 | 1.526 |
| #1 | .9146 | .2188 | 1.0000 | .9874 |
| #2 | .9792 | .2259 | 1.026 | 1.009 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .9805 | .4064 | .1429 | .5019 |
| Stddev | .0046 | .0295 | .0153 | .0027 |
| %RSD | .4653 | 7.261 | 10.68 | .5295 |
| #1 | .9773 | .3855 | .1537 | .5000 |
| #2 | .9837 | .4273 | .1321 | .5038 |

Sample Name: ICV Run Time: 04/01/08 08:37

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | .4870 | .5117 | .5177 |
| Stddev | .0055 | .0075 | .0025 |
| %RSD | 1.128 | 1.461 | .4857 |
| | | | |
| #1 | .4831 | .5064 | .5160 |
| #2 | .4909 | .5170 | .5195 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.226 | 131.91 |
| Stddev | .320 | 2.62 |
| %RSD | .46175 | 1.9839 |
| | | |
| #1 | 69.452 | 133.76 |
| #2 | 69.000 | 130.06 |

Method: MTHD08 Sample Name: ICB Operator:
Comment:
Run Time: 04/01/08 08:43 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0019 | -.0131 | -.0062 | .0050 |
| Stddev | .0009 | .0124 | .0110 | .0032 |
| %RSD | 50.11 | 94.19 | 179.1 | 64.80 |
| #1 | -.0025 | -.0044 | -.0140 | .0072 |
| #2 | -.0012 | -.0219 | .0016 | .0027 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0041 | .0030 | -.0016 | -.0018 |
| Stddev | .0020 | .0015 | .0004 | .0001 |
| %RSD | 49.12 | 48.03 | 22.66 | 4.722 |
| #1 | .0055 | .0041 | -.0014 | -.0018 |
| #2 | .0027 | .0020 | -.0019 | -.0019 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0232 | -.0002 | -.0003 |
| Stddev | .0000 | .1927 | .0010 | .0001 |
| %RSD | 40.36 | 830.7 | 486.9 | 32.44 |
| #1 | .0000 | -.1595 | -.0009 | -.0004 |
| #2 | .0000 | .1131 | .0005 | -.0003 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0006 | -.0004 | .0016 | -.0079 |
| Stddev | .0001 | .0005 | .0018 | .0061 |
| %RSD | 11.68 | 131.7 | 109.8 | 77.20 |
| #1 | .0006 | -.0007 | .0029 | -.0036 |
| #2 | .0005 | .0000 | .0004 | -.0122 |

| Elem | Fe2599 | K_7664 | Mg2802 | Mg2852 |
|---|---|---|---|---|
| Line | 259.940 {129} | 766.490 { 44} | 280.270 {119} | 285.213 {117} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0014 | .0033 | -.0008 | .0036 |
| Stddev | .0002 | .0009 | .0009 | .0000 |
| %RSD | 14.91 | 28.87 | 104.9 | .1236 |
| #1 | -.0015 | .0039 | -.0002 | .0036 |
| #2 | -.0012 | .0026 | -.0015 | .0036 |

Method: MTHD08 Sample Name: CCV Operator:
Comment:
Run Time: 04/01/08 12:39 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.391 | 10.53 | 10.55 | 4.799 |
| Stddev | .065 | .52 | .52 | .079 |
| %RSD | 4.682 | 4.969 | 4.973 | 1.642 |
| #1 | 1.437 | 10.90 | 10.93 | 4.743 |
| #2 | 1.345 | 10.16 | 10.18 | 4.854 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.994 | 4.761 | 9.347 | 10.66 |
| Stddev | .125 | .113 | .208 | .48 |
| %RSD | 2.507 | 2.379 | 2.226 | 4.506 |
| #1 | 4.905 | 4.681 | 9.200 | 11.00 |
| #2 | 5.082 | 4.841 | 9.494 | 10.32 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2385 | 27.26 | 2.554 | 2.484 |
| Stddev | .0045 | .69 | .056 | .055 |
| %RSD | 1.901 | 2.528 | 2.180 | 2.216 |
| #1 | .2353 | 26.77 | 2.514 | 2.445 |
| #2 | .2417 | 27.75 | 2.593 | 2.522 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.477 | .9887 | 1.263 | 1.194 |
| Stddev | .058 | .0155 | .033 | .012 |
| %RSD | 2.341 | 1.567 | 2.600 | .9977 |
| #1 | 2.436 | .9778 | 1.239 | 1.186 |
| #2 | 2.518 | .9997 | 1.286 | 1.203 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.957 | 4.699 | 25.99 | 23.71 |
| Stddev | .119 | .108 | .97 | .28 |
| %RSD | 2.393 | 2.305 | 3.730 | 1.190 |
| #1 | 4.874 | 4.622 | 26.68 | 23.51 |
| #2 | 5.041 | 4.775 | 25.31 | 23.91 |

Sample Name: CCV Run Time: 04/01/08 12:39

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 24.60 | 2.425 | 4.889 | 26.85 |
| Stddev | .33 | .059 | .128 | 1.08 |
| %RSD | 1.331 | 2.419 | 2.614 | 4.042 |
| | | | | |
| #1 | 24.37 | 2.384 | 4.799 | 27.62 |
| #2 | 24.83 | 2.467 | 4.980 | 26.08 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.373 | 2.531 | 4.775 | 4.643 |
| Stddev | .050 | .053 | .122 | .100 |
| %RSD | 2.124 | 2.098 | 2.550 | 2.162 |
| | | | | |
| #1 | 2.337 | 2.494 | 4.689 | 4.572 |
| #2 | 2.408 | 2.569 | 4.861 | 4.714 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.872 | 4.961 | 4.812 | 4.748 |
| Stddev | .123 | .134 | .082 | .088 |
| %RSD | 2.533 | 2.694 | 1.711 | 1.856 |
| | | | | |
| #1 | 4.784 | 4.867 | 4.754 | 4.686 |
| #2 | 4.959 | 5.056 | 4.870 | 4.810 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.838 | 1.250 | 5.570 | 5.106 |
| Stddev | .126 | .067 | .322 | .151 |
| %RSD | 2.597 | 5.362 | 5.780 | 2.952 |
| | | | | |
| #1 | 4.749 | 1.297 | 5.797 | 4.999 |
| #2 | 4.927 | 1.202 | 5.342 | 5.212 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.921 | 2.450 | .7310 | 2.548 |
| Stddev | .106 | .118 | .0120 | .019 |
| %RSD | 2.164 | 4.829 | 1.645 | .7501 |
| | | | | |
| #1 | 4.845 | 2.533 | .7395 | 2.561 |
| #2 | 4.996 | 2.366 | .7225 | 2.534 |

Sample Name: CCV Run Time: 04/01/08 12:39

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | 2.509 | 2.451 | 2.524 |
| Stddev | .016 | .052 | .058 |
| %RSD | .6229 | 2.126 | 2.314 |
| | | | |
| #1 | 2.520 | 2.415 | 2.483 |
| #2 | 2.498 | 2.488 | 2.565 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 71.110 | 123.51 |
| Stddev | 1.415 | 5.33 |
| %RSD | 1.9899 | 4.3194 |
| | | |
| #1 | 72.111 | 119.74 |
| #2 | 70.110 | 127.28 |

Method: MTHD08 Sample Name: CCB Operator:
Comment:
Run Time: 04/01/08 12:44 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0013 | .0094 | .0037 | .0045 |
| Stddev | .0036 | .0072 | .0030 | .0068 |
| %RSD | 270.0 | 75.99 | 81.30 | 152.5 |
| #1 | .0039 | .0145 | .0016 | -.0004 |
| #2 | -.0012 | .0044 | .0059 | .0093 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0056 | .0024 | .0007 | -.0005 |
| Stddev | .0013 | .0010 | .0013 | .0003 |
| %RSD | 23.33 | 39.64 | 184.5 | 52.94 |
| #1 | .0047 | .0031 | .0016 | -.0003 |
| #2 | .0066 | .0018 | -.0002 | -.0007 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.0250 | -.0003 | -.0003 |
| Stddev | .0001 | .1482 | .0011 | .0002 |
| %RSD | 139.4 | 592.0 | 328.9 | 81.99 |
| #1 | .0001 | -.1298 | -.0011 | -.0004 |
| #2 | .0000 | .0798 | .0004 | -.0001 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0004 | -.0001 | -.0003 | -.0055 |
| Stddev | .0003 | .0001 | .0019 | .0040 |
| %RSD | 69.56 | 238.5 | 575.5 | 71.50 |
| #1 | -.0006 | .0000 | .0010 | -.0083 |
| #2 | -.0002 | -.0002 | -.0017 | -.0027 |

| Elem | Fe2599 | K_7664 | Mg2802 | Mg2852 |
|---|---|---|---|---|
| Line | 259.940 {129} | 766.490 { 44} | 280.270 {119} | 285.213 {117} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0004 | -.0095 | .0001 | -.0026 |
| Stddev | .0002 | .0067 | .0003 | .0112 |
| %RSD | 54.87 | 70.69 | 214.2 | 434.2 |
| #1 | .0003 | -.0048 | .0003 | -.0105 |
| #2 | .0006 | -.0143 | -.0001 | .0053 |

Sample Name: CCB Run Time: 04/01/08 12:44

| Elem | Mn2576 | Mo2020 | Na5889 | Ni2216 |
|---|---|---|---|---|
| Line | 257.610 {131} | 202.030 {166} | 588.995 { 57} | 221.647 {152} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0001 | -.0032 | -.0360 | -.0009 |
| Stddev | .0000 | .0055 | .0034 | .0011 |
| %RSD | 30.80 | 172.2 | 9.426 | 122.6 |
| #1 | .0001 | .0007 | -.0384 | -.0017 |
| #2 | .0001 | -.0070 | -.0336 | -.0001 |

| Elem | Ni2316 | Pb2203 | Sb2068 | Sb2175 |
|---|---|---|---|---|
| Line | 231.604 {145} | 220.353 {152} | 206.833 {162} | 217.581 {154} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0001 | -.0058 | .0022 | .0058 |
| Stddev | .0015 | .0031 | .0002 | .0059 |
| %RSD | 1769. | 54.21 | 7.223 | 101.6 |
| #1 | -.0012 | -.0080 | .0024 | .0016 |
| #2 | .0010 | -.0036 | .0021 | .0100 |

| Elem | Se1960 | Si2124 | Si2516 | Sn1899 |
|---|---|---|---|---|
| Line | 196.090 {171} | 212.412 {158} | 251.612 {134} | 189.989 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0021 | .0312 | .0347 | -.0147 |
| Stddev | .0043 | .0001 | .0026 | .0019 |
| %RSD | 209.9 | .3716 | 7.620 | 12.72 |
| #1 | .0010 | .0313 | .0366 | -.0134 |
| #2 | -.0051 | .0311 | .0328 | -.0160 |

| Elem | Sr4077 | Ti3349 | Tl1908 | Tl1908 |
|---|---|---|---|---|
| Line | 407.771 { 82} | 334.941 {100} | 190.864 {175} | 190.864 {176} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0001 | .0001 | .0055 | .0016 |
| Stddev | .0000 | .0006 | .0237 | .0022 |
| %RSD | 28.21 | 865.1 | 431.8 | 141.1 |
| #1 | .0001 | -.0003 | .0223 | .0032 |
| #2 | .0001 | .0005 | -.0113 | .0000 |

| Elem | V_2924 | V_3093 | V_3102 | V_3110 |
|---|---|---|---|---|
| Line | 292.402 {115} | 309.311 {108} | 310.230 {108} | 311.071 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0017 | -.0046 | -.0072 | -.0002 |
| Stddev | .0033 | .0042 | .0032 | .0023 |
| %RSD | 189.8 | 92.62 | 44.03 | 969.0 |
| #1 | -.0041 | -.0075 | -.0094 | .0014 |
| #2 | .0006 | -.0016 | -.0049 | -.0019 |

Sample Name: CCB Run Time: 04/01/08 12:44

| Elem | Zn2062 | Zn2062 |
|---|---|---|
| Line | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm |
| Avg | -.0025 | -.0008 |
| Stddev | .0000 | .0002 |
| %RSD | .9118 | 29.14 |
| | | |
| #1 | -.0024 | -.0010 |
| #2 | -.0025 | -.0007 |
| | | |
| Int. Std. | Y_2243 | Y_3710 |
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 70.078 | 131.08 |
| Stddev | .780 | .14 |
| %RSD | 1.1132 | .10942 |
| | | |
| #1 | 69.526 | 131.18 |
| #2 | 70.629 | 130.98 |

Method: MTHD08 Sample Name: MB0401-2 Operator:
Comment:
Run Time: 04/01/08 12:52 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0013 | .0045 | .0065 | .0047 |
| Stddev | .0048 | .0016 | .0022 | .0016 |
| %RSD | 379.7 | 35.42 | 34.57 | 33.28 |
| #1 | -.0021 | .0034 | .0049 | .0036 |
| #2 | .0046 | .0057 | .0081 | .0058 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0016 | .0004 | -.0013 | -.0021 |
| Stddev | .0006 | .0011 | .0013 | .0002 |
| %RSD | 40.21 | 258.9 | 103.2 | 8.089 |
| #1 | .0011 | .0012 | -.0003 | -.0020 |
| #2 | .0020 | -.0003 | -.0022 | -.0022 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0002 | -.0482 | .0004 | -.0004 |
| Stddev | .0000 | .1829 | .0007 | .0000 |
| %RSD | 13.99 | 379.0 | 163.4 | 5.041 |
| #1 | -.0002 | -.1775 | .0010 | -.0004 |
| #2 | -.0002 | .0811 | -.0001 | -.0004 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0007 | -.0033 | -.0012 | -.0081 |
| Stddev | .0002 | .0011 | .0013 | .0009 |
| %RSD | 26.30 | 34.66 | 112.9 | 11.59 |
| #1 | -.0008 | -.0041 | -.0021 | -.0088 |
| #2 | -.0006 | -.0025 | -.0002 | -.0075 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0009 | -.0008 | -.0078 | -.0014 |
| Stddev | .0005 | .0002 | .0079 | .0005 |
| %RSD | 52.67 | 26.10 | 100.9 | 35.30 |
| #1 | .0012 | -.0009 | -.0133 | -.0010 |
| #2 | .0005 | -.0007 | -.0022 | -.0017 |

Sample Name: MB0401-2 Run Time: 04/01/08 12:52

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0103 | .0001 | -.0135 | -.0288 |
| Stddev | .0070 | .0001 | .0006 | .0002 |
| %RSD | 68.12 | 40.07 | 4.624 | .5976 |
| | | | | |
| #1 | -.0053 | .0001 | -.0131 | -.0289 |
| #2 | -.0152 | .0002 | -.0140 | -.0287 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0003 | -.0028 | .0008 | .0012 |
| Stddev | .0003 | .0012 | .0025 | .0018 |
| %RSD | 106.5 | 43.97 | 336.8 | 143.8 |
| | | | | |
| #1 | -.0005 | -.0019 | .0026 | .0025 |
| #2 | -.0001 | -.0036 | -.0010 | .0000 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0061 | .0120 | .0883 | .0829 |
| Stddev | .0046 | .0035 | .0035 | .0037 |
| %RSD | 75.23 | 29.48 | 3.956 | 4.439 |
| | | | | |
| #1 | .0093 | .0145 | .0907 | .0855 |
| #2 | .0028 | .0095 | .0858 | .0803 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0280 | .0000 | -.0016 | -.0109 |
| Stddev | .0134 | .0001 | .0013 | .0052 |
| %RSD | 47.70 | 1926. | 79.18 | 47.41 |
| | | | | |
| #1 | -.0375 | .0001 | -.0025 | -.0146 |
| #2 | -.0186 | -.0001 | -.0007 | -.0072 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0029 | .0065 | -.0041 | -.0049 |
| Stddev | .0000 | .0182 | .0068 | .0023 |
| %RSD | .9149 | 282.0 | 166.4 | 47.20 |
| | | | | |
| #1 | -.0028 | .0194 | .0007 | -.0033 |
| #2 | -.0029 | -.0064 | -.0089 | -.0066 |

Sample Name: MB0401-2 Run Time: 04/01/08 12:52

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | -.0045 | -.0042 | -.0031 |
| Stddev | .0020 | .0029 | .0009 |
| %RSD | 44.68 | 68.66 | 29.48 |
| | | | |
| #1 | -.0060 | -.0062 | -.0038 |
| #2 | -.0031 | -.0022 | -.0025 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.178 | 130.71 |
| Stddev | .297 | .01 |
| %RSD | .42948 | .01028 |
| | | |
| #1 | 68.968 | 130.72 |
| #2 | 69.388 | 130.70 |

Method: MTHD08 Sample Name: LCS0401-2 Operator:
Comment:
Run Time: 04/01/08 12:58 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2013 | 2.076 | 2.120 | 1.924 |
| Stddev | .0076 | .021 | .010 | .004 |
| %RSD | 3.765 | 1.037 | .4883 | .1873 |
| #1 | .1960 | 2.091 | 2.127 | 1.926 |
| #2 | .2067 | 2.061 | 2.113 | 1.921 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.950 | 1.900 | 2.225 | 2.402 |
| Stddev | .004 | .003 | .007 | .008 |
| %RSD | .2176 | .1460 | .3019 | .3383 |
| #1 | 1.947 | 1.898 | 2.220 | 2.397 |
| #2 | 1.953 | 1.902 | 2.229 | 2.408 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .1920 | 22.29 | .2111 | .2021 |
| Stddev | .0003 | .07 | .0009 | .0009 |
| %RSD | .1569 | .3334 | .4083 | .4252 |
| #1 | .1918 | 22.23 | .2117 | .2015 |
| #2 | .1922 | 22.34 | .2105 | .2027 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2049 | 2.058 | .1974 | .1822 |
| Stddev | .0018 | .002 | .0001 | .0043 |
| %RSD | .8632 | .1015 | .0323 | 2.340 |
| #1 | .2061 | 2.056 | .1973 | .1792 |
| #2 | .2036 | 2.059 | .1974 | .1852 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.082 | 2.010 | 20.37 | 19.94 |
| Stddev | .001 | .005 | .11 | .06 |
| %RSD | .0652 | .2363 | .5210 | .3143 |
| #1 | 2.083 | 2.007 | 20.45 | 19.90 |
| #2 | 2.081 | 2.014 | 20.30 | 19.99 |

Sample Name: LCS0401-2 Run Time: 04/01/08 12:58

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 20.17 | .2072 | 2.017 | 21.09 |
| Stddev | .03 | .0000 | .006 | .01 |
| %RSD | .1424 | .0236 | .3101 | .0504 |
| #1 | 20.15 | .2072 | 2.013 | 21.08 |
| #2 | 20.19 | .2073 | 2.021 | 21.09 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.974 | 2.081 | 1.951 | 1.916 |
| Stddev | .002 | .005 | .017 | .009 |
| %RSD | .0792 | .2640 | .8936 | .4885 |
| #1 | 1.973 | 2.077 | 1.963 | 1.909 |
| #2 | 1.975 | 2.085 | 1.938 | 1.923 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.011 | 1.842 | 2.031 | 1.999 |
| Stddev | .003 | .004 | .006 | .005 |
| %RSD | .1541 | .2440 | .3212 | .2279 |
| #1 | 2.009 | 1.846 | 2.027 | 2.002 |
| #2 | 2.013 | 1.839 | 2.036 | 1.995 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.067 | .2463 | 2.144 | 1.989 |
| Stddev | .014 | .0016 | .006 | .006 |
| %RSD | .6782 | .6449 | .2727 | .3210 |
| #1 | 2.057 | .2474 | 2.140 | 1.993 |
| #2 | 2.076 | .2451 | 2.148 | 1.984 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.929 | 1.894 | 2.173 | 2.060 |
| Stddev | .057 | .037 | .002 | .000 |
| %RSD | 2.940 | 1.973 | .0926 | .0132 |
| #1 | 1.889 | 1.868 | 2.171 | 2.060 |
| #2 | 1.969 | 1.921 | 2.174 | 2.060 |

Sample Name: LCS0401-2 Run Time: 04/01/08 12:58

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | 1.993 | 1.962 | 2.018 |
| Stddev | .001 | .001 | .001 |
| %RSD | .0261 | .0730 | .0490 |
| | | | |
| #1 | 1.994 | 1.963 | 2.019 |
| #2 | 1.993 | 1.961 | 2.017 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 69.152 | 128.54 |
| Stddev | .129 | .21 |
| %RSD | .18634 | .16599 |
| | | |
| #1 | 69.061 | 128.39 |
| #2 | 69.243 | 128.69 |

Method: MTHD08 Sample Name: 0803C07-02C Operator:
Comment:
Run Time: 04/01/08 13:31 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0019 | .2442 | .3330 | .0075 |
| Stddev | .0031 | .0058 | .0079 | .0137 |
| %RSD | 166.1 | 2.391 | 2.376 | 182.8 |
| #1 | .0041 | .2484 | .3274 | -.0022 |
| #2 | -.0003 | .2401 | .3386 | .0172 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .1307 | .1274 | .0686 | .0738 |
| Stddev | .0019 | .0013 | .0002 | .0002 |
| %RSD | 1.433 | 1.000 | .3524 | .2164 |
| #1 | .1321 | .1283 | .0688 | .0737 |
| #2 | .1294 | .1265 | .0684 | .0739 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0001 | 123.9 | .0037 | .0018 |
| Stddev | .0000 | .2 | .0003 | .0001 |
| %RSD | 6.632 | .1302 | 7.454 | 3.761 |
| #1 | -.0002 | 124.0 | .0035 | .0018 |
| #2 | -.0001 | 123.8 | .0039 | .0019 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0811 | .4865 | .2266 | .2062 |
| Stddev | .0002 | .0020 | .0019 | .0022 |
| %RSD | .2965 | .4202 | .8451 | 1.067 |
| #1 | .0810 | .4851 | .2253 | .2047 |
| #2 | .0813 | .4880 | .2280 | .2078 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 3.752 | 3.573 | 6.206 | 35.85 |
| Stddev | .007 | .017 | .053 | .14 |
| %RSD | .1756 | .4816 | .8531 | .3802 |
| #1 | 3.757 | 3.585 | 6.244 | 35.95 |
| #2 | 3.748 | 3.560 | 6.169 | 35.76 |

Sample Name: 0803C07-02C Run Time: 04/01/08 13:31

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 37.50 | .4727 | -.0083 | 264.0 |
| Stddev | .45 | .0010 | .0007 | 3.5 |
| %RSD | 1.194 | .2143 | 8.435 | 1.308 |
| | | | | |
| #1 | 37.82 | .4734 | -.0078 | 266.5 |
| #2 | 37.18 | .4720 | -.0088 | 261.6 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .4918 | .5145 | .0433 | .0061 |
| Stddev | .0034 | .0006 | .0007 | .0020 |
| %RSD | .6851 | .1255 | 1.731 | 32.35 |
| | | | | |
| #1 | .4942 | .5140 | .0428 | .0047 |
| #2 | .4894 | .5149 | .0438 | .0075 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0091 | .0118 | 5.093 | 5.095 |
| Stddev | .0032 | .0144 | .001 | .006 |
| %RSD | 34.80 | 121.8 | .0278 | .1231 |
| | | | | |
| #1 | .0069 | .0016 | 5.092 | 5.100 |
| #2 | .0113 | .0220 | 5.094 | 5.091 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0372 | .3513 | -.0011 | .0120 |
| Stddev | .0387 | .0010 | .0007 | .0157 |
| %RSD | 103.9 | .2830 | 63.41 | 130.8 |
| | | | | |
| #1 | -.0646 | .3506 | -.0016 | .0009 |
| #2 | -.0099 | .3520 | -.0006 | .0231 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0105 | -.0067 | .1296 | -.0095 |
| Stddev | .0066 | .0140 | .0081 | .0015 |
| %RSD | 62.56 | 209.9 | 6.264 | 15.72 |
| | | | | |
| #1 | -.0152 | .0032 | .1239 | -.0085 |
| #2 | -.0059 | -.0166 | .1353 | -.0106 |

Sample Name: 0803C07-02C Run Time: 04/01/08 13:31

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | .0014 | .0759 | .0784 |
| Stddev | .0029 | .0016 | .0011 |
| %RSD | 208.0 | 2.097 | 1.423 |
| | | | |
| #1 | .0034 | .0770 | .0776 |
| #2 | -.0007 | .0748 | .0792 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 68.037 | 123.56 |
| Stddev | .504 | .12 |
| %RSD | .74007 | .09357 |
| | | |
| #1 | 67.681 | 123.48 |
| #2 | 68.393 | 123.64 |

Method: MTHD08 Sample Name: 0803C07-02CMS Operator:
Comment:
Run Time: 04/01/08 13:37 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2045 | 2.357 | 2.424 | 1.961 |
| Stddev | .0041 | .011 | .008 | .005 |
| %RSD | 2.025 | .4897 | .3158 | .2661 |
| #1 | .2075 | 2.365 | 2.419 | 1.957 |
| #2 | .2016 | 2.349 | 2.430 | 1.964 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.092 | 2.082 | 2.280 | 2.415 |
| Stddev | .002 | .003 | .003 | .020 |
| %RSD | .1085 | .1322 | .1313 | .8178 |
| #1 | 2.091 | 2.084 | 2.283 | 2.429 |
| #2 | 2.094 | 2.080 | 2.278 | 2.401 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .1944 | 142.7 | .2096 | .1986 |
| Stddev | .0005 | .8 | .0028 | .0007 |
| %RSD | .2385 | .5707 | 1.341 | .3409 |
| #1 | .1947 | 142.1 | .2076 | .1991 |
| #2 | .1940 | 143.3 | .2115 | .1981 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2766 | 2.502 | .4236 | .3982 |
| Stddev | .0001 | .003 | .0065 | .0046 |
| %RSD | .0276 | .1255 | 1.531 | 1.144 |
| #1 | .2765 | 2.500 | .4190 | .4014 |
| #2 | .2766 | 2.505 | .4282 | .3950 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.757 | 5.489 | 27.04 | 54.17 |
| Stddev | .016 | .014 | .07 | .18 |
| %RSD | .2729 | .2478 | .2557 | .3415 |
| #1 | 5.745 | 5.499 | 27.09 | 54.30 |
| #2 | 5.768 | 5.479 | 26.99 | 54.04 |

Sample Name: 0803C07-02CMS Run Time: 04/01/08 13:37

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 57.86 | .6773 | 1.984 | 276.2 |
| Stddev | .01 | .0010 | .008 | 1.0 |
| %RSD | .0202 | .1456 | .4036 | .3647 |
| #1 | 57.87 | .6766 | 1.978 | 275.5 |
| #2 | 57.85 | .6780 | 1.989 | 276.9 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.426 | 2.545 | 1.958 | 1.925 |
| Stddev | .004 | .005 | .005 | .006 |
| %RSD | .1808 | .1836 | .2673 | .3190 |
| #1 | 2.423 | 2.542 | 1.954 | 1.930 |
| #2 | 2.429 | 2.548 | 1.961 | 1.921 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.004 | 1.872 | 7.086 | 7.080 |
| Stddev | .010 | .031 | .009 | .015 |
| %RSD | .5074 | 1.664 | .1292 | .2044 |
| #1 | 1.997 | 1.850 | 7.080 | 7.091 |
| #2 | 2.011 | 1.894 | 7.093 | 7.070 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.029 | .5822 | 2.140 | 1.905 |
| Stddev | .003 | .0017 | .013 | .006 |
| %RSD | .1604 | .2890 | .6100 | .3124 |
| #1 | 2.031 | .5811 | 2.149 | 1.901 |
| #2 | 2.027 | .5834 | 2.131 | 1.909 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.889 | 1.914 | 2.222 | 1.989 |
| Stddev | .021 | .011 | .013 | .006 |
| %RSD | 1.103 | .5796 | .5844 | .2835 |
| #1 | 1.875 | 1.922 | 2.213 | 1.985 |
| #2 | 1.904 | 1.906 | 2.231 | 1.993 |

Sample Name: 0803C07-02CMS Run Time: 04/01/08 13:37

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | 1.938 | 1.978 | 2.036 |
| Stddev | .004 | .001 | .003 |
| %RSD | .1794 | .0358 | .1688 |
| | | | |
| #1 | 1.941 | 1.979 | 2.034 |
| #2 | 1.936 | 1.978 | 2.039 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 67.828 | 124.32 |
| Stddev | .354 | .72 |
| %RSD | .52124 | .57791 |
| | | |
| #1 | 67.578 | 123.81 |
| #2 | 68.078 | 124.83 |

Method: MTHD08 Sample Name: 0803C07-02CMSD Operator:
Comment:
Run Time: 04/01/08 13:43 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2033 | 2.362 | 2.412 | 1.928 |
| Stddev | .0039 | .048 | .004 | .009 |
| %RSD | 1.929 | 2.034 | .1520 | .4527 |
| #1 | .2060 | 2.328 | 2.414 | 1.934 |
| #2 | .2005 | 2.396 | 2.409 | 1.922 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.082 | 2.026 | 2.217 | 2.387 |
| Stddev | .015 | .003 | .011 | .006 |
| %RSD | .7038 | .1355 | .4954 | .2463 |
| #1 | 2.071 | 2.028 | 2.225 | 2.391 |
| #2 | 2.092 | 2.024 | 2.210 | 2.383 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .1904 | 141.9 | .2063 | .1972 |
| Stddev | .0005 | .4 | .0002 | .0003 |
| %RSD | .2867 | .2571 | .0784 | .1621 |
| #1 | .1900 | 141.6 | .2062 | .1974 |
| #2 | .1908 | 142.1 | .2065 | .1970 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2725 | 2.449 | .4155 | .4010 |
| Stddev | .0007 | .004 | .0023 | .0032 |
| %RSD | .2744 | .1747 | .5506 | .8058 |
| #1 | .2720 | 2.452 | .4139 | .4033 |
| #2 | .2730 | 2.446 | .4171 | .3987 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.649 | 5.323 | 26.94 | 53.16 |
| Stddev | .005 | .015 | .11 | .26 |
| %RSD | .0961 | .2847 | .4220 | .4813 |
| #1 | 5.645 | 5.334 | 27.02 | 53.34 |
| #2 | 5.653 | 5.312 | 26.86 | 52.98 |

Sample Name: 0803C07-02CMSD Run Time: 04/01/08 13:43

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 57.16 | .6646 | 1.954 | 279.5 |
| Stddev | .36 | .0002 | .001 | .0 |
| %RSD | .6347 | .0319 | .0614 | .0002 |
| #1 | 57.41 | .6645 | 1.955 | 279.5 |
| #2 | 56.90 | .6648 | 1.953 | 279.5 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.359 | 2.511 | 1.925 | 1.885 |
| Stddev | .003 | .002 | .002 | .014 |
| %RSD | .1099 | .0721 | .1084 | .7602 |
| #1 | 2.361 | 2.510 | 1.926 | 1.895 |
| #2 | 2.357 | 2.512 | 1.923 | 1.875 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.991 | 1.848 | 6.953 | 6.919 |
| Stddev | .001 | .011 | .023 | .014 |
| %RSD | .0654 | .5927 | .3275 | .2037 |
| #1 | 1.992 | 1.856 | 6.969 | 6.929 |
| #2 | 1.990 | 1.840 | 6.937 | 6.910 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.997 | .5918 | 2.120 | 1.927 |
| Stddev | .040 | .0005 | .001 | .023 |
| %RSD | 2.005 | .0769 | .0661 | 1.216 |
| #1 | 1.969 | .5921 | 2.119 | 1.943 |
| #2 | 2.026 | .5915 | 2.121 | 1.910 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.904 | 1.873 | 2.175 | 1.965 |
| Stddev | .023 | .009 | .016 | .002 |
| %RSD | 1.192 | .4597 | .7193 | .0870 |
| #1 | 1.888 | 1.879 | 2.186 | 1.966 |
| #2 | 1.920 | 1.867 | 2.164 | 1.964 |

Sample Name: 0803C07-02CMSD Run Time: 04/01/08 13:43

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | 1.895 | 1.935 | 2.001 |
| Stddev | .020 | .003 | .004 |
| %RSD | 1.066 | .1635 | .1962 |
| | | | |
| #1 | 1.881 | 1.937 | 1.998 |
| #2 | 1.909 | 1.933 | 2.003 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 67.871 | 123.64 |
| Stddev | .441 | .10 |
| %RSD | .65018 | .08268 |
| | | |
| #1 | 67.559 | 123.57 |
| #2 | 68.183 | 123.72 |

Method: MTHD08 Sample Name: CCV Operator:
Comment:
Run Time: 04/01/08 13:48 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 1.287 | 9.533 | 9.645 | 4.910 |
| Stddev | .107 | .751 | .751 | .035 |
| %RSD | 8.353 | 7.880 | 7.788 | .7177 |
| #1 | 1.211 | 9.002 | 9.114 | 4.935 |
| #2 | 1.363 | 10.06 | 10.18 | 4.885 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.145 | 4.871 | 9.501 | 9.773 |
| Stddev | .008 | .021 | .054 | .742 |
| %RSD | .1556 | .4356 | .5654 | 7.594 |
| #1 | 5.151 | 4.886 | 9.539 | 9.248 |
| #2 | 5.139 | 4.856 | 9.463 | 10.30 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .2449 | 28.49 | 2.642 | 2.549 |
| Stddev | .0014 | .19 | .009 | .008 |
| %RSD | .5639 | .6743 | .3434 | .3017 |
| #1 | .2458 | 28.36 | 2.649 | 2.555 |
| #2 | .2439 | 28.63 | 2.636 | 2.544 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.547 | 1.011 | 1.298 | 1.209 |
| Stddev | .005 | .004 | .002 | .009 |
| %RSD | .1840 | .3894 | .1557 | .7883 |
| #1 | 2.550 | 1.013 | 1.300 | 1.202 |
| #2 | 2.544 | 1.008 | 1.297 | 1.216 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.096 | 4.782 | 23.61 | 24.08 |
| Stddev | .017 | .014 | 1.75 | .35 |
| %RSD | .3234 | .2937 | 7.418 | 1.472 |
| #1 | 5.108 | 4.792 | 22.37 | 23.83 |
| #2 | 5.085 | 4.772 | 24.85 | 24.33 |

Sample Name: CCV Run Time: 04/01/08 13:48

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 24.79 | 2.489 | 5.002 | 24.58 |
| Stddev | .38 | .009 | .011 | 1.80 |
| %RSD | 1.536 | .3710 | .2256 | 7.341 |
| | | | | |
| #1 | 24.53 | 2.495 | 4.994 | 23.30 |
| #2 | 25.06 | 2.482 | 5.010 | 25.85 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 2.435 | 2.613 | 4.883 | 4.741 |
| Stddev | .011 | .007 | .008 | .021 |
| %RSD | .4623 | .2635 | .1719 | .4497 |
| | | | | |
| #1 | 2.443 | 2.618 | 4.889 | 4.757 |
| #2 | 2.427 | 2.608 | 4.877 | 4.726 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.014 | 5.107 | 4.875 | 4.814 |
| Stddev | .011 | .008 | .021 | .021 |
| %RSD | .2255 | .1590 | .4404 | .4398 |
| | | | | |
| #1 | 5.022 | 5.102 | 4.890 | 4.829 |
| #2 | 5.006 | 5.113 | 4.860 | 4.799 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 4.941 | 1.181 | 5.100 | 5.248 |
| Stddev | .072 | .096 | .383 | .028 |
| %RSD | 1.461 | 8.107 | 7.500 | .5346 |
| | | | | |
| #1 | 4.992 | 1.113 | 4.830 | 5.228 |
| #2 | 4.890 | 1.249 | 5.371 | 5.268 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | 5.079 | 2.299 | .7628 | 2.554 |
| Stddev | .005 | .217 | .0049 | .027 |
| %RSD | .0960 | 9.434 | .6362 | 1.069 |
| | | | | |
| #1 | 5.076 | 2.146 | .7662 | 2.535 |
| #2 | 5.083 | 2.452 | .7593 | 2.574 |

Sample Name: CCV Run Time: 04/01/08 13:48

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | 2.504 | 2.528 | 2.613 |
| Stddev | .030 | .003 | .013 |
| %RSD | 1.204 | .1171 | .5018 |
| | | | |
| #1 | 2.482 | 2.530 | 2.622 |
| #2 | 2.525 | 2.526 | 2.604 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 70.726 | 133.81 |
| Stddev | .274 | 9.21 |
| %RSD | .38702 | 6.8812 |
| | | |
| #1 | 70.919 | 140.32 |
| #2 | 70.532 | 127.30 |

Method: MTHD08 Sample Name: CCB Operator:
Comment:
Run Time: 04/01/08 14:00 Type: Unk Mode: CONC Corr.Fact: 1.000000

| Elem | Ag3280 | Al3944 | Al3961 | As1890 |
|---|---|---|---|---|
| Line | 328.068 {102} | 394.401 { 85} | 396.152 { 85} | 189.042 {177} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0003 | -.0179 | .0006 | .0045 |
| Stddev | .0000 | .0142 | .0029 | .0010 |
| %RSD | 7.605 | 79.37 | 525.1 | 22.77 |
| #1 | -.0003 | -.0079 | .0026 | .0052 |
| #2 | -.0004 | -.0280 | -.0015 | .0038 |

| Elem | B_2089 | B_2496 | Ba2335 | Ba4554 |
|---|---|---|---|---|
| Line | 208.959 {161} | 249.678 {135} | 233.527 {144} | 455.403 { 74} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0020 | -.0006 | -.0016 | -.0020 |
| Stddev | .0009 | .0014 | .0001 | .0003 |
| %RSD | 43.16 | 234.0 | 7.871 | 17.39 |
| #1 | .0026 | .0004 | -.0015 | -.0018 |
| #2 | .0014 | -.0016 | -.0017 | -.0023 |

| Elem | Be2348 | Ca1840 | Cd2144 | Cd2265 |
|---|---|---|---|---|
| Line | 234.861 {143} | 184.006 {182} | 214.438 {157} | 226.502 {148} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0000 | -.1347 | .0002 | -.0004 |
| Stddev | .0000 | .1346 | .0000 | .0002 |
| %RSD | 99.91 | 99.95 | 4.802 | 46.71 |
| #1 | .0001 | -.2298 | .0002 | -.0006 |
| #2 | .0000 | -.0395 | .0002 | -.0003 |

| Elem | Co2286 | Cr2061 | Cu2247 | Cu3247 |
|---|---|---|---|---|
| Line | 228.616 {147} | 206.149 {163} | 224.700 {150} | 324.754 {103} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0006 | -.0005 | -.0028 | -.0072 |
| Stddev | .0011 | .0026 | .0031 | .0074 |
| %RSD | 196.7 | 534.4 | 111.0 | 103.1 |
| #1 | .0014 | -.0023 | -.0049 | -.0019 |
| #2 | -.0002 | .0013 | -.0006 | -.0124 |

| Elem | Fe2404 | Fe2599 | K_7664 | Mg2802 |
|---|---|---|---|---|
| Line | 240.488 {140} | 259.940 {129} | 766.490 { 44} | 280.270 {119} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0012 | -.0020 | .0113 | .0005 |
| Stddev | .0007 | .0001 | .0067 | .0020 |
| %RSD | 63.31 | 4.235 | 59.82 | 419.7 |
| #1 | .0006 | -.0020 | .0160 | .0019 |
| #2 | .0017 | -.0019 | .0065 | -.0009 |

Sample Name: CCB Run Time: 04/01/08 14:00

| Elem | Mg2852 | Mn2576 | Mo2020 | Na5889 |
|---|---|---|---|---|
| Line | 285.213 {117} | 257.610 {131} | 202.030 {166} | 588.995 { 57} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0133 | .0000 | -.0139 | -.0509 |
| Stddev | .0040 | .0000 | .0002 | .0039 |
| %RSD | 29.83 | 38.94 | 1.462 | 7.708 |
| #1 | -.0161 | .0000 | -.0140 | -.0537 |
| #2 | -.0105 | .0000 | -.0137 | -.0481 |

| Elem | Ni2216 | Ni2316 | Pb2203 | Sb2068 |
|---|---|---|---|---|
| Line | 221.647 {152} | 231.604 {145} | 220.353 {152} | 206.833 {162} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0009 | .0008 | -.0039 | .0029 |
| Stddev | .0021 | .0000 | .0077 | .0017 |
| %RSD | 242.5 | 4.672 | 198.0 | 57.95 |
| #1 | -.0024 | .0007 | -.0093 | .0017 |
| #2 | .0006 | .0008 | .0016 | .0041 |

| Elem | Sb2175 | Se1960 | Si2124 | Si2516 |
|---|---|---|---|---|
| Line | 217.581 {154} | 196.090 {171} | 212.412 {158} | 251.612 {134} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0062 | .0113 | .0126 | .0146 |
| Stddev | .0003 | .0085 | .0015 | .0015 |
| %RSD | 4.380 | 75.79 | 11.65 | 10.01 |
| #1 | .0061 | .0173 | .0137 | .0136 |
| #2 | .0064 | .0052 | .0116 | .0157 |

| Elem | Sn1899 | Sr4077 | Ti3349 | Tl1908 |
|---|---|---|---|---|
| Line | 189.989 {177} | 407.771 { 82} | 334.941 {100} | 190.864 {175} |
| Units | ppm | ppm | ppm | ppm |
| Avg | -.0410 | -.0001 | -.0006 | -.0116 |
| Stddev | .0130 | .0000 | .0005 | .0050 |
| %RSD | 31.63 | 30.88 | 70.55 | 43.38 |
| #1 | -.0502 | -.0001 | -.0010 | -.0080 |
| #2 | -.0319 | .0000 | -.0003 | -.0151 |

| Elem | Tl1908 | V_2924 | V_3093 | V_3102 |
|---|---|---|---|---|
| Line | 190.864 {176} | 292.402 {115} | 309.311 {108} | 310.230 {108} |
| Units | ppm | ppm | ppm | ppm |
| Avg | .0043 | -.0029 | -.0032 | -.0056 |
| Stddev | .0104 | .0182 | .0042 | .0073 |
| %RSD | 244.0 | 625.8 | 132.8 | 129.8 |
| #1 | -.0031 | -.0158 | -.0062 | -.0108 |
| #2 | .0116 | .0100 | -.0002 | -.0005 |

Sample Name: CCB Run Time: 04/01/08 14:00

| Elem | V_3110 | Zn2062 | Zn2062 |
|---|---|---|---|
| Line | 311.071 {108} | 206.200 {162} | 206.200 {163} |
| Units | ppm | ppm | ppm |
| Avg | .0079 | -.0041 | -.0094 |
| Stddev | .0000 | .0039 | .0044 |
| %RSD | .0397 | 95.23 | 47.44 |
| | | | |
| #1 | .0079 | -.0068 | -.0062 |
| #2 | .0079 | -.0013 | -.0125 |

| Int. Std. | Y_2243 | Y_3710 |
|---|---|---|
| Line | 224.306 {150} | 371.030 { 90} |
| Units | Cts/S | Cts/S |
| Avg | 71.839 | 131.09 |
| Stddev | .114 | .13 |
| %RSD | .15913 | .09841 |
| | | |
| #1 | 71.920 | 131.18 |
| #2 | 71.758 | 130.99 |

# DIGESTION LOG(S)

# Microbac Laboratories, Inc.

# PREP BATCH REPORT



Prep Batch **60753** Prep Code: **3010** Technician: **Shon Ahrendt**

Prep Start Date: **4/1/2008 7:20:00 AM**
Prep End Date: **4/1/2008 10:20:00 AM**

| Sample ID | Matrix | pH | wt (g) | Ini vol (mL) | Sol Added | Sol Recov | Fin Vol (mL) | factor | PrepStart | PrepEnd |
|---|---|---|---|---|---|---|---|---|---|---|
| LCS080401-2 | | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| MB080401-2 | | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803564-02A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803A80-01A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803A80-01AM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803A80-01AM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C02-01A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C02-01AM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C02-01AM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C02-02A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C02-03A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C02-04A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C07-02C | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C07-02CM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C07-02CM | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C13-01A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C16-01A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C16-02A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C16-03A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0803C16-04A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |
| ME0804010-01A | Aqueous | | | 50 | 0 | 0 | 50 | 1 | 4/1/2008 | 4/1/2008 |

# SVOA GC/MS
# RAW DATA

# METHOD BLANK RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040204.D
Acq On : 2 Apr 2008 5:30 pm
Sample : ,mblk,bk-1-040208,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008

Vial: 26
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 118091 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 353494 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 151733 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 223731 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 194492 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 151890 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 143493 | 39.19 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 121806 | 25.16 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 197516 | 46.49 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 265658 | 55.87 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 104206 | 82.92 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 273133 | 64.22 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 10) 1,3-Dichlorobenzene | 4.29 | 146 | 5395 | 1.31 | ug/ml# | 92 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 5395 | 1.31 | ug/ml# | 91 |
| 12) 1,2-Dichlorobenzene | 4.29 | 146 | 5395 | 1.39 | ug/ml | 91 |

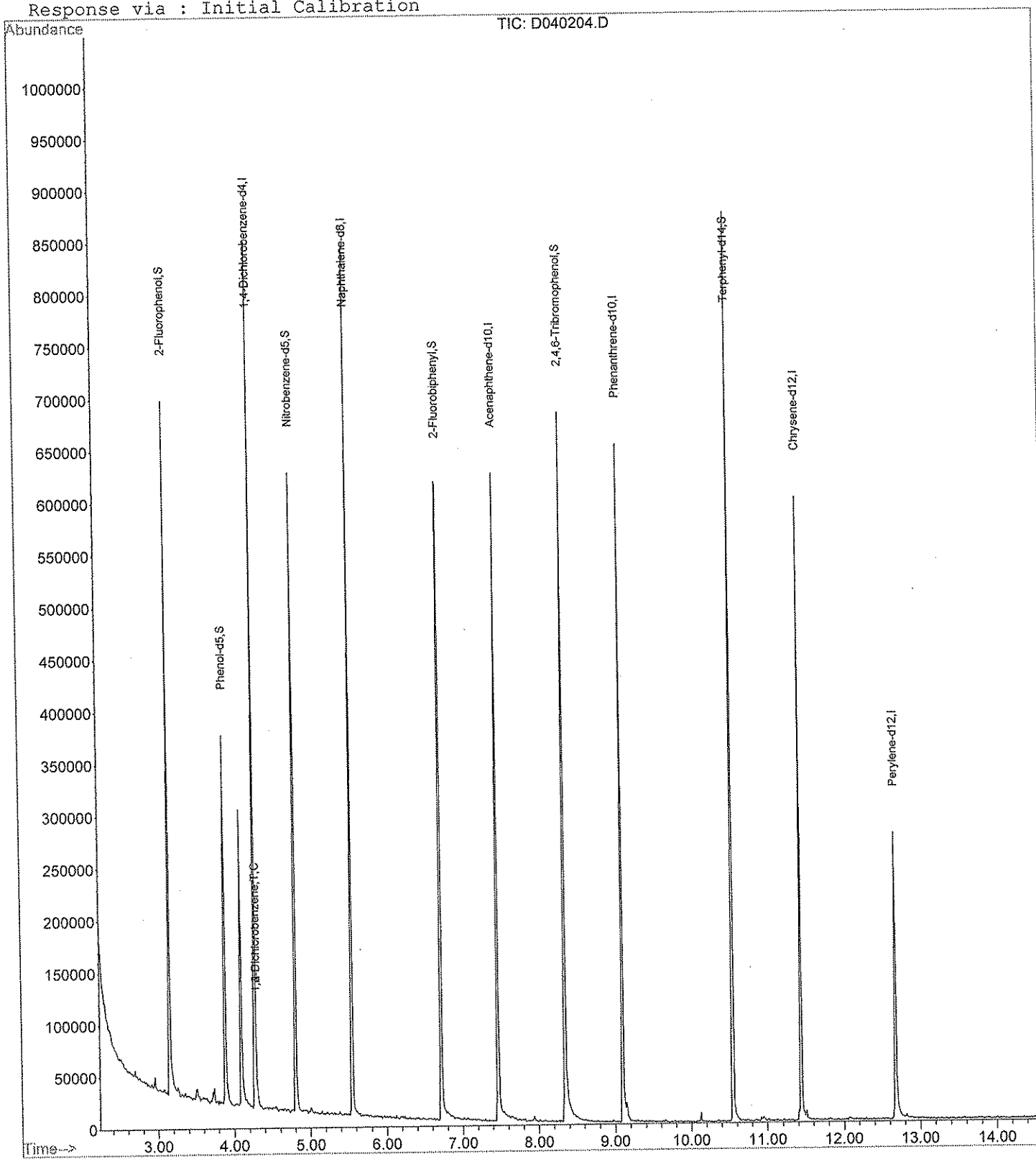
(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\D040208\D040204.D
Acq On : 2 Apr 2008 5:30 pm
Sample : ,mblk,bk-1-040208,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008

Vial: 26
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# LABORATORY CONTROL SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040206.D Vial: 28
Acq On : 2 Apr 2008 6:23 pm Operator: mills
Sample : ,lcs,lcs-1-040208,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 104343 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 320001 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 150619 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 208187 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 172264 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 162068 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 141228 | 43.65 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 125970 | 29.44 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 214570 | 55.79 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 310083 | 65.69 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 122565 | 104.81 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 281364 | 74.69 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 6) Phenol | 3.90 | 94 | 83118 | 20.48 | ug/ml | 92 |
| 7) Aniline | 4.07 | 93 | 3492 | 0.78 | ug/ml# | 1 |
| 8) bis(2-Chloroethyl)ether | 4.07 | 93 | 3492 | 1.03 | ug/ml# | 1 |
| 9) 2-Chlorophenol | 4.07 | 128 | 170141 | 52.39 | ug/ml | 98 |
| 10) 1,3-Dichlorobenzene | 4.29 | 146 | 192016 | 52.60 | ug/ml | 96 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 192016 | 52.69 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.29 | 146 | 192016 | 55.85 | ug/ml | 98 |
| 13) Benzyl alcohol | 4.29 | 108 | 1888 | 0.96 | ug/ml# | 16 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 341909 | 52.53 | ug/ml | 97 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 146657 | 61.86 | ug/ml | 97 |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 154107 | 54.20 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.13 | 107 | 174321 | 65.38 | ug/ml | 89 |
| 35) 2-Methylnaphthalene | 6.13 | 142 | 140516 | 29.31 | ug/ml# | 19 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 270581 | 47.29 | ug/ml | 97 |
| 44) Dimethyl phthalate | 7.17 | 163 | 411727 | 72.31 | ug/ml | 100 |
| 47) Acenaphthene | 7.51 | 153 | 269988 | 69.20 | ug/ml | 99 |
| 50) 4-Nitrophenol | 7.60 | 109 | 28159 | 26.90 | ug/ml | 95 |
| 51) 2,4-Dinitrotoluene | 7.69 | 165 | 136433 | 83.76 | ug/ml | 84 |
| 53) 4-Chlorophenyl phenylether | 8.09 | 204 | 158756 | 88.91 | ug/ml | 98 |
| 54) Diethyl phthalate | 7.96 | 149 | 456841 | 78.56 | ug/ml | 98 |
| 58) n-Nitrosodiphenylamine | 8.08 | 169 | 16379 | 3.01 | ug/ml# | 63 |
| 63) Pentachlorophenol | 8.90 | 266 | 78030 | 80.17 | ug/ml | 99 |
| 68) Fluoranthene | 10.42 | 202 | 442078 | 76.15 | ug/ml# | 81 |
| 71) Pyrene | 10.42 | 202 | 456554 | 73.17 | ug/ml | 96 |
| 75) 3,3'-Dichlorobenzidine | 11.41 | 252 | 139844 | 79.04 | ug/ml | 93 |
| 77) bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 407710 | 78.29 | ug/ml | 96 |
| 80) Benzo[b]fluoranthene | 12.36 | 252 | 339552 | 50.42 | ug/ml# | 94 |
| 81) Benzo[k]fluoranthene | 12.36 | 252 | 339552 | 74.83 | ug/ml | 98 |
| 83) Indeno[1,2,3cd]pyrene | 13.88 | 276 | 246535 | 64.50 | ug/ml | 89 |
| 84) Dibenz[a,h]anthracene | 13.89 | 278 | 196889 | 92.88 | ug/ml | 93 |
| 85) Benzo[g,h,i]perylene | 14.23 | 276 | 194335 | 61.27 | ug/ml | 99 |

4/2/08

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

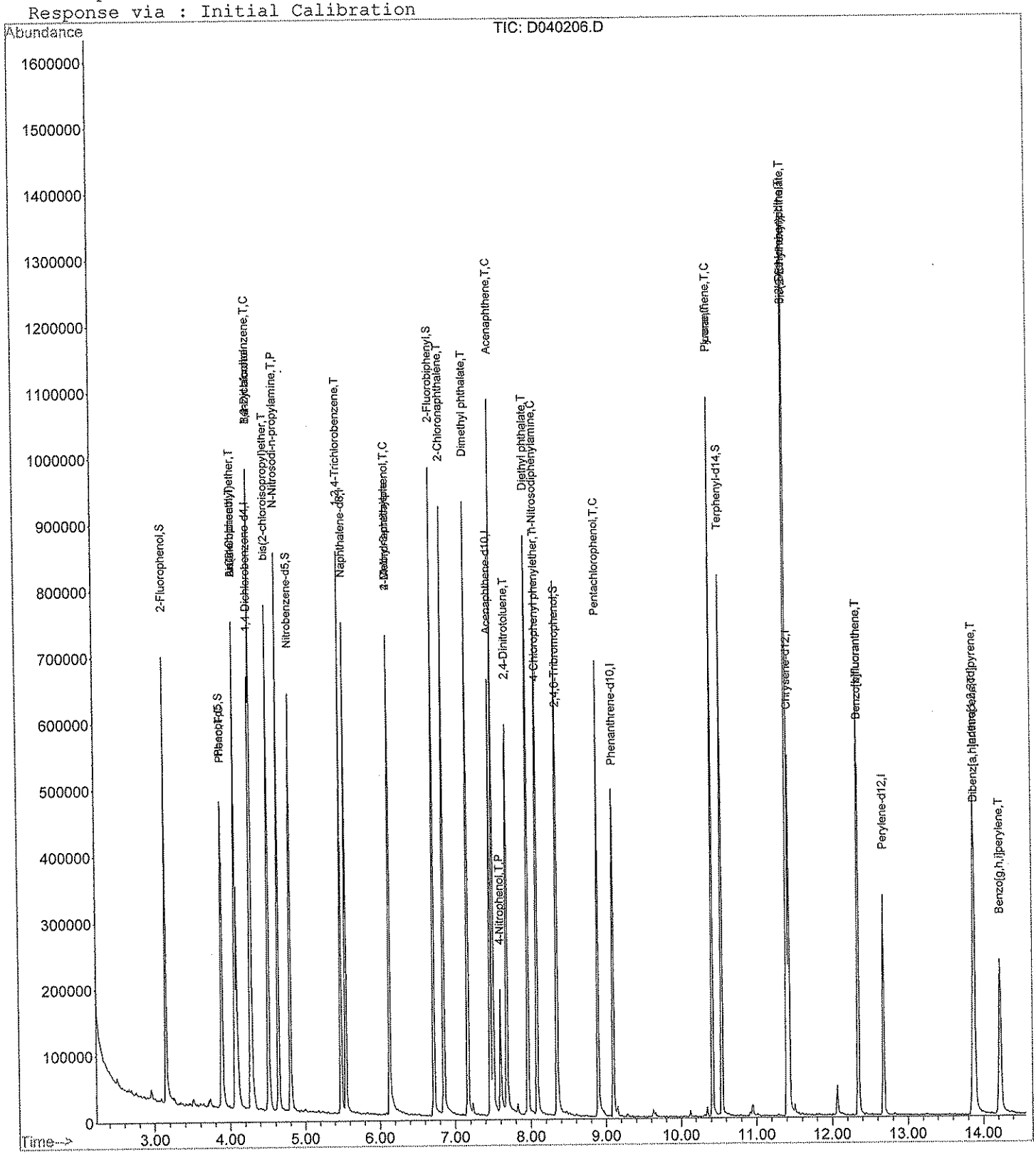
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D040208\D040206.D
Acq On : 2 Apr 2008 6:23 pm
Sample : ,lcs,lcs-1-040208,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 2 21:05 2008

Vial: 28
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# MATRIX SPIKE/MATRIX SPIKE DUPLICATE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040340.D Vial: 16
Acq On : 4 Apr 2008 4:12 am Operator: mills
Sample : ,samp,me0803c07-02b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

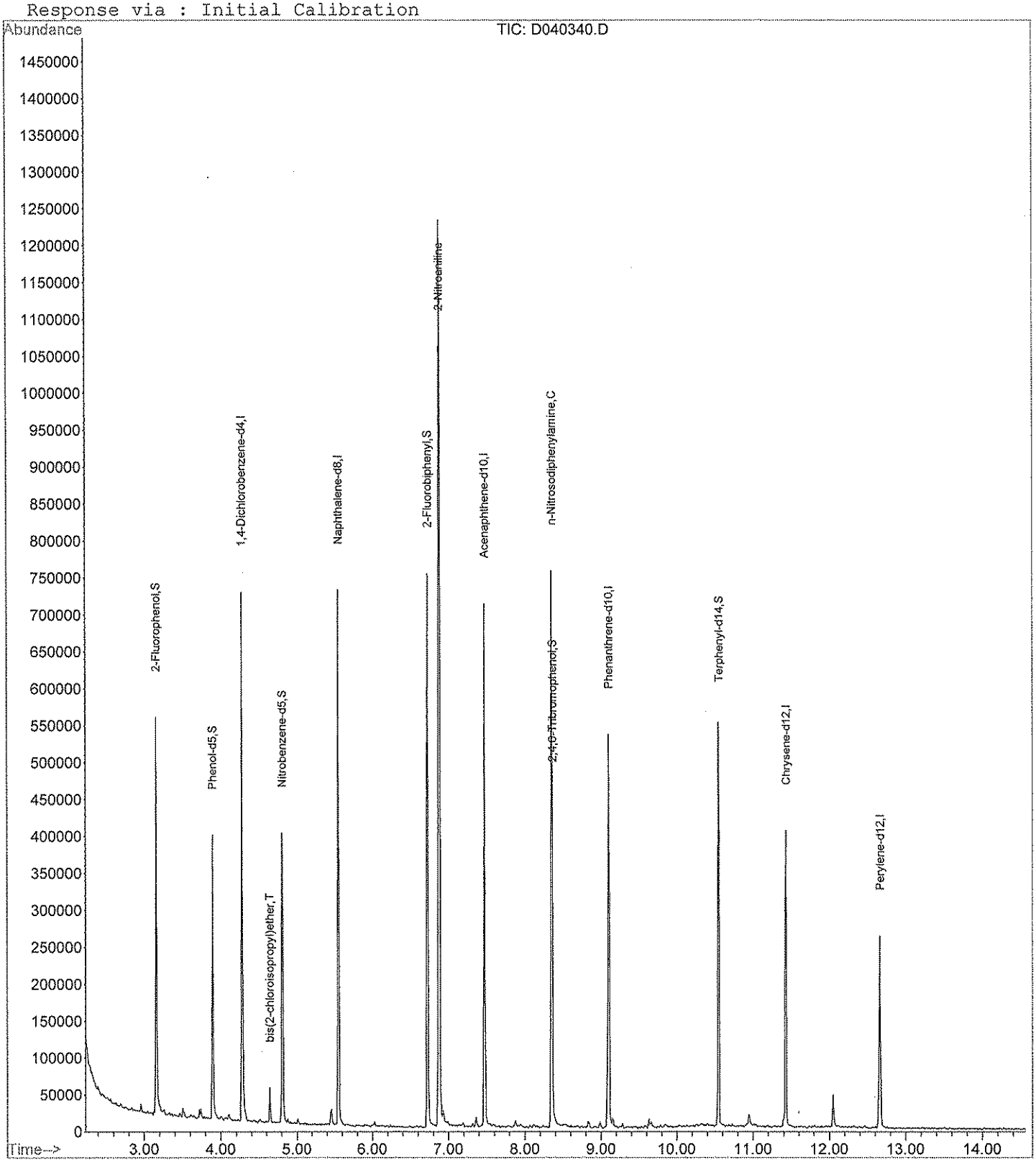
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 101707 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 303173 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 146540 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 186252 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.43 | 240 | 149848 | 40.00 | ug/ml | -0.01 |
| 78) Perylene-d12 | 12.66 | 264 | 119085 | 40.00 | ug/ml | -0.02 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 102824 | 32.61 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 94773 | 22.73 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 147824 | 40.57 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 238215 | 51.87 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 105256 | 100.60 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 203035 | 61.96 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| ~~14)~~ bis(2-chloroisopropyl)ethe | 4.64 | 45 | 18070 | 2.85 | ug/ml# | 74 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 22857 | 12.38 | ug/ml# | 16 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.35 | 169 | 3532 | 0.72 | ug/ml# | 29 |

4-4-08

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

Data File : C:\HPCHEM\1\DATA\D040308\D040340.D Vial: 16
Acq On : 4 Apr 2008 4:12 am Operator: mills
Sample : ,samp,me0803c07-02b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040341.D Vial: 17
Acq On : 4 Apr 2008 4:38 am Operator: mills
Sample : ,ms,me0803c07-02bms,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

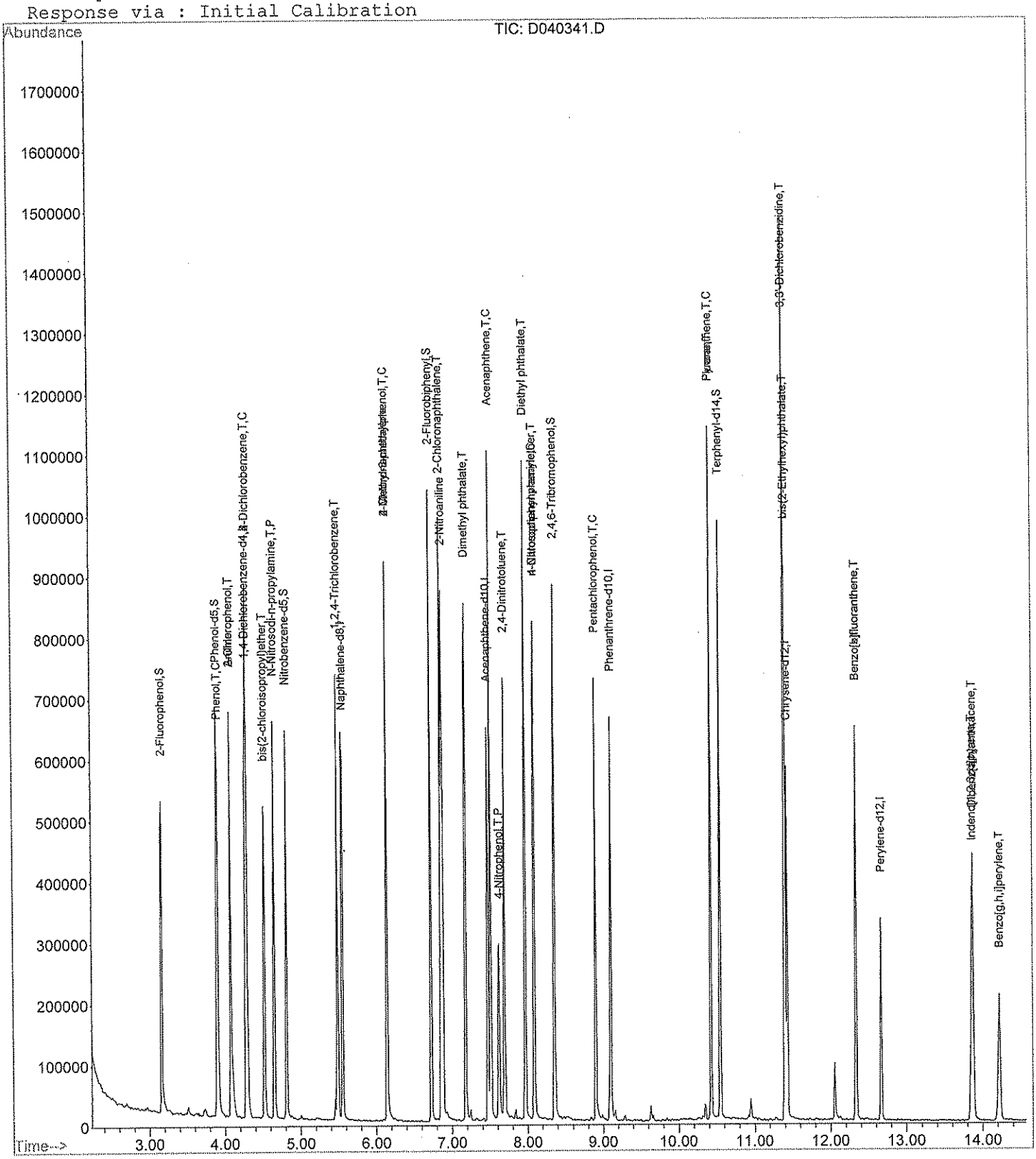
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 113309 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 350856 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 171925 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 228824 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.43 | 240 | 180385 | 40.00 | ug/ml | -0.02 |
| 78) Perylene-d12 | 12.67 | 264 | 142848 | 40.00 | ug/ml | -0.02 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 150805 | 42.93 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 174681 | 37.60 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 173860 | 41.23 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 295609 | 54.86 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 126646 | 98.53 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 258758 | 65.60 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 6) Phenol | 3.91 | 94 | 110027 | 24.96 | ug/ml | 88 |
| ~~7)~~ Aniline | 4.08 | 93 | 2820 | 0.58 | ug/ml# | 1 |
| 9) 2-Chlorophenol | 4.08 | 128 | 133860 | 37.96 | ug/ml | 94 |
| ~~10)~~ 1,3-Dichlorobenzene | 4.29 | 146 | 153079 | 38.62 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 153079 | 38.68 | ug/ml | 100 |
| ~~12)~~ 1,2-Dichlorobenzene | 4.29 | 146 | 153079 | 41.00 | ug/ml | 99 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 245628 | 34.75 | ug/ml | 98 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 116545 | 45.27 | ug/ml | 92 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 125287 | 40.19 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.14 | 107 | 174502 | 59.69 | ug/ml | 89 |
| ~~35)~~ 2-Methylnaphthalene | 6.14 | 142 | 143392 | 27.28 | ug/ml# | 20 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 257923 | 39.49 | ug/ml | 97 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 14093 | 6.51 | ug/ml# | 11 |
| 44) Dimethyl phthalate | 7.19 | 163 | 438782 | 67.51 | ug/ml | 98 |
| 47) Acenaphthene | 7.51 | 153 | 261275 | 58.67 | ug/ml | 99 |
| 50) 4-Nitrophenol | 7.63 | 109 | 56279 | 47.09 | ug/ml# | 73 |
| 51) 2,4-Dinitrotoluene | 7.70 | 165 | 123942 | 66.66 | ug/ml | 97 |
| 53) 4-Chlorophenyl phenylether | 8.10 | 204 | 160436 | 78.72 | ug/ml | 95 |
| 54) Diethyl phthalate | 7.97 | 149 | 480734 | 72.43 | ug/ml | 100 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.10 | 169 | 16174 | 2.70 | ug/ml# | 59 |
| 63) Pentachlorophenol | 8.90 | 266 | 78416 | 73.30 | ug/ml | 98 |
| ~~68)~~ Fluoranthene | 10.43 | 202 | 439772 | 68.92 | ug/ml# | 86 |
| 71) Pyrene | 10.43 | 202 | 446901 | 68.40 | ug/ml | 100 |
| 75) 3,3'-Dichlorobenzidine | 11.40 | 252 | 101764 | 54.93 | ug/ml# | 93 |
| 77) bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 407623 | 74.75 | ug/ml | 95 |
| ~~80)~~ Benzo[b]fluoranthene | 12.34 | 252 | 285509 | 48.10 | ug/ml | 97 |
| 81) Benzo[k]fluoranthene | 12.34 | 252 | 285509 | 71.38 | ug/ml | 97 |
| 83) Indeno[1,2,3cd]pyrene | 13.87 | 276 | 201244 | 59.73 | ug/ml | 95 |
| 84) Dibenz[a,h]anthracene | 13.88 | 278 | 162739 | 87.10 | ug/ml | 98 |
| 85) Benzo[g,h,i]perylene | 14.22 | 276 | 165605 | 59.24 | ug/ml | 91 |

4/4/08

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

Data File : C:\HPCHEM\1\DATA\D040308\D040341.D Vial: 17
Acq On : 4 Apr 2008 4:38 am Operator: mills
Sample : ,ms,me0803c07-02bms,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040342.D Vial: 18
Acq On : 4 Apr 2008 5:03 am Operator: mills
Sample : ,msd,me0803c07-02bmsd,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120613 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 358599 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 175228 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 220294 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 171757 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 147870 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 165399 | 44.23 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 199804 | 40.40 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 194503 | 45.13 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 338971 | 61.73 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.37 | 330 | 134947 | 109.05 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.56 | 244 | 263889 | 70.26 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 6) Phenol | 3.92 | 94 | 127717 | 27.22 | ug/ml | 95 |
| ~~7)~~ Aniline | 4.08 | 93 | 3011 | 0.58 | ug/ml# | 1 |
| 9) 2-Chlorophenol | 4.08 | 128 | 162089 | 43.18 | ug/ml | 96 |
| ~~10)~~ 1,3-Dichlorobenzene | 4.30 | 146 | 180462 | 42.77 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.30 | 146 | 180462 | 42.84 | ug/ml | 99 |
| ~~12)~~ 1,2-Dichlorobenzene | 4.30 | 146 | 180462 | 45.41 | ug/ml | 99 |
| ~~13)~~ Benzyl alcohol | 4.30 | 108 | 2270 | 0.99 | ug/ml# | 12 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 282493 | 37.55 | ug/ml | 99 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 138013 | 50.36 | ug/ml | 94 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 152610 | 47.89 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.15 | 107 | 202486 | 67.76 | ug/ml | 94 |
| ~~35)~~ 2-Methylnaphthalene | 6.15 | 142 | 157393 | 29.29 | ug/ml# | 18 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 294388 | 44.22 | ug/ml | 96 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 14208 | 6.44 | ug/ml# | 16 |
| 44) Dimethyl phthalate | 7.18 | 163 | 426633 | 64.41 | ug/ml | 99 |
| 47) Acenaphthene | 7.52 | 153 | 297674 | 65.58 | ug/ml | 99 |
| 50) 4-Nitrophenol | 7.62 | 109 | 53986 | 44.32 | ug/ml | 87 |
| 51) 2,4-Dinitrotoluene | 7.70 | 165 | 133901 | 70.66 | ug/ml | 86 |
| 53) 4-Chlorophenyl phenylether | 8.09 | 204 | 158494 | 76.30 | ug/ml | 87 |
| 54) Diethyl phthalate | 7.97 | 149 | 484853 | 71.67 | ug/ml | 99 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.09 | 169 | 15855 | 2.75 | ug/ml# | 60 |
| 63) Pentachlorophenol | 8.91 | 266 | 78504 | 76.22 | ug/ml | 97 |
| 71) Pyrene | 10.43 | 202 | 473632 | 76.13 | ug/ml | 89 |
| 75) 3,3'-Dichlorobenzidine | 11.41 | 252 | 94216 | 53.41 | ug/ml | 95 |
| 77) bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 377229 | 72.65 | ug/ml | 96 |
| ~~80)~~ Benzo[b]fluoranthene | 12.35 | 252 | 274001 | 44.60 | ug/ml | 96 |
| 81) Benzo[k]fluoranthene | 12.35 | 252 | 274615 | 66.33 | ug/ml# | 94 |
| 83) Indeno[1,2,3cd]pyrene | 13.88 | 276 | 223966 | 64.22 | ug/ml | 92 |
| 84) Dibenz[a,h]anthracene | 13.89 | 278 | 178219 | 92.15 | ug/ml | 99 |
| 85) Benzo[g,h,i]perylene | 14.24 | 276 | 191078 | 66.03 | ug/ml | 92 |

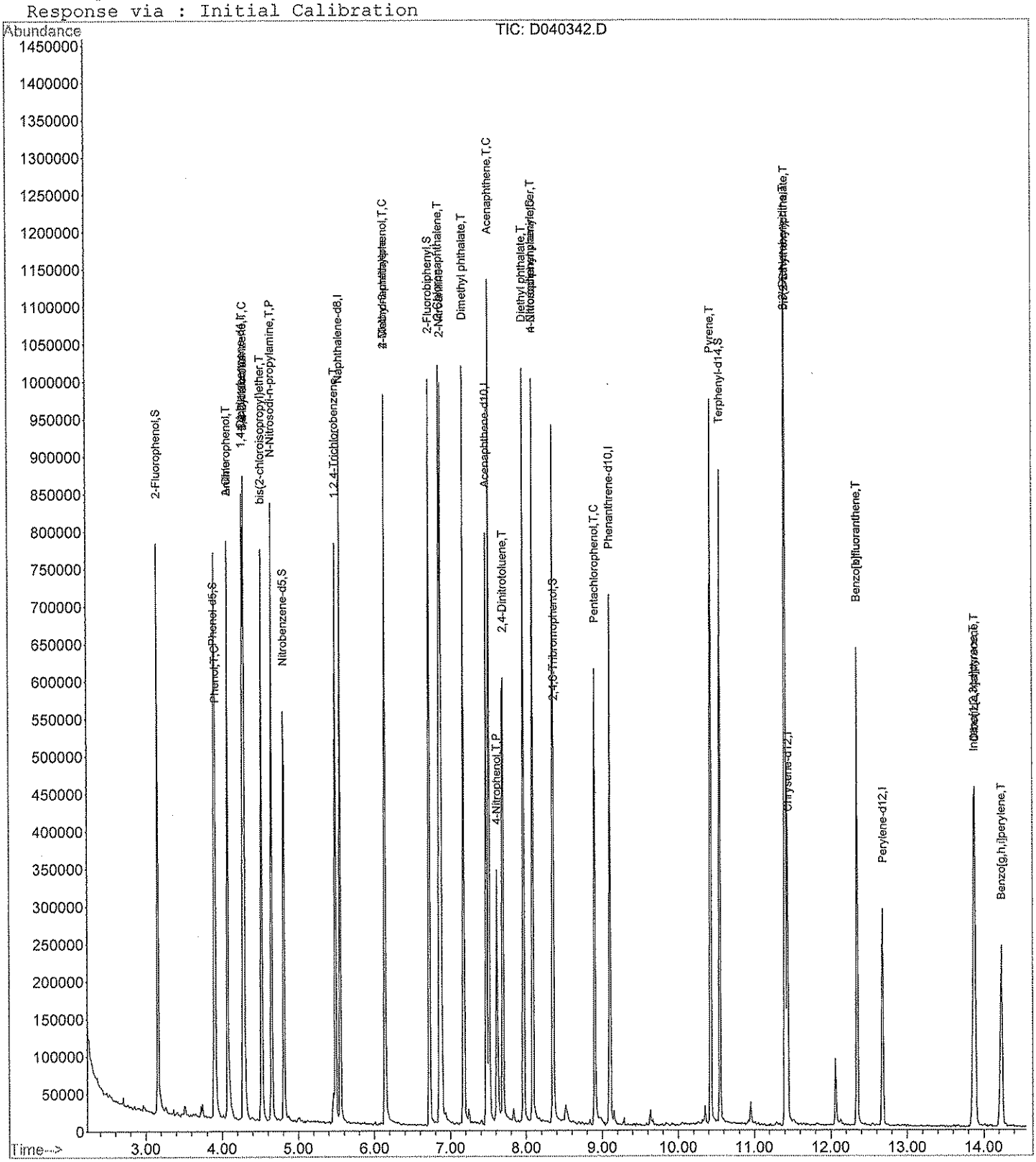
4-4-08

(#) = qualifier out of range (m) = manual integration
D040342.D SVOA0328.M Fri Apr 04 14:59:10 2008 SVOA 4

Quantitation Report

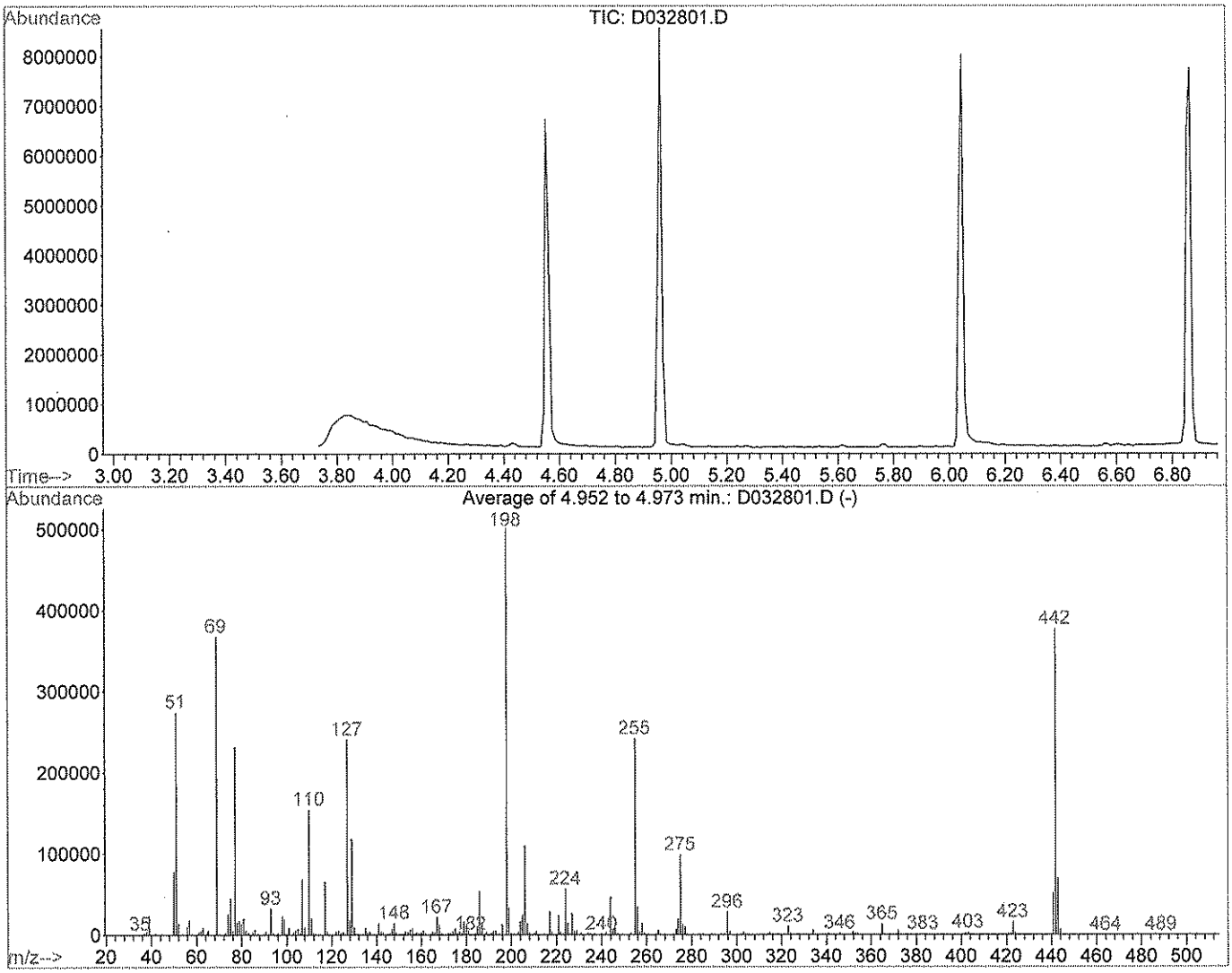
Data File : C:\HPCHEM\1\DATA\D040308\D040342.D Vial: 18
Acq On : 4 Apr 2008 5:03 am Operator: mills
Sample : ,msd,me0803c07-02bmsd,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# TUNING RAW DATA

Data File : C:\HPCHEM\1\DATA\D032708\D032801.D Vial: 1
Acq On : 28 Mar 2008 4:26 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP




AutoFind: Scans 120, 121, 122; Background Corrected with Scan 116

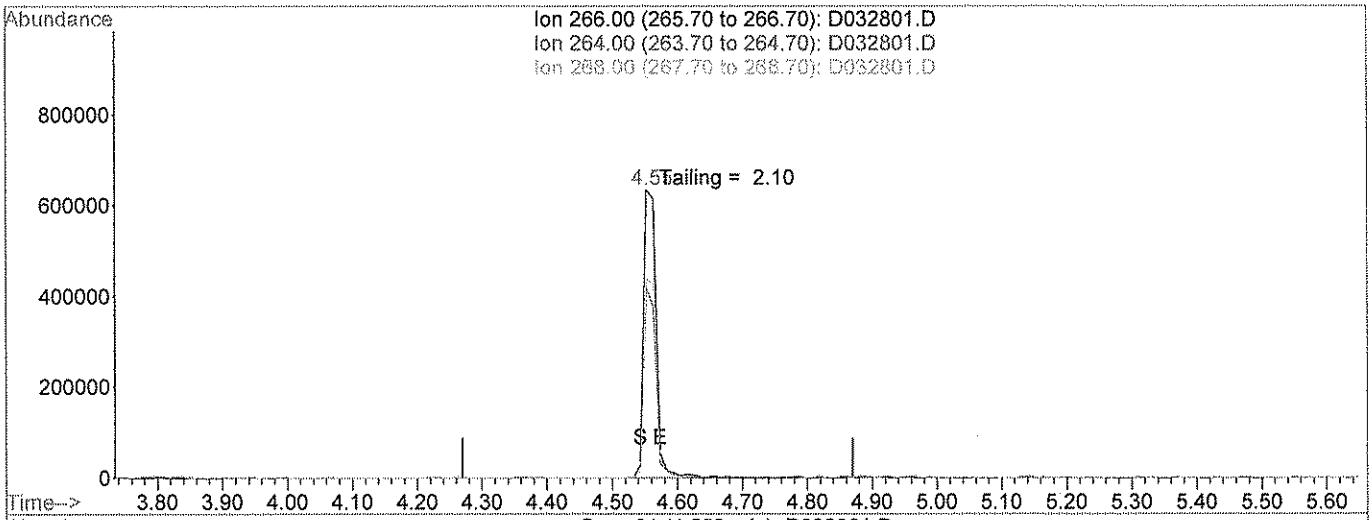
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 51 | 198 | 30 | 60 | 54.8 | 274221 | PASS |
| 68 | 69 | 0.00 | 2 | 0.0 | 0 | PASS |
| 70 | 69 | 0.00 | 2 | 0.3 | 1166 | PASS |
| 127 | 198 | 40 | 60 | 48.1 | 240719 | PASS |
| 197 | 198 | 0.00 | 1 | 0.0 | 0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | 500629 | PASS |
| 199 | 198 | 5 | 9 | 6.7 | 33653 | PASS |
| 275 | 198 | 10 | 30 | 19.6 | 98369 | PASS |
| 365 | 198 | 1 | 100 | 2.6 | 13217 | PASS |
| 441 | 443 | 0.01 | 100 | 73.5 | 51334 | PASS |
| 442 | 198 | 40 | 250 | 75.4 | 377253 | PASS |
| 443 | 442 | 17 | 23 | 18.5 | 69817 | PASS |

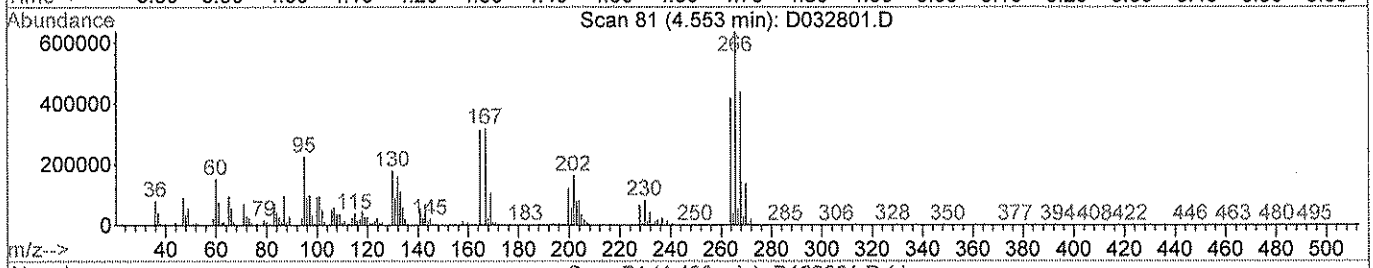
D032801.D DFTPP.M Fri Mar 28 21:14:11 2008 SVOA 4

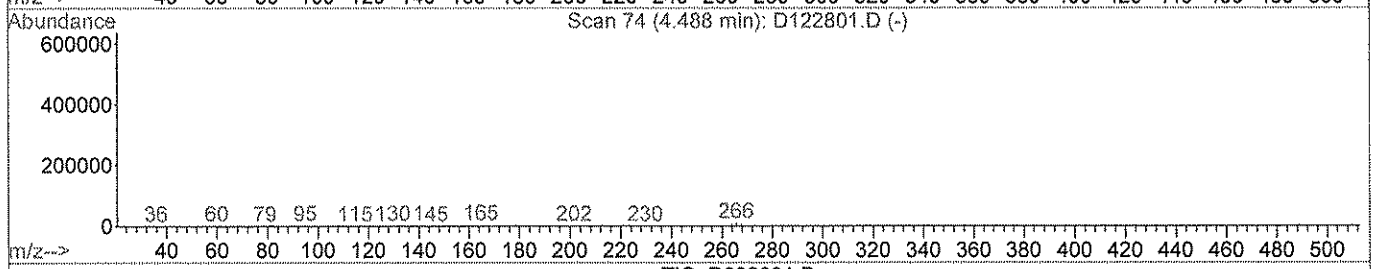
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D032708\D032801.D Vial: 1
Acq On : 28 Mar 2008 4:26 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 28 21:14 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Mar 28 21:14:17 2008
Response via : Single Level Calibration




TIC: D032801.D

(1) PENTACHLOROPHENOL

4.55min 63.86

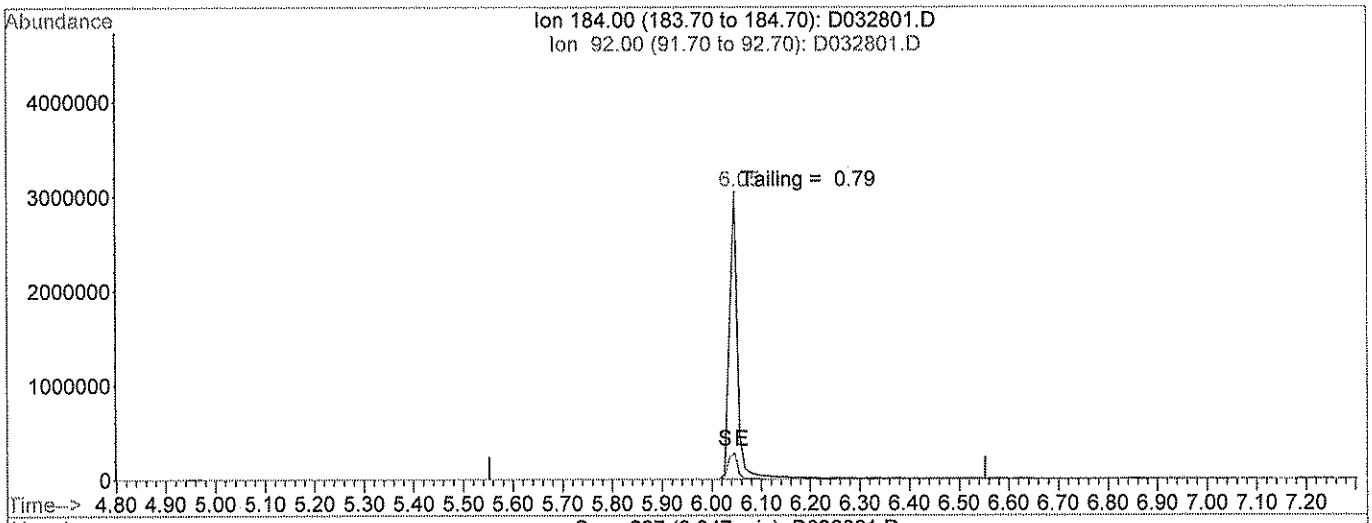
response 848211

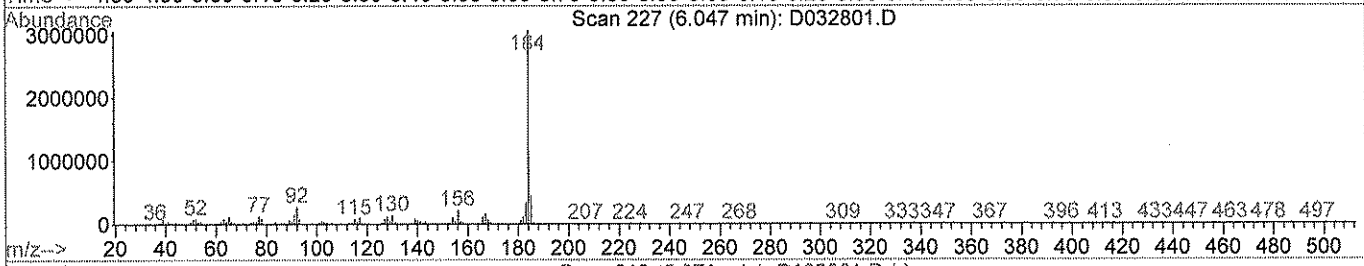
| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 63.53 |
| 268.00 | 64.60 | 69.59 |
| 0.00 | 0.00 | 0.00 |

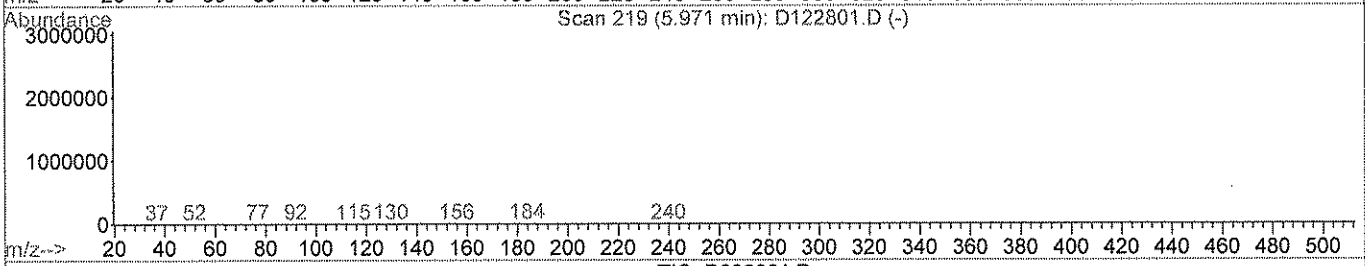
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D032708\D032801.D Vial: 1
Acq On : 28 Mar 2008 4:26 pm Operator: mills
Sample : ,tune,dftpp tune,1, Inst : SVOA 4
Misc : dftpp Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 28 21:14 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Mar 28 21:14:17 2008
Response via : Single Level Calibration




TIC: D032801.D

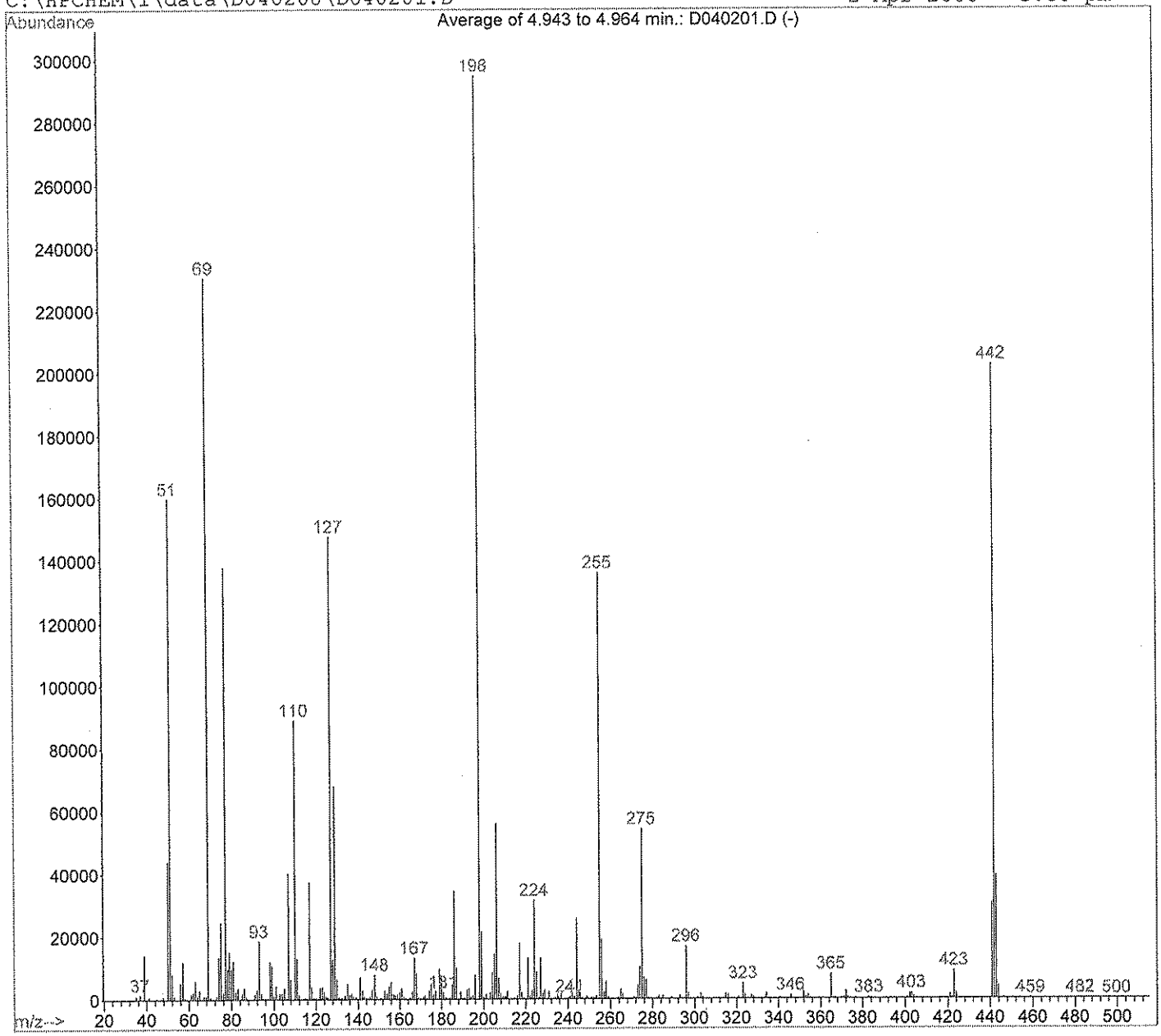
(3) BENZIDINE

6.05min 62.82

response 3500067

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100 | 100 |
| 92.00 | 12.20 | 10.74 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

C:\HPCHEM\1\data\D040208\D040201.D 2 Apr 2008 3:55 pm



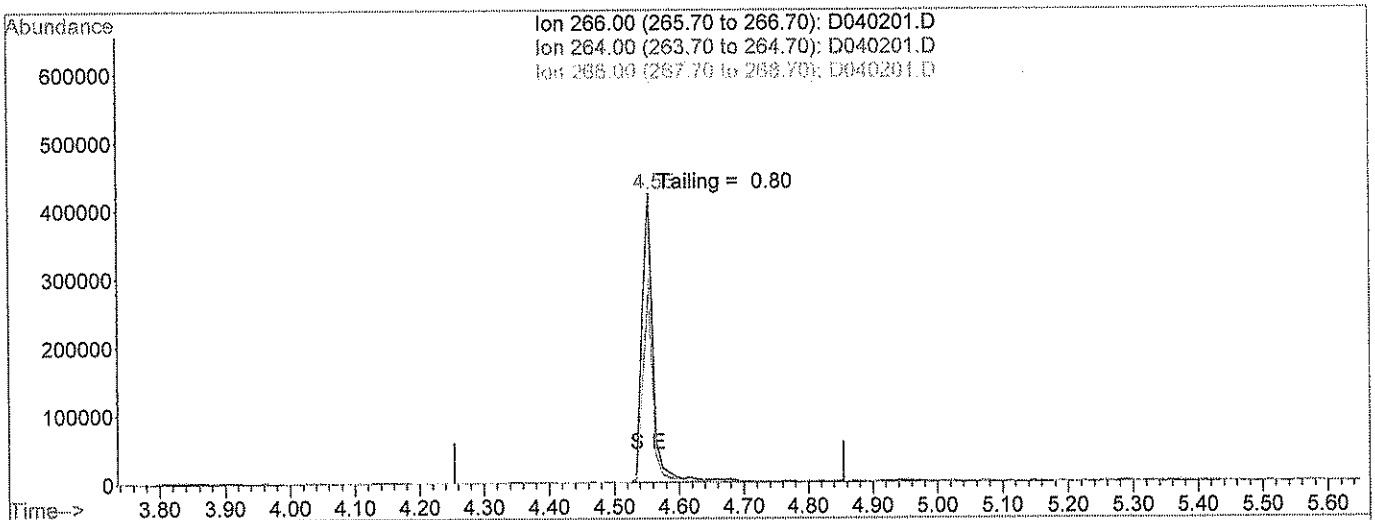

Peak Apex is scan: 120
Average of 3 scans: 119,120,121 minus background scan 115

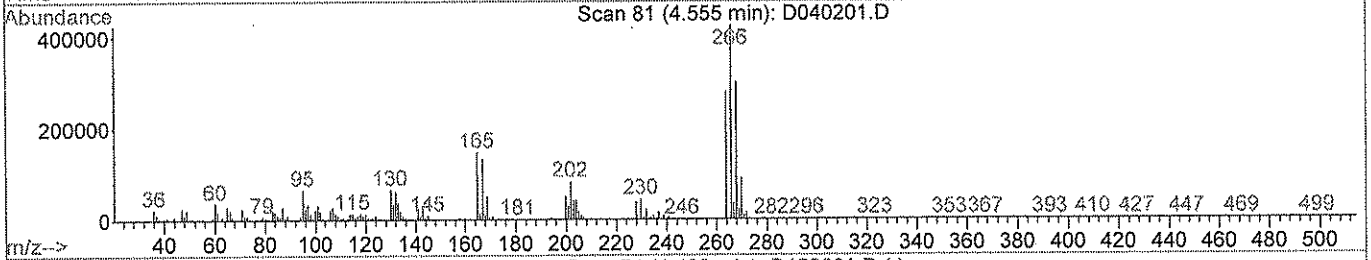
| Target Mass | Comparison Mass | Lower Limit,% | Upper Limit,% | Relative Abundance,% | Result Pass/Fail |
|---|---|---|---|---|---|
| 51 | 198 | 30 | 60 | 54.2 | PASS |
| 68 | 69 | 0 | 2 | 0.5 | PASS |
| 69 | 198 | 0 | 100 | 78.2 | PASS |
| 70 | 69 | 0 | 2 | 0.3 | PASS |
| 127 | 198 | 40 | 60 | 50.1 | PASS |
| 197 | 198 | 0 | 1 | 0.1 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | PASS |
| 199 | 198 | 5 | 9 | 7.4 | PASS |
| 275 | 198 | 10 | 30 | 18.4 | PASS |
| 365 | 198 | 1 | 100 | 2.7 | PASS |
| 441 | 443 | >0 | 100 | 77.4 | PASS |
| 442 | 198 | 40 | 100 | 68.7 | PASS |
| 443 | 442 | 17 | 23 | 19.4 | PASS |

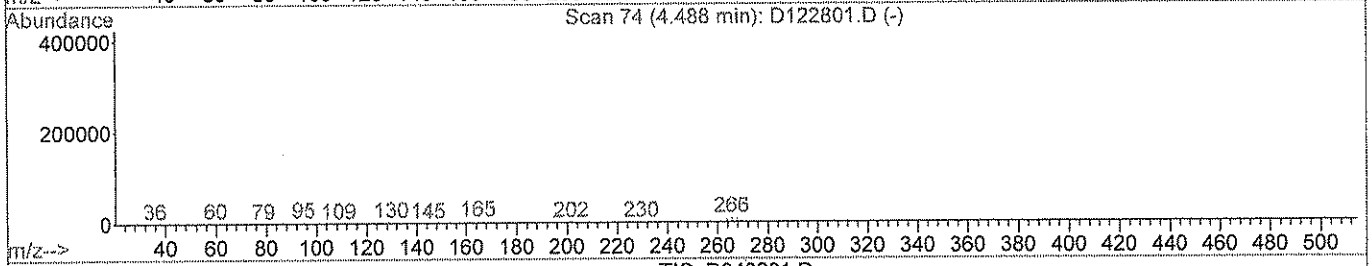
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040208\D040201.D  Vial: 1
Acq On : 2 Apr 2008 3:55 pm  Operator: mills
Sample : ,tune,dftpp tune,1,  Inst : SVOA 4
Misc : dftpp  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 17:03 2008  Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 02 16:03:03 2008
Response via : Single Level Calibration




TIC: D040201.D

(1) PENTACHLOROPHENOL

4.55min 50.00

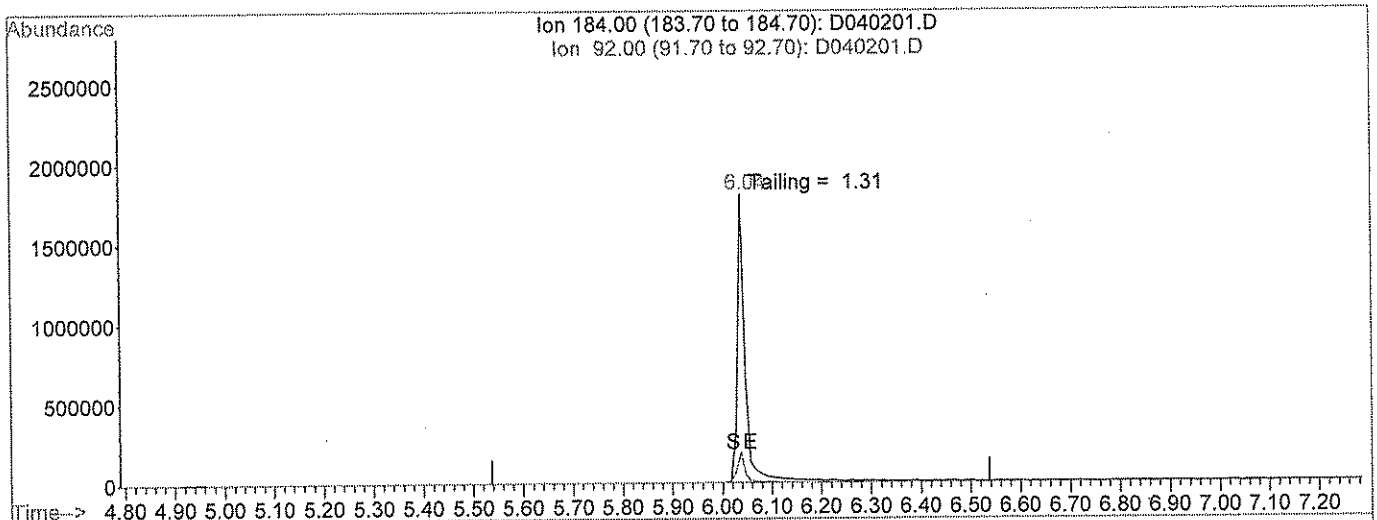
response 493439

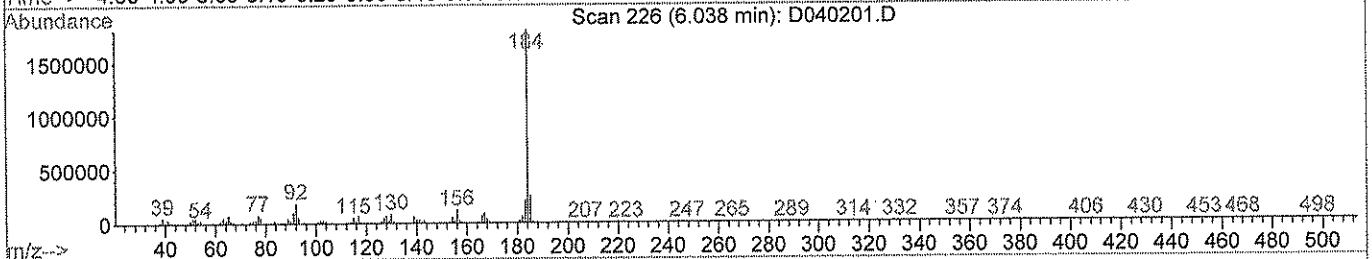
| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 62.81 |
| 268.00 | 64.60 | 67.75 |
| 0.00 | 0.00 | 0.00 |

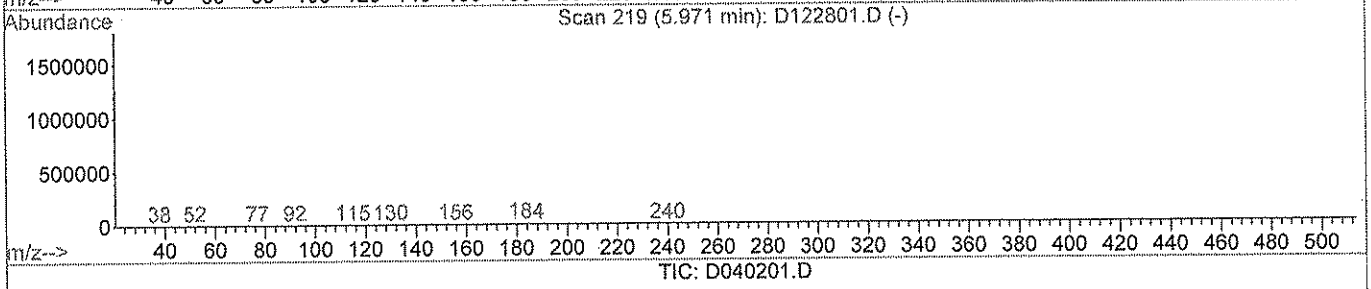
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040208\D040201.D  Vial: 1
Acq On : 2 Apr 2008 3:55 pm  Operator: mills
Sample : ,tune,dftpp tune,1,  Inst : SVOA 4
Misc : dftpp  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 17:03 2008  Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Wed Apr 02 16:03:03 2008
Response via : Single Level Calibration



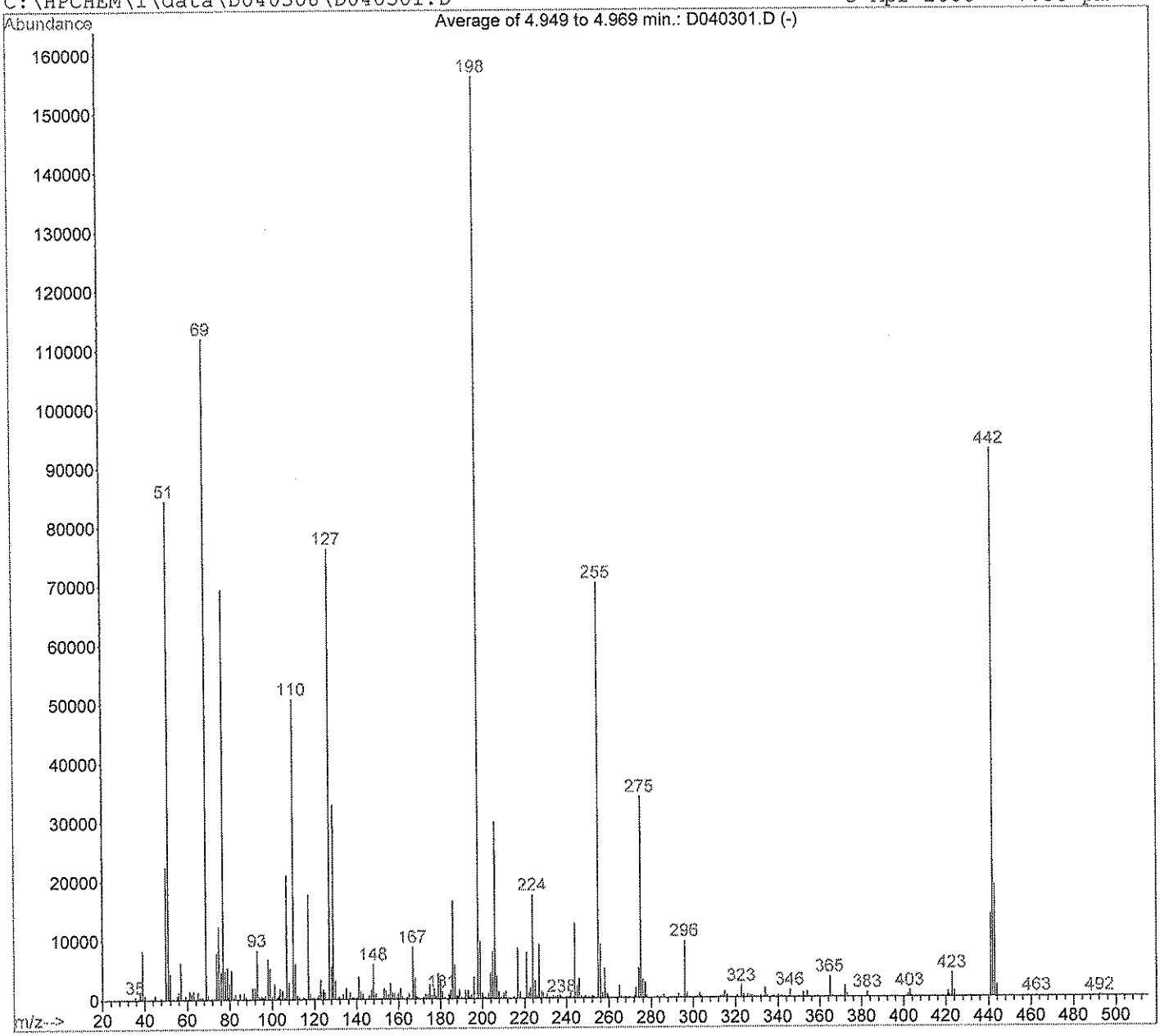

(3) BENZIDINE

6.04min 50.00

response 2030670

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100 | 100 |
| 92.00 | 12.20 | 10.50 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

C:\HPCHEM\1\data\D040308\D040301.D 3 Apr 2008 7:35 pm



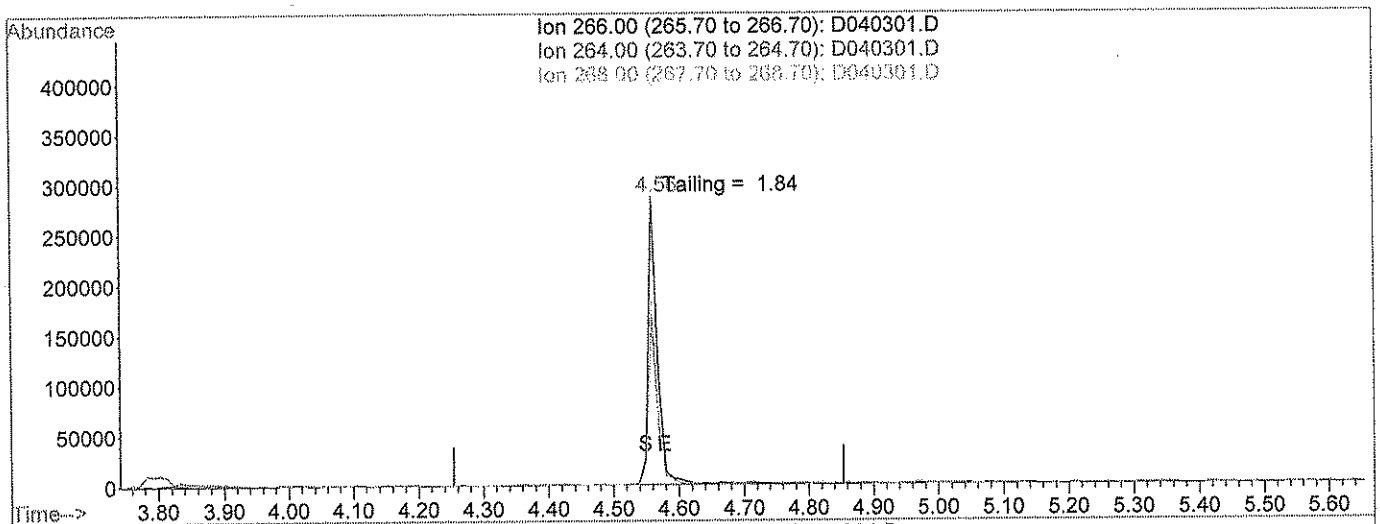

Peak Apex is scan: 120
Average of 3 scans: 119,120,121 minus background scan 113

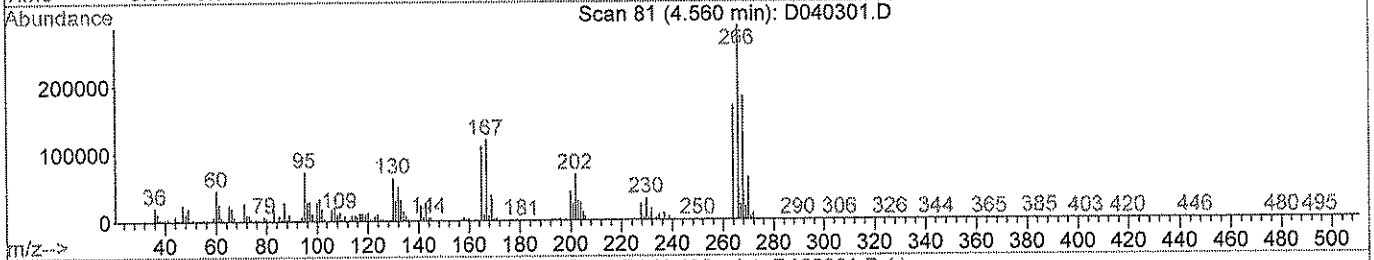
| Target Mass | Comparison Mass | Lower Limit,% | Upper Limit,% | Relative Abundance,% | Result Pass/Fail |
|---|---|---|---|---|---|
| 51 | 198 | 30 | 60 | 54.1 | PASS |
| 68 | 69 | 0 | 2 | 0.1 | PASS |
| 69 | 198 | 0 | 100 | 71.7 | PASS |
| 70 | 69 | 0 | 2 | 0.7 | PASS |
| 127 | 198 | 40 | 60 | 48.9 | PASS |
| 197 | 198 | 0 | 1 | 0.0 | PASS |
| 198 | 198 | 100 | 100 | 100.0 | PASS |
| 199 | 198 | 5 | 9 | 6.3 | PASS |
| 275 | 198 | 10 | 30 | 21.8 | PASS |
| 365 | 198 | 1 | 100 | 2.2 | PASS |
| 441 | 443 | >0 | 100 | 74.0 | PASS |
| 442 | 198 | 40 | 100 | 59.5 | PASS |
| 443 | 442 | 17 | 23 | 20.4 | PASS |

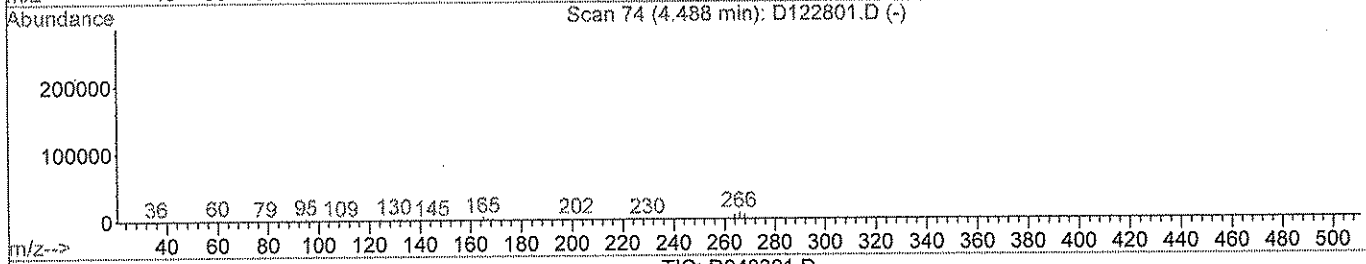
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040308\D040301.D  Vial: 1
Acq On : 3 Apr 2008 7:35 pm  Operator: mills
Sample : ,tune,dftpp tune,1,  Inst : SVOA 4
Misc : dftpp  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 3 19:51 2008  Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Thu Apr 03 19:51:44 2008
Response via : Single Level Calibration




TIC: D040301.D

(1) PENTACHLOROPHENOL

4.56min 27.98

response 276148

| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 59.04 |
| 268.00 | 64.60 | 64.13 |
| 0.00 | 0.00 | 0.00 |

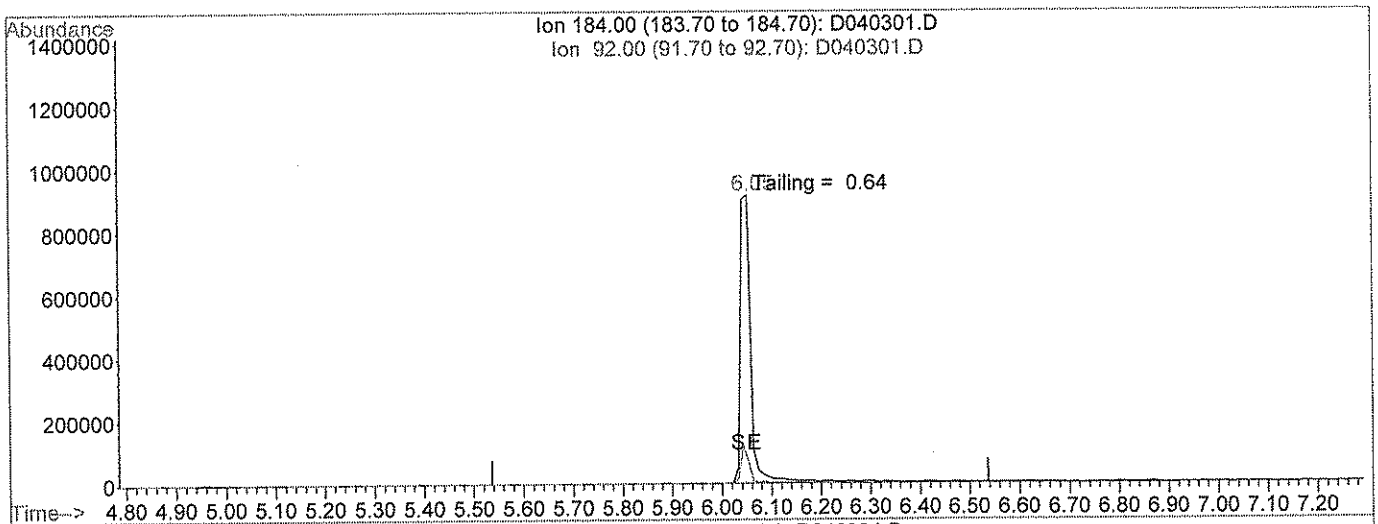
Quantitation Report (Qedit)

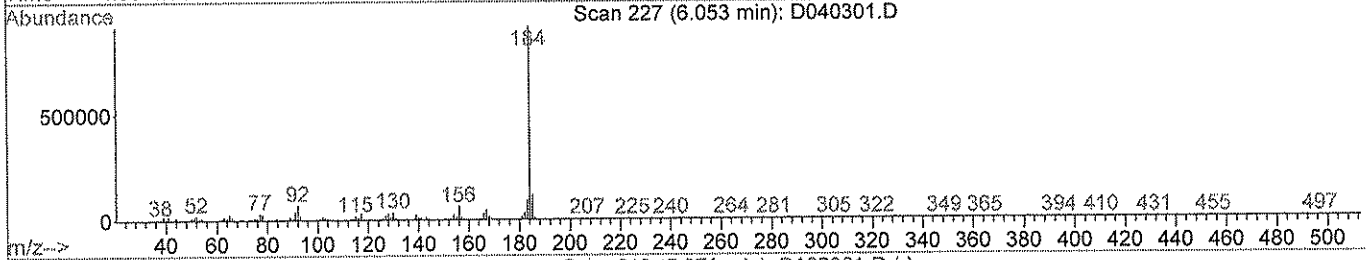
Data File : C:\HPCHEM\1\DATA\D040308\D040301.D
Acq On : 3 Apr 2008 7:35 pm
Sample : ,tune,dftpp tune,1,
Misc : dftpp
MS Integration Params: rteint.p
Quant Time: Apr 3 19:51 2008

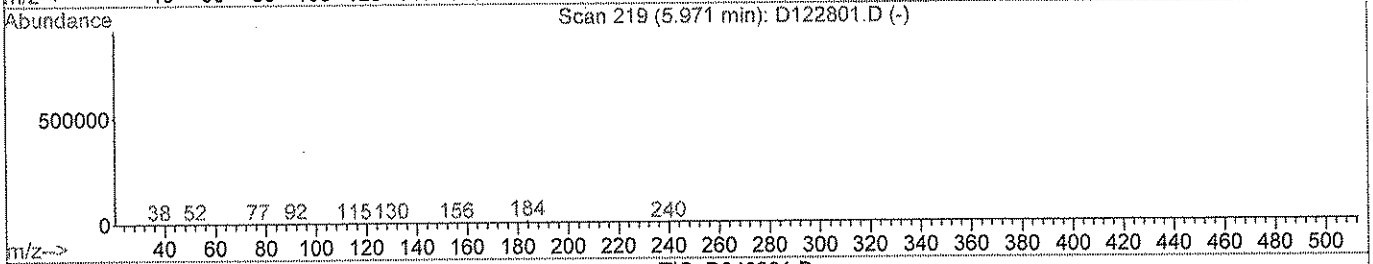
Vial: 1
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Thu Apr 03 19:51:44 2008
Response via : Single Level Calibration




TIC: D040301.D

(3) BENZIDINE

6.05min 32.60

response 1323935

| Ion | Exp% | Act% |
|---|---|---|
| 184.00 | 100 | 100 |
| 92.00 | 12.20 | 10.63 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# INITIAL CALIBRATION RAW DATA

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration

Avg = 10%

Calibration Files
1.0 =D032802.D 5.0 =D032803.D 10 =D032804.D
20 =D032805.D 50 =D032806.D 80 =D032807.D

100 = D032808 120 = D032808

| | | Compound | 1.0 | 5.0 | 10 | 20 | 50 | 80 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | 1,4-Dichlorobenzene-d | ISTD | | | | | | | |
| 2) | | Pyridine | | | 1.426 | 1.521 | 1.450 | 1.318 | 1.414 | 4.90 |
| 3) | | n-Nitrosodimethylam | | | 0.941 | 0.810 | 0.936 | 0.889 | 0.894 | 5.28 |
| 4) | S | 2-Fluorophenol | | | 1.246 | 1.207 | 1.295 | 1.223 | 1.240 | 2.68 |
| 5) | S | Phenol-d5 | | | 1.566 | 1.550 | 1.684 | 1.663 | 1.640 | 3.92 |
| 6) | T,C | Phenol | | | 1.434 | 1.463 | 1.581 | 1.549 | 1.556 | 6.04 |
| 7) | | Aniline | | | 1.727 | 1.679 | 1.744 | 1.785 | 1.707 | 4.32 |
| 8) | T | bis(2-Chloroethyl)e | | | 1.239 | 1.158 | 1.341 | 1.157 | 1.298 | 11.53 |
| 9) | T | 2-Chlorophenol | | | 1.325 | 1.275 | 1.343 | 1.209 | 1.245 | 6.58 |
| 10) | T | 1,3-Dichlorobenzene | | | 1.533 | 1.510 | 1.467 | 1.325 | 1.399 | 8.56 |
| 11) | T,C | 1,4-Dichlorobenzene | | | 1.547 | 1.500 | 1.502 | 1.317 | 1.397 | 9.57 |
| 12) | T | 1,2-Dichlorobenzene | | | 1.479 | 1.455 | 1.431 | 1.251 | 1.318 | 11.89 |
| 13) | | Benzyl alcohol | | | 0.720 | 0.747 | 0.807 | 0.770 | 0.757 | 3.84 |
| 14) | T | bis(2-chloroisoprop | | | 2.567 | 2.451 | 2.564 | 2.436 | 2.495 | 2.36 |
| 15) | | 2-Methylphenol | | | 1.065 | 1.049 | 1.134 | 1.078 | 1.092 | 3.00 |
| 16) | T | Hexachloroethane | | | 0.775 | 0.735 | 0.767 | 0.702 | 0.723 | 5.93 |
| 17) | T,P | N-Nitrosodi-n-propy | | | 0.986 | 0.914 | 0.954 | 0.876 | 0.909 | 5.77 |
| 18) | | 3/4-Methylphenol | | | 1.067 | 1.060 | 1.144 | 1.116 | 1.102 | 2.97 |
| 19) | I | Naphthalene-d8 | ISTD | | | | | | | |
| 20) | S | Nitrobenzene-d5 | 0.429 | 0.532 | 0.513 | 0.496 | 0.498 | 0.470 | 0.481 | 7.21 |
| 21) | T | Nitrobenzene | | | 0.492 | 0.452 | 0.458 | 0.422 | 0.440 | 7.62 |
| 22) | | Acetophenone | | | 0.599 | 0.586 | 0.597 | 0.555 | 0.568 | 5.56 |
| 23) | T | Isophorone | | | 0.876 | 0.814 | 0.833 | 0.816 | 0.827 | 3.05 |
| 24) | T,C | 2-Nitrophenol | | | 0.237 | 0.238 | 0.244 | 0.239 | 0.242 | 1.78 |
| 25) | T | 2,4-Dimethylphenol | | | 0.401 | 0.391 | 0.427 | 0.417 | 0.408 | 3.04 |
| 26) | T | bis(2-Chloroethoxy) | | | 0.491 | 0.482 | 0.515 | 0.501 | 0.492 | 3.28 |
| 27) | T,C | 2,4-Dichlorophenol | | | 0.355 | 0.332 | 0.363 | 0.344 | 0.345 | 3.39 |
| 28) | | Benzoic acid | | | 0.139 | 0.178 | 0.224 | 0.233 | 0.203 | 18.41 |
| 29) | T | 1,2,4-Trichlorobenz | | | 0.384 | 0.372 | 0.374 | 0.345 | 0.355 | 7.16 |
| 30) | T | Naphthalene | 0.942 | 1.019 | 1.032 | 0.953 | 0.965 | 0.892 | 0.937 | 7.59 |
| 31) | | 2,6-Dichlorophenol | | | 0.336 | 0.333 | 0.340 | 0.293 | 0.313 | 8.32 |
| 32) | | 4-Chloroaniline | | | 0.437 | 0.422 | 0.419 | 0.383 | 0.404 | 6.87 |
| 33) | T,C | Hexachlorobutadiene | | | 0.256 | 0.237 | 0.229 | 0.204 | 0.217 | 13.18 |
| 34) | T,C | 4-Chloro-3-methylph | | | 0.336 | 0.322 | 0.339 | 0.342 | 0.333 | 2.67 |
| 35) | | 2-Methylnaphthalene | | | 0.688 | 0.619 | 0.625 | 0.580 | 0.599 | 9.47 |
| 36) | I | Acenaphthene-d10 | ISTD | | | | | | | |
| 37) | P | Hexachlorocyclopent | | | 0.392 | 0.387 | 0.291 | 0.261 | 0.316 | 18.50 |
| 38) | | 2,4,5-Trichlorophen | | | 0.417 | 0.485 | 0.510 | 0.469 | 0.457 | 8.00 |
| 39) | T,C | 2,4,6-Trichlorophen | | | 0.456 | 0.431 | 0.461 | 0.444 | 0.455 | 3.65 |
| 40) | S | 2-Fluorobiphenyl | 1.175 | 1.392 | 1.406 | 1.348 | 1.328 | 1.162 | 1.254 | 10.18 |
| 41) | T | 2-Chloronaphthalene | | | 1.548 | 1.634 | 1.643 | 1.566 | 1.520 | 9.21 |
| 42) | | 2-Nitroaniline | | | 0.483 | 0.502 | 0.532 | 0.501 | 0.504 | 3.55 |
| 43) | T | Acenaphthylene | 1.658 | 2.042 | 1.940 | 1.889 | 1.893 | 1.650 | 1.791 | 9.33 |
| 44) | T | Dimethyl phthalate | | | 1.556 | 1.546 | 1.550 | 1.480 | 1.512 | 2.80 |
| 45) | T | 2,6-Dinitrotoluene | | | 0.324 | 0.357 | 0.391 | 0.358 | 0.359 | 6.52 |
| 46) | | 3-Nitroaniline | | | 0.401 | 0.378 | 0.401 | 0.389 | 0.392 | 2.19 |
| 47) | T,C | Acenaphthene | 0.998 | 1.173 | 1.160 | 1.103 | 1.088 | 0.939 | 1.036 | 10.50 |
| 48) | T,P | 2,4-Dinitrophenol | | | 0.156 | 0.174 | 0.230 | 0.238 | 0.219 | 20.05 |
| 49) | | Dibenzofuran | | | 1.680 | 1.606 | 1.497 | 1.319 | 1.457 | 11.04 |
| 50) | T,P | 4-Nitrophenol | | | 0.237 | 0.293 | 0.324 | 0.295 | 0.278 | 11.43 |

(#) = Out of Range ### Number of calibration levels exceeded format ###

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration

Calibration Files
1.0 =D032802.D 5.0 =D032803.D 10 =D032804.D
20 =D032805.D 50 =D032806.D 80 =D032807.D

| | | Compound | 1.0 | 5.0 | 10 | 20 | 50 | 80 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 51) | T | 2,4-Dinitrotoluene | | | 0.439 | 0.459 | 0.436 | 0.416 | 0.433 | 4.02 |
| 52) | T | Fluorene | 1.121 | 1.152 | 1.241 | 1.151 | 1.047 | 0.845 | 1.014 | 18.38 |
| 53) | T | 4-Chlorophenyl phen | | | 0.571 | 0.560 | 0.530 | 0.435 | 0.474 | 19.17 |
| 54) | T | Diethyl phthalate | | | 1.772 | 1.645 | 1.559 | 1.474 | 1.544 | 9.41 |
| 55) | | 4-Nitroaniline | | | 0.397 | 0.381 | 0.375 | 0.383 | 0.380 | 2.67 |
| 56) | I | Phenanthrene-d10 | ---------- | | ISTD | ---------- | | | | |
| 57) | T | 4,6-Dinitro-2-methy | | | 0.176 | 0.183 | 0.210 | 0.217 | 0.202 | 8.99 |
| 58) | C | n-Nitrosodiphenylam | | | 1.105 | 1.175 | 1.173 | 1.015 | 1.047 | 11.83 |
| 59) | | 1,2-diphenyl-Hydraz | | | 1.155 | 1.145 | 1.172 | 1.018 | 1.065 | 9.82 |
| 60) | S | 2,4,6-Tribromopheno | | | 0.228 | 0.249 | 0.248 | 0.219 | 0.225 | 9.50 |
| 61) | T | 4-Bromophenyl pheny | | | 0.269 | 0.280 | 0.269 | 0.237 | 0.246 | 12.79 |
| 62) | T | Hexachlorobenzene | | | 0.364 | 0.372 | 0.365 | 0.309 | 0.328 | 13.54 |
| 63) | T,C | Pentachlorophenol | | | 0.207 | 0.214 | 0.211 | 0.180 | 0.187 | 14.77 |
| 64) | T | Phenanthrene | 1.113 | 1.227 | 1.223 | 1.202 | 1.295 | 1.130 | 1.147 | 9.74 |
| 65) | T | Anthracene | 1.140 | 1.286 | 1.239 | 1.209 | 1.331 | 1.194 | 1.177 | 10.18 |
| 66) | | Carbazole | | | 1.131 | 1.248 | 1.867 | 1.705 | 1.339 | 26.79 |
| 67) | T | Di-n-butyl phthalat | | | 2.104 | 2.107 | 2.035 | 1.785 | 1.851 | 14.68 |
| 68) | T,C | Fluoranthene | 0.919 | 1.243 | 1.215 | 1.243 | 1.246 | 1.143 | 1.115 | 13.04 |
| 69) | I | Chrysene-d12 | ---------- | | ISTD | ---------- | | | | |
| 70) | | Benzidine | | | 0.485 | 0.471 | 0.314 | 0.357 | 0.420 | 16.74 |
| 71) | T | Pyrene | 1.196 | 1.551 | 1.577 | 1.441 | 1.566 | 1.454 | 1.449 | 9.04 |
| 72) | S | Terphenyl-d14 | 0.788 | 0.950 | 0.999 | 0.944 | 0.911 | 0.835 | 0.875 | 10.28 |
| 73) | T | Butyl benzyl phthal | | | 1.173 | 1.087 | 1.137 | 1.017 | 1.048 | 9.74 |
| 74) | T | Benzo[a]anthracene | 0.998 | 1.173 | 1.180 | 1.163 | 1.128 | 1.157 | 1.113 | 6.62 |
| 75) | T | 3,3'-Dichlorobenzid | | | 0.449 | 0.476 | 0.482 | 0.409 | 0.411 | 17.97 |
| 76) | T | Chrysene | 1.135 | 1.165 | 1.228 | 1.066 | 1.067 | 1.050 | 1.076 | 9.20 |
| 77) | T | bis(2-Ethylhexyl)ph | | | 1.566 | 1.465 | 1.397 | 1.069 | 1.209 | 25.27 |
| 78) | I | Perylene-d12 | ---------- | | ISTD | ---------- | | | | |
| 79) | T,C | Di-n-octyl phthalat | | | 2.972 | 3.012 | 2.906 | 2.985 | 3.107 | 7.58 |
| 80) | T | Benzo[b]fluoranthen | 1.535 | 1.889 | 1.556 | 1.924 | 1.752 | 1.353 | 1.662 | 11.62 |
| 81) | T | Benzo[k]fluoranthen | 1.413 | 1.844 | 1.251 | 0.825 | 0.716 | 1.082 | 1.120 | 33.48 |
| 82) | T,C | Benzo[a]pyrene | 1.227 | 1.815 | 1.426 | 1.318 | 1.211 | 1.129 | 1.305 | 17.51 |
| 83) | T | Indeno[1,2,3cd]pyre | 0.954 | 1.264 | 1.061 | 1.032 | 0.954 | 0.782 | 0.943 | 19.05 |
| 84) | T | Dibenz[a,h]anthrace | 0.640 | 0.910 | 0.454 | 0.492 | 0.479 | 0.402 | 0.523 | 33.40 |
| 85) | T | Benzo[g,h,i]perylen | 0.867 | 1.074 | 0.856 | 0.879 | 0.799 | 0.621 | 0.783 | 22.28 |

3/28/08

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032808\D032802.D Vial: 2
Acq On : 28 Mar 2008 4:44 pm Operator: mills
Sample : ,ical,pna ical 1.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:05 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:03:39 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

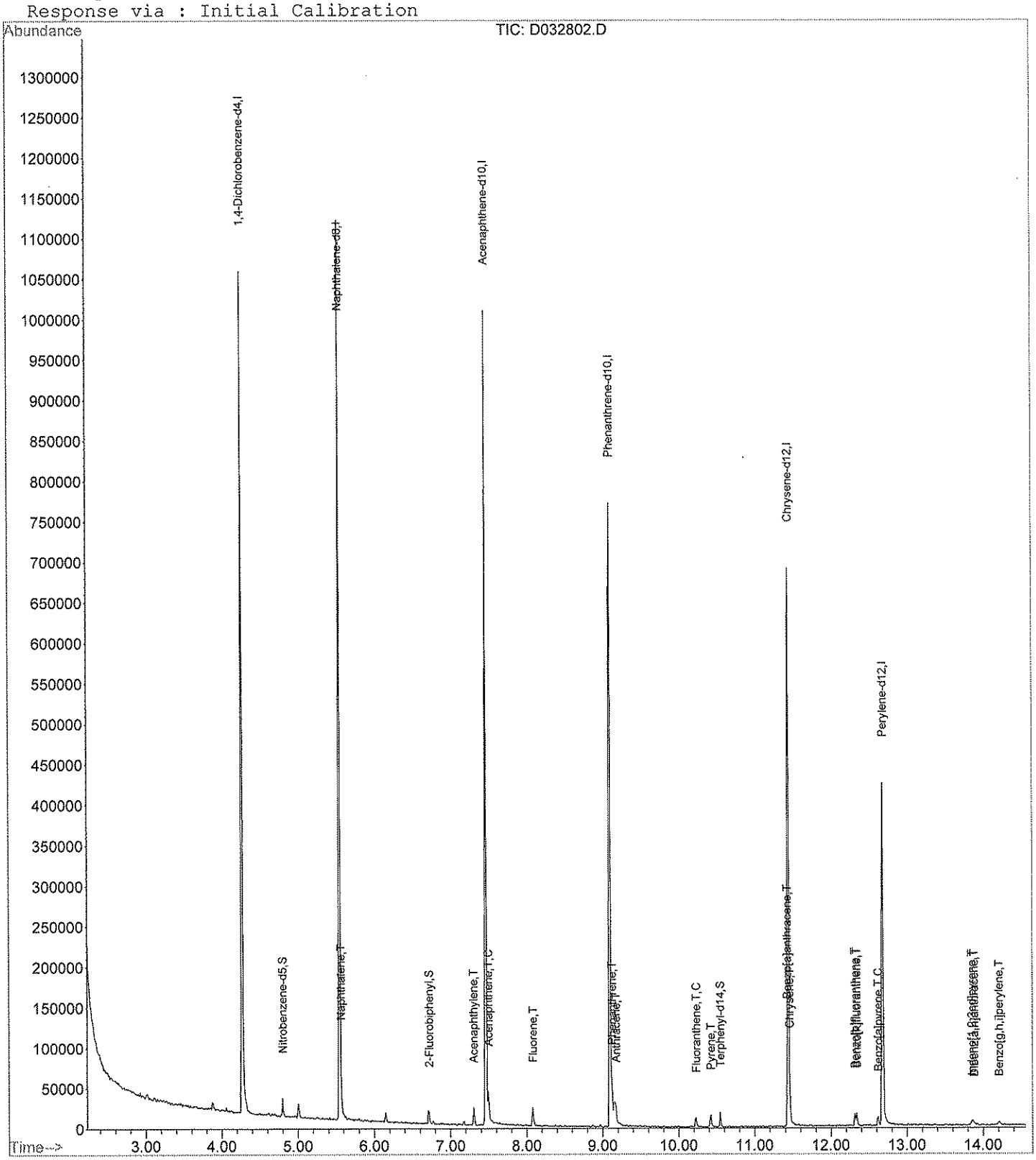
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 175134 | 40.00 | ug/ml | -0.01 |
| 19) Naphthalene-d8 | 5.54 | 136 | 524133 | 40.00 | ug/ml | -0.01 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 252469 | 40.00 | ug/ml | -0.01 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 328748 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 291217 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 191401 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 0.00 | 112 | 0 | 0.00 | ug/ml | |
| 5) Phenol-d5 | 0.00 | 99 | 0 | 0.00 | ug/ml | |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 5623 | 0.89 | ug/ml | -0.01 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 7414 | 0.94 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 0.00 | 330 | 0 | 0.00 | ug/ml | |
| 72) Terphenyl-d14 | 10.55 | 244 | 5737 | 0.90 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 30) Naphthalene | 5.57 | 128 | 12338 | 1.02 | ug/ml | 99 |
| 43) Acenaphthylene | 7.30 | 152 | 10465 | 0.94 | ug/ml | 97 |
| 47) Acenaphthene | 7.50 | 153 | 6301 | 0.98 | ug/ml | 97 |
| 52) Fluorene | 8.08 | 166 | 7073 | 1.15 | ug/ml | 86 |
| 64) Phenanthrene | 9.12 | 178 | 9150 | 0.98 | ug/ml | 90 |
| 65) Anthracene | 9.18 | 178 | 9373 | 0.98 | ug/ml | 97 |
| 68) Fluoranthene | 10.23 | 202 | 7555 | 0.82 | ug/ml# | 86 |
| 71) Pyrene | 10.42 | 202 | 8705 | 0.81 | ug/ml# | 77 |
| 74) Benzo[a]anthracene | 11.43 | 228 | 7269 | 0.89 | ug/ml | 96 |
| 76) Chrysene | 11.46 | 228 | 8266 | 1.08 | ug/ml | 93 |
| 80) Benzo[b]fluoranthene | 12.32 | 252 | 7344 | 0.93 | ug/ml | 94 |
| 81) Benzo[k]fluoranthene | 12.34 | 252 | 6759m | 1.49 | ug/ml | |
| 82) Benzo[a]pyrene | 12.62 | 252 | 5872 | 1.00 | ug/ml# | 91 |
| 83) Indeno[1,2,3cd]pyrene | 13.85 | 276 | 4567 | 1.04 | ug/ml# | 84 |
| 84) Dibenz[a,h]anthracene | 13.88 | 278 | 3061 | 1.43 | ug/ml | 86 |
| 85) Benzo[g,h,i]perylene | 14.21 | 276 | 4151 | 1.16 | ug/ml# | 80 |

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D032808\D032802.D Vial: 2
Acq On : 28 Mar 2008 4:44 pm Operator: mills
Sample : ,ical,pna ical 1.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:05 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032803.D Vial: 3
Acq On : 28 Mar 2008 5:10 pm Operator: mills
Sample : ,ical,pna ical 5.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:10 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:06:04 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

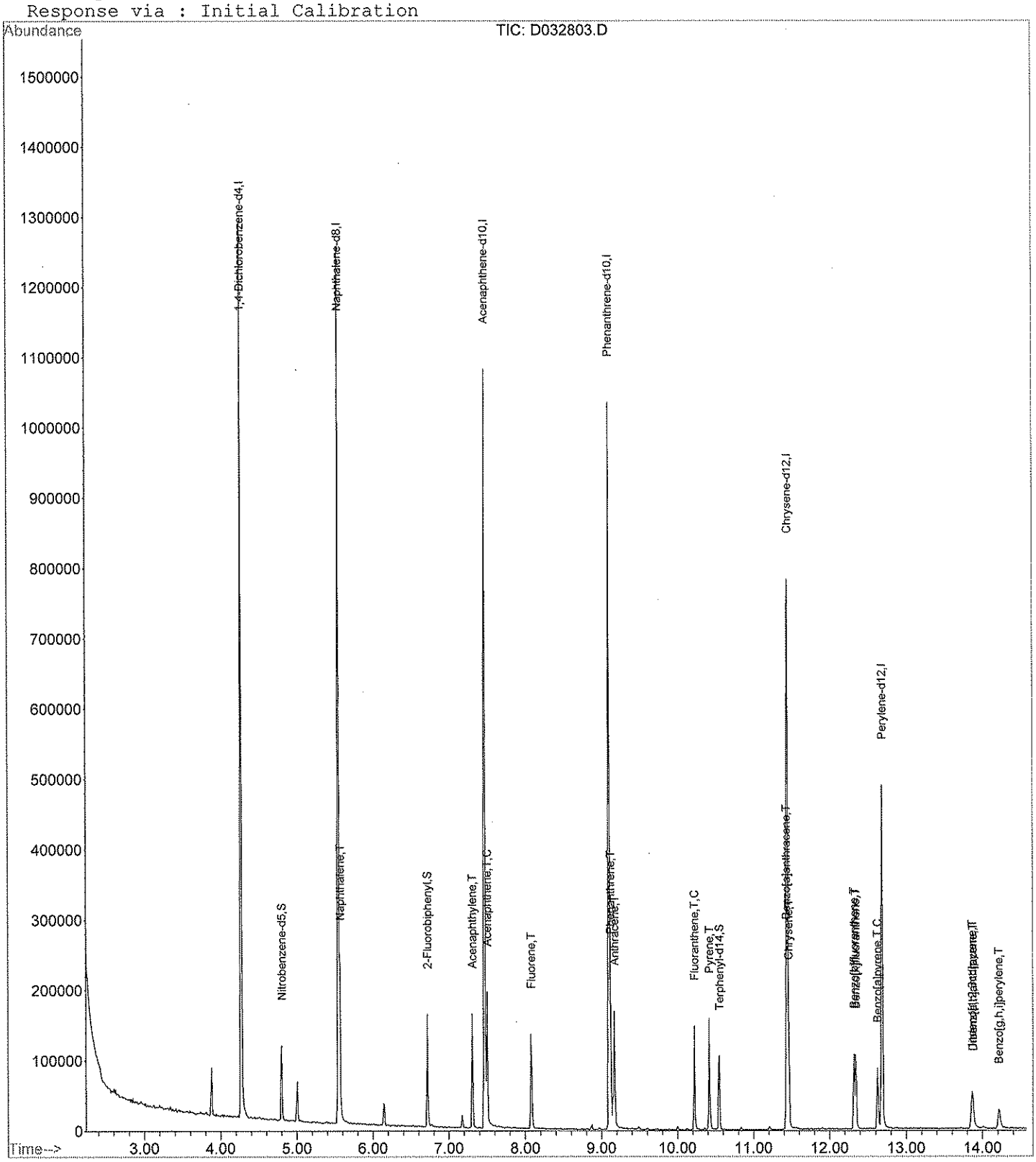
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 185657 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 573855 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 275992 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 382222 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 326457 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.69 | 264 | 203454 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 0.00 | 112 | 0 | 0.00 | ug/ml | |
| 5) Phenol-d5 | 0.00 | 99 | 0 | 0.00 | ug/ml | |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 38138 | 5.61 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 48025 | 5.64 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 0.00 | 330 | 0 | 0.00 | ug/ml | |
| 72) Terphenyl-d14 | 10.55 | 244 | 38773 | 5.50 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 30) Naphthalene | 5.57 | 128 | 73061 | 5.50 | ug/ml | 98 |
| 43) Acenaphthylene | 7.31 | 152 | 70434 | 5.82 | ug/ml | 99 |
| 47) Acenaphthene | 7.50 | 153 | 40466 | 5.77 | ug/ml | 96 |
| 52) Fluorene | 8.08 | 166 | 39736 | 5.79 | ug/ml | 93 |
| 64) Phenanthrene | 9.12 | 178 | 58610 | 5.40 | ug/ml | 98 |
| 65) Anthracene | 9.17 | 178 | 61434 | 5.54 | ug/ml | 98 |
| 68) Fluoranthene | 10.22 | 202 | 59370 | 5.66 | ug/ml | 91 |
| 71) Pyrene | 10.42 | 202 | 63297 | 5.41 | ug/ml | 89 |
| 74) Benzo[a]anthracene | 11.43 | 228 | 47874 | 5.31 | ug/ml | 99 |
| 76) Chrysene | 11.46 | 228 | 47530 | 5.48 | ug/ml | 96 |
| 80) Benzo[b]fluoranthene | 12.32 | 252 | 48036 | 5.80 | ug/ml | 95 |
| 81) Benzo[k]fluoranthene | 12.34 | 252 | 46904 | 9.07 | ug/ml | 96 |
| 82) Benzo[a]pyrene | 12.63 | 252 | 46163 | 7.37 | ug/ml | 97 |
| 83) Indeno[1,2,3cd]pyrene | 13.87 | 276 | 32152 | 6.85 | ug/ml | 91 |
| 84) Dibenz[a,h]anthracene | 13.88 | 278 | 23136m3 | 9.49 | ug/ml | |
| 85) Benzo[g,h,i]perylene | 14.21 | 276 | 27301 | 7.01 | ug/ml | 98 |

(#) = qualifier out of range (m) = manual integration
D032803.D SVOA0328.M Fri Mar 28 21:13:21 2008 SVOA 4 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D032708\D032803.D Vial: 3
Acq On : 28 Mar 2008 5:10 pm Operator: mills
Sample : ,ical,pna ical 5.0ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:10 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032804.D Vial: 4
Acq On : 28 Mar 2008 5:35 pm Operator: mills
Sample : ,ical,svoa ical 10ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:57 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:56:11 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 126914 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 379233 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 192057 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 260746 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 220183 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.70 | 264 | 187656 | 40.00 | ug/ml | 0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 39526 | 9.62 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 49698 | 9.30 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 48623 | 10.31 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 67523 | 10.59 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 14895 | 9.22 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 55011 | 10.97 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.39 | 79 | 45247 | 9.84 | ug/ml | 94 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 29871 | 10.06 | ug/ml | 95 |
| 6) Phenol | 3.90 | 94 | 45486 | 9.07 | ug/ml | 81 |
| 7) Aniline | 3.97 | 93 | 54788 | 9.90 | ug/ml | 98 |
| 8) bis(2-Chloroethyl)ether | 4.01 | 93 | 39321 | 9.24 | ug/ml | 99 |
| 9) 2-Chlorophenol | 4.07 | 128 | 42054 | 9.87 | ug/ml | 89 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 48645 | 10.45 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 49081 | 10.30 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 46919 | 10.34 | ug/ml | 97 |
| 13) Benzyl alcohol | 4.38 | 108 | 22841 | 8.93 | ug/ml | 86 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 81459 | 10.01 | ug/ml | 97 |
| 15) 2-Methylphenol | 4.47 | 108 | 33800 | 9.39 | ug/ml | 98 |
| 16) Hexachloroethane | 4.76 | 117 | 24583 | 10.10 | ug/ml | 82 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 31291 | 10.33 | ug/ml | 94 |
| 18) 3/4-Methylphenol | 4.62 | 108 | 33846 | 9.32 | ug/ml | 95 |
| 21) Nitrobenzene | 4.82 | 77 | 46629 | 10.75 | ug/ml | 90 |
| 22) Acetophenone | 4.65 | 105 | 56819 | 10.04 | ug/ml | 88 |
| 23) Isophorone | 5.07 | 82 | 83015 | 10.52 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.15 | 139 | 22481 | 9.73 | ug/ml | 97 |
| 25) 2,4-Dimethylphenol | 5.17 | 107 | 38009 | 9.40 | ug/ml | 97 |
| 26) bis(2-Chloroethoxy)methane | 5.28 | 93 | 46585 | 9.53 | ug/ml | 96 |
| 27) 2,4-Dichlorophenol | 5.38 | 162 | 33655 | 9.79 | ug/ml | 96 |
| 28) Benzoic acid | 5.23 | 122 | 13148m2 | 6.18 | ug/ml | |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 36452 | 10.28 | ug/ml | 95 |
| 30) Naphthalene | 5.57 | 128 | 97813 | 10.69 | ug/ml | 98 |
| 31) 2,6-Dichlorophenol | 5.63 | 162 | 31859 | 9.87 | ug/ml | 80 |
| 32) 4-Chloroaniline | 5.62 | 127 | 41410 | 10.42 | ug/ml | 98 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 24276 | 11.16 | ug/ml | 93 |
| 34) 4-Chloro-3-methylphenol | 6.13 | 107 | 31855 | 9.91 | ug/ml | 98 |
| 35) 2-Methylnaphthalene | 6.31 | 142 | 65239 | 11.01 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 18831 | 13.50 | ug/ml | 98 |
| 38) 2,4,5-Trichlorophenol | 6.65 | 196 | 20026 | 8.18 | ug/ml | 95 |
| 39) 2,4,6-Trichlorophenol | 6.62 | 196 | 21871 | 9.88 | ug/ml | 99 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 74341 | 9.43 | ug/ml | 99 |
| 42) 2-Nitroaniline | 6.96 | 65 | 23204 | 9.08 | ug/ml | 96 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032804.D Vial: 4
Acq On : 28 Mar 2008 5:35 pm Operator: mills
Sample : ,ical,svoa ical 10ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:57 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:56:11 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

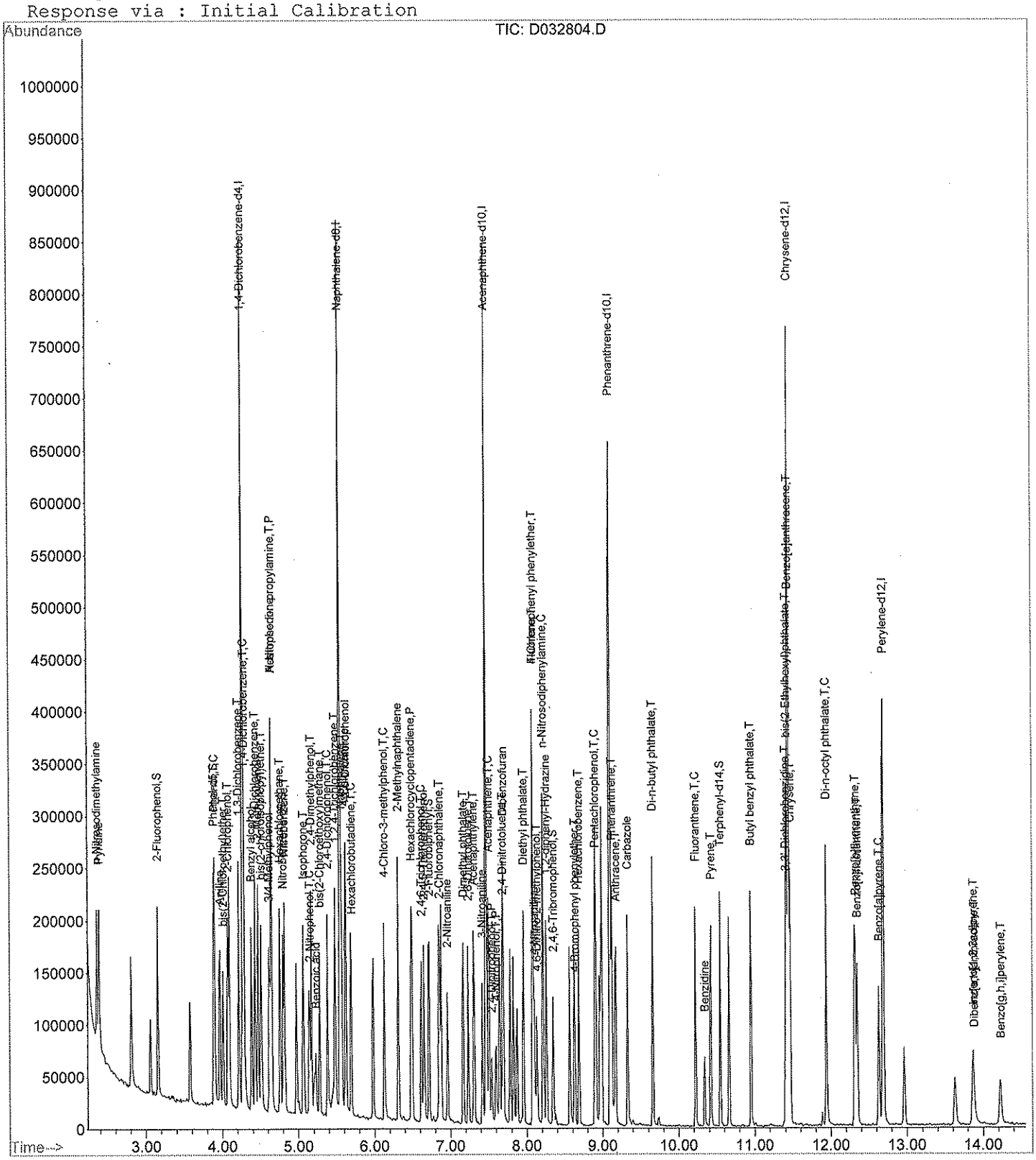
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.31 | 152 | 93152 | 10.25 | ug/ml | 98 |
| 44) | Dimethyl phthalate | 7.17 | 163 | 74688 | 10.04 | ug/ml | 98 |
| 45) | 2,6-Dinitrotoluene | 7.23 | 165 | 15560 | 8.28 | ug/ml# | 57 |
| 46) | 3-Nitroaniline | 7.42 | 138 | 19257 | 10.01 | ug/ml | 95 |
| 47) | Acenaphthene | 7.50 | 153 | 55688 | 10.66 | ug/ml | 97 |
| 48) | 2,4-Dinitrophenol | 7.54 | 184 | 7495 | 6.78 | ug/ml | 93 |
| 49) | Dibenzofuran | 7.69 | 168 | 80640 | 11.22 | ug/ml | 83 |
| 50) | 4-Nitrophenol | 7.60 | 109 | 11396 | 7.33 | ug/ml# | 77 |
| 51) | 2,4-Dinitrotoluene | 7.68 | 165 | 21075 | 10.07 | ug/ml | 81 |
| 52) | Fluorene | 8.08 | 166 | 59569 | 11.85 | ug/ml | 99 |
| 53) | 4-Chlorophenyl phenylether | 8.08 | 204 | 27395 | 10.76 | ug/ml | 88 |
| 54) | Diethyl phthalate | 7.96 | 149 | 85070 | 11.37 | ug/ml | 95 |
| 55) | 4-Nitroaniline | 8.10 | 138 | 19077 | 10.61 | ug/ml | 92 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.13 | 198 | 11445 | 8.36 | ug/ml | 95 |
| 58) | n-Nitrosodiphenylamine | 8.22 | 169 | 72054 | 9.42 | ug/ml | 94 |
| 59) | 1,2-diphenyl-Hydrazine | 8.26 | 77 | 75280 | 9.85 | ug/ml# | 87 |
| 61) | 4-Bromophenyl phenylether | 8.63 | 248 | 17520 | 9.99 | ug/ml | 99 |
| 62) | Hexachlorobenzene | 8.69 | 284 | 23729 | 9.99 | ug/ml# | 81 |
| 63) | Pentachlorophenol | 8.90 | 266 | 13499 | 9.83 | ug/ml | 99 |
| 64) | Phenanthrene | 9.13 | 178 | 79729 | 9.45 | ug/ml | 97 |
| 65) | Anthracene | 9.18 | 178 | 80736 | 9.30 | ug/ml | 100 |
| 66) | Carbazole | 9.33 | 167 | 73738 | 6.06 | ug/ml | 97 |
| 67) | Di-n-butyl phthalate | 9.66 | 149 | 137153 | 10.34 | ug/ml | 99 |
| 68) | Fluoranthene | 10.22 | 202 | 79183 | 9.75 | ug/ml | 93 |
| 70) | Benzidine | 10.34 | 184 | 26699 | 15.43 | ug/ml# | 96 |
| 71) | Pyrene | 10.42 | 202 | 86790m2 | 10.07 | ug/ml | |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 64548 | 10.31 | ug/ml# | 79 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 64976 | 10.46 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.41 | 252 | 24727 | 9.32 | ug/ml | 91 |
| 76) | Chrysene | 11.47 | 228 | 67595 | 11.51 | ug/ml | 97 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 86201 | 11.21 | ug/ml | 98 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 139416 | 10.23 | ug/ml | 100 |
| 80) | Benzo[b]fluoranthene | 12.33 | 252 | 72995 | 8.88 | ug/ml | 95 |
| 81) | Benzo[k]fluoranthene | 12.35 | 252 | 58668 | 17.47 | ug/ml | 97 |
| 82) | Benzo[a]pyrene | 12.63 | 252 | 66916 | 11.77 | ug/ml | 95 |
| 83) | Indeno[1,2,3cd]pyrene | 13.87 | 276 | 49791 | 11.12 | ug/ml | 91 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 21317 | 9.48 | ug/ml | 98 |
| 85) | Benzo[g,h,i]perylene | 14.23 | 276 | 40178 | 10.72 | ug/ml | 92 |

3-28-08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032804.D Vial: 4
Acq On : 28 Mar 2008 5:35 pm Operator: mills
Sample : ,ical,svoa ical 10ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:57 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032805.D Vial: 5
Acq On : 28 Mar 2008 6:02 pm Operator: mills
Sample : ,ical,svoa ical 20ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:58 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:57:31 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 126599 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 389056 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 187609 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 239823 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 205821 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.69 | 264 | 165565 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 76421 | 19.01 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 98122 | 19.08 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 96434 | 19.63 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 126492 | 19.72 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.35 | 330 | 29909 | 20.94 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 97172 | 19.77 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.38 | 79 | 96263 | 21.15 | ug/ml | 99 |
| 3) n-Nitrosodimethylamine | 2.36 | 74 | 51277 | 17.26 | ug/ml | 91 |
| 6) Phenol | 3.90 | 94 | 92613 | 19.41 | ug/ml | 88 |
| 7) Aniline | 3.96 | 93 | 106258 | 19.35 | ug/ml | 90 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 73313 | 17.96 | ug/ml | 97 |
| 9) 2-Chlorophenol | 4.08 | 128 | 80724 | 19.12 | ug/ml | 88 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 95585 | 20.13 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 94951 | 19.68 | ug/ml | 97 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 92119 | 20.01 | ug/ml | 97 |
| 13) Benzyl alcohol | 4.38 | 108 | 47282 | 19.57 | ug/ml | 84 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 155158 | 19.11 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.48 | 108 | 66391 | 19.08 | ug/ml | 96 |
| 16) Hexachloroethane | 4.76 | 117 | 46519 | 19.06 | ug/ml | 96 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 57880 | 18.85 | ug/ml | 94 |
| 18) 3/4-Methylphenol | 4.63 | 108 | 67089 | 19.17 | ug/ml | 98 |
| 21) Nitrobenzene | 4.82 | 77 | 87882 | 19.03 | ug/ml | 94 |
| 22) Acetophenone | 4.65 | 105 | 113948 | 19.58 | ug/ml | 94 |
| 23) Isophorone | 5.07 | 82 | 158400 | 19.07 | ug/ml | 99 |
| 24) 2-Nitrophenol | 5.14 | 139 | 46362 | 19.83 | ug/ml | 84 |
| 25) 2,4-Dimethylphenol | 5.17 | 107 | 76130 | 18.92 | ug/ml | 99 |
| 26) bis(2-Chloroethoxy)methane | 5.28 | 93 | 93780 | 19.16 | ug/ml | 98 |
| 27) 2,4-Dichlorophenol | 5.39 | 162 | 64644 | 18.52 | ug/ml | 94 |
| 28) Benzoic acid | 5.25 | 122 | 34536 | 19.56 | ug/ml | 92 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 72413 | 19.63 | ug/ml | 99 |
| 30) Naphthalene | 5.57 | 128 | 185369 | 19.09 | ug/ml | 100 |
| 31) 2,6-Dichlorophenol | 5.63 | 162 | 64794 | 19.70 | ug/ml | 90 |
| 32) 4-Chloroaniline | 5.62 | 127 | 82163 | 19.74 | ug/ml | 100 |
| 33) Hexachlorobutadiene | 5.69 | 225 | 46072 | 19.51 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.13 | 107 | 62708 | 19.10 | ug/ml | 97 |
| 35) 2-Methylnaphthalene | 6.32 | 142 | 120346 | 18.84 | ug/ml | 100 |
| 37) Hexachlorocyclopentadiene | 6.48 | 237 | 36335 | 22.69 | ug/ml | 95 |
| 38) 2,4,5-Trichlorophenol | 6.65 | 196 | 45469 | 20.92 | ug/ml | 95 |
| 39) 2,4,6-Trichlorophenol | 6.62 | 196 | 40439 | 18.82 | ug/ml | 95 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 153232 | 20.48 | ug/ml | 96 |
| 42) 2-Nitroaniline | 6.96 | 65 | 47115 | 19.79 | ug/ml | 93 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032805.D Vial: 5
Acq On : 28 Mar 2008 6:02 pm Operator: mills
Sample : ,ical,svoa ical 20ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:58 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:57:31 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

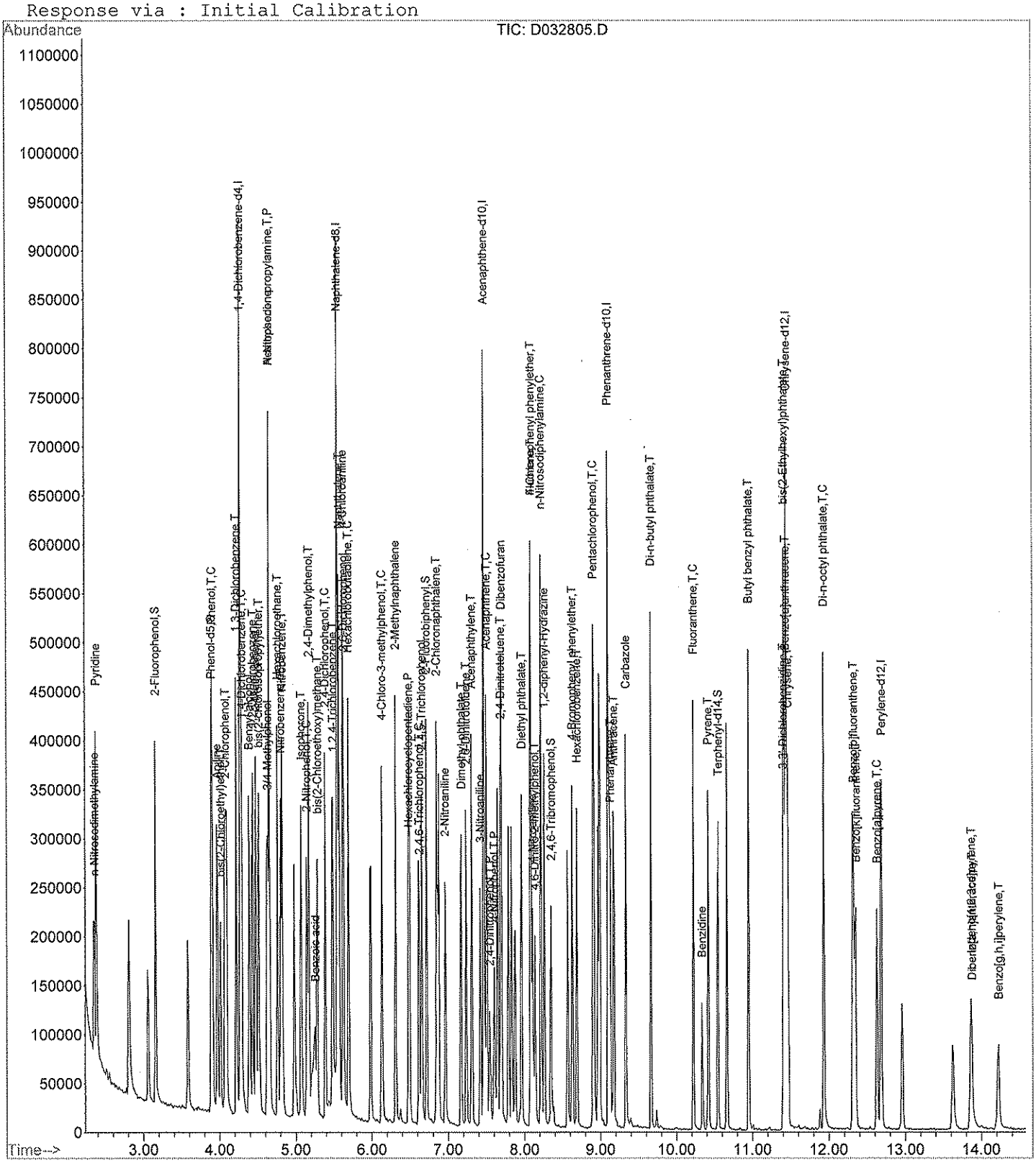
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.31 | 152 | 177182 | 19.71 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.18 | 163 | 144998 | 19.91 | ug/ml | 98 |
| 45) | 2,6-Dinitrotoluene | 7.24 | 165 | 33451 | 19.94 | ug/ml# | 68 |
| 46) | 3-Nitroaniline | 7.42 | 138 | 35458 | 18.86 | ug/ml | 95 |
| 47) | Acenaphthene | 7.50 | 153 | 103498 | 19.63 | ug/ml | 97 |
| 48) | 2,4-Dinitrophenol | 7.54 | 184 | 16344 | 18.04 | ug/ml | 86 |
| 49) | Dibenzofuran | 7.70 | 168 | 150685 | 20.23 | ug/ml | 87 |
| 50) | 4-Nitrophenol | 7.61 | 109 | 27469 | 20.87 | ug/ml | 84 |
| 51) | 2,4-Dinitrotoluene | 7.69 | 165 | 43069 | 21.00 | ug/ml | 89 |
| 52) | Fluorene | 8.09 | 166 | 108006 | 20.13 | ug/ml | 94 |
| 53) | 4-Chlorophenyl phenylether | 8.09 | 204 | 52523 | 20.34 | ug/ml | 95 |
| 54) | Diethyl phthalate | 7.96 | 149 | 154267 | 19.75 | ug/ml | 97 |
| 55) | 4-Nitroaniline | 8.11 | 138 | 35780 | 19.77 | ug/ml | 91 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.14 | 198 | 21918 | 18.96 | ug/ml | 84 |
| 58) | n-Nitrosodiphenylamine | 8.22 | 169 | 140912 | 20.63 | ug/ml | 98 |
| 59) | 1,2-diphenyl-Hydrazine | 8.26 | 77 | 137350 | 19.69 | ug/ml | 92 |
| 61) | 4-Bromophenyl phenylether | 8.63 | 248 | 33619 | 20.85 | ug/ml# | 78 |
| 62) | Hexachlorobenzene | 8.69 | 284 | 44647 | 20.44 | ug/ml# | 83 |
| 63) | Pentachlorophenol | 8.90 | 266 | 25674 | 20.50 | ug/ml | 95 |
| 64) | Phenanthrene | 9.13 | 178 | 144185 | 19.10 | ug/ml | 98 |
| 65) | Anthracene | 9.17 | 178 | 144993 | 18.82 | ug/ml | 98 |
| 66) | Carbazole | 9.33 | 167 | 149693 | 16.65 | ug/ml | 99 |
| 67) | Di-n-butyl phthalate | 9.66 | 149 | 252703 | 20.36 | ug/ml | 99 |
| 68) | Fluoranthene | 10.22 | 202 | 149033 | 20.21 | ug/ml | 88 |
| 70) | Benzidine | 10.34 | 184 | 48518 | 23.59 | ug/ml | 99 |
| 71) | Pyrene | 10.42 | 202 | 148335 | 18.34 | ug/ml | 97 |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 111862 | 18.83 | ug/ml | 89 |
| 74) | Benzo[a]anthracene | 11.43 | 228 | 119692 | 20.15 | ug/ml | 98 |
| 75) | 3,3'-Dichlorobenzidine | 11.40 | 252 | 48974 | 20.45 | ug/ml | 97 |
| 76) | Chrysene | 11.46 | 228 | 109753 | 18.59 | ug/ml | 96 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 150803 | 19.78 | ug/ml | 97 |
| 79) | Di-n-octyl phthalate | 11.93 | 149 | 249371 | 20.50 | ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.32 | 252 | 159283 | 23.27 | ug/ml | 97 |
| 81) | Benzo[k]fluoranthene | 12.35 | 252 | 68304m2 | 16.79 | ug/ml | |
| 82) | Benzo[a]pyrene | 12.63 | 252 | 109126 | 19.99 | ug/ml | 97 |
| 83) | Indeno[1,2,3cd]pyrene | 13.87 | 276 | 85406 | 20.47 | ug/ml | 96 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 40745 | 21.09 | ug/ml | 93 |
| 85) | Benzo[g,h,i]perylene | 14.22 | 276 | 72770 | 21.24 | ug/ml | 96 |

4/3-2008

(#) = qualifier out of range (m) = manual integration
D032805.D SVOA0328.M Fri Mar 28 21:13:25 2008 SVOA 4 Page 2

Data File : C:\HPCHEM\1\DATA\D032708\D032805.D Vial: 5
Acq On : 28 Mar 2008 6:02 pm Operator: mills
Sample : ,ical,svoa ical 20ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:58 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032806.D Vial: 6
Acq On : 28 Mar 2008 6:27 pm Operator: mills
Sample : ,ical,svoa ical 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:55 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:55:01 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 116985 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 367424 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 184189 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 228920 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 181640 | 40.00 | ug/ml | -0.03 |
| 78) Perylene-d12 | 12.68 | 264 | 158702 | 40.00 | ug/ml | -0.03 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 189346 | 48.52 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.90 | 99 | 246214 | 49.63 | ug/ml | -0.02 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 228496 | 46.85 | ug/ml | -0.02 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 305829 | 52.04 | ug/ml | -0.02 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 70938 | 52.16 | ug/ml | -0.02 |
| 72) Terphenyl-d14 | 10.55 | 244 | 206795 | 40.66 | ug/ml | -0.02 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.37 | 79 | 211984 | 44.02 | ug/ml | 94 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 136901 | 45.94 | ug/ml | 94 |
| 6) Phenol | 3.91 | 94 | 231175 | 48.27 | ug/ml | 90 |
| 7) Aniline | 3.97 | 93 | 255023 | 46.29 | ug/ml | 96 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 196073 | 49.27 | ug/ml | 95 |
| 9) 2-Chlorophenol | 4.08 | 128 | 196361 | 50.57 | ug/ml | 89 |
| 10) 1,3-Dichlorobenzene | 4.23 | 146 | 214571 | 50.87 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 219700 | 52.71 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 209206 | 51.47 | ug/ml | 96 |
| 13) Benzyl alcohol | 4.40 | 108 | 117940 | 49.36 | ug/ml | 98 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 374889 | 44.59 | ug/ml | 100 |
| 15) 2-Methylphenol | 4.48 | 108 | 165817 | 49.80 | ug/ml | 99 |
| 16) Hexachloroethane | 4.77 | 117 | 112199 | 51.42 | ug/ml | 88 |
| 17) N-Nitrosodi-n-propylamine | 4.67 | 70 | 139543 | 50.28 | ug/ml | 97 |
| 18) 3/4-Methylphenol | 4.63 | 108 | 167358 | 49.40 | ug/ml | 99 |
| 21) Nitrobenzene | 4.83 | 77 | 210223 | 49.16 | ug/ml | 92 |
| 22) Acetophenone | 4.66 | 105 | 274287 | 53.20 | ug/ml | 97 |
| 23) Isophorone | 5.07 | 82 | 382380 | 46.32 | ug/ml | 95 |
| 24) 2-Nitrophenol | 5.15 | 139 | 111944 | 50.11 | ug/ml | 81 |
| 25) 2,4-Dimethylphenol | 5.18 | 107 | 195945 | 51.59 | ug/ml | 96 |
| 26) bis(2-Chloroethoxy)methane | 5.29 | 93 | 236688 | 51.80 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.39 | 162 | 166556 | 53.27 | ug/ml | 98 |
| 28) Benzoic acid | 5.31 | 122 | 103018 | 49.56 | ug/ml | 93 |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 171765 | 54.00 | ug/ml | 98 |
| 30) Naphthalene | 5.58 | 128 | 443415 | 49.24 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 156352 | 54.25 | ug/ml | 77 |
| 32) 4-Chloroaniline | 5.63 | 127 | 192526 | 52.06 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 105362 | 54.39 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.14 | 107 | 155777 | 49.86 | ug/ml | 95 |
| 35) 2-Methylnaphthalene | 6.32 | 142 | 287081 | 51.61 | ug/ml | 98 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 66899 | 47.58 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.66 | 196 | 117371 | 54.71 | ug/ml | 98 |
| 39) 2,4,6-Trichlorophenol | 6.63 | 196 | 106134 | 52.10 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 378211 | 58.15 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.98 | 65 | 122514 | 47.98 | ug/ml | 81 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032806.D Vial: 6
Acq On : 28 Mar 2008 6:27 pm Operator: mills
Sample : ,ical,svoa ical 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:55 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:55:01 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

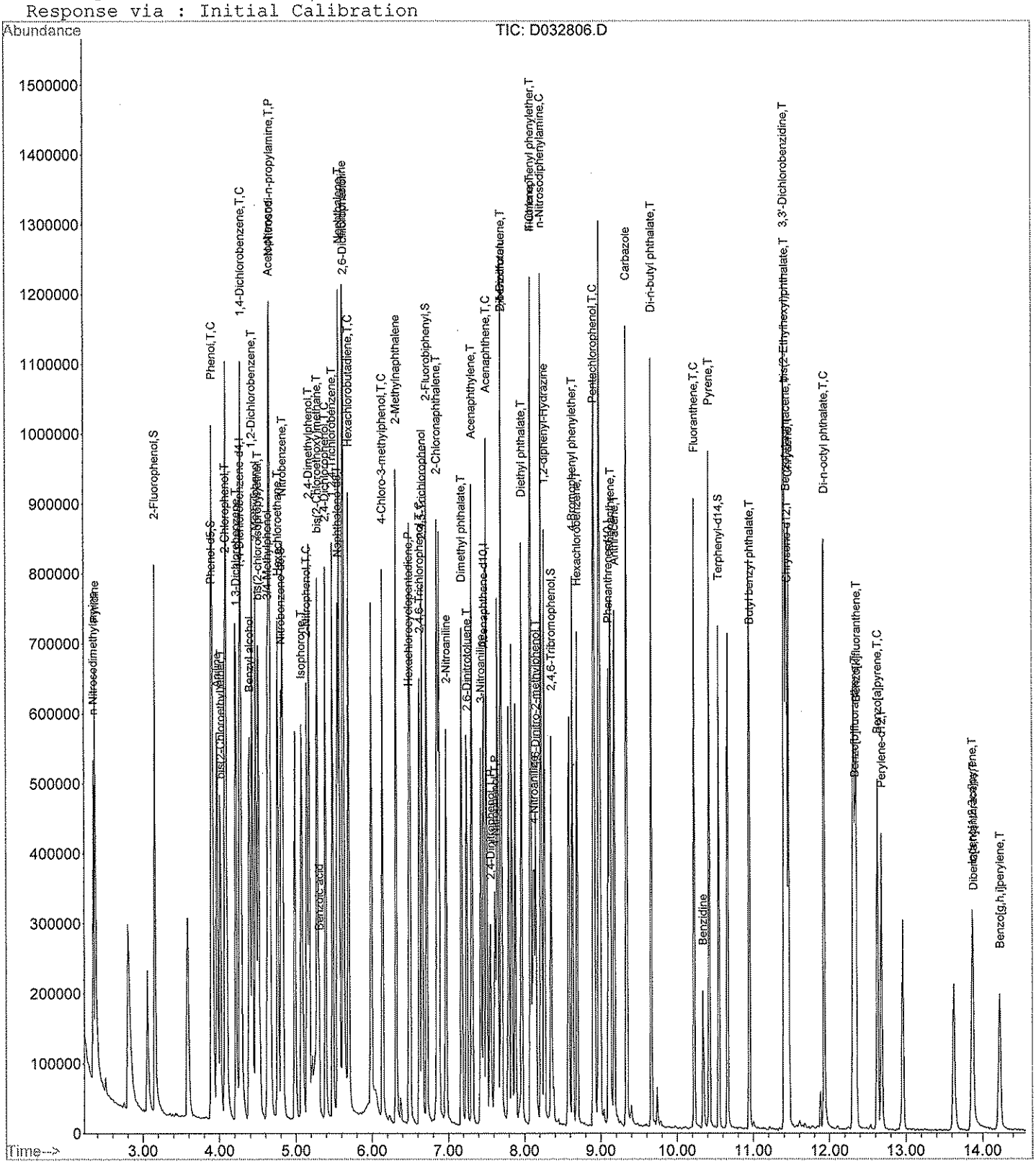
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.31 | 152 | 435904 | 50.46 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.18 | 163 | 356832 | 50.71 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.25 | 165 | 90125 | 51.98 | ug/ml | 93 |
| 46) | 3-Nitroaniline | 7.44 | 138 | 92258 | 47.69 | ug/ml | 97 |
| 47) | Acenaphthene | 7.51 | 153 | 250503 | 50.25 | ug/ml | 95 |
| 48) | 2,4-Dinitrophenol | 7.56 | 184 | 53028 | 56.86 | ug/ml | 96 |
| 49) | Dibenzofuran | 7.70 | 168 | 344669 | 49.90 | ug/ml | 96 |
| 50) | 4-Nitrophenol | 7.62 | 109 | 74578 | 63.61 | ug/ml | 86 |
| 51) | 2,4-Dinitrotoluene | 7.70 | 165 | 100317 | 51.77 | ug/ml | 96 |
| 52) | Fluorene | 8.09 | 166 | 241001 | 50.50 | ug/ml | 98 |
| 53) | 4-Chlorophenyl phenylether | 8.09 | 204 | 122107 | 53.19 | ug/ml | 94 |
| 54) | Diethyl phthalate | 7.97 | 149 | 358890 | 49.65 | ug/ml | 97 |
| 55) | 4-Nitroaniline | 8.13 | 138 | 86238 | 46.22 | ug/ml | 94 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.15 | 198 | 60097 | 55.70 | ug/ml | 94 |
| 58) | n-Nitrosodiphenylamine | 8.22 | 169 | 335626 | 53.32 | ug/ml | 99 |
| 59) | 1,2-diphenyl-Hydrazine | 8.27 | 77 | 335368 | 49.21 | ug/ml | 93 |
| 61) | 4-Bromophenyl phenylether | 8.63 | 248 | 77002 | 49.57 | ug/ml | 87 |
| 62) | Hexachlorobenzene | 8.70 | 284 | 104308 | 50.63 | ug/ml# | 80 |
| 63) | Pentachlorophenol | 8.91 | 266 | 60303 | 53.14 | ug/ml | 97 |
| 64) | Phenanthrene | 9.13 | 178 | 370535 | 55.58 | ug/ml | 99 |
| 65) | Anthracene | 9.19 | 178 | 380958 | 54.56 | ug/ml | 98 |
| 66) | Carbazole | 9.34 | 167 | 534331 | 70.05 | ug/ml | 95 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 582408 | 53.17 | ug/ml | 100 |
| 68) | Fluoranthene | 10.23 | 202 | 356449 | 58.81 | ug/ml | 94 |
| 70) | Benzidine | 10.34 | 184 | 71377 | 33.03 | ug/ml | 98 |
| 71) | Pyrene | 10.42 | 202 | 355665 | 43.86 | ug/ml | 91 |
| 73) | Butyl benzyl phthalate | 10.96 | 149 | 258133 | 43.54 | ug/ml | 95 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 256150 | 52.67 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.41 | 252 | 109380 | 51.16 | ug/ml | 95 |
| 76) | Chrysene | 11.47 | 228 | 242332 | 53.34 | ug/ml | 96 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 317262 | 50.49 | ug/ml | 99 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 576393 | 37.16 | ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.34 | 252 | 347587 | 42.51 | ug/ml | 97 |
| 81) | Benzo[k]fluoranthene | 12.36 | 252 | 141976 | 24.03 | ug/ml | 96 |
| 82) | Benzo[a]pyrene | 12.63 | 252 | 240332 | 38.90 | ug/ml | 99 |
| 83) | Indeno[1,2,3cd]pyrene | 13.87 | 276 | 189344 | 38.23 | ug/ml | 96 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 95083 | 36.40 | ug/ml | 96 |
| 85) | Benzo[g,h,i]perylene | 14.23 | 276 | 158536 | 41.18 | ug/ml | 96 |

3/28/08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032806.D Vial: 6
Acq On : 28 Mar 2008 6:27 pm Operator: mills
Sample : ,ical,svoa ical 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:55 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032807.D Vial: 7
Acq On : 28 Mar 2008 6:53 pm Operator: mills
Sample : ,ical,svoa ical 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:58:37 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 127517 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 396088 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 205312 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 261355 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.45 | 240 | 190697 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 148032 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 311886 | 78.31 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.91 | 99 | 424068 | 83.14 | ug/ml | 0.02 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 372683 | 74.97 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 477064 | 68.29 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 114708 | 72.56 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 318417 | 70.20 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.38 | 79 | 336216 | 71.97 | ug/ml | 96 |
| 3) n-Nitrosodimethylamine | 2.36 | 74 | 226819 | 79.42 | ug/ml | 97 |
| 6) Phenol | 3.93 | 94 | 394999m3 | 83.02 | ug/ml | |
| 7) Aniline | 3.98 | 93 | 455349 | 83.21 | ug/ml | 98 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 295194 | 74.31 | ug/ml | 98 |
| 9) 2-Chlorophenol | 4.09 | 128 | 308219 | 73.55 | ug/ml | 96 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 337809 | 70.48 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 335972 | 69.50 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 318982 | 68.77 | ug/ml | 97 |
| 13) Benzyl alcohol | 4.42 | 108 | 196456 | 81.32 | ug/ml | 98 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 621346 | 77.12 | ug/ml | 99 |
| 15) 2-Methylphenol | 4.49 | 108 | 274969 | 79.67 | ug/ml | 97 |
| 16) Hexachloroethane | 4.76 | 117 | 179040 | 74.00 | ug/ml | 90 |
| 17) N-Nitrosodi-n-propylamine | 4.68 | 70 | 223361 | 73.63 | ug/ml | 97 |
| 18) 3/4-Methylphenol | 4.65 | 108 | 284702 | 81.91 | ug/ml | 96 |
| 21) Nitrobenzene | 4.84 | 77 | 334669 | 72.35 | ug/ml | 96 |
| 22) Acetophenone | 4.67 | 105 | 439432 | 74.70 | ug/ml | 99 |
| 23) Isophorone | 5.10 | 82 | 646412 | 77.64 | ug/ml | 100 |
| 24) 2-Nitrophenol | 5.15 | 139 | 189652 | 79.89 | ug/ml | 88 |
| 25) 2,4-Dimethylphenol | 5.19 | 107 | 330055 | 82.04 | ug/ml | 99 |
| 26) bis(2-Chloroethoxy)methane | 5.30 | 93 | 396655 | 80.72 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.41 | 162 | 272264 | 78.56 | ug/ml | 97 |
| 28) Benzoic acid | 5.35 | 122 | 184654 | 103.50 | ug/ml | 93 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 273597 | 73.31 | ug/ml | 99 |
| 30) Naphthalene | 5.58 | 128 | 706369 | 72.54 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 232452 | 69.76 | ug/ml# | 64 |
| 32) 4-Chloroaniline | 5.64 | 127 | 303191 | 71.86 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 161984 | 67.94 | ug/ml | 97 |
| 34) 4-Chloro-3-methylphenol | 6.15 | 107 | 270993 | 82.30 | ug/ml | 94 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 459327 | 72.03 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 107247 | 58.58 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.67 | 196 | 192504 | 79.71 | ug/ml | 98 |
| 39) 2,4,6-Trichlorophenol | 6.64 | 196 | 182340 | 79.08 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.86 | 162 | 643189 | 77.92 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.98 | 65 | 205621 | 79.19 | ug/ml | 92 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032807.D Vial: 7
Acq On : 28 Mar 2008 6:53 pm Operator: mills
Sample : ,ical,svoa ical 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:58:37 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

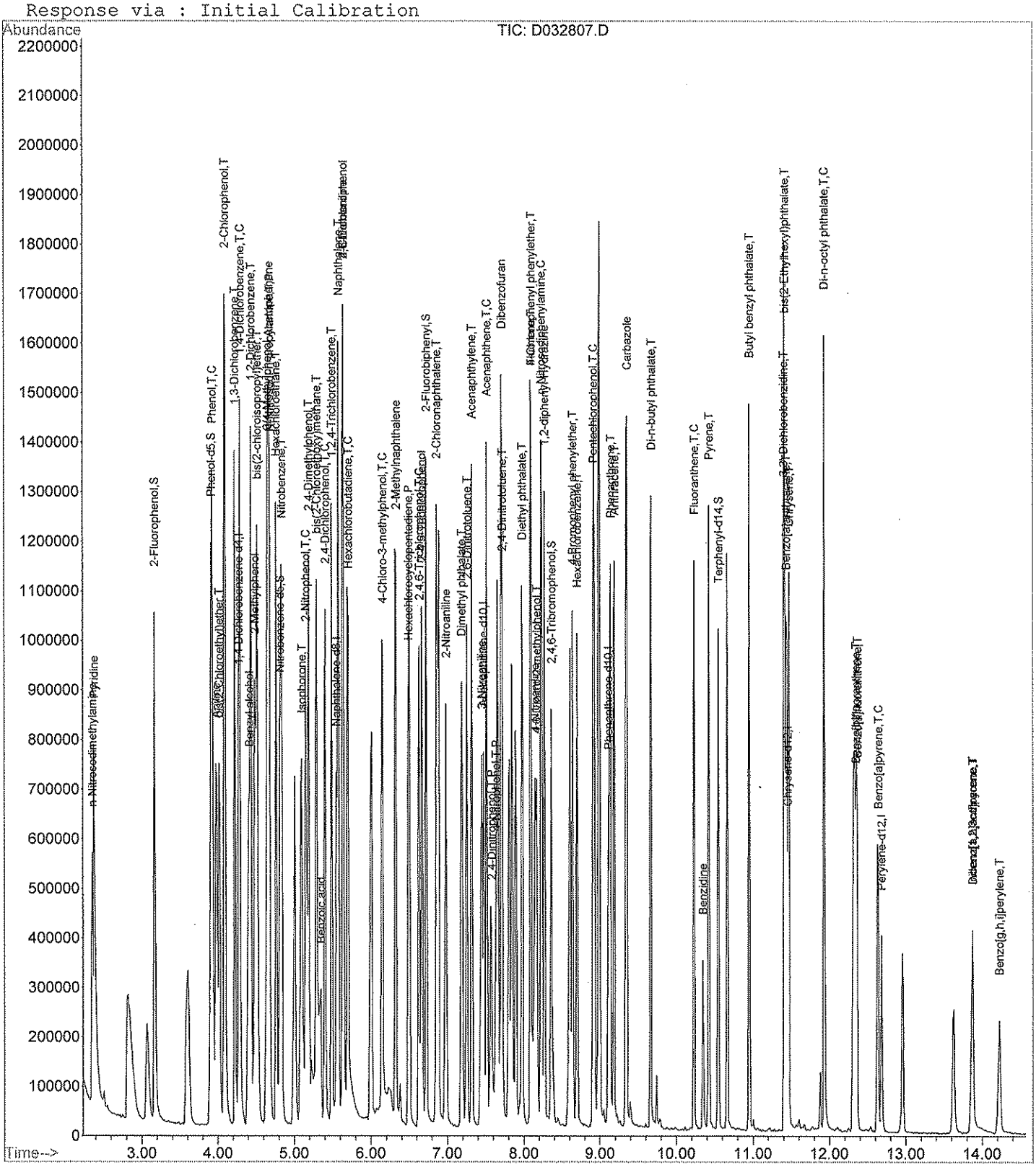
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.32 | 152 | 677338 | 69.18 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.19 | 163 | 607877 | 76.39 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.26 | 165 | 147009 | 80.14 | ug/ml | 81 |
| 46) | 3-Nitroaniline | 7.45 | 138 | 159763 | 79.15 | ug/ml | 98 |
| 47) | Acenaphthene | 7.52 | 153 | 385611 | 67.25 | ug/ml | 98 |
| 48) | 2,4-Dinitrophenol | 7.58 | 184 | 97531 | 101.68 | ug/ml | 99 |
| 49) | Dibenzofuran | 7.71 | 168 | 541747 | 66.20 | ug/ml | 95 |
| 50) | 4-Nitrophenol | 7.64 | 109 | 121113 | 82.88 | ug/ml | 87 |
| 51) | 2,4-Dinitrotoluene | 7.72 | 165 | 170877 | 74.88 | ug/ml | 74 |
| 52) | Fluorene | 8.10 | 166 | 346798 | 58.94 | ug/ml | 97 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 178821 | 62.93 | ug/ml | 93 |
| 54) | Diethyl phthalate | 7.98 | 149 | 605453 | 71.13 | ug/ml | 98 |
| 55) | 4-Nitroaniline | 8.15 | 138 | 157450 | 79.79 | ug/ml | 93 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.17 | 198 | 113400 | 91.61 | ug/ml | 89 |
| 58) | n-Nitrosodiphenylamine | 8.23 | 169 | 530491 | 70.53 | ug/ml | 99 |
| 59) | 1,2-diphenyl-Hydrazine | 8.27 | 77 | 532206 | 70.37 | ug/ml | 96 |
| 61) | 4-Bromophenyl phenylether | 8.64 | 248 | 123626 | 69.37 | ug/ml | 95 |
| 62) | Hexachlorobenzene | 8.70 | 284 | 161310 | 67.28 | ug/ml# | 80 |
| 63) | Pentachlorophenol | 8.92 | 266 | 94303 | 68.52 | ug/ml | 97 |
| 64) | Phenanthrene | 9.14 | 178 | 590797 | 72.91 | ug/ml | 99 |
| 65) | Anthracene | 9.19 | 178 | 624118 | 75.83 | ug/ml | 99 |
| 66) | Carbazole | 9.36 | 167 | 891237 | 96.36 | ug/ml | 98 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 932889 | 68.57 | ug/ml | 99 |
| 68) | Fluoranthene | 10.24 | 202 | 597410 | 74.07 | ug/ml | 91 |
| 70) | Benzidine | 10.35 | 184 | 136272 | 67.48 | ug/ml | 98 |
| 71) | Pyrene | 10.43 | 202 | 554512 | 76.11 | ug/ml | 95 |
| 73) | Butyl benzyl phthalate | 10.95 | 149 | 387935 | 71.87 | ug/ml | 95 |
| 74) | Benzo[a]anthracene | 11.43 | 228 | 441110 | 79.96 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.40 | 252 | 156042 | 69.80 | ug/ml | 99 |
| 76) | Chrysene | 11.47 | 228 | 400316 | 74.93 | ug/ml | 98 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 407695 | 57.93 | ug/ml | 96 |
| 79) | Di-n-octyl phthalate | 11.93 | 149 | 883777 | 80.59 | ug/ml | 99 |
| 80) | Benzo[b]fluoranthene | 12.34 | 252 | 400657m2 | 62.07 | ug/ml | |
| 81) | Benzo[k]fluoranthene | 12.36 | 252 | 320296 | 93.02 | ug/ml | 96 |
| 82) | Benzo[a]pyrene | 12.64 | 252 | 334133 | 68.47 | ug/ml | 96 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 231378 | 61.55 | ug/ml | 93 |
| 84) | Dibenz[a,h]anthracene | 13.88 | 278 | 118967 | 67.63 | ug/ml | 92 |
| 85) | Benzo[g,h,i]perylene | 14.22 | 276 | 183730 | 58.76 | ug/ml | 98 |

3/28/08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032807.D Vial: 7
Acq On : 28 Mar 2008 6:53 pm Operator: mills
Sample : ,ical,svoa ical 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 20:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032808.D Vial: 8
Acq On : 28 Mar 2008 7:18 pm Operator: mills
Sample : ,ical,svoa ical 100ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:01 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:59:59 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 123662 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 388869 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 207240 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.12 | 188 | 284987 | 40.00 | ug/ml | 0.01 |
| 69) Chrysene-d12 | 11.46 | 240 | 201044 | 40.00 | ug/ml | 0.01 |
| 78) Perylene-d12 | 12.69 | 264 | 131752 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.18 | 112 | 374716 | 97.53 | ug/ml | 0.01 |
| 5) Phenol-d5 | 3.92 | 99 | 521395 | 104.38 | ug/ml | 0.02 |
| 20) Nitrobenzene-d5 | 4.82 | 82 | 449436 | 93.56 | ug/ml | 0.01 |
| 40) 2-Fluorobiphenyl | 6.74 | 172 | 577496 | 85.01 | ug/ml | 0.01 |
| 60) 2,4,6-Tribromophenol | 8.37 | 330 | 142536 | 84.66 | ug/ml | 0.01 |
| 72) Terphenyl-d14 | 10.56 | 244 | 417262 | 90.01 | ug/ml | 0.01 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.39 | 79 | 424440 | 96.09 | ug/ml | 98 |
| 3) n-Nitrosodimethylamine | 2.36 | 74 | 274490 | 99.28 | ug/ml | 92 |
| 6) Phenol | 3.93 | 94 | 516447m | 110.88 | ug/ml | |
| 7) Aniline | 3.98 | 93 | 536165 | 100.03 | ug/ml | 100 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 414532m | 109.55 | ug/ml | |
| 9) 2-Chlorophenol | 4.09 | 128 | 362867 | 91.13 | ug/ml | 94 |
| 10) 1,3-Dichlorobenzene | 4.23 | 146 | 407746 | 90.41 | ug/ml | 97 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 390355 | 86.09 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 364237 | 83.92 | ug/ml | 98 |
| 13) Benzyl alcohol | 4.42 | 108 | 233309 | 99.18 | ug/ml | 86 |
| 14) bis(2-chloroisopropyl)ethe | 4.53 | 45 | 757663 | 97.85 | ug/ml | 99 |
| 15) 2-Methylphenol | 4.50 | 108 | 343750 | 102.81 | ug/ml | 98 |
| 16) Hexachloroethane | 4.76 | 117 | 208783 | 90.68 | ug/ml | 97 |
| 17) N-Nitrosodi-n-propylamine | 4.69 | 70 | 266785 | 92.52 | ug/ml | 98 |
| 18) 3/4-Methylphenol | 4.66 | 108 | 346236 | 102.11 | ug/ml | 98 |
| 21) Nitrobenzene | 4.84 | 77 | 393373 | 88.75 | ug/ml | 97 |
| 22) Acetophenone | 4.68 | 105 | 532703 | 93.79 | ug/ml | 99 |
| 23) Isophorone | 5.11 | 82 | 795755 | 98.07 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.16 | 139 | 240916 | 103.41 | ug/ml | 92 |
| 25) 2,4-Dimethylphenol | 5.20 | 107 | 394960 | 99.36 | ug/ml | 99 |
| 26) bis(2-Chloroethoxy)methane | 5.29 | 93 | 482085 | 99.70 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.42 | 162 | 329141 | 97.17 | ug/ml | 99 |
| 28) Benzoic acid | 5.36 | 122 | 220475 | 117.26 | ug/ml | 93 |
| 29) 1,2,4-Trichlorobenzene | 5.50 | 180 | 328628 | 91.60 | ug/ml | 97 |
| 30) Naphthalene | 5.58 | 128 | 843940 | 90.39 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 280051 | 88.43 | ug/ml | 99 |
| 32) 4-Chloroaniline | 5.65 | 127 | 386992 | 95.86 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 183766 | 81.58 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.15 | 107 | 328997 | 101.05 | ug/ml | 92 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 538622 | 88.23 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 149991 | 86.98 | ug/ml | 100 |
| 38) 2,4,5-Trichlorophenol | 6.67 | 196 | 226350 | 92.93 | ug/ml | 97 |
| 39) 2,4,6-Trichlorophenol | 6.63 | 196 | 237604 | 102.39 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.87 | 162 | 657260 | 79.40 | ug/ml | 99 |
| 42) 2-Nitroaniline | 6.99 | 65 | 253329 | 96.90 | ug/ml | 97 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032808.D Vial: 8
Acq On : 28 Mar 2008 7:18 pm Operator: mills
Sample : ,ical,svoa ical 100ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:01 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 20:59:59 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

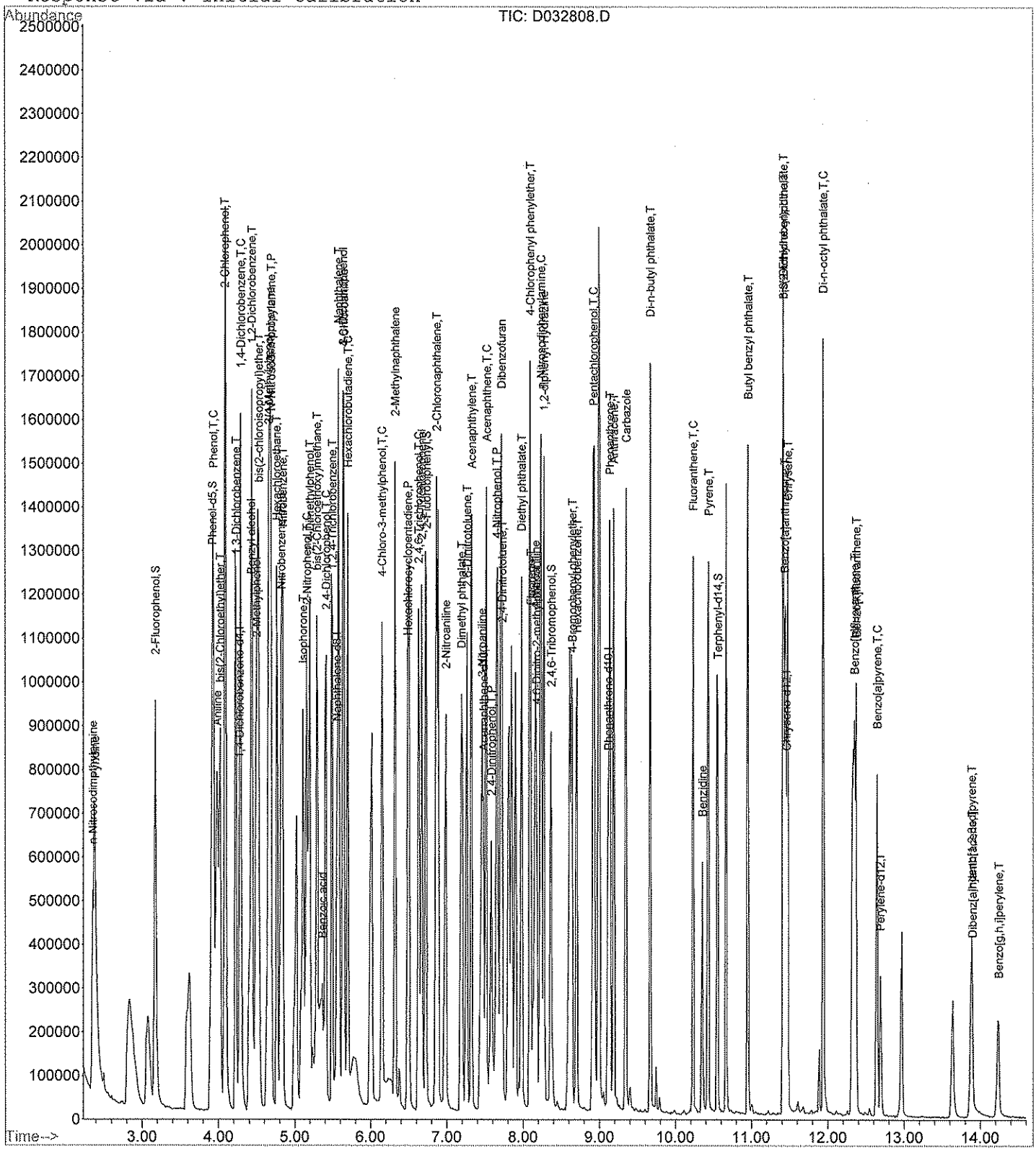
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.33 | 152 | 847015 | 88.71 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.20 | 163 | 759242 | 95.60 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.27 | 165 | 180286 | 97.33 | ug/ml | 96 |
| 46) | 3-Nitroaniline | 7.46 | 138 | 203445 | 100.12 | ug/ml | 98 |
| 47) | Acenaphthene | 7.52 | 153 | 462659 | 83.26 | ug/ml | 100 |
| 48) | 2,4-Dinitrophenol | 7.58 | 184 | 131718 | 127.41 | ug/ml | 92 |
| 49) | Dibenzofuran | 7.72 | 168 | 683989 | 86.54 | ug/ml | 97 |
| 50) | 4-Nitrophenol | 7.66 | 109 | 138182 | 92.85 | ug/ml | 92 |
| 51) | 2,4-Dinitrotoluene | 7.73 | 165 | 212793 | 93.88 | ug/ml | 98 |
| 52) | Fluorene | 8.11 | 166 | 421861 | 76.04 | ug/ml | 97 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 197861 | 72.87 | ug/ml | 89 |
| 54) | Diethyl phthalate | 7.98 | 149 | 744637 | 89.14 | ug/ml | 99 |
| 55) | 4-Nitroaniline | 8.17 | 138 | 191585 | 96.25 | ug/ml | 94 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.18 | 198 | 151337 | 108.19 | ug/ml | 94 |
| 58) | n-Nitrosodiphenylamine | 8.24 | 169 | 652326 | 81.96 | ug/ml | 99 |
| 59) | 1,2-diphenyl-Hydrazine | 8.28 | 77 | 667238 | 83.42 | ug/ml | 95 |
| 61) | 4-Bromophenyl phenylether | 8.65 | 248 | 151213 | 80.49 | ug/ml | 92 |
| 62) | Hexachlorobenzene | 8.71 | 284 | 193245 | 76.97 | ug/ml | 91 |
| 63) | Pentachlorophenol | 8.92 | 266 | 111811 | 77.28 | ug/ml | 99 |
| 64) | Phenanthrene | 9.14 | 178 | 728133 | 84.28 | ug/ml | 99 |
| 65) | Anthracene | 9.19 | 178 | 733887 | 82.85 | ug/ml | 99 |
| 66) | Carbazole | 9.35 | 167 | 729780 | 68.84 | ug/ml | 99 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 1063297 | 74.33 | ug/ml | 99 |
| 68) | Fluoranthene | 10.23 | 202 | 684788 | 79.33 | ug/ml | 93 |
| 70) | Benzidine | 10.36 | 184 | 237709 | 116.19 | ug/ml | 97 |
| 71) | Pyrene | 10.44 | 202 | 742002 | 97.79 | ug/ml | 94 |
| 73) | Butyl benzyl phthalate | 10.96 | 149 | 488902 | 88.16 | ug/ml | 95 |
| 74) | Benzo[a]anthracene | 11.44 | 228 | 551993 | 94.92 | ug/ml | 98 |
| 75) | 3,3'-Dichlorobenzidine | 11.42 | 252 | 177484 | 77.78 | ug/ml | 94 |
| 76) | Chrysene | 11.48 | 228 | 472679 | 85.27 | ug/ml | 99 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 452318 | 65.48 | ug/ml | 98 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 1067094 | 109.13 | ug/ml | 100 |
| 80) | Benzo[b]fluoranthene | 12.35 | 252 | 563935m | 103.99 | ug/ml | |
| 81) | Benzo[k]fluoranthene | 12.37 | 252 | 267924m | 84.01 | ug/ml | |
| 82) | Benzo[a]pyrene | 12.65 | 252 | 379624 | 90.67 | ug/ml | 94 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 245840 | 77.97 | ug/ml | 96 |
| 84) | Dibenz[a,h]anthracene | 13.89 | 278 | 131976 | 87.69 | ug/ml | 89 |
| 85) | Benzo[g,h,i]perylene | 14.24 | 276 | 194818 | 74.98 | ug/ml | 87 |

3/28/08

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

Data File : C:\HPCHEM\1\DATA\D032708\D032808.D Vial: 8
Acq On : 28 Mar 2008 7:18 pm Operator: mills
Sample : ,ical,svoa ical 100ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:01 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032809.D Vial: 9
Acq On : 28 Mar 2008 7:44 pm Operator: mills
Sample : ,ical,svoa ical 120ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:03 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:01:32 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120417 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 384868 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.48 | 164 | 195601 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 265326 | 40.00 | ug/ml | 0.01 |
| 69) Chrysene-d12 | 11.46 | 240 | 192043 | 40.00 | ug/ml | 0.01 |
| 78) Perylene-d12 | 12.69 | 264 | 110503 | 40.00 | ug/ml | 0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 454577 | 122.11 | ug/ml | 0.01 |
| 5) Phenol-d5 | 3.93 | 99 | 610846 | 124.49 | ug/ml | 0.03 |
| 20) Nitrobenzene-d5 | 4.83 | 82 | 515661 | 109.87 | ug/ml | 0.02 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 646772 | 103.99 | ug/ml | 0.01 |
| 60) 2,4,6-Tribromophenol | 8.38 | 330 | 161439 | 106.25 | ug/ml | 0.02 |
| 72) Terphenyl-d14 | 10.56 | 244 | 426396 | 98.26 | ug/ml | 0.01 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.38 | 79 | 504023 | 118.11 | ug/ml | 96 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 324668 | 120.77 | ug/ml | 89 |
| 6) Phenol | 3.94 | 94 | 591811m | 127.71 | ug/ml | |
| 7) Aniline | 3.99 | 93 | 568550 | 108.93 | ug/ml | 99 |
| 8) bis(2-Chloroethyl)ether | 4.02 | 93 | 561466m | 149.53 | ug/ml | |
| 9) 2-Chlorophenol | 4.09 | 128 | 413274 | 108.51 | ug/ml | 95 |
| 10) 1,3-Dichlorobenzene | 4.23 | 146 | 448582 | 104.14 | ug/ml | 98 |
| 11) 1,4-Dichlorobenzene | 4.30 | 146 | 452526 | 105.42 | ug/ml | 98 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 402646 | 98.44 | ug/ml | 99 |
| 13) Benzyl alcohol | 4.43 | 108 | 269642 | 117.91 | ug/ml | 75 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 903429 | 120.34 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.50 | 108 | 402085 | 122.80 | ug/ml | 98 |
| 16) Hexachloroethane | 4.77 | 117 | 246295 | 111.94 | ug/ml | 87 |
| 17) N-Nitrosodi-n-propylamine | 4.70 | 70 | 310393 | 112.23 | ug/ml | 98 |
| 18) 3/4-Methylphenol | 4.67 | 108 | 399503 | 120.48 | ug/ml | 96 |
| 21) Nitrobenzene | 4.85 | 77 | 473189 | 110.35 | ug/ml | 93 |
| 22) Acetophenone | 4.69 | 105 | 600906 | 108.24 | ug/ml | 95 |
| 23) Isophorone | 5.12 | 82 | 930688 | 116.34 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.17 | 139 | 283484 | 122.11 | ug/ml | 91 |
| 25) 2,4-Dimethylphenol | 5.21 | 107 | 466209 | 118.65 | ug/ml | 100 |
| 26) bis(2-Chloroethoxy)methane | 5.30 | 93 | 540506 | 113.01 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.41 | 162 | 388925 | 116.68 | ug/ml | 96 |
| 28) Benzoic acid | 5.38 | 122 | 254605 | 132.25 | ug/ml | 98 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 367751 | 105.34 | ug/ml | 97 |
| 30) Naphthalene | 5.59 | 128 | 955560 | 105.43 | ug/ml | 100 |
| 31) 2,6-Dichlorophenol | 5.65 | 162 | 330916 | 108.08 | ug/ml | 97 |
| 32) 4-Chloroaniline | 5.65 | 127 | 418649 | 105.65 | ug/ml | 99 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 212798 | 99.11 | ug/ml | 98 |
| 34) 4-Chloro-3-methylphenol | 6.16 | 107 | 371543 | 115.06 | ug/ml | 93 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 612453 | 103.82 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 160519 | 101.26 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.68 | 196 | 249652m | 110.16 | ug/ml | |
| 39) 2,4,6-Trichlorophenol | 6.64 | 196 | 281796 | 128.05 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.87 | 162 | 855429 | 114.19 | ug/ml | 98 |
| 42) 2-Nitroaniline | 7.00 | 65 | 302692 | 123.44 | ug/ml | 96 |

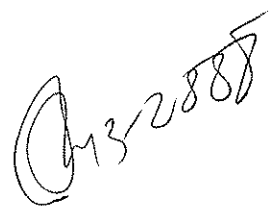
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D032708\D032809.D Vial: 9
Acq On : 28 Mar 2008 7:44 pm Operator: mills
Sample : ,ical,svoa ical 120ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:03 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:01:32 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

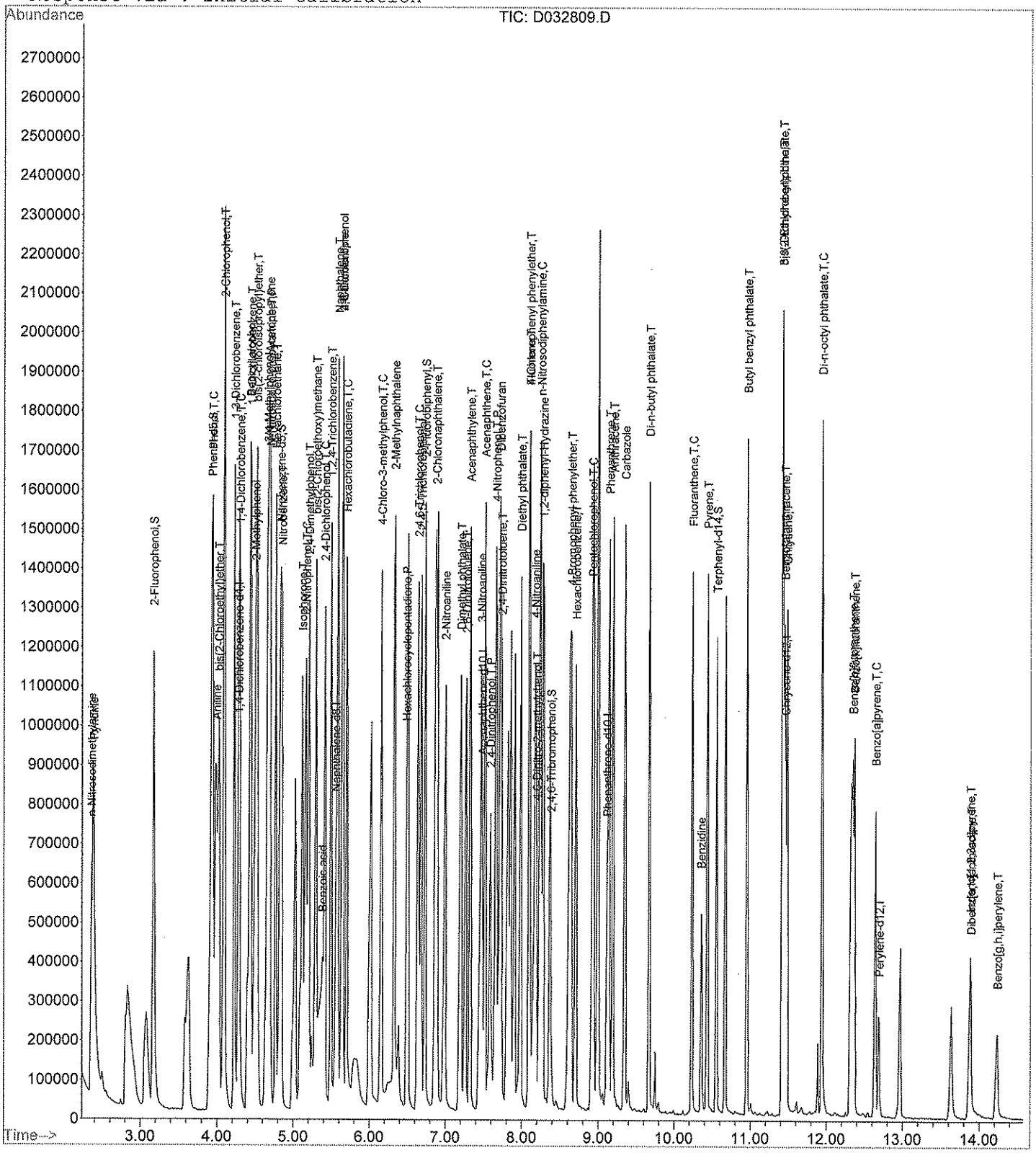
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 43) | Acenaphthylene | 7.32 | 152 | 951888 | 108.06 | ug/ml | 99 |
| 44) | Dimethyl phthalate | 7.20 | 163 | 865784 | 116.53 | ug/ml | 99 |
| 45) | 2,6-Dinitrotoluene | 7.27 | 165 | 221575 | 127.42 | ug/ml | 88 |
| 46) | 3-Nitroaniline | 7.47 | 138 | 228521 | 119.12 | ug/ml | 100 |
| 47) | Acenaphthene | 7.52 | 153 | 548428 | 108.19 | ug/ml | 100 |
| 48) | 2,4-Dinitrophenol | 7.59 | 184 | 154768 | 150.37 | ug/ml | 97 |
| 49) | Dibenzofuran | 7.71 | 168 | 775307 | 106.80 | ug/ml | 100 |
| 50) | 4-Nitrophenol | 7.66 | 109 | 148133 | 106.98 | ug/ml | 94 |
| 51) | 2,4-Dinitrotoluene | 7.73 | 165 | 255136 | 120.74 | ug/ml | 96 |
| 52) | Fluorene | 8.10 | 166 | 436569 | 87.57 | ug/ml | 100 |
| 53) | 4-Chlorophenyl phenylether | 8.10 | 204 | 215355 | 88.85 | ug/ml | 95 |
| 54) | Diethyl phthalate | 7.99 | 149 | 809253 | 104.92 | ug/ml | 99 |
| 55) | 4-Nitroaniline | 8.17 | 138 | 218235 | 117.04 | ug/ml | 94 |
| 57) | 4,6-Dinitro-2-methylphenol | 8.19 | 198 | 171781 | 129.78 | ug/ml# | 72 |
| 58) | n-Nitrosodiphenylamine | 8.25 | 169 | 713628 | 99.91 | ug/ml | 100 |
| 59) | 1,2-diphenyl-Hydrazine | 8.28 | 77 | 767940 | 106.66 | ug/ml | 99 |
| 61) | 4-Bromophenyl phenylether | 8.64 | 248 | 165229 | 98.30 | ug/ml | 99 |
| 62) | Hexachlorobenzene | 8.71 | 284 | 228551 | 102.50 | ug/ml | 98 |
| 63) | Pentachlorophenol | 8.92 | 266 | 121649 | 94.60 | ug/ml | 98 |
| 64) | Phenanthrene | 9.15 | 178 | 767705 | 98.54 | ug/ml | 99 |
| 65) | Anthracene | 9.20 | 178 | 784394 | 98.49 | ug/ml | 99 |
| 66) | Carbazole | 9.35 | 167 | 841163 | 90.89 | ug/ml# | 96 |
| 67) | Di-n-butyl phthalate | 9.67 | 149 | 1259106 | 99.65 | ug/ml | 99 |
| 68) | Fluoranthene | 10.24 | 202 | 759800 | 98.62 | ug/ml | 98 |
| 70) | Benzidine | 10.35 | 184 | 242984 | 120.44 | ug/ml | 95 |
| 71) | Pyrene | 10.43 | 202 | 765584 | 106.10 | ug/ml | 98 |
| 73) | Butyl benzyl phthalate | 10.96 | 149 | 521119 | 100.76 | ug/ml | 100 |
| 74) | Benzo[a]anthracene | 11.45 | 228 | 578674 | 105.24 | ug/ml | 99 |
| 75) | 3,3'-Dichlorobenzidine | 11.42 | 252 | 170517 | 81.87 | ug/ml | 95 |
| 76) | Chrysene | 11.48 | 228 | 549893 | 107.01 | ug/ml | 100 |
| 77) | bis(2-Ethylhexyl)phthalate | 11.42 | 149 | 494266 | 80.46 | ug/ml | 99 |
| 79) | Di-n-octyl phthalate | 11.94 | 149 | 1169329 | 140.02 | ug/ml | 100 |
| 80) | Benzo[b]fluoranthene | 12.35 | 252 | 522136m | 113.89 | ug/ml | |
| 81) | Benzo[k]fluoranthene | 12.37 | 252 | 336875m | 130.10 | ug/ml | |
| 82) | Benzo[a]pyrene | 12.64 | 252 | 384492 | 111.57 | ug/ml# | 92 |
| 83) | Indeno[1,2,3cd]pyrene | 13.88 | 276 | 249651 | 94.40 | ug/ml | 98 |
| 84) | Dibenz[a,h]anthracene | 13.89 | 278 | 135113 | 107.04 | ug/ml | 95 |
| 85) | Benzo[g,h,i]perylene | 14.24 | 276 | 190463 | 87.40 | ug/ml | 94 |



(#) = qualifier out of range (m) = manual integration
D032809.D SVOA0328.M Fri Mar 28 21:13:35 2008 SVOA 4 Page 2

Data File : C:\HPCHEM\1\DATA\D032708\D032809.D Vial: 9
Acq On : 28 Mar 2008 7:44 pm Operator: mills
Sample : ,ical,svoa ical 120ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 28 21:03 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# CONTINUING CALIBRATION RAW DATA

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D
Acq On : 2 Apr 2008 4:14 pm
Sample : ,ccv, svoa ccv 50ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 103 | -0.01 |
| 2 | | Pyridine | 1.414 | 1.474 | -4.2 | 105 | 0.00 |
| 3 | | n-Nitrosodimethylamine | 0.894 | 0.940 | -5.1 | 103 | -0.01 |
| 4 | S | 2-Fluorophenol | 1.240 | 1.276 | -2.9 | 101 | -0.01 |
| 5 | S | Phenol-d5 | 1.640 | 1.704 | -3.9 | 104 | 0.00 |
| 6 | T,C | Phenol | 1.556 | 1.628 | -4.6 | 106 | 0.00 |
| 7 | | Aniline | 1.707 | 1.705 | 0.1 | 101 | 0.00 |
| 8 | T | bis(2-Chloroethyl)ether | 1.298 | 1.432 | -10.3 | 110 | -0.01 |
| 9 | T | 2-Chlorophenol | 1.245 | 1.338 | -7.5 | 102 | -0.01 |
| 10 | T | 1,3-Dichlorobenzene | 1.399 | 1.480 | -5.8 | 104 | -0.01 |
| 11 | T,C | 1,4-Dichlorobenzene | 1.397 | 1.522 | -8.9 | 104 | 0.00 |
| 12 | T | 1,2-Dichlorobenzene | 1.318 | 1.443 | -9.5 | 104 | 0.00 |
| 13 | | Benzyl alcohol | 0.757 | 0.796 | -5.2 | 102 | -0.01 |
| 14 | T | bis(2-chloroisopropyl)ether | 2.495 | 2.605 | -4.4 | 105 | 0.00 |
| 15 | | 2-Methylphenol | 1.092 | 1.100 | -0.7 | 100 | 0.00 |
| 16 | T | Hexachloroethane | 0.723 | 0.781 | -8.0 | 105 | -0.01 |
| 17 | T,P | N-Nitrosodi-n-propylamine | 0.909 | 0.907 | 0.2 | 98 | -0.01 |
| 18 | | 3/4-Methylphenol | 1.102 | 1.133 | -2.8 | 102 | 0.00 |
| 19 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 101 | -0.01 |
| 20 | S | Nitrobenzene-d5 | 0.481 | 0.504 | -4.8 | 103 | 0.00 |
| 21 | T | Nitrobenzene | 0.440 | 0.456 | -3.6 | 101 | 0.00 |
| 22 | | Acetophenone | 0.568 | 0.595 | -4.8 | 101 | 0.00 |
| 23 | T | Isophorone | 0.827 | 0.870 | -5.2 | 106 | 0.00 |
| 24 | T,C | 2-Nitrophenol | 0.242 | 0.248 | -2.5 | 103 | 0.00 |
| 25 | T | 2,4-Dimethylphenol | 0.408 | 0.434 | -6.4 | 103 | 0.00 |
| 26 | T | bis(2-Chloroethoxy)methane | 0.492 | 0.505 | -2.6 | 99 | -0.01 |
| 27 | T,C | 2,4-Dichlorophenol | 0.345 | 0.350 | -1.4 | 98 | 0.00 |
| 28 | | Benzoic acid | 0.203 | 0.210 | -3.4 | 95 | -0.01 |
| 29 | T | 1,2,4-Trichlorobenzene | 0.355 | 0.377 | -6.2 | 102 | 0.00 |
| 30 | T | Naphthalene | 0.937 | 0.982 | -4.8 | 103 | 0.00 |
| 31 | | 2,6-Dichlorophenol | 0.313 | 0.335 | -7.0 | 100 | 0.00 |
| 32 | | 4-Chloroaniline | 0.404 | 0.396 | 2.0 | 96 | 0.00 |
| 33 | T,C | Hexachlorobutadiene | 0.217 | 0.228 | -5.1 | 101 | 0.00 |
| 34 | T,C | 4-Chloro-3-methylphenol | 0.333 | 0.342 | -2.7 | 102 | 0.00 |
| 35 | | 2-Methylnaphthalene | 0.599 | 0.619 | -3.3 | 100 | -0.01 |
| 36 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 97 | -0.01 |
| 37 | P | Hexachlorocyclopentadiene | 0.316 | 0.290 | 8.2 | 97 | 0.00 |
| 38 | | 2,4,5-Trichlorophenol | 0.457 | 0.522 | -14.2 | 100 | 0.00 |
| 39 | T,C | 2,4,6-Trichlorophenol | 0.455 | 0.466 | -2.4 | 99 | -0.01 |
| 40 | S | 2-Fluorobiphenyl | 1.254 | 1.355 | -8.1 | 99 | 0.00 |
| 41 | T | 2-Chloronaphthalene | 1.520 | 1.361 | 10.5 | 81 | 0.00 |
| 42 | | 2-Nitroaniline | 0.504 | 0.517 | -2.6 | 95 | -0.01 |
| 43 | T | Acenaphthylene | 1.791 | 1.910 | -6.6 | 98 | 0.00 |
| 44 | T | Dimethyl phthalate | 1.512 | 1.598 | -5.7 | 100 | 0.00 |
| 45 | T | 2,6-Dinitrotoluene | 0.359 | 0.388 | -8.1 | 97 | -0.01 |
| 46 | | 3-Nitroaniline | 0.392 | 0.417 | -6.4 | 101 | 0.00 |
| 47 | T,C | Acenaphthene | 1.036 | 1.114 | -7.5 | 100 | 0.00 |
| 48 | T,P | 2,4-Dinitrophenol | 0.219 | 0.241 | -10.0 | 102 | -0.01 |

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D
Acq On : 2 Apr 2008 4:14 pm
Sample : ,ccv, svoa ccv 50ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | | Dibenzofuran | 1.457 | 1.591 | -9.2 | 104 | 0.00 |
| 50 | T,P | 4-Nitrophenol | 0.278 | 0.315 | -13.3 | 95 | 0.00 |
| 51 | T | 2,4-Dinitrotoluene | 0.433 | 0.451 | -4.2 | 101 | 0.00 |
| 52 | T | Fluorene | 1.014 | 1.048 | -3.4 | 98 | -0.01 |
| 53 | T | 4-Chlorophenyl phenylether | 0.474 | 0.554 | -16.9 | 102 | -0.01 |
| 54 | T | Diethyl phthalate | 1.544 | 1.663 | -7.7 | 104 | 0.00 |
| 55 | | 4-Nitroaniline | 0.380 | 0.373 | 1.8 | 97 | -0.01 |
| 56 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 57 | T | 4,6-Dinitro-2-methylphenol | 0.202 | 0.227 | -12.4 | 105 | 0.00 |
| 58 | C | n-Nitrosodiphenylamine | 1.047 | 1.171 | -11.8 | 97 | 0.00 |
| 59 | | 1,2-diphenyl-Hydrazine | 1.065 | 1.194 | -12.1 | 99 | 0.00 |
| 60 | S | 2,4,6-Tribromophenol | 0.225 | 0.254 | -12.9 | 100 | 0.00 |
| 61 | T | 4-Bromophenyl phenylether | 0.246 | 0.280 | -13.8 | 101 | 0.00 |
| 62 | T | Hexachlorobenzene | 0.328 | 0.362 | -10.4 | 97 | 0.00 |
| 63 | T,C | Pentachlorophenol | 0.187 | 0.224 | -19.8 | 104 | 0.00 |
| 64 | T | Phenanthrene | 1.147 | 1.266 | -10.4 | 95 | -0.01 |
| 65 | T | Anthracene | 1.177 | 1.305 | -10.9 | 95 | -0.01 |
| 66 | | Carbazole | 1.339 | 1.734 | -29.5# | 90 | 0.00 |
| 67 | T | Di-n-butyl phthalate | 1.851 | 2.133 | -15.2 | 102 | 0.00 |
| 68 | T,C | Fluoranthene | 1.115 | 1.298 | -16.4 | 101 | 0.00 |
| 69 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 98 | -0.01 |
| 70 | | Benzidine | 0.420 | 0.319 | 24.0# | 99 | 0.00 |
| 71 | T | Pyrene | 1.449 | 1.574 | -8.6 | 98 | 0.00 |
| 72 | S | Terphenyl-d14 | 0.875 | 0.926 | -5.8 | 99 | 0.00 |
| 73 | T | Butyl benzyl phthalate | 1.048 | 1.144 | -9.2 | 98 | -0.01 |
| 74 | T | Benzo[a]anthracene | 1.113 | 1.227 | -10.2 | 106 | -0.01 |
| 75 | T | 3,3'-Dichlorobenzidine | 0.411 | 0.454 | -10.5 | 92 | -0.01 |
| 76 | T | Chrysene | 1.076 | 1.070 | 0.6 | 98 | -0.01 |
| 77 | T | bis(2-Ethylhexyl)phthalate | 1.209 | 1.404 | -16.1 | 98 | -0.01 |
| 78 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 94 | -0.01 |
| 79 | T,C | Di-n-octyl phthalate | 3.107 | 3.149 | -1.4 | 102 | -0.01 |
| 80 | T | Benzo[b]fluoranthene | 1.662 | 1.788 | -7.6 | 96 | -0.01 |
| 81 | T | Benzo[k]fluoranthene | 1.120 | 0.744 | 33.6# | 98 | -0.01 |
| 82 | T,C | Benzo[a]pyrene | 1.305 | 1.204 | 7.7 | 94 | -0.01 |
| 83 | T | Indeno[1,2,3cd]pyrene | 0.943 | 0.811 | 14.0 | 80 | -0.02 |
| 84 | T | Dibenz[a,h]anthracene | 0.523 | 0.375 | 28.3# | 74 | -0.02 |
| 85 | T | Benzo[g,h,i]perylene | 0.783 | 0.627 | 19.9 | 74 | -0.02 |

4-2-08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
D040202.D SVOA0328.M Wed Apr 02 17:02:43 2008 SVOA 4

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D Vial: 2
Acq On : 2 Apr 2008 4:14 pm Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 16:31 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 120354 | 40.00 | ug/ml | -0.01 |
| 19) Naphthalene-d8 | 5.54 | 136 | 372704 | 40.00 | ug/ml | -0.01 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 179485 | 40.00 | ug/ml | -0.01 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 222834 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.44 | 240 | 177706 | 40.00 | ug/ml | -0.01 |
| 78) Perylene-d12 | 12.67 | 264 | 149943 | 40.00 | ug/ml | -0.01 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.15 | 112 | 192035 | 51.46 | ug/ml | -0.01 |
| 5) Phenol-d5 | 3.90 | 99 | 256331 | 51.94 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.81 | 82 | 234713 | 52.39 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.72 | 172 | 303926 | 54.03 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 70811 | 56.57 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 205616 | 52.91 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.37 | 79 | 221745 | 52.13 | ug/ml | 95 |
| 3) n-Nitrosodimethylamine | 2.34 | 74 | 141367 | 52.56 | ug/ml | 92 |
| 6) Phenol | 3.91 | 94 | 244944 | 52.32 | ug/ml | 99 |
| 7) Aniline | 3.97 | 93 | 256479 | 49.93 | ug/ml | 98 |
| 8) bis(2-Chloroethyl)ether | 4.01 | 93 | 215427 | 55.14 | ug/ml | 99 |
| 9) 2-Chlorophenol | 4.07 | 128 | 201254 | 53.73 | ug/ml | 95 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 222674 | 52.89 | ug/ml | 99 |
| 11) 1,4-Dichlorobenzene | 4.29 | 146 | 228935 | 54.46 | ug/ml | 97 |
| 12) 1,2-Dichlorobenzene | 4.43 | 146 | 217149 | 54.76 | ug/ml | 99 |
| 13) Benzyl alcohol | 4.39 | 108 | 119736 | 52.54 | ug/ml | 99 |
| 14) bis(2-chloroisopropyl)ethe | 4.51 | 45 | 391967 | 52.21 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.48 | 108 | 165520 | 50.38 | ug/ml | 96 |
| 16) Hexachloroethane | 4.76 | 117 | 117530 | 54.05 | ug/ml | 94 |
| 17) N-Nitrosodi-n-propylamine | 4.65 | 70 | 136450 | 49.90 | ug/ml | 91 |
| 18) 3/4-Methylphenol | 4.63 | 108 | 170502 | 51.41 | ug/ml | 97 |
| 21) Nitrobenzene | 4.83 | 77 | 212237 | 51.80 | ug/ml | 96 |
| 22) Acetophenone | 4.65 | 105 | 277342 | 52.44 | ug/ml | 96 |
| 23) Isophorone | 5.07 | 82 | 405335 | 52.59 | ug/ml | 97 |
| 24) 2-Nitrophenol | 5.15 | 139 | 115698 | 51.31 | ug/ml | 94 |
| 25) 2,4-Dimethylphenol | 5.18 | 107 | 202308 | 53.27 | ug/ml | 96 |
| 26) bis(2-Chloroethoxy)methane | 5.28 | 93 | 235039 | 51.24 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.39 | 162 | 163268 | 50.81 | ug/ml | 98 |
| 28) Benzoic acid | 5.30 | 122 | 97844 | 51.61 | ug/ml | 97 |
| 29) 1,2,4-Trichlorobenzene | 5.48 | 180 | 175682 | 53.05 | ug/ml | 98 |
| 30) Naphthalene | 5.58 | 128 | 457526 | 52.39 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.64 | 162 | 156084 | 53.53 | ug/ml | 70 |
| 32) 4-Chloroaniline | 5.63 | 127 | 184308 | 49.01 | ug/ml | 97 |
| 33) Hexachlorobutadiene | 5.70 | 225 | 106120 | 52.56 | ug/ml | 99 |
| 34) 4-Chloro-3-methylphenol | 6.14 | 107 | 159290 | 51.29 | ug/ml | 95 |
| 35) 2-Methylnaphthalene | 6.31 | 142 | 288193 | 51.61 | ug/ml | 99 |
| 37) Hexachlorocyclopentadiene | 6.49 | 237 | 65128 | 45.97 | ug/ml | 96 |
| 38) 2,4,5-Trichlorophenol | 6.66 | 196 | 117018 | 57.05 | ug/ml | 99 |
| 39) 2,4,6-Trichlorophenol | 6.62 | 196 | 104565 | 51.21 | ug/ml | 98 |
| 41) 2-Chloronaphthalene | 6.85 | 162 | 305353 | 44.78 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.97 | 65 | 116030 | 51.32 | ug/ml | 97 |

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

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D Vial: 2
Acq On : 2 Apr 2008 4:14 pm Operator: mills
Sample : ,ccv, svoa ccv 50ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 2 16:31 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|
| 43) Acenaphthylene | 7.31 | 152 | 428428 | 53.31 | ug/ml | 99 |
| 44) Dimethyl phthalate | 7.18 | 163 | 358422 | 52.83 | ug/ml | 99 |
| 45) 2,6-Dinitrotoluene | 7.24 | 165 | 87025 | 53.98 | ug/ml | 94 |
| 46) 3-Nitroaniline | 7.44 | 138 | 93478 | 53.17 | ug/ml | 91 |
| 47) Acenaphthene | 7.51 | 153 | 250003 | 53.77 | ug/ml | 99 |
| 48) 2,4-Dinitrophenol | 7.55 | 184 | 54172 | 55.04 | ug/ml | 86 |
| 49) Dibenzofuran | 7.70 | 168 | 356935 | 54.59 | ug/ml | 97 |
| 50) 4-Nitrophenol | 7.62 | 109 | 70740 | 56.70 | ug/ml | 93 |
| 51) 2,4-Dinitrotoluene | 7.70 | 165 | 101084 | 52.08 | ug/ml | 83 |
| 52) Fluorene | 8.08 | 166 | 235184 | 51.68 | ug/ml | 99 |
| 53) 4-Chlorophenyl phenylether | 8.08 | 204 | 124246 | 58.39 | ug/ml | 91 |
| 54) Diethyl phthalate | 7.97 | 149 | 373158 | 53.85 | ug/ml | 99 |
| 55) 4-Nitroaniline | 8.12 | 138 | 83697 | 49.12 | ug/ml | 100 |
| 57) 4,6-Dinitro-2-methylphenol | 8.15 | 198 | 63094 | 56.00 | ug/ml | 88 |
| 58) n-Nitrosodiphenylamine | 8.22 | 169 | 326175 | 55.94 | ug/ml | 99 |
| 59) 1,2-diphenyl-Hydrazine | 8.27 | 77 | 332547 | 56.04 | ug/ml | 98 |
| 61) 4-Bromophenyl phenylether | 8.63 | 248 | 78045 | 57.01 | ug/ml | 97 |
| 62) Hexachlorobenzene | 8.69 | 284 | 100845 | 55.19 | ug/ml | 93 |
| 63) Pentachlorophenol | 8.91 | 266 | 62424 | 59.92 | ug/ml | 93 |
| 64) Phenanthrene | 9.12 | 178 | 352507 | 55.16 | ug/ml | 99 |
| 65) Anthracene | 9.18 | 178 | 363448 | 55.44 | ug/ml | 99 |
| 66) Carbazole | 9.34 | 167 | 482941 | 64.75 | ug/ml | 97 |
| 67) Di-n-butyl phthalate | 9.67 | 149 | 594162 | 57.62 | ug/ml | 100 |
| 68) Fluoranthene | 10.23 | 202 | 361601 | 58.19 | ug/ml | 92 |
| 70) Benzidine | 10.34 | 184 | 70871 | 37.94 | ug/ml | 99 |
| 71) Pyrene | 10.42 | 202 | 349717 | 54.33 | ug/ml | 100 |
| 73) Butyl benzyl phthalate | 10.95 | 149 | 254188 | 54.57 | ug/ml | 90 |
| 74) Benzo[a]anthracene | 11.43 | 228 | 272487 | 55.12 | ug/ml | 99 |
| 75) 3,3'-Dichlorobenzidine | 11.40 | 252 | 100877 | 55.27 | ug/ml | 98 |
| 76) Chrysene | 11.46 | 228 | 237735 | 49.74 | ug/ml | 100 |
| 77) bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 311797 | 58.04 | ug/ml | 94 |
| 79) Di-n-octyl phthalate | 11.93 | 149 | 590129 | 50.67 | ug/ml | 99 |
| 80) Benzo[b]fluoranthene | 12.33 | 252 | 335100 | 53.79 | ug/ml | 96 |
| 81) Benzo[k]fluoranthene | 12.35 | 252 | 139469 | 33.22 | ug/ml | 98 |
| 82) Benzo[a]pyrene | 12.62 | 252 | 225631 | 46.13 | ug/ml | 99 |
| 83) Indeno[1,2,3cd]pyrene | 13.85 | 276 | 152056 | 43.00 | ug/ml | 95 |
| 84) Dibenz[a,h]anthracene | 13.86 | 278 | 70362 | 35.88 | ug/ml | 94 |
| 85) Benzo[g,h,i]perylene | 14.21 | 276 | 117573 | 40.07 | ug/ml | 93 |

4/2/08

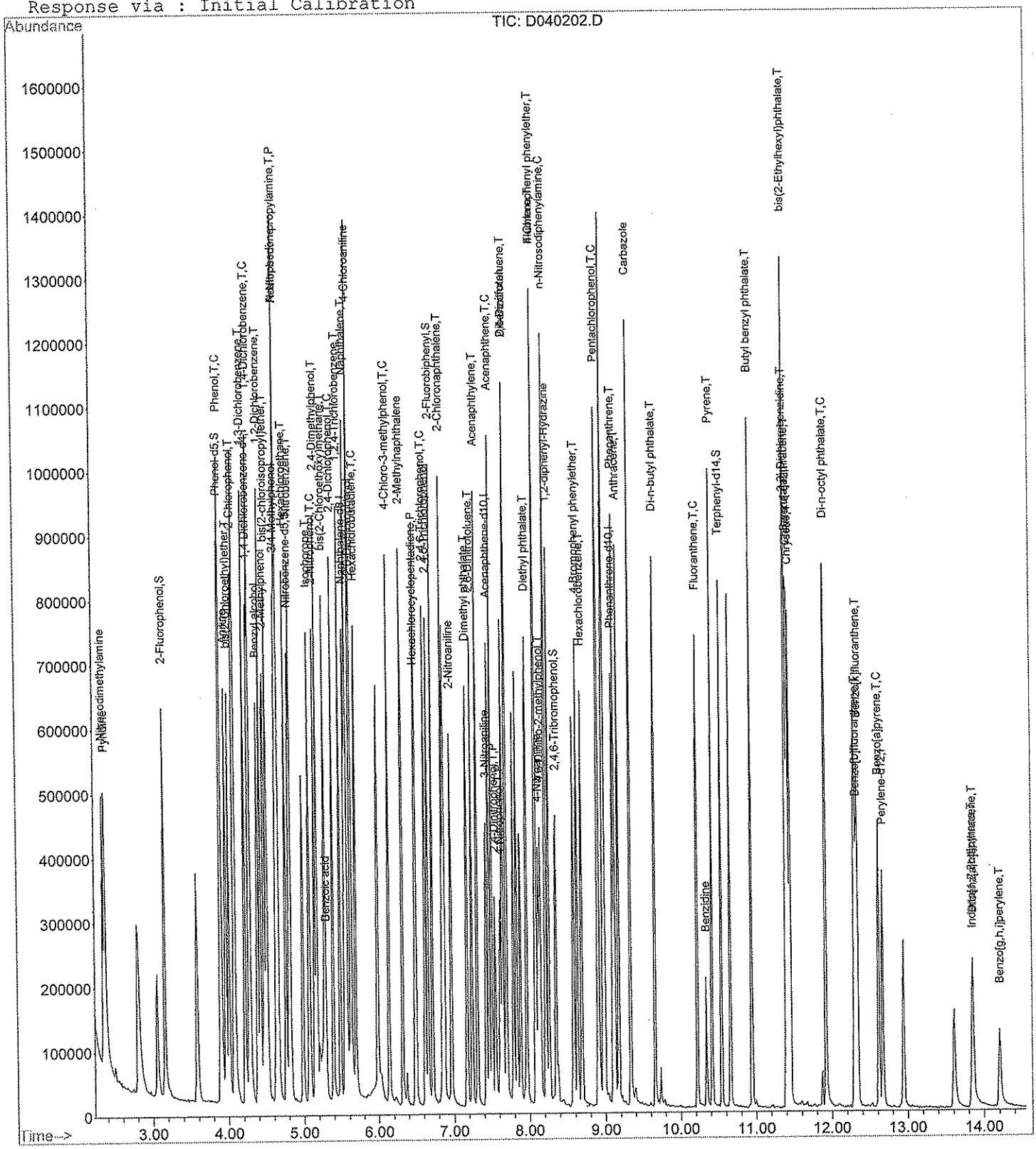
(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\D040208\D040202.D
Acq On : 2 Apr 2008 4:14 pm
Sample : ,ccv, svoa ccv 50ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 2 16:31 2008

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,ccv, svoa ccv 80ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 95 | 0.00 |
| 2 | | Pyridine | 1.414 | 1.297 | 8.3 | 93 | 0.00 |
| 3 | | n-Nitrosodimethylamine | 0.894 | 0.838 | 6.3 | 89 | 0.00 |
| 4 | S | 2-Fluorophenol | 1.240 | 1.199 | 3.3 | 93 | 0.00 |
| 5 | S | Phenol-d5 | 1.640 | 1.644 | -0.2 | 94 | 0.02 |
| 6 | T,C | Phenol | 1.556 | 1.559 | -0.2 | 95 | 0.02 |
| 7 | | Aniline | 1.707 | 1.643 | 3.7 | 87 | 0.02 |
| 8 | T | bis(2-Chloroethyl)ether | 1.298 | 1.167 | 10.1 | 96 | 0.00 |
| 9 | T | 2-Chlorophenol | 1.245 | 1.262 | -1.4 | 99 | 0.00 |
| 10 | T | 1,3-Dichlorobenzene | 1.399 | 1.400 | -0.1 | 100 | 0.00 |
| 11 | T,C | 1,4-Dichlorobenzene | 1.397 | 1.365 | 2.3 | 98 | 0.00 |
| 12 | T | 1,2-Dichlorobenzene | 1.318 | 1.304 | 1.1 | 99 | 0.00 |
| 13 | | Benzyl alcohol | 0.757 | 0.766 | -1.2 | 94 | 0.02 |
| 14 | T | bis(2-chloroisopropyl)ether | 2.495 | 2.373 | 4.9 | 92 | 0.00 |
| 15 | | 2-Methylphenol | 1.092 | 1.097 | -0.5 | 96 | 0.02 |
| 16 | T | Hexachloroethane | 0.723 | 0.723 | 0.0 | 98 | 0.00 |
| 17 | T,P | N-Nitrosodi-n-propylamine | 0.909 | 0.879 | 3.3 | 95 | 0.02 |
| 18 | | 3/4-Methylphenol | 1.102 | 1.146 | -4.0 | 97 | 0.03 |
| 19 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 20 | S | Nitrobenzene-d5 | 0.481 | 0.466 | 3.1 | 96 | 0.02 |
| 21 | T | Nitrobenzene | 0.440 | 0.432 | 1.8 | 99 | 0.02 |
| 22 | | Acetophenone | 0.568 | 0.578 | -1.8 | 101 | 0.02 |
| 23 | T | Isophorone | 0.827 | 0.793 | 4.1 | 94 | 0.03 |
| 24 | T,C | 2-Nitrophenol | 0.242 | 0.234 | 3.3 | 94 | 0.02 |
| 25 | T | 2,4-Dimethylphenol | 0.408 | 0.420 | -2.9 | 98 | 0.02 |
| 26 | T | bis(2-Chloroethoxy)methane | 0.492 | 0.479 | 2.6 | 93 | 0.00 |
| 27 | T,C | 2,4-Dichlorophenol | 0.345 | 0.344 | 0.3 | 97 | 0.02 |
| 28 | | Benzoic acid | 0.203 | 0.200 | 1.5 | 83 | 0.04 |
| 29 | T | 1,2,4-Trichlorobenzene | 0.355 | 0.363 | -2.3 | 102 | 0.00 |
| 30 | T | Naphthalene | 0.937 | 0.900 | 3.9 | 98 | 0.00 |
| 31 | | 2,6-Dichlorophenol | 0.313 | 0.324 | -3.5 | 107 | 0.00 |
| 32 | | 4-Chloroaniline | 0.404 | 0.394 | 2.5 | 100 | 0.02 |
| 33 | T,C | Hexachlorobutadiene | 0.217 | 0.210 | 3.2 | 99 | 0.00 |
| 34 | T,C | 4-Chloro-3-methylphenol | 0.333 | 0.340 | -2.1 | 96 | 0.02 |
| 35 | | 2-Methylnaphthalene | 0.599 | 0.563 | 6.0 | 94 | 0.00 |
| 36 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 37 | P | Hexachlorocyclopentadiene | 0.316 | 0.262 | 17.1 | 99 | 0.00 |
| 38 | | 2,4,5-Trichlorophenol | 0.457 | 0.476 | -4.2 | 100 | 0.02 |
| 39 | T,C | 2,4,6-Trichlorophenol | 0.455 | 0.467 | -2.6 | 104 | 0.00 |
| 40 | S | 2-Fluorobiphenyl | 1.254 | 1.227 | 2.2 | 104 | 0.00 |
| 41 | T | 2-Chloronaphthalene | 1.520 | 1.476 | 2.9 | 93 | 0.02 |
| 42 | | 2-Nitroaniline | 0.504 | 0.497 | 1.4 | 98 | 0.00 |
| 43 | T | Acenaphthylene | 1.791 | 1.777 | 0.8 | 106 | 0.00 |
| 44 | T | Dimethyl phthalate | 1.512 | 1.479 | 2.2 | 98 | 0.02 |
| 45 | T | 2,6-Dinitrotoluene | 0.359 | 0.370 | -3.1 | 102 | 0.00 |
| 46 | | 3-Nitroaniline | 0.392 | 0.376 | 4.1 | 95 | 0.02 |
| 47 | T,C | Acenaphthene | 1.036 | 1.019 | 1.6 | 107 | 0.00 |
| 48 | T,P | 2,4-Dinitrophenol | 0.219 | 0.235 | -7.3 | 98 | 0.02 |

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,ccv, svoa ccv 80ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | | Dibenzofuran | 1.457 | 1.436 | 1.4 | 107 | 0.00 |
| 50 | T,P | 4-Nitrophenol | 0.278 | 0.292 | -5.0 | 98 | 0.03 |
| 51 | T | 2,4-Dinitrotoluene | 0.433 | 0.410 | 5.3 | 97 | 0.02 |
| 52 | T | Fluorene | 1.014 | 0.847 | 16.5 | 99 | 0.00 |
| 53 | T | 4-Chlorophenyl phenylether | 0.474 | 0.460 | 3.0 | 104 | 0.00 |
| 54 | T | Diethyl phthalate | 1.544 | 1.523 | 1.4 | 102 | 0.02 |
| 55 | | 4-Nitroaniline | 0.380 | 0.360 | 5.3 | 92 | 0.03 |
| 56 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 57 | T | 4,6-Dinitro-2-methylphenol | 0.202 | 0.213 | -5.4 | 98 | 0.03 |
| 58 | C | n-Nitrosodiphenylamine | 1.047 | 0.997 | 4.8 | 98 | 0.02 |
| 59 | | 1,2-diphenyl-Hydrazine | 1.065 | 1.035 | 2.8 | 102 | 0.00 |
| 60 | S | 2,4,6-Tribromophenol | 0.225 | 0.230 | -2.2 | 105 | 0.02 |
| 61 | T | 4-Bromophenyl phenylether | 0.246 | 0.248 | -0.8 | 105 | 0.00 |
| 62 | T | Hexachlorobenzene | 0.328 | 0.326 | 0.6 | 106 | 0.00 |
| 63 | T,C | Pentachlorophenol | 0.187 | 0.183 | 2.1 | 101 | 0.00 |
| 64 | T | Phenanthrene | 1.147 | 1.108 | 3.4 | 98 | 0.00 |
| 65 | T | Anthracene | 1.177 | 1.163 | 1.2 | 98 | 0.00 |
| 66 | | Carbazole | 1.339 | 1.662 | -24.1# | 98 | 0.02 |
| 67 | T | Di-n-butyl phthalate | 1.851 | 1.763 | 4.8 | 99 | 0.00 |
| 68 | T,C | Fluoranthene | 1.115 | 1.109 | 0.5 | 97 | 0.00 |
| 69 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 70 | | Benzidine | 0.420 | 0.285 | 32.1# | 78 | 0.00 |
| 71 | T | Pyrene | 1.449 | 1.435 | 1.0 | 97 | 0.00 |
| 72 | S | Terphenyl-d14 | 0.875 | 0.828 | 5.4 | 97 | 0.00 |
| 73 | T | Butyl benzyl phthalate | 1.048 | 0.998 | 4.8 | 96 | 0.00 |
| 74 | T | Benzo[a]anthracene | 1.113 | 1.155 | -3.8 | 98 | 0.00 |
| 75 | T | 3,3'-Dichlorobenzidine | 0.411 | 0.398 | 3.2 | 95 | 0.00 |
| 76 | T | Chrysene | 1.076 | 1.054 | 2.0 | 98 | 0.00 |
| 77 | T | bis(2-Ethylhexyl)phthalate | 1.209 | 1.105 | 8.6 | 101 | 0.00 |
| 78 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 79 | T,C | Di-n-octyl phthalate | 3.107 | 3.004 | 3.3 | 94 | 0.00 |
| 80 | T | Benzo[b]fluoranthene | 1.662 | 1.399 | 15.8 | 96 | 0.00 |
| 81 | T | Benzo[k]fluoranthene | 1.120 | 1.075 | 4.0 | 93 | 0.00 |
| 82 | T,C | Benzo[a]pyrene | 1.305 | 1.133 | 13.2 | 94 | 0.00 |
| 83 | T | Indeno[1,2,3cd]pyrene | 0.943 | 0.758 | 19.6 | 90 | 0.00 |
| 84 | T | Dibenz[a,h]anthracene | 0.523 | 0.383 | 26.8# | 89 | 0.00 |
| 85 | T | Benzo[g,h,i]perylene | 0.783 | 0.628 | 19.8 | 94 | 0.00 |

4-3-08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
D040302.D SVOA0328.M Thu Apr 03 21:09:12 2008 SVOA 4

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,ccv, svoa ccv 80ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00
Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120953 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.56 | 136 | 383369 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.49 | 164 | 202281 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.11 | 188 | 261771 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.46 | 240 | 186913 | 40.00 | ug/ml | 0.00 |
| 78) Perylene-d12 | 12.68 | 264 | 137911 | 40.00 | ug/ml | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.17 | 112 | 289942 | 77.31 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.92 | 99 | 397778 | 80.21 | ug/ml | 0.02 |
| 20) Nitrobenzene-d5 | 4.83 | 82 | 357124 | 77.50 | ug/ml | 0.02 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 496268 | 78.28 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.38 | 330 | 120361 | 81.85 | ug/ml | 0.02 |
| 72) Terphenyl-d14 | 10.56 | 244 | 309466 | 75.71 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) Pyridine | 2.37 | 79 | 313766 | 73.39 | ug/ml | 100 |
| 3) n-Nitrosodimethylamine | 2.35 | 74 | 202760 | 75.01 | ug/ml | 88 |
| 6) Phenol | 3.93 | 94 | 377202m | 80.18 | ug/ml | |
| 7) Aniline | 3.99 | 93 | 397375 | 76.98 | ug/ml | 100 |
| 8) bis(2-Chloroethyl)ether | 4.03 | 93 | 282340 | 71.91 | ug/ml | 91 |
| 9) 2-Chlorophenol | 4.09 | 128 | 305263 | 81.09 | ug/ml | 99 |
| 10) 1,3-Dichlorobenzene | 4.22 | 146 | 338665 | 80.04 | ug/ml | 100 |
| 11) 1,4-Dichlorobenzene | 4.30 | 146 | 330232 | 78.17 | ug/ml | 99 |
| 12) 1,2-Dichlorobenzene | 4.44 | 146 | 315528 | 79.17 | ug/ml | 99 |
| 13) Benzyl alcohol | 4.42 | 108 | 185399 | 80.95 | ug/ml | 98 |
| 14) bis(2-chloroisopropyl)ethe | 4.52 | 45 | 574073 | 76.09 | ug/ml | 98 |
| 15) 2-Methylphenol | 4.50 | 108 | 265315 | 80.36 | ug/ml | 98 |
| 16) Hexachloroethane | 4.77 | 117 | 174924 | 80.05 | ug/ml | 95 |
| 17) N-Nitrosodi-n-propylamine | 4.68 | 70 | 212663 | 77.39 | ug/ml | 97 |
| 18) 3/4-Methylphenol | 4.66 | 108 | 277303 | 83.20 | ug/ml | 95 |
| 21) Nitrobenzene | 4.85 | 77 | 331475 | 78.66 | ug/ml | 92 |
| 22) Acetophenone | 4.67 | 105 | 443490 | 81.53 | ug/ml | 100 |
| 23) Isophorone | 5.10 | 82 | 608028 | 76.70 | ug/ml | 98 |
| 24) 2-Nitrophenol | 5.17 | 139 | 179177 | 77.26 | ug/ml | 89 |
| 25) 2,4-Dimethylphenol | 5.20 | 107 | 321963 | 82.42 | ug/ml | 96 |
| 26) bis(2-Chloroethoxy)methane | 5.30 | 93 | 367615 | 77.92 | ug/ml | 99 |
| 27) 2,4-Dichlorophenol | 5.41 | 162 | 264069 | 79.90 | ug/ml | 99 |
| 28) Benzoic acid | 5.35 | 122 | 153720 | 78.82 | ug/ml | 98 |
| 29) 1,2,4-Trichlorobenzene | 5.49 | 180 | 278134 | 81.65 | ug/ml | 99 |
| 30) Naphthalene | 5.59 | 128 | 690138 | 76.83 | ug/ml | 99 |
| 31) 2,6-Dichlorophenol | 5.65 | 162 | 248612 | 82.89 | ug/ml | 98 |
| 32) 4-Chloroaniline | 5.65 | 127 | 302069 | 78.09 | ug/ml | 98 |
| 33) Hexachlorobutadiene | 5.71 | 225 | 160741 | 77.40 | ug/ml | 97 |
| 34) 4-Chloro-3-methylphenol | 6.16 | 107 | 260374 | 81.51 | ug/ml | 92 |
| 35) 2-Methylnaphthalene | 6.33 | 142 | 431999 | 75.20 | ug/ml | 100 |
| 37) Hexachlorocyclopentadiene | 6.50 | 237 | 105901 | 66.33 | ug/ml | 97 |
| 38) 2,4,5-Trichlorophenol | 6.68 | 196 | 192681 | 83.35 | ug/ml | 99 |
| 39) 2,4,6-Trichlorophenol | 6.64 | 196 | 188785 | 82.03 | ug/ml | 99 |
| 41) 2-Chloronaphthalene | 6.87 | 162 | 596967 | 77.69 | ug/ml | 97 |
| 42) 2-Nitroaniline | 6.99 | 65 | 200954 | 78.87 | ug/ml | 95 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,ccv, svoa ccv 80ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00
Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

| Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|
| 43) Acenaphthylene | 7.32 | 152 | 718809 | 79.36 | ug/ml | 99 |
| 44) Dimethyl phthalate | 7.20 | 163 | 598409 | 78.26 | ug/ml | 99 |
| 45) 2,6-Dinitrotoluene | 7.26 | 165 | 149604 | 82.34 | ug/ml | 94 |
| 46) 3-Nitroaniline | 7.46 | 138 | 152219 | 76.82 | ug/ml | 98 |
| 47) Acenaphthene | 7.52 | 153 | 412120 | 78.65 | ug/ml | 98 |
| 48) 2,4-Dinitrophenol | 7.58 | 184 | 95214 | 85.83 | ug/ml | 93 |
| 49) Dibenzofuran | 7.71 | 168 | 580795 | 78.81 | ug/ml | 97 |
| 50) 4-Nitrophenol | 7.65 | 109 | 118253 | 84.10 | ug/ml | 90 |
| 51) 2,4-Dinitrotoluene | 7.72 | 165 | 165949 | 75.86 | ug/ml | 77 |
| 52) Fluorene | 8.10 | 166 | 342487 | 66.77 | ug/ml | 98 |
| 53) 4-Chlorophenyl phenylether | 8.10 | 204 | 186036 | 77.58 | ug/ml | 99 |
| 54) Diethyl phthalate | 7.99 | 149 | 616219 | 78.90 | ug/ml | 98 |
| 55) 4-Nitroaniline | 8.16 | 138 | 145463 | 75.75 | ug/ml | 99 |
| 57) 4,6-Dinitro-2-methylphenol | 8.18 | 198 | 111413 | 84.17 | ug/ml# | 75 |
| 58) n-Nitrosodiphenylamine | 8.24 | 169 | 521835 | 76.18 | ug/ml | 98 |
| 59) 1,2-diphenyl-Hydrazine | 8.27 | 77 | 541938 | 77.74 | ug/ml | 98 |
| 61) 4-Bromophenyl phenylether | 8.64 | 248 | 129949 | 80.80 | ug/ml | 94 |
| 62) Hexachlorobenzene | 8.70 | 284 | 170426 | 79.40 | ug/ml | 94 |
| 63) Pentachlorophenol | 8.92 | 266 | 95645 | 78.15 | ug/ml | 97 |
| 64) Phenanthrene | 9.14 | 178 | 580202 | 77.29 | ug/ml | 100 |
| 65) Anthracene | 9.20 | 178 | 608748 | 79.04 | ug/ml | 99 |
| 66) Carbazole | 9.36 | 167 | 869866 | 99.28 | ug/ml | 99 |
| 67) Di-n-butyl phthalate | 9.68 | 149 | 922902 | 76.19 | ug/ml | 100 |
| 68) Fluoranthene | 10.24 | 202 | 580483 | 79.52 | ug/ml | 97 |
| 70) Benzidine | 10.35 | 184 | 106470 | 54.19 | ug/ml | 96 |
| 71) Pyrene | 10.43 | 202 | 536492 | 79.25 | ug/ml | 100 |
| 73) Butyl benzyl phthalate | 10.95 | 149 | 373001 | 76.13 | ug/ml | 99 |
| 74) Benzo[a]anthracene | 11.44 | 228 | 431660 | 83.01 | ug/ml | 100 |
| 75) 3,3'-Dichlorobenzidine | 11.40 | 252 | 148622 | 77.42 | ug/ml | 100 |
| 76) Chrysene | 11.48 | 228 | 393856 | 78.35 | ug/ml | 100 |
| 77) bis(2-Ethylhexyl)phthalate | 11.41 | 149 | 413078 | 73.10 | ug/ml | 98 |
| 79) Di-n-octyl phthalate | 11.94 | 149 | 828601 | 77.35 | ug/ml | 99 |
| 80) Benzo[b]fluoranthene | 12.34 | 252 | 385814 | 67.33 | ug/ml | 97 |
| 81) Benzo[k]fluoranthene | 12.37 | 252 | 296452 | 76.77 | ug/ml | 97 |
| 82) Benzo[a]pyrene | 12.64 | 252 | 312522 | 69.46 | ug/ml | 98 |
| 83) Indeno[1,2,3cd]pyrene | 13.88 | 276 | 209057 | 64.27 | ug/ml | 99 |
| 84) Dibenz[a,h]anthracene | 13.89 | 278 | 105747 | 58.63 | ug/ml | 89 |
| 85) Benzo[g,h,i]perylene | 14.24 | 276 | 173114 | 64.14 | ug/ml | 90 |

4/3/08

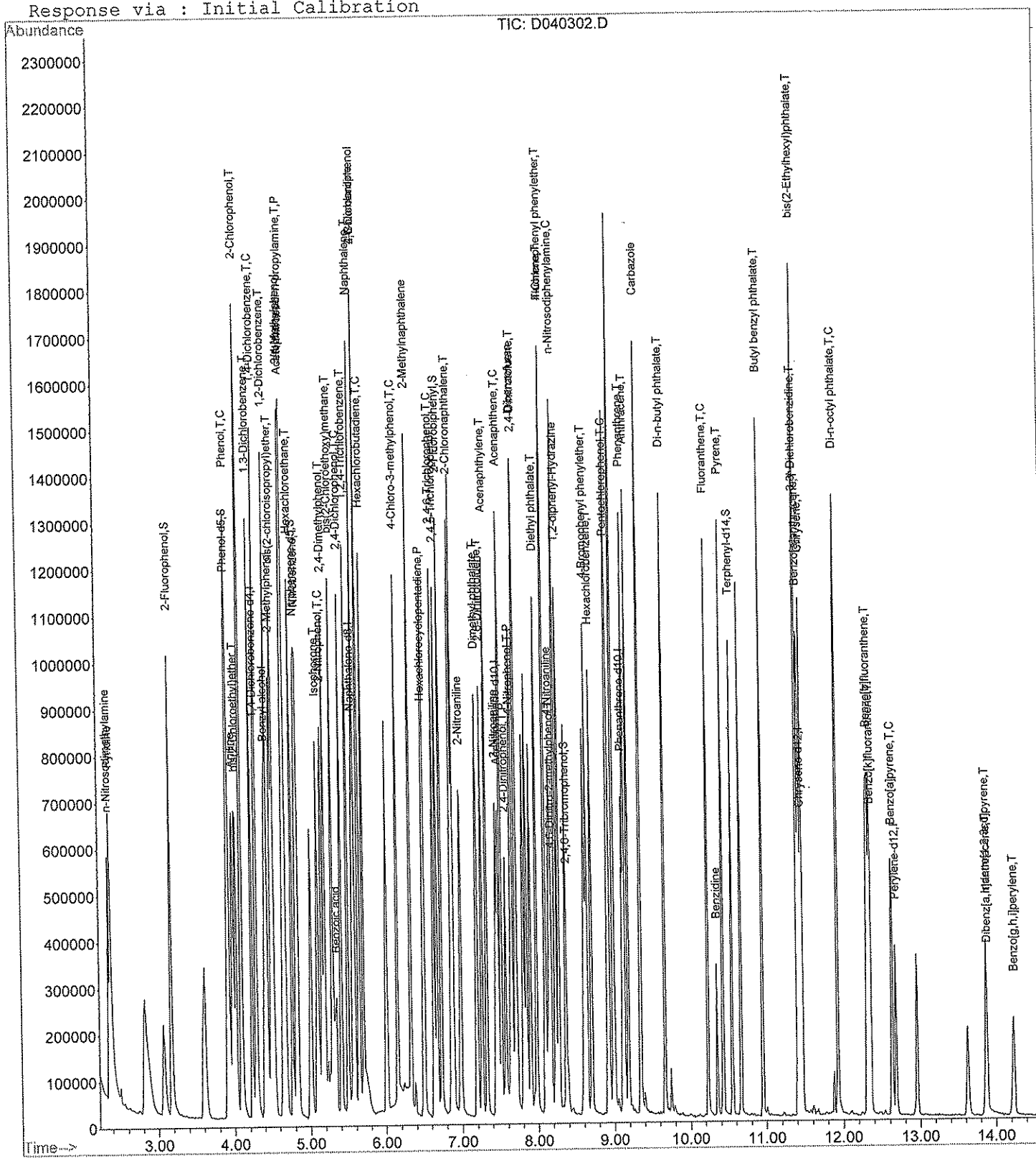
(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,ccv, svoa ccv 80ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00

Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration

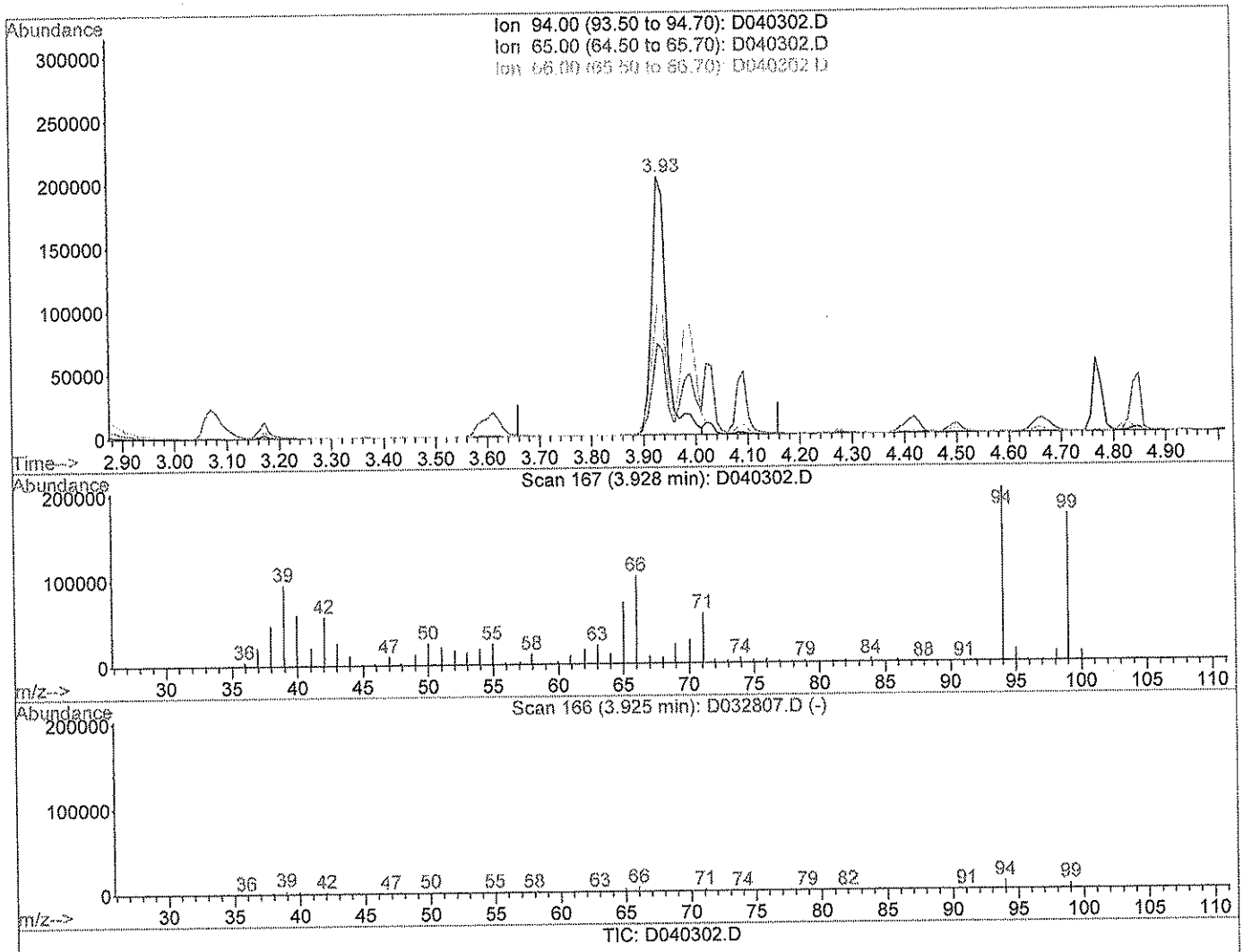


Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,ccv, svoa ccv 80ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration




(6) Phenol (T,C)

3.93min 86.06ug/ml

response 404869

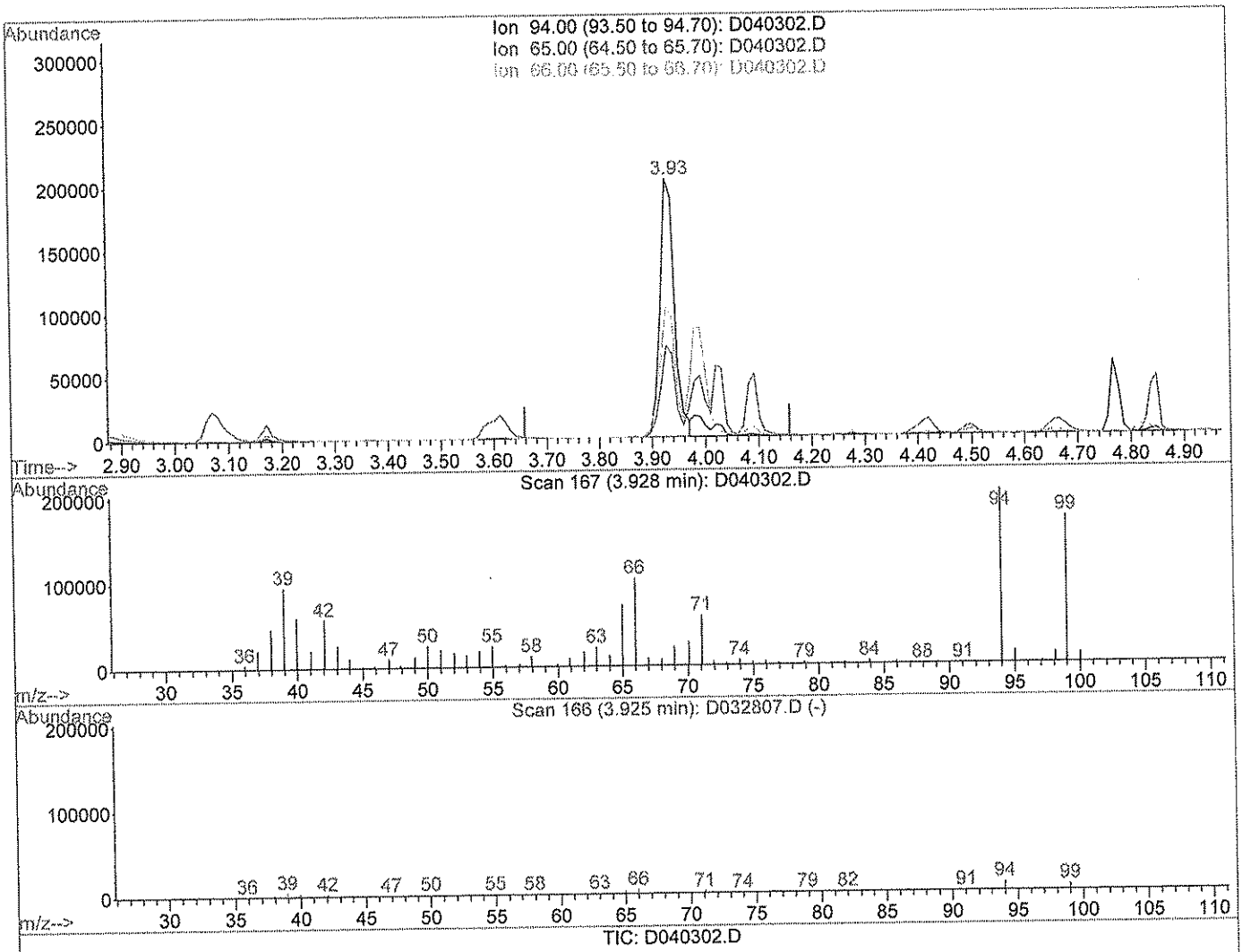
| Ion | Exp% | Act% |
|---|---|---|
| 94.00 | 100 | 100 |
| 65.00 | 35.30 | 35.16 |
| 66.00 | 48.70 | 50.52 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D
Acq On : 3 Apr 2008 7:53 pm
Sample : ,ccv, svoa ccv 80ug/ml,1,
Misc : 8270_w
MS Integration Params: LSCINT.P
Quant Time: Apr 3 21:08 2008

Vial: 2
Operator: mills
Inst : SVOA 4
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Multiple Level Calibration




(6) Phenol (T,C)

3.93min 80.18ug/ml m

response 377202

| Ion | Exp% | Act% |
|---|---|---|
| 94.00 | 100 | 100 |
| 65.00 | 35.30 | 35.16 |
| 66.00 | 48.70 | 50.52 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D Vial: 2
Acq On : 3 Apr 2008 7:53 pm Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 4 17:36 2008 Quant Results File: IWS.RES

Quant Method : C:\HPCHEM\1\METHODS\IWS.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Apr 04 17:36:44 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\D040308\D040302.D
DataAcq Meth : 8270-AQ

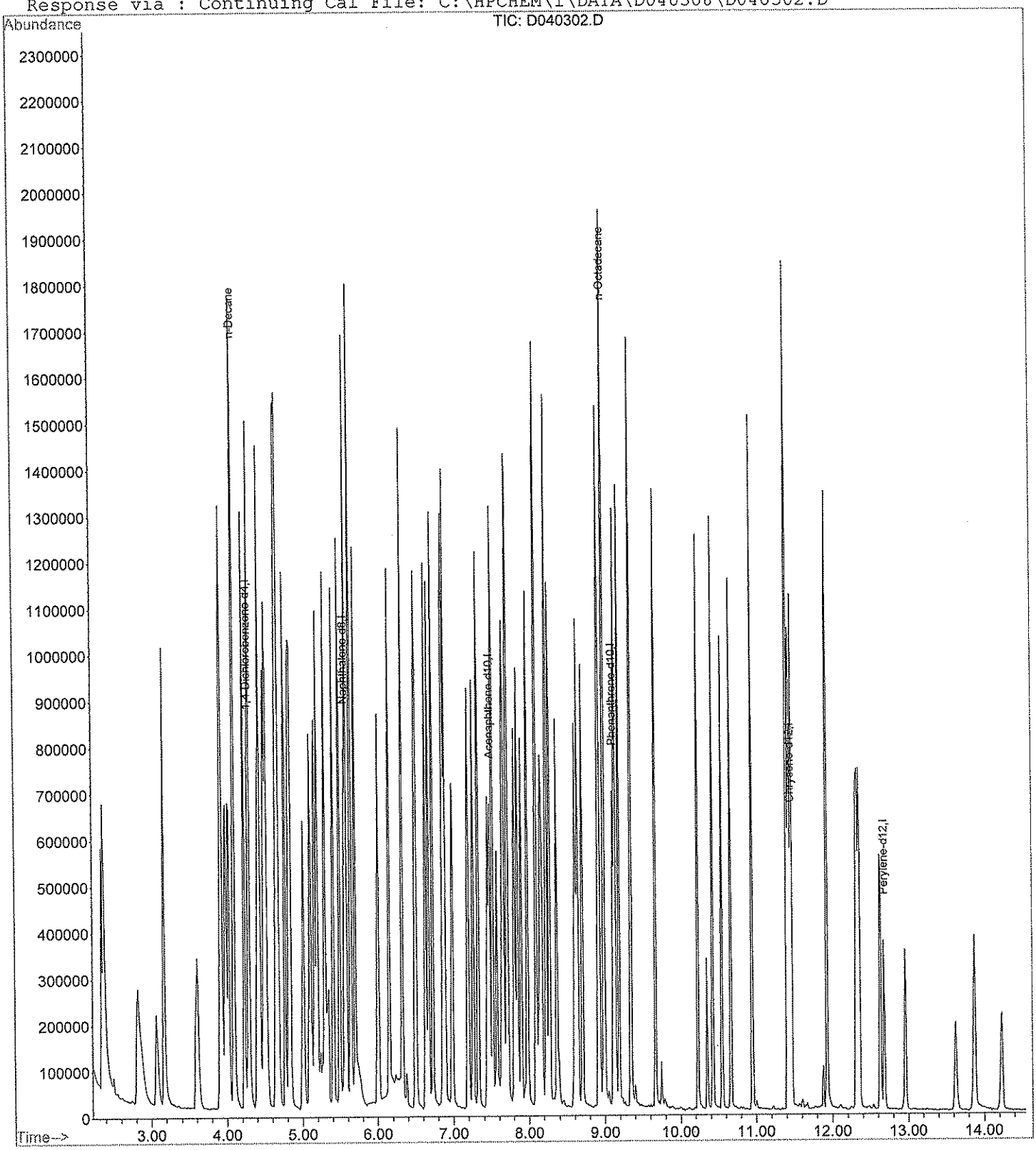
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 120953 | 40.00 | ug/ml | 0.00 |
| 3) Naphthalene-d8 | 5.56 | 136 | 383369 | 40.00 | ug/ml | 0.00 |
| 4) Acenaphthene-d10 | 7.49 | 164 | 202281 | 40.00 | ug/ml | 0.00 |
| 6) Phenanthrene-d10 | 9.11 | 188 | 261771 | 40.00 | ug/ml | 0.00 |
| 7) Chrysene-d12 | 11.46 | 240 | 186913 | 40.00 | ug/ml | 0.00 |
| 8) Perylene-d12 | 12.68 | 264 | 137911 | 40.00 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| 2) n-Decane | 4.10 | 57 | 311279 | 80.00 | ug/ml | 96 |
| 5) n-Octadecane | 9.00 | 57 | 363573 | 80.00 | ug/ml | 97 |

4-4-08

(#) = qualifier out of range (m) = manual integration
D040302.D IWS.M Fri Apr 04 17:37:00 2008 SVOA 4

Data File : C:\HPCHEM\1\DATA\D040308\D040302.D  Vial: 2
Acq On : 3 Apr 2008 7:53 pm  Operator: mills
Sample : ,ccv, svoa ccv 80ug/ml,1,  Inst : SVOA 4
Misc : 8270_w  Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 4 17:36 2008  Quant Results File: IWS.RES

Method : C:\HPCHEM\1\METHODS\IWS.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Apr 04 17:36:44 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\D040308\D040302.D



# SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D040308\D040340.D Vial: 16
Acq On : 4 Apr 2008 4:12 am Operator: mills
Sample : ,samp,me0803c07-02b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Quant Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration
DataAcq Meth : 8270-AQ

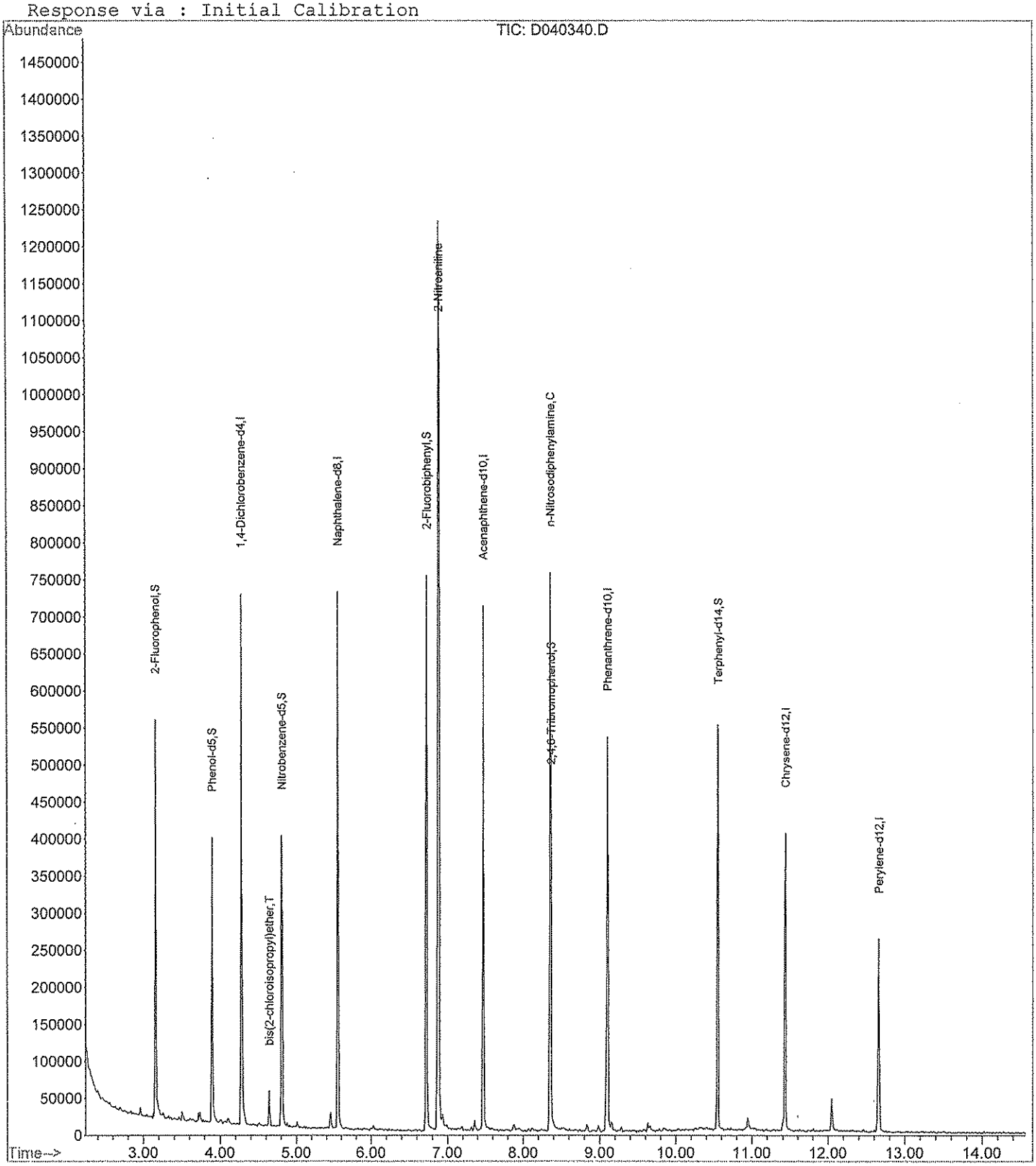
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.27 | 152 | 101707 | 40.00 | ug/ml | 0.00 |
| 19) Naphthalene-d8 | 5.55 | 136 | 303173 | 40.00 | ug/ml | 0.00 |
| 36) Acenaphthene-d10 | 7.47 | 164 | 146540 | 40.00 | ug/ml | 0.00 |
| 56) Phenanthrene-d10 | 9.10 | 188 | 186252 | 40.00 | ug/ml | 0.00 |
| 69) Chrysene-d12 | 11.43 | 240 | 149848 | 40.00 | ug/ml | -0.01 |
| 78) Perylene-d12 | 12.66 | 264 | 119085 | 40.00 | ug/ml | -0.02 |
| **System Monitoring Compounds** | | | | | | |
| 4) 2-Fluorophenol | 3.16 | 112 | 102824 | 32.61 | ug/ml | 0.00 |
| 5) Phenol-d5 | 3.89 | 99 | 94773 | 22.73 | ug/ml | 0.00 |
| 20) Nitrobenzene-d5 | 4.80 | 82 | 147824 | 40.57 | ug/ml | 0.00 |
| 40) 2-Fluorobiphenyl | 6.73 | 172 | 238215 | 51.87 | ug/ml | 0.00 |
| 60) 2,4,6-Tribromophenol | 8.36 | 330 | 105256 | 100.60 | ug/ml | 0.00 |
| 72) Terphenyl-d14 | 10.55 | 244 | 203035 | 61.96 | ug/ml | 0.00 |
| **Target Compounds** | | | | | | Qvalue |
| ~~14)~~ bis(2-chloroisopropyl)ethe | 4.64 | 45 | 18070 | 2.85 | ug/ml# | 74 |
| ~~42)~~ 2-Nitroaniline | 6.88 | 65 | 22857 | 12.38 | ug/ml# | 16 |
| ~~58)~~ n-Nitrosodiphenylamine | 8.35 | 169 | 3532 | 0.72 | ug/ml# | 29 |

4-4-08

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

Data File : C:\HPCHEM\1\DATA\D040308\D040340.D Vial: 16
Acq On : 4 Apr 2008 4:12 am Operator: mills
Sample : ,samp,me0803c07-02b,1, Inst : SVOA 4
Misc : 8270_w Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 14:59 2008 Quant Results File: SVOA0328.RES

Method : C:\HPCHEM\1\METHODS\SVOA0328.M (RTE Integrator)
Title : BNA Quantitation
Last Update : Fri Mar 28 21:11:03 2008
Response via : Initial Calibration



# EXTRACTION LOG(S)

# Microbac Laboratories, Inc.

# PREP BATCH REPORT



Prep Batch **60802** Prep Code: **3510_B** Technician: **James Manley**

Prep Start Date: **4/2/2008 6:22:00 AM**
Prep End Date: **4/2/2008 1:44:00 PM**

| Sample ID | Matrix | pH | wt (g) | Ini vol (mL) | Sol Added | Sol Recov | Fin Vol (mL) | factor | PrepStart | PrepEnd |
|---|---|---|---|---|---|---|---|---|---|---|
| BK-1-040208 | | | | 1000 | 0 | 0 | 1 | 0.001 | 4/2/2008 | 4/2/2008 |
| LCS-1-040208 | | | | 1000 | 0 | 0 | 1 | 0.001 | 4/2/2008 | 4/2/2008 |
| ME0803A91-07B | Aqueous | | | 980 | 0 | 0 | 1 | 0.0010204 | 4/2/2008 | 4/2/2008 |
| ME0803A91-11C | Aqueous | | | 990 | 0 | 0 | 1 | 0.0010101 | 4/2/2008 | 4/2/2008 |
| ME0803B85-14B | Aqueous | | | 970 | 0 | 0 | 1 | 0.0010309 | 4/2/2008 | 4/2/2008 |
| ME0803B85-17B | Aqueous | | | 980 | 0 | 0 | 1 | 0.0010204 | 4/2/2008 | 4/2/2008 |
| ME0803C07-02B | Aqueous | | | 970 | 0 | 0 | 1 | 0.0010309 | 4/2/2008 | 4/2/2008 |
| ME0803C07-02BM | Aqueous | | | 470 | 0 | 0 | 1 | 0.0021277 | 4/2/2008 | 4/2/2008 |
| ME0803C07-02BM | Aqueous | | | 480 | 0 | 0 | 1 | 0.0020833 | 4/2/2008 | 4/2/2008 |
| ME0803C18-01B | Aqueous | | | 1010 | 0 | 0 | 1 | 0.0009901 | 4/2/2008 | 4/2/2008 |
| ME0804043-01B | Aqueous | | | 970 | 0 | 0 | 1 | 0.0010309 | 4/2/2008 | 4/2/2008 |
| ME0804043-02B | Aqueous | | | 990 | 0 | 0 | 1 | 0.0010101 | 4/2/2008 | 4/2/2008 |

| Spk ID | Spike Name | SampType | AmtAdd |
|---|---|---|---|
| 1MLSPAB62-12 | | | 0 |
| 1MLSRAB62-07 | | | 0 |

# Injection Log

Directory: C:\HPCHEM\1\DATA\D040208

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | D040201.D | 1. | ,tune,dftpp tune,1, | dftpp | 2 Apr 2008 15:55 |
| 2 | 2 | D040202.D | 1. | ,ccv, svoa ccv 50ug/ml,1, | 8270_w | 2 Apr 2008 16:14 |
| 3 | 100 | D040203.D | 1. | rinse | 8270_w | 2 Apr 2008 17:08 |
| 4 | 26 | D040204.D | 1. | ,mblk,bk-1-040208,1, | 8270_w | 2 Apr 2008 17:30 |
| 5 | 27 | D040205.D | 1. | ,mblk,bk-1-032708,1, | 8270_w | 2 Apr 2008 17:57 |
| 6 | 28 | D040206.D | 1. | ,lcs,lcs-1-040208,1, | 8270_w | 2 Apr 2008 18:23 |
| 7 | 29 | D040207.D | 1. | ,lcs,lcs-1-032708,1, | 8270_w | 2 Apr 2008 18:48 |
| 8 | 30 | D040208.D | 1. | ,samp,me0803c18-01b,1, | 8270_w | 2 Apr 2008 19:15 |
| 9 | 31 | D040209.D | 1. | ,samp,me0803968-01a,1, | 625_w | 2 Apr 2008 19:41 |
| 10 | 36 | D040210.D | 1. | ,lcs,lcs-9a-032108,1, | 8270_o | 2 Apr 2008 20:07 |
| 11 | 37 | D040211.D | 1. | ,lcs,lcs-9b-032108,1, | 8270_o | 2 Apr 2008 20:34 |
| 12 | 32 | D040212.D | 1. | ,ms,me0803866-02ems,1, | 8270_w | 2 Apr 2008 21:00 |
| 13 | 33 | D040213.D | 1. | ,msd,me0803866-02emsd,1, | 8270_w | 2 Apr 2008 21:26 |
| 14 | 34 | D040214.D | 1. | ,samp,me0803a91-07b,1, | 8270_w | 2 Apr 2008 21:52 |
| 15 | 35 | D040215.D | 1. | ,samp,me0803a91-11c,1, | 8270_w | 2 Apr 2008 22:18 |
| 16 | 38 | D040216.D | 1. | ,samp,me0803a81-01a,1, | 1311_b | 2 Apr 2008 22:41 |
| 17 | 39 | D040217.D | 1. | ,samp,me0803a19-01a,1, | 8270_s_pah | 2 Apr 2008 23:07 |
| 18 | 40 | D040218.D | 1. | ,samp,me0803a19-02a,1, | 8270_s_pah | 2 Apr 2008 23:32 |
| 19 | 41 | D040219.D | 1. | ,samp,me0803a19-03a,1, | 8270_s_pah | 2 Apr 2008 23:57 |
| 20 | 42 | D040220.D | 1. | ,samp,me0803880-01a,1, | 8270_s_pah | 3 Apr 2008 00:23 |
| 21 | 43 | D040221.D | 1. | ,ms,me0803880-01ams,1, | 8270_s_pah | 3 Apr 2008 00:48 |
| 22 | 44 | D040222.D | 1. | ,msd,me0803880-01amsd,1, | 8270_s_pah | 3 Apr 2008 01:13 |
| 23 | 45 | D040223.D | 1. | ,samp,me0803880-03a,1, | 8270_s_pah | 3 Apr 2008 01:38 |

1762699

SVOA Standards

Acquisition Method 8270-AQ
Initial Linearity Date 3-28-08
Tune Std. # T7-7-2
ICV Std. # AB19-12
CCV Std. # AB61-02
I.S. # AB107-02

4-3-08

# Injection Log

Directory: C:\HPCHEM\1\DATA\D040308

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | D040301.D | 1. | ,tune,dftpp tune,1, | dftpp | 3 Apr 2008 19:35 |
| 2 | 2 | D040302.D | 1. | ,ccv, svoa ccv 80ug/ml,1, | 8270_w | 3 Apr 2008 19:53 |
| 3 | 100 | D040303.D | 1. | rinse | 8270_w | 3 Apr 2008 21:16 |
| 4 | 3 | D040304.D | 1. | ,samp,me0803b68-01c,1,#37 only | 625+_w | 3 Apr 2008 21:41 |
| 5 | 100 | D040325.D | 1. | rinse | 8270_w | 3 Apr 2008 21:57 |
| 6 | 100 | D040327.D | 1. | rinse | 8270_w | 3 Apr 2008 22:23 |
| 7 | 4 | D040328.D | 1. | ,mblk,bk-8-040308,1,short 625 list | 8270_w | 3 Apr 2008 22:59 |
| 8 | 5 | D040329.D | 1. | ,lcs,lcs-8a-040308,1,short 625 list | 8270_w | 3 Apr 2008 23:27 |
| 9 | 6 | D040330.D | 1. | ,lcs,lcs-8b-040308,1,short 625 list | 8270_w | 3 Apr 2008 23:54 |
| 10 | 7 | D040331.D | 1. | ,samp,me0804101-01a,1, | 8270_w | 4 Apr 2008 00:22 |
| 11 | 8 | D040332.D | 1. | ,samp,me0804119-03b,1, | 8270_w | 4 Apr 2008 00:49 |
| 12 | 9 | D040333.D | 1. | ,samp,me0804119-04b,1, | 8270_w | 4 Apr 2008 01:13 |
| 13 | 10 | D040334.D | 1. | ,samp,me0804043-03b,1, | 8270_w | 4 Apr 2008 01:39 |
| 14 | 11 | D040335.D | 1. | ,samp,me0804043-04b,1, | 8270_w | 4 Apr 2008 02:04 |
| 15 | 12 | D040336.D | 1. | ,samp,me0804107-01a,1, | 625_w | 4 Apr 2008 02:30 |
| 16 | 13 | D040337.D | 1. | ,samp,me0804126-02a,1, | 625+_w | 4 Apr 2008 02:56 |
| 17 | 14 | D040338.D | 1. | ,samp,me0803b85-14b,1, | 8270_w | 4 Apr 2008 03:21 |
| 18 | 15 | D040339.D | 1. | ,samp,me0803b85-17b,1, | 8270_w | 4 Apr 2008 03:47 |
| 19 | 16 | D040340.D | 1. | ,samp,me0803c07-02b,1, | 8270_w | 4 Apr 2008 04:12 |
| 20 | 17 | D040341.D | 1. | ,ms,me0803c07-02bms,1, | 8270_w | 4 Apr 2008 04:38 |
| 21 | 18 | D040342.D | 1. | ,msd,me0803c07-02bmsd,1, | 8270_w | 4 Apr 2008 05:03 |
| 22 | 19 | D040343.D | 1. | ,samp,me0804043-01b,1, | 8270_w | 4 Apr 2008 05:29 |
| 23 | 20 | D040344.D | 1. | ,samp,me0804043-02b,1, | 8270_w | 4 Apr 2008 05:54 |
| 24 | 21 | D040345.D | 1. | ,samp,me0804053-01a,1, | 625_w | 4 Apr 2008 06:20 |
| 25 | 22 | D040346.D | 1. | ,samp,me0804005-01a,1, | 625_w | 4 Apr 2008 06:45 |
| 26 | 23 | D040347.D | 1. | ,lcs,lcs-2-033108,1, not used | 8270_s_pah | 4 Apr 2008 07:11 |
| 27 | 100 | D040350.D | 1. | rinse | 625_w | 4 Apr 2008 07:27 |

SVOA Standards

Acquisition Method 8270-AE
Initial Linearity Date 3-28-08
Tune Std. # T7720
ICV Std. # AB1912
CCV Std. # AB61-03
LS # AB10702

BM 4-4-08

# VOA GC/MS
# RAW DATA

# METHOD BLANK RAW DATA

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040604.D
Acq On : 6 Apr 2008 4:41 pm
Sample : ,MBLK,MB_W25 4/6,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 17:08:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.011 | 96 | 627528 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 427806 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.385 | 152 | 211790 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.166 | 113 | 160712 | 9.83 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.30% | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 164232 | 10.48 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 104.80% | | |
| 44) toluene-d8 | 9.249 | 98 | 595365 | 11.46 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 114.60% | | |
| 63) 4-bromofluorobenzene | 13.524 | 95 | 211705 | 9.67 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.70% | | |
| Target Compounds | | | | | | Qvalue |
| 81) 1,2,4-trichlorobenzene | 18.000 | 180 | 4708 | 0.33 | ug/L | 85 |
| 82) hexachlorobutadiene | 18.158 | 225 | 4068 | 0.33 | ug/L | 95 |
| 83) naphthalene | 18.256 | 128 | 7187 | 0.48 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.505 | 180 | 5324 | 0.49 | ug/L | 96 |
| 85) 2-methyl naphthalene | 19.326 | 142 | 10760 | 1.47 | ug/L | 95 |

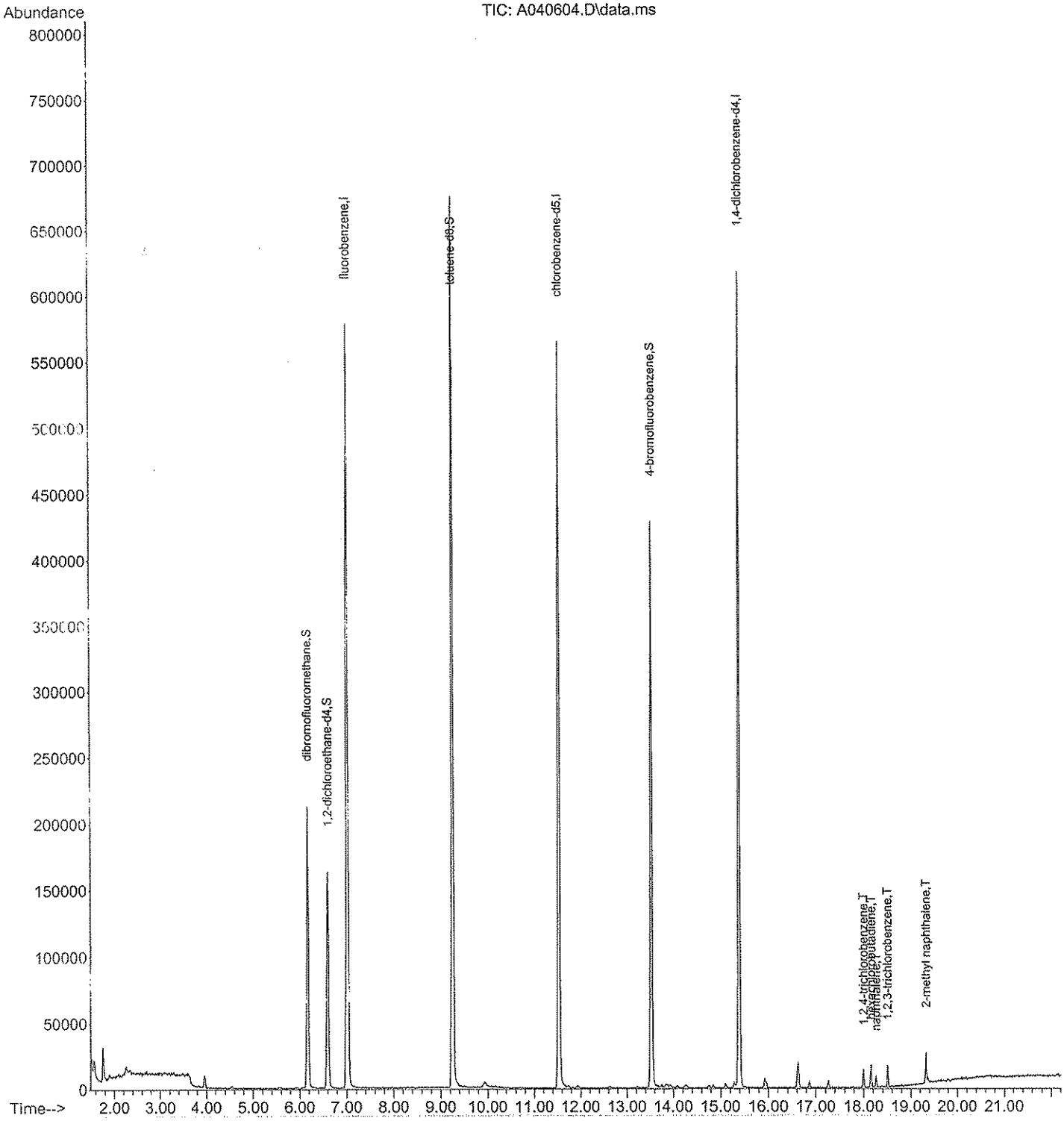
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4-6-08

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040604.D
Acq On : 6 Apr 2008 4:41 pm
Sample : ,MBLK,MB_W25 4/6,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 17:08:26 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040803.D
Acq On : 8 Apr 2008 8:11 am
Sample : ,MBLK,MB_W25 4/8,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 08 08:38:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

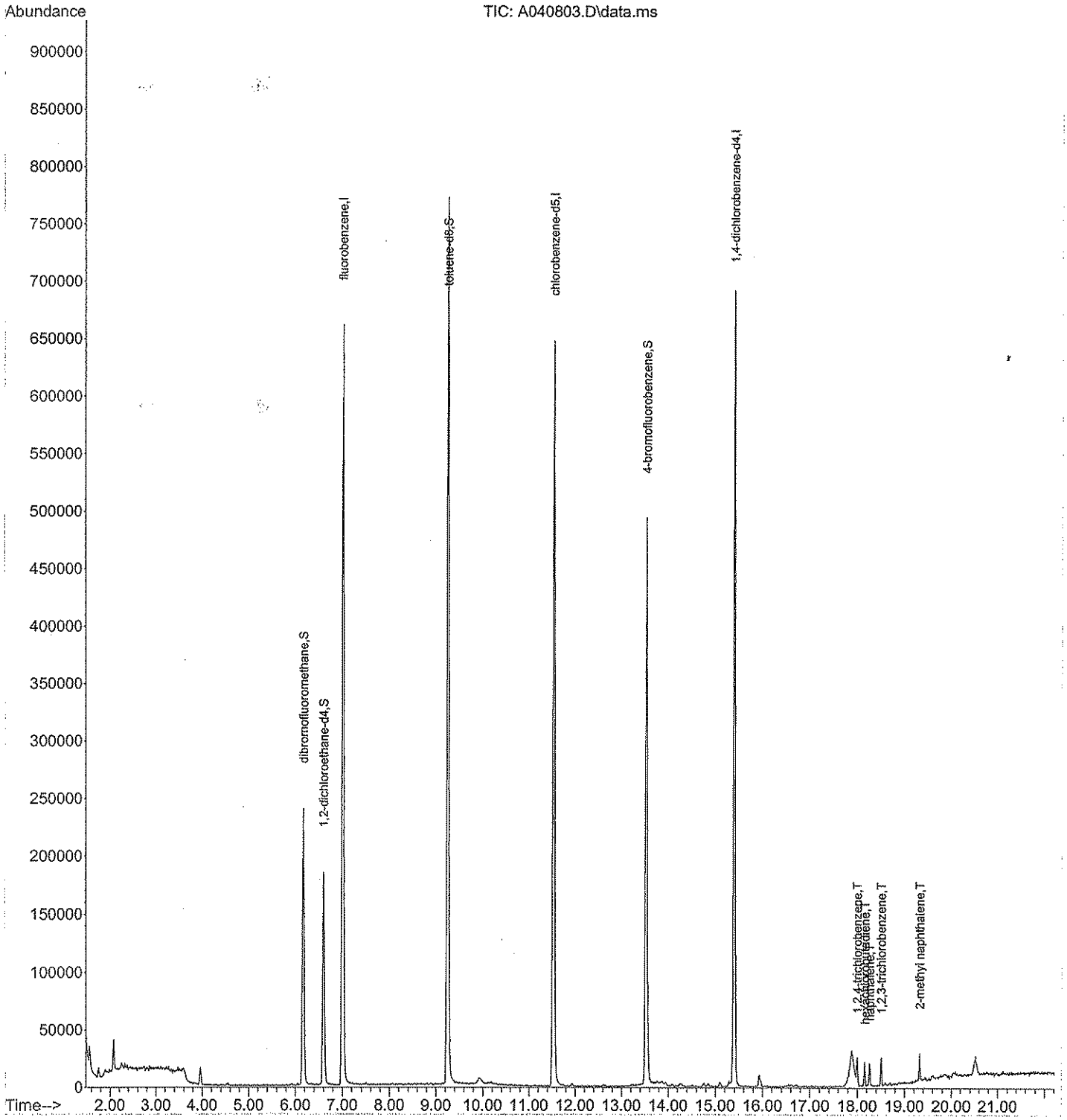
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 710960 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 495503 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 243132 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 182003 | 9.83 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.30% | | | |
| 30) 1,2-dichloroethane-d4 | 6.596 | 65 | 184449 | 10.39 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.90% | | | |
| 44) toluene-d8 | 9.248 | 98 | 687782 | 11.43 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.30% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 240030 | 9.47 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 94.70% | | | |
| Target Compounds | | | | | | Qvalue |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 7704 | 0.47 | ug/L | 94 |
| 82) hexachlorobutadiene | 18.163 | 225 | 4541 | 0.32 | ug/L | 82 |
| 83) naphthalene | 18.260 | 128 | 14622 | 0.85 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 7893 | 0.63 | ug/L | 95 |
| 85) 2-methyl naphthalene | 19.324 | 142 | 10521 | 1.25 | ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040803.D
Acq On : 8 Apr 2008 8:11 am
Sample :,,MBLK,MB_W25 4/8,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 08 08:38:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# LABORATORY CONTROL SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040605.D
Acq On : 6 Apr 2008 5:16 pm
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 06 17:45:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.013 | 96 | 606659 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 424883 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.387 | 152 | 247235 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 158215 | 10.02 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.20% | | | |
| 30) 1,2-dichloroethane-d4 | 6.605 | 65 | 159317 | 10.52 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.20% | | | |
| 44) toluene-d8 | 9.251 | 98 | 593085 | 11.49 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.90% | | | |
| 63) 4-bromofluorobenzene | 13.520 | 95 | 226550 | 10.42 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.20% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 79005 | 6.31 | ug/L | 97 |
| 3) chloromethane | 1.819 | 50 | 194633 | 9.74 | ug/L | 96 |
| 4) vinyl chloride | 1.935 | 62 | 157128 | 7.36 | ug/L | 98 |
| 6) bromomethane | 2.318 | 94 | 44088 | 5.84 | ug/L | 95 |
| 7) chloroethane | 2.446 | 64 | 113837 | 9.03 | ug/L | 96 |
| 8) trichlorofluoromethane | 2.725 | 101 | 373231 | 9.90 | ug/L | 99 |
| 9) acrolein | 3.273 | 56 | 1151 | 4.79 | ug/L | 93 |
| 10) 1,1-dichloroethene | 3.346 | 96 | 152049 | 9.18 | ug/L | 99 |
| 11) acetone | 3.473 | 43 | 18515 | 8.52 | ug/L | 89 |
| 12) carbon disulfide | 3.589 | 76 | 386571 | 7.17 | ug/L | 97 |
| 13) methylene chloride | 3.966 | 84 | 160296 | 8.19 | ug/L | 89 |
| 14) acrylonitrile | 4.300 | 53 | 20820 | 9.63 | ug/L | 98 |
| 15) trans-1,2-dichloroethene | 4.270 | 96 | 166187 | 9.15 | ug/L | 98 |
| 16) methyl-t-butyl ether | 4.264 | 73 | 245940 | 8.78 | ug/L | 99 |
| 17) acetonitrile | 3.826 | 41 | 8462 | 9.04 | ug/L | 91 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 346301 | 9.57 | ug/L | 99 |
| 20) vinyl acetate | 4.872 | 43 | 140728 | 14.01 | ug/L | 100 |
| 21) cis-1,2-dichloroethene | 5.535 | 96 | 165195 | 8.93 | ug/L | 95 |
| 22) 2,2-dichloropropane | 5.505 | 77 | 350557 | 9.79 | ug/L | 98 |
| 23) 2-butanone | 5.577 | 72 | 3756 | 8.20 | ug/L # | 83 |
| 25) chloroform | 5.955 | 83 | 361241 | 9.93 | ug/L | 99 |
| 27) 1,1,1-trichloroethane | 6.137 | 97 | 373763 | 9.73 | ug/L | 98 |
| 29) carbon tetrachloride | 6.344 | 117 | 323144 | 9.77 | ug/L | 99 |
| 31) benzene | 6.630 | 78 | 619446 | 9.12 | ug/L | 98 |
| 32) 1,1-dichloropropene | 6.350 | 75 | 243629 | 9.27 | ug/L | 98 |
| 33) 1,2-dichloroethane | 6.703 | 62 | 205661 | 9.78 | ug/L | 99 |
| 34) trichloroethene | 7.511 | 95 | 178870 | 8.78 | ug/L | 99 |
| 36) 1,2-dichloropropane | 7.846 | 63 | 139261 | 9.00 | ug/L | 90 |
| 37) methyl methacrylate | 7.840 | 41 | 123734 | 18.91 | ug/L # | 57 |
| 38) dibromomethane | 8.034 | 93 | 64123 | 9.52 | ug/L | 96 |
| 39) bromodichloromethane | 8.265 | 83 | 225123 | 9.38 | ug/L | 99 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 195066 | 11.18 | ug/L | 94 |
| 43) 4-methyl-2-pentanone | 9.129 | 43 | 56970 | 10.89 | ug/L | 99 |
| 45) toluene | 9.348 | 92 | 416191 | 11.25 | ug/L | 98 |
| 46) 1,1,2-trichloroethane | 10.041 | 83 | 61646 | 10.66 | ug/L | 96 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040605.D
Acq On : 6 Apr 2008 5:16 pm
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 06 17:45:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

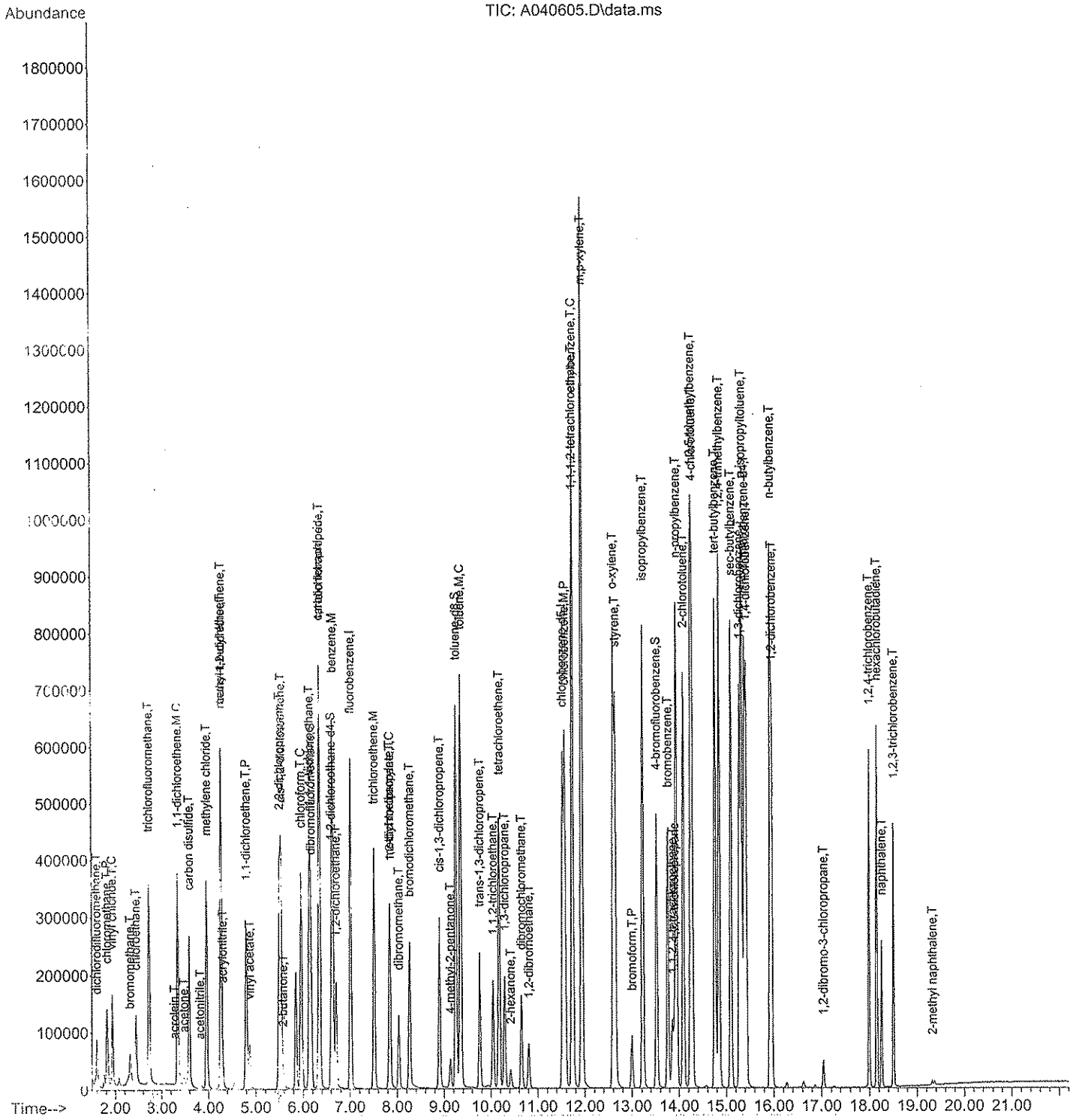
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 47) | 1,3-dichloropropane | 10.291 | 76 | 136946 | 11.03 | ug/L | | 99 |
| 48) | tetrachloroethene | 10.175 | 164 | 150785 | 11.15 | ug/L | | 98 |
| 49) | trans-1,3-dichloropropene | 9.755 | 75 | 165970 | 12.55 | ug/L | | 97 |
| 50) | 2-hexanone | 10.418 | 43 | 36805 | 11.68 | ug/L | | 95 |
| 51) | dibromochloromethane | 10.649 | 129 | 120541 | 11.82 | ug/L | | 96 |
| 52) | 1,2-dibromoethane | 10.807 | 107 | 78895 | 11.48 | ug/L | | 95 |
| 53) | chlorobenzene | 11.574 | 112 | 427596 | 11.38 | ug/L | | 98 |
| 54) | 1,1,1,2-tetrachloroethane | 11.726 | 131 | 157693 | 11.30 | ug/L | | 97 |
| 55) | ethylbenzene | 11.738 | 91 | 866504 | 11.55 | ug/L | | 100 |
| 56) | m,p-xylene | 11.939 | 106 | 625466 | 22.86 | ug/L | | 100 |
| 58) | o-xylene | 12.601 | 106 | 291065 | 11.36 | ug/L | | 96 |
| 59) | styrene | 12.644 | 104 | 455954 | 11.10 | ug/L | | 99 |
| 60) | isopropylbenzene | 13.228 | 105 | 826978 | 13.04 | ug/L | | 100 |
| 61) | bromobenzene | 13.763 | 156 | 190291 | 11.73 | ug/L | | 93 |
| 62) | bromoform | 13.003 | 173 | 66670 | 11.74 | ug/L | | 96 |
| 64) | 1,2,3-trichloropropane | 13.903 | 75 | 70455 | 11.24 | ug/L | | 92 |
| 65) | n-propylbenzene | 13.939 | 91 | 997889 | 11.62 | ug/L | | 99 |
| 66) | 2-chlorotoluene | 14.091 | 91 | 613762 | 11.57 | ug/L | | 99 |
| 67) | 4-chlorotoluene | 14.274 | 91 | 731985 | 11.77 | ug/L | | 96 |
| 68) | 1,3,5-trimethylbenzene | 14.249 | 105 | 721344 | 11.80 | ug/L | | 100 |
| 70) | 1,1,2,2-tetrachloroethane | 13.860 | 83 | 77239 | 11.22 | ug/L | | 95 |
| 71) | tert-butylbenzene | 14.760 | 119 | 576514 | 11.46 | ug/L | | 98 |
| 72) | sec-butylbenzene | 15.101 | 105 | 785595 | 10.67 | ug/L | | 100 |
| 73) | 1,2,4-trimethylbenzene | 14.845 | 105 | 723299 | 11.22 | ug/L | | 97 |
| 74) | 1,3-dichlorobenzene | 15.283 | 146 | 374379 | 11.42 | ug/L | | 98 |
| 75) | p-isopropyltoluene | 15.326 | 119 | 740997 | 12.04 | ug/L | | 99 |
| 77) | 1,4-dichlorobenzene | 15.423 | 146 | 368878 | 11.31 | ug/L | | 98 |
| 78) | 1,2-dichlorobenzene | 15.958 | 146 | 310648 | 11.63 | ug/L | | 98 |
| 79) | n-butylbenzene | 15.922 | 91 | 654301 | 11.18 | ug/L | | 100 |
| 80) | 1,2-dibromo-3-chloropr... | 17.041 | 75 | 15249 | 11.53 | ug/L | | 91 |
| 81) | 1,2,4-trichlorobenzene | 17.996 | 180 | 185478 | 11.22 | ug/L | | 96 |
| 82) | hexachlorobutadiene | 18.160 | 225 | 146028 | 10.15 | ug/L | | 99 |
| 83) | naphthalene | 18.257 | 128 | 189181 | 10.79 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.506 | 180 | 138052 | 10.87 | ug/L | | 99 |
| 85) | 2-methyl naphthalene | 19.327 | 142 | 3636 | 0.42 | ug/L | # | 78 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040605.D
Acq On : 6 Apr 2008 5:16 pm
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 06 17:45:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040804.D
Acq On : 8 Apr 2008 8:46 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 08 09:16:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 690153 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 488172 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 275032 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 178210 | 9.92 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 182290 | 10.58 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.80% | | | | |
| 44) toluene-d8 | 9.253 | 98 | 675936 | 11.40 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.00% | | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 253927 | 10.17 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.70% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 225751 | 15.85 | ug/L | | 96 |
| 3) chloromethane | 1.815 | 50 | 301424 | 13.26 | ug/L | | 99 |
| 4) vinyl chloride | 1.931 | 62 | 232097 | 9.55 | ug/L | | 99 |
| 6) bromomethane | 2.320 | 94 | 96638 | 11.26 | ug/L | | 98 |
| 7) chloroethane | 2.442 | 64 | 141743 | 9.88 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.728 | 101 | 430122 | 10.03 | ug/L | | 98 |
| 9) acrolein | 3.293 | 56 | 3130 | 11.45 | ug/L | | 98 |
| 10) 1,1-dichloroethene | 3.348 | 96 | 157163 | 8.34 | ug/L | | 98 |
| 11) acetone | 3.476 | 43 | 20250 | 8.19 | ug/L | | 98 |
| 12) carbon disulfide | 3.591 | 76 | 560040 | 9.13 | ug/L | | 99 |
| 13) methylene chloride | 3.962 | 84 | 174403 | 7.83 | ug/L | | 88 |
| 14) acrylonitrile | 4.303 | 53 | 22586 | 9.18 | ug/L | | 90 |
| 15) trans-1,2-dichloroethene | 4.272 | 96 | 169532 | 8.21 | ug/L | | 97 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 259766 | 8.15 | ug/L | | 100 |
| 17) acetonitrile | 3.828 | 41 | 9751 | 9.16 | ug/L | | 95 |
| 19) 1,1-dichloroethane | 4.801 | 63 | 352048 | 8.56 | ug/L | | 98 |
| 20) vinyl acetate | 4.874 | 43 | 183429 | 16.06 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 165454 | 7.86 | ug/L | | 96 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 359386 | 8.82 | ug/L | | 100 |
| 23) 2-butanone | 5.592 | 72 | 4276 | 8.20 | ug/L | # | 38 |
| 25) chloroform | 5.957 | 83 | 371511 | 8.97 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.139 | 97 | 384706 | 8.81 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.340 | 117 | 331090 | 8.80 | ug/L | | 99 |
| 31) benzene | 6.632 | 78 | 624321 | 8.08 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 250063 | 8.36 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 208593 | 8.72 | ug/L | | 97 |
| 34) trichloroethene | 7.508 | 95 | 187975 | 8.11 | ug/L | | 98 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 140199 | 7.96 | ug/L | | 96 |
| 37) methyl methacrylate | 7.842 | 41 | 128211 | 17.22 | ug/L | # | 59 |
| 38) dibromomethane | 8.037 | 93 | 65237 | 8.52 | ug/L | | 98 |
| 39) bromodichloromethane | 8.268 | 83 | 230165 | 8.43 | ug/L | | 99 |
| 42) cis-1,3-dichloropropene | 8.900 | 75 | 199206 | 9.94 | ug/L | | 92 |
| 43) 4-methyl-2-pentanone | 9.125 | 43 | 58227 | 9.69 | ug/L | | 93 |
| 45) toluene | 9.350 | 92 | 426313 | 10.03 | ug/L | | 100 |
| 46) 1,1,2-trichloroethane | 10.043 | 83 | 65219 | 9.82 | ug/L | | 98 |

CG 4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040804.D
Acq On : 8 Apr 2008 8:46 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 08 09:16:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

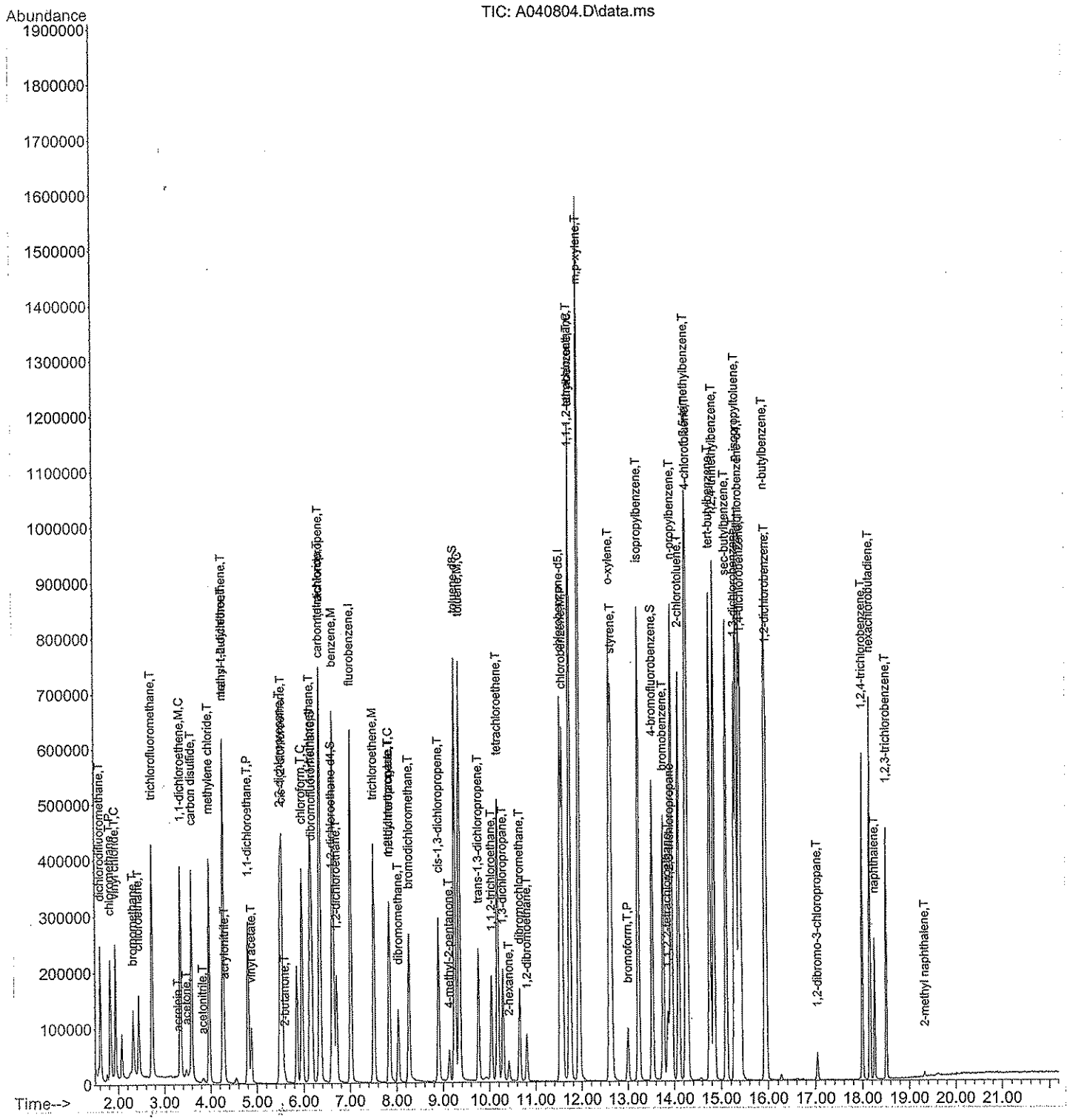
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 47) | 1,3-dichloropropane | 10.287 | 76 | 140221 | 9.83 | ug/L | | 98 |
| 48) | tetrachloroethene | 10.171 | 164 | 159983 | 10.30 | ug/L | | 98 |
| 49) | trans-1,3-dichloropropene | 9.758 | 75 | 168042 | 11.06 | ug/L | | 96 |
| 50) | 2-hexanone | 10.420 | 43 | 38749 | 10.70 | ug/L | | 99 |
| 51) | dibromochloromethane | 10.652 | 129 | 122048 | 10.41 | ug/L | | 97 |
| 52) | 1,2-dibromoethane | 10.810 | 107 | 81504 | 10.32 | ug/L | | 97 |
| 53) | chlorobenzene | 11.576 | 112 | 433620 | 10.04 | ug/L | | 96 |
| 54) | 1,1,1,2-tetrachloroethane | 11.728 | 131 | 162343 | 10.13 | ug/L | | 95 |
| 55) | ethylbenzene | 11.740 | 91 | 887396 | 10.29 | ug/L | | 98 |
| 56) | m,p-xylene | 11.941 | 106 | 637150 | 20.27 | ug/L | | 98 |
| 58) | o-xylene | 12.604 | 106 | 299755 | 10.19 | ug/L | | 100 |
| 59) | styrene | 12.646 | 104 | 468151 | 9.92 | ug/L | | 99 |
| 60) | isopropylbenzene | 13.224 | 105 | 848020 | 11.64 | ug/L | | 99 |
| 61) | bromobenzene | 13.759 | 156 | 193309 | 10.37 | ug/L | | 95 |
| 62) | bromoform | 12.999 | 173 | 68617 | 10.52 | ug/L | | 99 |
| 64) | 1,2,3-trichloropropane | 13.911 | 75 | 70798 | 9.83 | ug/L | | 81 |
| 65) | n-propylbenzene | 13.942 | 91 | 1019484 | 10.33 | ug/L | | 100 |
| 66) | 2-chlorotoluene | 14.094 | 91 | 624543 | 10.25 | ug/L | | 98 |
| 67) | 4-chlorotoluene | 14.276 | 91 | 743712 | 10.40 | ug/L | | 97 |
| 68) | 1,3,5-trimethylbenzene | 14.252 | 105 | 744802 | 10.61 | ug/L | | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 13.856 | 83 | 76080 | 9.93 | ug/L | | 99 |
| 71) | tert-butylbenzene | 14.763 | 119 | 594213 | 10.62 | ug/L | | 98 |
| 72) | sec-butylbenzene | 15.103 | 105 | 796930 | 9.73 | ug/L | | 100 |
| 73) | 1,2,4-trimethylbenzene | 14.848 | 105 | 745999 | 10.40 | ug/L | | 97 |
| 74) | 1,3-dichlorobenzene | 15.286 | 146 | 379239 | 10.40 | ug/L | | 99 |
| 75) | p-isopropyltoluene | 15.328 | 119 | 747125 | 10.92 | ug/L | | 100 |
| 77) | 1,4-dichlorobenzene | 15.425 | 146 | 367946 | 10.14 | ug/L | | 100 |
| 78) | 1,2-dichlorobenzene | 15.954 | 146 | 313614 | 10.55 | ug/L | | 97 |
| 79) | n-butylbenzene | 15.924 | 91 | 649678 | 9.98 | ug/L | | 99 |
| 80) | 1,2-dibromo-3-chloropr... | 17.037 | 75 | 15502 | 10.54 | ug/L | | 93 |
| 81) | 1,2,4-trichlorobenzene | 17.998 | 180 | 186379 | 10.13 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.156 | 225 | 148317 | 9.27 | ug/L | | 99 |
| 83) | naphthalene | 18.259 | 128 | 187570 | 9.62 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.509 | 180 | 139938 | 9.90 | ug/L | | 98 |
| 85) | 2-methyl naphthalene | 19.324 | 142 | 3626 | 0.38 | ug/L | # | 77 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040804.D
Acq On : 8 Apr 2008 8:46 am
Sample : ,LCS,LCS_W25 10 PPB,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 08 09:16:24 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# MATRIX SPIKE/MATRIX SPIKE DUPLICATE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040815.D
Acq On : 8 Apr 2008 3:51 pm
Sample : ,MS,me0803c07-02AMS,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 08 16:17:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 551934 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 389035 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 237905 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.173 | 113 | 148385 | 10.32 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.604 | 65 | 158649 | 11.51 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.10% | | | | |
| 44) toluene-d8 | 9.250 | 98 | 537092 | 11.37 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.70% | | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 212425 | 10.67 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 106.70% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.605 | 85 | 186778 | 16.40 | ug/L | | 96 |
| 3) chloromethane | 1.818 | 50 | 261882 | 14.40 | ug/L | | 99 |
| 4) vinyl chloride | 1.934 | 62 | 201299 | 10.36 | ug/L | | 97 |
| 6) bromomethane | 2.317 | 94 | 68267 | 9.94 | ug/L | | 97 |
| 7) chloroethane | 2.445 | 64 | 164404 | 14.33 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.730 | 101 | 427470 | 12.46 | ug/L | | 97 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 137439 | 9.12 | ug/L | | 92 |
| 11) acetone | 3.472 | 43 | 21816 | 11.03 | ug/L | | 88 |
| 12) carbon disulfide | 3.594 | 76 | 517603 | 10.55 | ug/L | | 99 |
| 13) methylene chloride | 3.965 | 84 | 138243 | 7.76 | ug/L | | 89 |
| 14) acrylonitrile | 4.306 | 53 | 16283 | 8.27 | ug/L | | 94 |
| 15) trans-1,2-dichloroethene | 4.275 | 96 | 141792 | 8.58 | ug/L | | 98 |
| 16) methyl-t-butyl ether | 4.269 | 73 | 221488 | 8.69 | ug/L | | 99 |
| 17) acetonitrile | 3.831 | 41 | 7650 | 8.98 | ug/L | | 95 |
| 19) 1,1-dichloroethane | 4.804 | 63 | 299535 | 9.10 | ug/L | | 99 |
| 20) vinyl acetate | 4.877 | 43 | 152923 | 16.74 | ug/L | | 96 |
| 21) cis-1,2-dichloroethene | 5.540 | 96 | 137000 | 8.14 | ug/L | | 93 |
| 22) 2,2-dichloropropane | 5.497 | 77 | 304412 | 9.35 | ug/L | | 98 |
| 23) 2-butanone | 5.589 | 72 | 3434 | 8.24 | ug/L | # | 89 |
| 25) chloroform | 5.960 | 83 | 308747 | 9.32 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.136 | 97 | 328421 | 9.40 | ug/L | | 97 |
| 29) carbon tetrachloride | 6.343 | 117 | 291253 | 9.68 | ug/L | | 98 |
| 31) benzene | 6.635 | 78 | 532565 | 8.62 | ug/L | | 97 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 207277 | 8.67 | ug/L | | 96 |
| 33) 1,2-dichloroethane | 6.708 | 62 | 182009 | 9.52 | ug/L | | 99 |
| 34) trichloroethene | 7.510 | 95 | 153439 | 8.27 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.845 | 63 | 113494 | 8.06 | ug/L | | 96 |
| 37) methyl methacrylate | 7.839 | 41 | 111498 | 18.73 | ug/L | # | 55 |
| 38) dibromomethane | 8.033 | 93 | 54513 | 8.90 | ug/L | | 89 |
| 39) bromodichloromethane | 8.265 | 83 | 196778 | 9.01 | ug/L | | 98 |
| 40) 2-chloroethyl vinyl ether | 8.909 | 63 | 874 | 1.67 | ug/L | # | 47 |
| 42) cis-1,3-dichloropropene | 8.897 | 75 | 160097 | 10.02 | ug/L | | 90 |
| 43) 4-methyl-2-pentanone | 9.128 | 43 | 47677 | 9.96 | ug/L | | 99 |
| 45) toluene | 9.353 | 92 | 344968 | 10.18 | ug/L | | 99 |
| 46) 1,1,2-trichloroethane | 10.046 | 83 | 53044 | 10.02 | ug/L | | 99 |

CR 4/18/08

A040815.D 25ML0403.M Tue Apr 08 16:17:17 2008 voa1 Page: 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040815.D
Acq On : 8 Apr 2008 3:51 pm
Sample : ,MS,me0803c07-02AMS,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 08 16:17:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

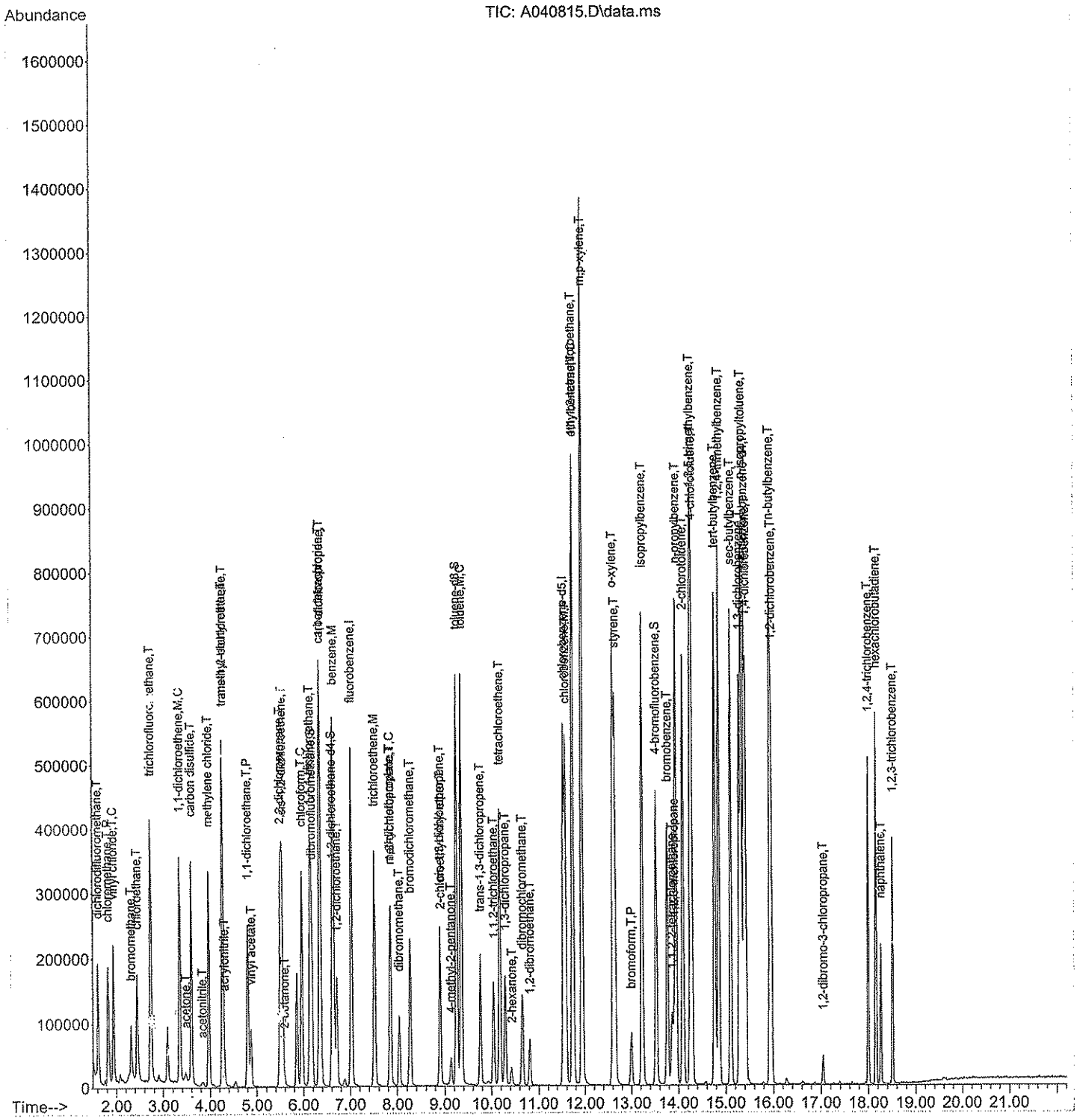
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 47) | 1,3-dichloropropane | 10.290 | 76 | 115532 | 10.17 | ug/L | 99 |
| 48) | tetrachloroethene | 10.174 | 164 | 126570 | 10.22 | ug/L | 95 |
| 49) | trans-1,3-dichloropropene | 9.754 | 75 | 135864 | 11.22 | ug/L | 97 |
| 50) | 2-hexanone | 10.429 | 43 | 29045 | 10.07 | ug/L | 96 |
| 51) | dibromochloromethane | 10.648 | 129 | 100652 | 10.78 | ug/L | 97 |
| 52) | 1,2-dibromoethane | 10.807 | 107 | 66682 | 10.59 | ug/L | 100 |
| 53) | chlorobenzene | 11.579 | 112 | 355884 | 10.34 | ug/L | 97 |
| 54) | 1,1,1,2-tetrachloroethane | 11.731 | 131 | 137094 | 10.73 | ug/L | 96 |
| 55) | ethylbenzene | 11.743 | 91 | 736931 | 10.73 | ug/L | 99 |
| 56) | m,p-xylene | 11.938 | 106 | 523408 | 20.89 | ug/L | 96 |
| 58) | o-xylene | 12.600 | 106 | 249842 | 10.65 | ug/L | 99 |
| 59) | styrene | 12.643 | 104 | 390824 | 10.39 | ug/L | 98 |
| 60) | isopropylbenzene | 13.227 | 105 | 714895 | 12.31 | ug/L | 98 |
| 61) | bromobenzene | 13.762 | 156 | 161639 | 10.88 | ug/L | 98 |
| 62) | bromoform | 12.996 | 173 | 56806 | 10.93 | ug/L | 99 |
| 64) | 1,2,3-trichloropropane | 13.908 | 75 | 62540 | 10.89 | ug/L | 99 |
| 65) | n-propylbenzene | 13.944 | 91 | 879846 | 11.19 | ug/L | 99 |
| 66) | 2-chlorotoluene | 14.090 | 91 | 542070 | 11.16 | ug/L | 99 |
| 67) | 4-chlorotoluene | 14.279 | 91 | 649419 | 11.40 | ug/L | 98 |
| 68) | 1,3,5-trimethylbenzene | 14.249 | 105 | 640651 | 11.45 | ug/L | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 13.859 | 83 | 67582 | 10.20 | ug/L | 96 |
| 71) | tert-butylbenzene | 14.759 | 119 | 509264 | 10.52 | ug/L | 96 |
| 72) | sec-butylbenzene | 15.100 | 105 | 696921 | 9.84 | ug/L | 100 |
| 73) | 1,2,4-trimethylbenzene | 14.851 | 105 | 649817 | 10.47 | ug/L | 98 |
| 74) | 1,3-dichlorobenzene | 15.282 | 146 | 324694 | 10.29 | ug/L | 98 |
| 75) | p-isopropyltoluene | 15.331 | 119 | 648083 | 10.95 | ug/L | 100 |
| 77) | 1,4-dichlorobenzene | 15.422 | 146 | 316154 | 10.07 | ug/L | 98 |
| 78) | 1,2-dichlorobenzene | 15.957 | 146 | 275795 | 10.73 | ug/L | 98 |
| 79) | n-butylbenzene | 15.921 | 91 | 565578 | 10.05 | ug/L | 99 |
| 80) | 1,2-dibromo-3-chloropr... | 17.040 | 75 | 14049 | 11.04 | ug/L | 88 |
| 81) | 1,2,4-trichlorobenzene | 17.995 | 180 | 160843 | 10.11 | ug/L | 95 |
| 82) | hexachlorobutadiene | 18.159 | 225 | 126325 | 9.13 | ug/L | 97 |
| 83) | naphthalene | 18.256 | 128 | 159383 | 9.45 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.505 | 180 | 117934 | 9.65 | ug/L | 96 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040815.D
Acq On : 8 Apr 2008 3:51 pm
Sample : ,MS,me0803c07-02AMS,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 08 16:17:16 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040815.D 25ML0403.M Tue Apr 08 16:17:18 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040816.D
Acq On : 8 Apr 2008 4:26 pm
Sample : ,MSD,me0803c07-02AMSD,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 08 16:53:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 577044 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 409049 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 244289 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.164 | 113 | 155331 | 10.34 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.40% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 164801 | 11.44 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.40% | | | | |
| 44) toluene-d8 | 9.254 | 98 | 566098 | 11.39 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.90% | | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 224325 | 10.72 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.20% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 202498 | 17.01 | ug/L | | 98 |
| 3) chloromethane | 1.816 | 50 | 288765 | 15.19 | ug/L | | 98 |
| 4) vinyl chloride | 1.932 | 62 | 222774 | 10.97 | ug/L | | 98 |
| 6) bromomethane | 2.315 | 94 | 83640 | 11.65 | ug/L | | 96 |
| 7) chloroethane | 2.442 | 64 | 178577 | 14.89 | ug/L | | 93 |
| 8) trichlorofluoromethane | 2.728 | 101 | 421531 | 11.76 | ug/L | | 96 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 144333 | 9.16 | ug/L | | 95 |
| 11) acetone | 3.470 | 43 | 20318 | 9.83 | ug/L | | 90 |
| 12) carbon disulfide | 3.586 | 76 | 531031 | 10.35 | ug/L | | 100 |
| 13) methylene chloride | 3.963 | 84 | 151997 | 8.17 | ug/L | | 88 |
| 14) acrylonitrile | 4.303 | 53 | 19980 | 9.71 | ug/L | | 90 |
| 15) trans-1,2-dichloroethene | 4.267 | 96 | 146742 | 8.49 | ug/L | | 94 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 231159 | 8.67 | ug/L | | 98 |
| 17) acetonitrile | 3.829 | 41 | 8412 | 9.45 | ug/L | | 97 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 318124 | 9.25 | ug/L | | 99 |
| 20) vinyl acetate | 4.869 | 43 | 162405 | 17.00 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 144943 | 8.23 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.501 | 77 | 315721 | 9.27 | ug/L | | 100 |
| 23) 2-butanone | 5.593 | 72 | 3907 | 8.97 | ug/L | # | 59 |
| 25) chloroform | 5.958 | 83 | 322235 | 9.31 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 346292 | 9.48 | ug/L | | 97 |
| 29) carbon tetrachloride | 6.341 | 117 | 297716 | 9.47 | ug/L | | 99 |
| 31) benzene | 6.633 | 78 | 541550 | 8.38 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 217453 | 8.70 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.706 | 62 | 187973 | 9.40 | ug/L | | 99 |
| 34) trichloroethene | 7.508 | 95 | 163250 | 8.42 | ug/L | | 96 |
| 36) 1,2-dichloropropane | 7.843 | 63 | 119244 | 8.10 | ug/L | | 95 |
| 37) methyl methacrylate | 7.843 | 41 | 116582 | 18.73 | ug/L | # | 53 |
| 38) dibromomethane | 8.037 | 93 | 56478 | 8.82 | ug/L | | 97 |
| 39) bromodichloromethane | 8.262 | 83 | 201005 | 8.80 | ug/L | | 98 |
| 40) 2-chloroethyl vinyl ether | 8.901 | 63 | 986 | 1.80 | ug/L | # | 47 |
| 42) cis-1,3-dichloropropene | 8.901 | 75 | 166261 | 9.90 | ug/L | | 94 |
| 43) 4-methyl-2-pentanone | 9.132 | 43 | 49517 | 9.83 | ug/L | | 98 |
| 45) toluene | 9.351 | 92 | 366490 | 10.29 | ug/L | | 98 |
| 46) 1,1,2-trichloroethane | 10.044 | 83 | 55025 | 9.88 | ug/L | | 96 |

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040816.D
Acq On : 8 Apr 2008 4:26 pm
Sample : ,MSD,me0803c07-02AMSD,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 08 16:53:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

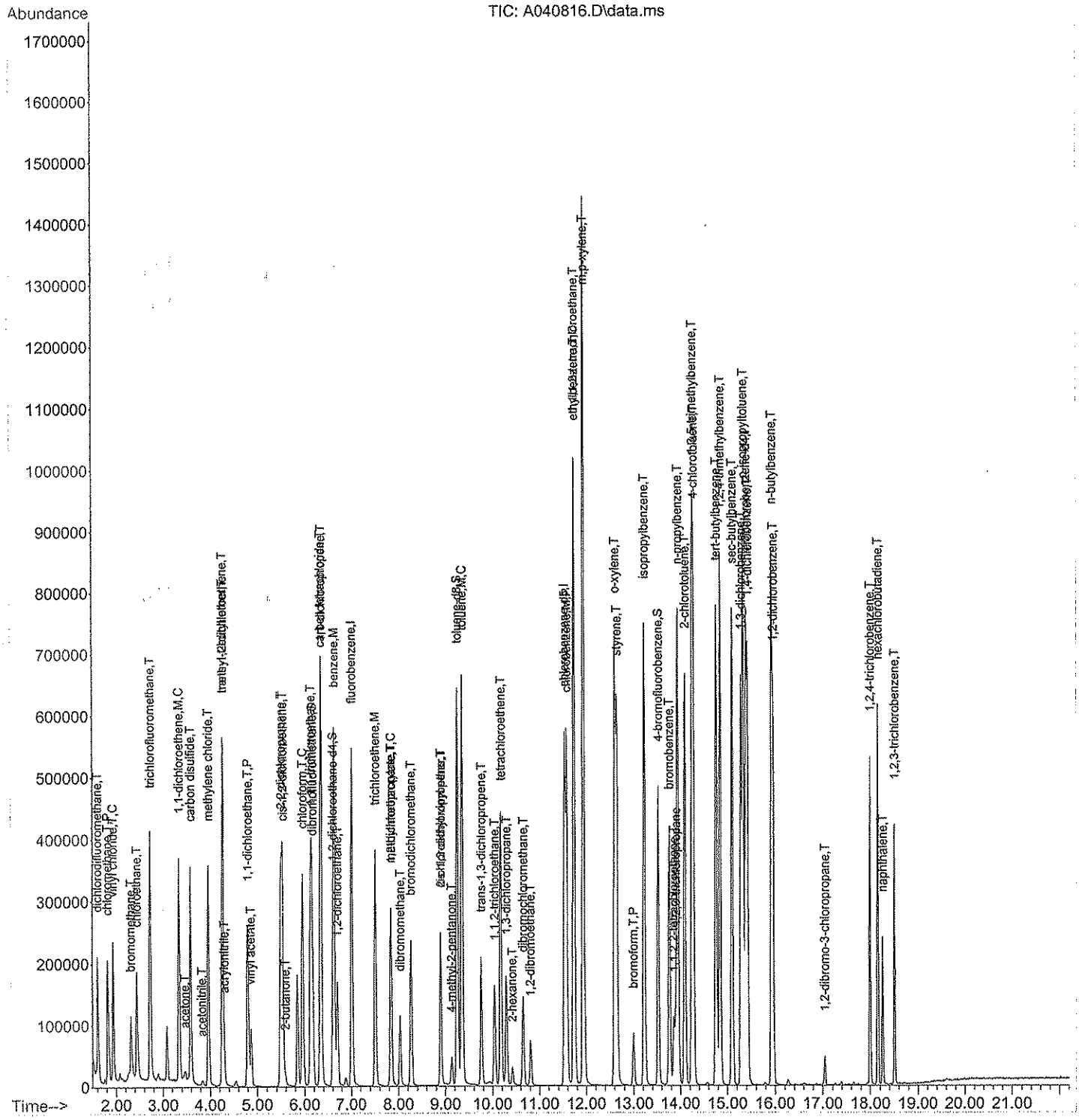
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 47) 1,3-dichloropropane | 10.294 | 76 | 122748 | 10.27 | ug/L | 99 |
| 48) tetrachloroethene | 10.178 | 164 | 136023 | 10.45 | ug/L | 98 |
| 49) trans-1,3-dichloropropene | 9.758 | 75 | 142527 | 11.19 | ug/L | 98 |
| 50) 2-hexanone | 10.421 | 43 | 32037 | 10.56 | ug/L | 98 |
| 51) dibromochloromethane | 10.652 | 129 | 104148 | 10.61 | ug/L | 96 |
| 52) 1,2-dibromoethane | 10.804 | 107 | 69296 | 10.47 | ug/L | 94 |
| 53) chlorobenzene | 11.577 | 112 | 376121 | 10.40 | ug/L | 96 |
| 54) 1,1,1,2-tetrachloroethane | 11.735 | 131 | 143396 | 10.68 | ug/L | 96 |
| 55) ethylbenzene | 11.741 | 91 | 775241 | 10.73 | ug/L | 98 |
| 56) m,p-xylene | 11.935 | 106 | 549244 | 20.85 | ug/L | 94 |
| 58) o-xylene | 12.604 | 106 | 259767 | 10.53 | ug/L | 99 |
| 59) styrene | 12.647 | 104 | 398833 | 10.08 | ug/L | 97 |
| 60) isopropylbenzene | 13.225 | 105 | 746564 | 12.23 | ug/L | 99 |
| 61) bromobenzene | 13.760 | 156 | 169145 | 10.83 | ug/L | 98 |
| 62) bromoform | 13.000 | 173 | 58698 | 10.74 | ug/L | 97 |
| 64) 1,2,3-trichloropropane | 13.906 | 75 | 65632 | 10.87 | ug/L | 95 |
| 65) n-propylbenzene | 13.942 | 91 | 911696 | 11.03 | ug/L | 99 |
| 66) 2-chlorotoluene | 14.094 | 91 | 561860 | 11.00 | ug/L | 98 |
| 67) 4-chlorotoluene | 14.277 | 91 | 676205 | 11.29 | ug/L | 98 |
| 68) 1,3,5-trimethylbenzene | 14.252 | 105 | 667160 | 11.34 | ug/L | 97 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 69652 | 10.24 | ug/L | 97 |
| 71) tert-butylbenzene | 14.763 | 119 | 528104 | 10.62 | ug/L | 97 |
| 72) sec-butylbenzene | 15.098 | 105 | 722148 | 9.93 | ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 656340 | 10.30 | ug/L | 98 |
| 74) 1,3-dichlorobenzene | 15.286 | 146 | 338507 | 10.45 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.329 | 119 | 664349 | 10.93 | ug/L | 98 |
| 77) 1,4-dichlorobenzene | 15.420 | 146 | 330419 | 10.25 | ug/L | 98 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 281532 | 10.67 | ug/L | 99 |
| 79) n-butylbenzene | 15.925 | 91 | 586428 | 10.14 | ug/L | 99 |
| 80) 1,2-dibromo-3-chloropr... | 17.044 | 75 | 14793 | 11.32 | ug/L | 89 |
| 81) 1,2,4-trichlorobenzene | 17.999 | 180 | 165634 | 10.14 | ug/L | 91 |
| 82) hexachlorobutadiene | 18.157 | 225 | 131834 | 9.28 | ug/L | 99 |
| 83) naphthalene | 18.260 | 128 | 181608 | 10.49 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 126133 | 10.05 | ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040816.D
Acq On : 8 Apr 2008 4:26 pm
Sample : ,MSD,me0803c07-02AMSD,1, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 08 16:53:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

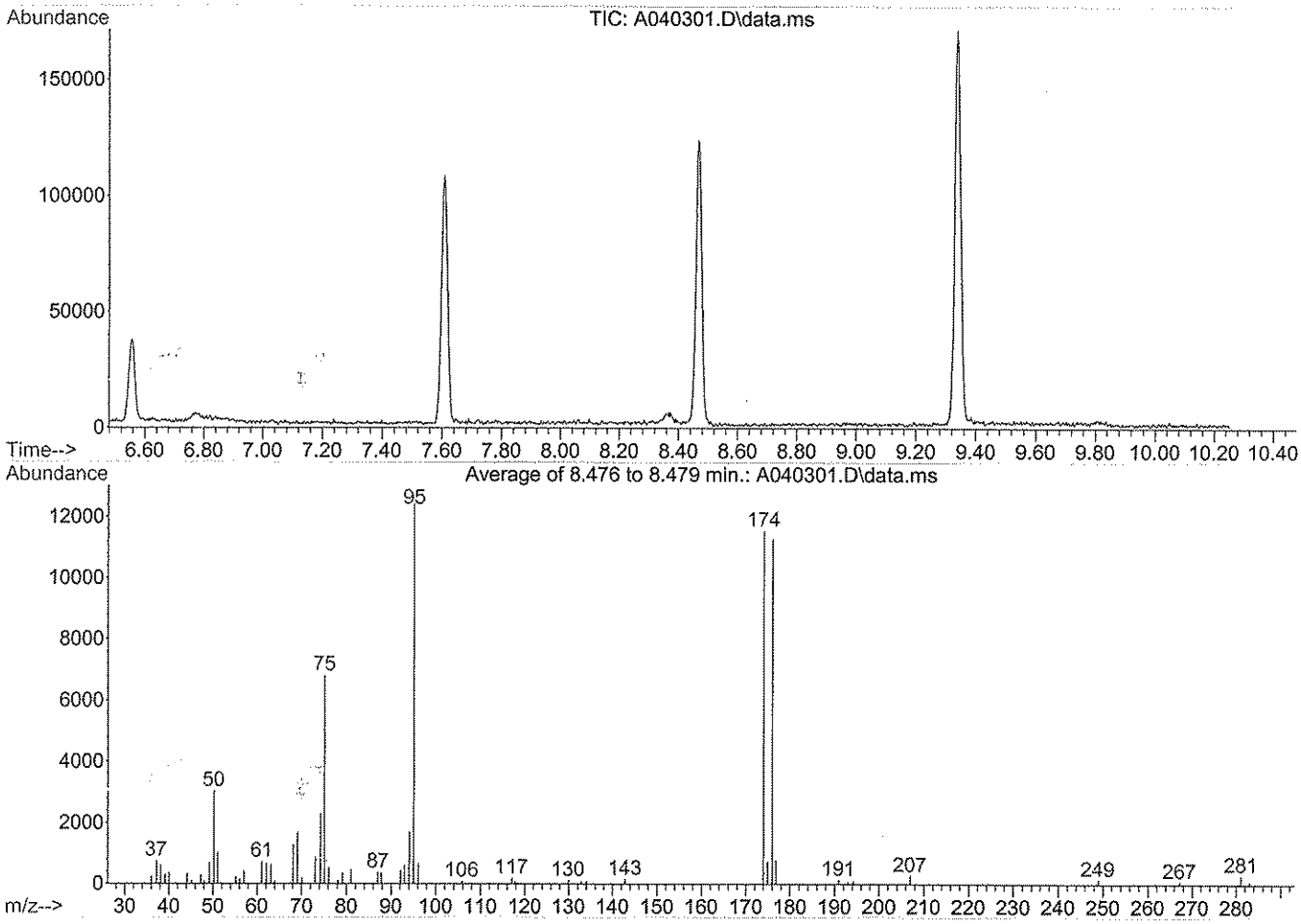


# TUNING RAW DATA

Data File: C:\msdchem\1\DATA\A040308\A040301.D
Acq On : 3 Apr 2008 7:03 am
Sample : ,tune,bfb tune,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds
Last Update : Mon Mar 31 16:38:00 2008




Spectrum Information: Average of 8.476 to 8.479 min.

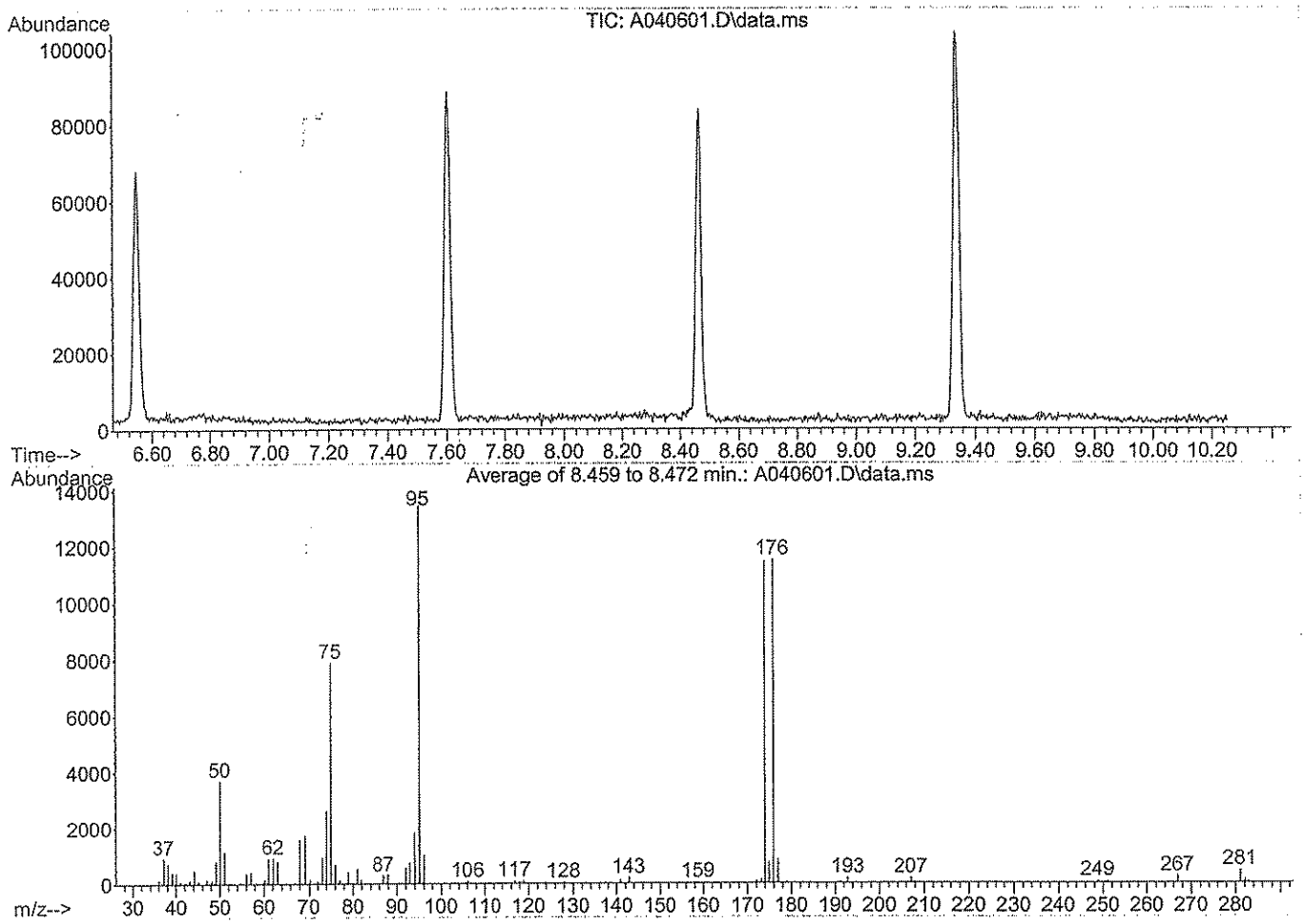
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 24.5 | 3039 | PASS |
| 75 | 95 | 30 | 60 | 54.9 | 6816 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 12410 | PASS |
| 96 | 95 | 5 | 9 | 5.3 | 657 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 93.1 | 11558 | PASS |
| 175 | 174 | 5 | 9 | 6.4 | 741 | PASS |
| 176 | 174 | 95 | 101 | 97.6 | 11286 | PASS |
| 177 | 176 | 5 | 9 | 6.9 | 774 | PASS |

4/8/08
04/03/08

Data File: C:\msdchem\1\DATA\A040608\A040601.D
Acq On : 6 Apr 2008 1:46 pm
Sample : ,TUNE,BFB TUNE,1, Inst : VOA1
Operator : jdb
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Fri Apr 04 10:20:24 2008




Spectrum Information: Average of 8.459 to 8.472 min.

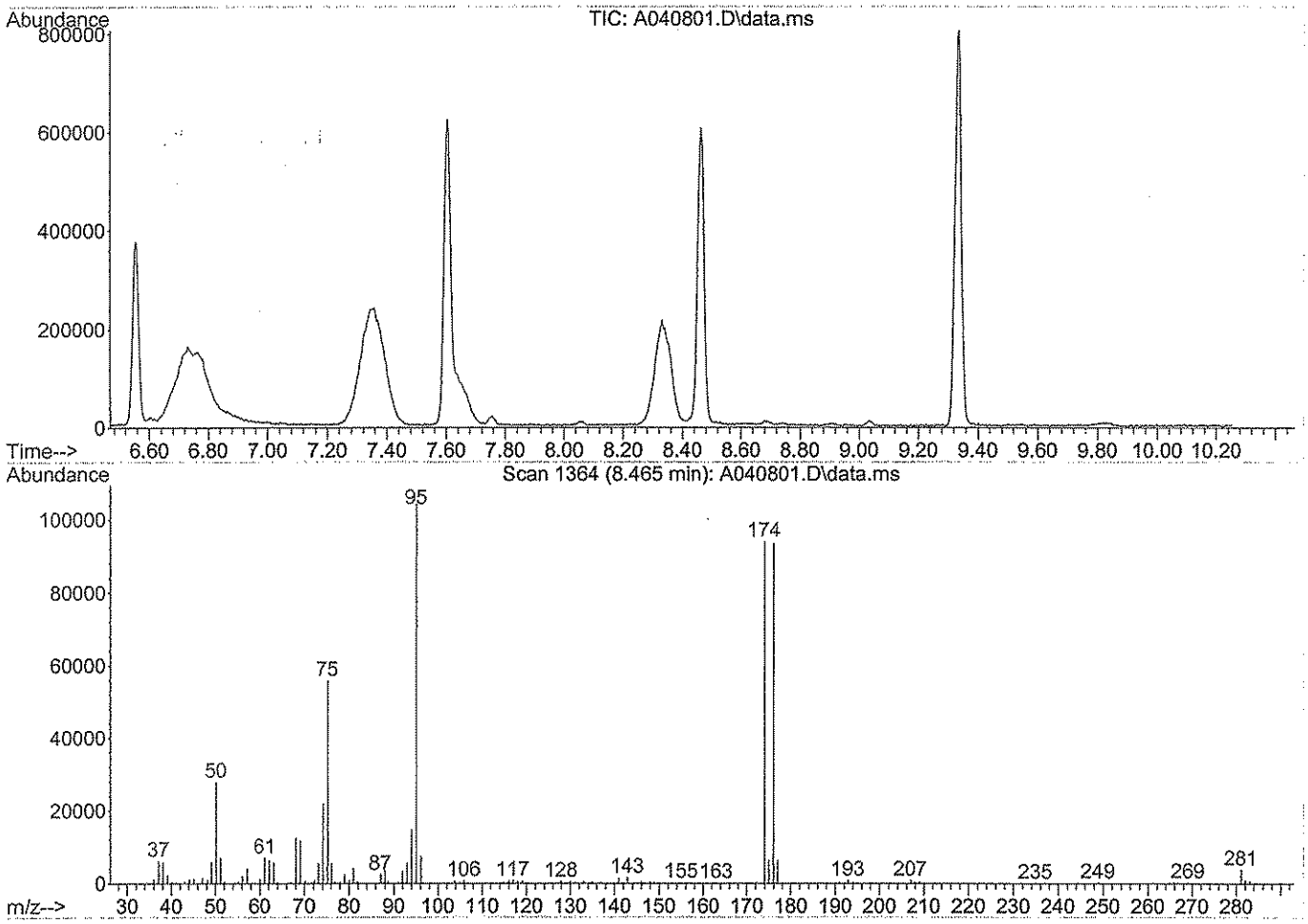
4-6-08

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 27.4 | 3689 | PASS |
| 75 | 95 | 30 | 60 | 58.7 | 7886 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 13439 | PASS |
| 96 | 95 | 5 | 9 | 7.4 | 1000 | PASS |
| 173 | 174 | 0.00 | 2 | 1.1 | 123 | PASS |
| 174 | 95 | 50 | 250 | 85.2 | 11453 | PASS |
| 175 | 174 | 5 | 9 | 6.5 | 742 | PASS |
| 176 | 174 | 95 | 101 | 100.4 | 11504 | PASS |
| 177 | 176 | 5 | 9 | 7.3 | 838 | PASS |

Data File: C:\msdchem\1\DATA\A040808\A040801.D
Acq On : 8 Apr 2008 6:51 am
Sample : ,TUNE,BFB TUNE,1, Inst : VOA1
Operator : BR
Misc : BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Fri Apr 04 10:20:24 2008




Spectrum Information: Scan 1364

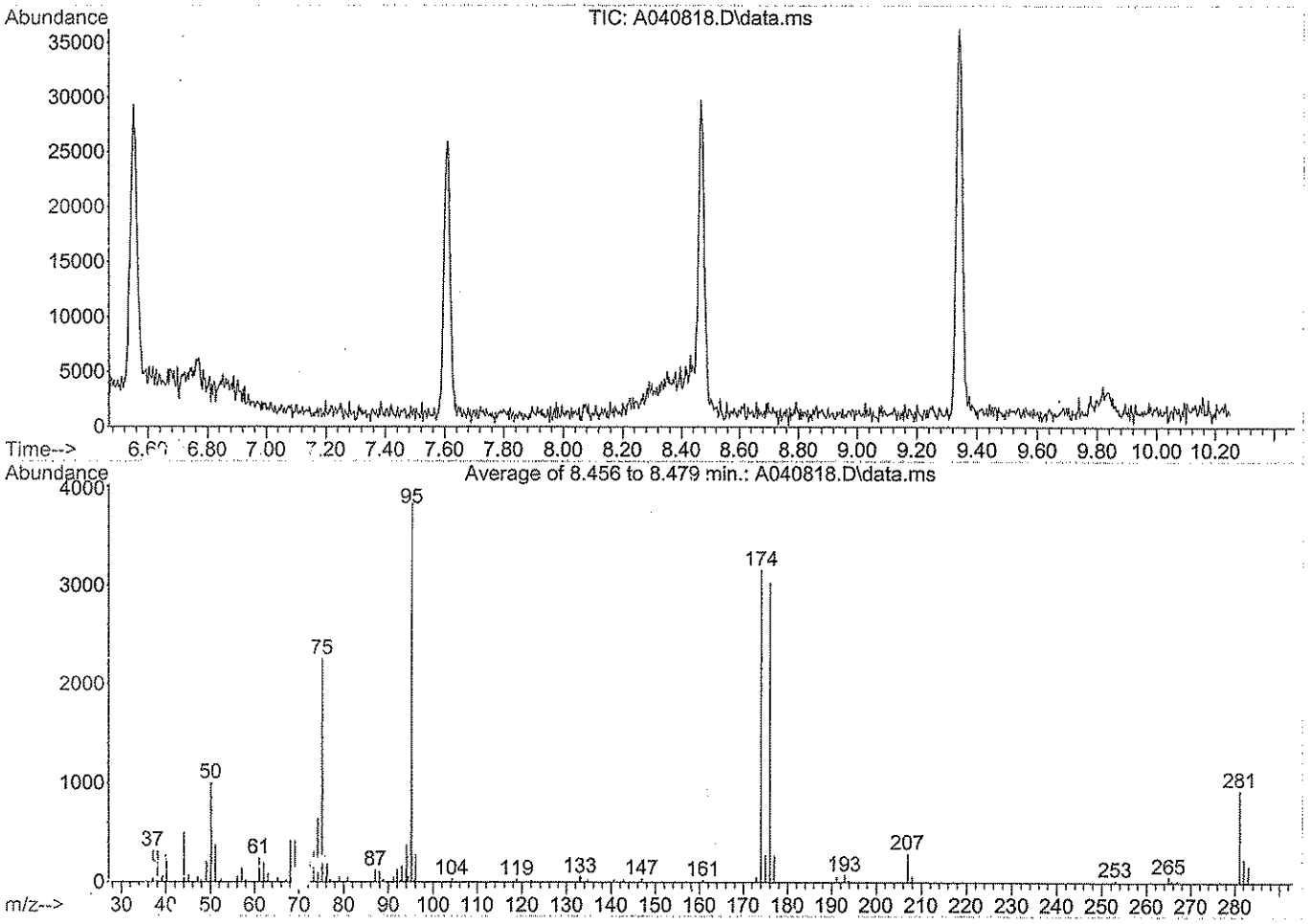
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 26.8 | 27936 | PASS |
| 75 | 95 | 30 | 60 | 53.6 | 55824 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 104072 | PASS |
| 96 | 95 | 5 | 9 | 7.2 | 7503 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 90.3 | 93952 | PASS |
| 175 | 174 | 5 | 9 | 6.8 | 6381 | PASS |
| 176 | 174 | 95 | 101 | 99.5 | 93456 | PASS |
| 177 | 176 | 5 | 9 | 6.6 | 6179 | PASS |

4/8/08

Data File: C:\msdchem\1\DATA\A040808\A040818.D
Acq On : 8 Apr 2008 5:38 pm
Sample : ,TUNE,BFB TUNE,1, Inst : VOA1
Operator : CR
Misc : BFB
ALS Vial : 19 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Tue Apr 08 10:25:16 2008




Spectrum Information: Average of 8.456 to 8.479 min.

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 26.1 | 997 | PASS |
| 75 | 95 | 30 | 60 | 58.9 | 2254 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 3824 | PASS |
| 96 | 95 | 5 | 9 | 7.1 | 271 | PASS |
| 173 | 174 | 0.00 | 2 | 1.5 | 47 | PASS |
| 174 | 95 | 50 | 250 | 82.5 | 3156 | PASS |
| 175 | 174 | 5 | 9 | 8.6 | 270 | PASS |
| 176 | 174 | 95 | 101 | 95.9 | 3026 | PASS |
| 177 | 176 | 5 | 9 | 8.8 | 265 | PASS |

CR 4/8/08

# INITIAL CALIBRATION RAW DATA

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds
Last Update : Thu Apr 03 13:49:20 2008
Response Via : Initial Calibration

Calibration Files
1 =A040307.D 2 =A040306.D 4 =A040305.D 8 =A040304.D 10 =A040303.D 20 =A040308.D 40 =A040309.D

| | | Compound | 1 | 2 | 4 | 8 | 10 | 20 | 40 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | fluorobenzene | 1 | 2 | 4 | ISTD | 10 | 20 | 40 | Avg | |
| 2) | T | dichlorodifluo... | 0.216 | 0.194 | 0.219 | 0.213 | 0.206 | 0.190 | 0.206 | 0.206 | 5.32 |
| 3) | T,P | chloromethane | 0.381 | 0.352 | 0.350 | 0.332 | 0.307 | 0.292 | 0.296 | 0.329 | 10.26 |
| 4) | T,C | vinyl chloride | 0.383 | 0.351 | 0.371 | 0.362 | 0.335 | 0.327 | 0.335 | 0.352 | 5.98 |
| 5) | | 1,3-butadiene | 0.371 | 0.316 | 0.337 | 0.287 | 0.336 | 0.331 | 0.339 | 0.331 | 7.66 |
| 6) | T | bromomethane | 0.144 | 0.126 | 0.149 | 0.145 | 0.133 | 0.090 | 0.084 | 0.124 | 21.56 |
| 7) | T | chloroethane | 0.249 | 0.207 | 0.219 | 0.213 | 0.196 | 0.192 | 0.179 | 0.208 | 10.83 |
| 8) | T | trichlorofluor... | 0.674 | 0.579 | 0.633 | 0.644 | 0.605 | 0.614 | 0.600 | 0.621 | 5.07 |
| 9) | T | acrolein | 0.005 | 0.004 | 0.004 | 0.004 | 0.003 | 0.004 | 0.004 | 0.004 | 14.35 |
| 10) | M,C | 1,1-dichloroet... | 0.319 | 0.264 | 0.288 | 0.258 | 0.252 | 0.261 | 0.269 | 0.273 | 8.50 |
| 11) | T | acetone | PQL=5 | | 0.045 | 0.037 | 0.033 | 0.034 | 0.030 | 0.036 | 16.17 |
| 12) | T | carbon disulfide | 1.041 | 0.871 | 0.881 | 0.841 | 0.849 | 0.861 | 0.879 | 0.889 | 7.71 |
| 13) | T | methylene chlo... | PQL=2 | 0.425 | 0.378 | 0.315 | 0.278 | 0.274 | 0.265 | 0.323 | 20.20 |
| 14) | T | acrylonitrile | 0.041 | 0.035 | 0.038 | 0.037 | 0.030 | 0.034 | 0.035 | 0.036 | 8.77 |
| 15) | T | trans-1,2-dich... | 0.333 | 0.301 | 0.306 | 0.290 | 0.275 | 0.291 | 0.300 | 0.299 | 5.98 |
| 16) | T | methyl-t-butyl... | 0.538 | 0.466 | 0.483 | 0.475 | 0.400 | 0.450 | 0.423 | 0.462 | 9.61 |
| 17) | T | acetonitrile | 0.020 | 0.017 | 0.016 | 0.015 | 0.013 | 0.014 | 0.013 | 0.015 | 15.69 |
| 18) | T | hexane | 0.387 | 0.357 | 0.376 | 0.314 | 0.384 | 0.401 | 0.424 | 0.377 | 9.21 |
| 19) | T,P | 1,1-dichloroet... | 0.682 | 0.570 | 0.604 | 0.591 | 0.544 | 0.585 | 0.597 | 0.596 | 7.20 |
| 20) | T | vinyl acetate | 0.178 | 0.156 | 0.174 | 0.172 | 0.147 | 0.163 | 0.168 | 0.166 | 6.68 |
| 21) | T | cis-1,2-dichlo... | 0.344 | 0.295 | 0.311 | 0.298 | 0.275 | 0.303 | 0.309 | 0.305 | 6.92 |
| 22) | T | 2,2-dichloropr... | 0.638 | 0.569 | 0.601 | 0.575 | 0.549 | 0.585 | 0.614 | 0.590 | 5.07 |
| 23) | T | 2-butanone | 0.006 | 0.010 | 0.007 | 0.008 | 0.007 | 0.007 | 0.008 | 0.008 | 16.11 |
| 24) | T | methyl acrylate | 0.099 | 0.088 | 0.095 | 0.093 | 0.077 | 0.092 | 0.094 | 0.091 | 7.64 |
| 25) | T,C | chloroform | 0.681 | 0.589 | 0.616 | 0.587 | 0.546 | 0.587 | 0.593 | 0.600 | 6.88 |
| 26) | S | dibromofluorom... | 0.269 | 0.263 | 0.260 | 0.263 | 0.254 | 0.261 | 0.252 | 0.260 | 2.24 |
| 27) | T | 1,1,1-trichlor... | 0.689 | 0.613 | 0.653 | 0.611 | 0.586 | 0.633 | 0.645 | 0.633 | 5.34 |
| 28) | T | cyclohexane | 0.477 | 0.432 | 0.496 | 0.417 | 0.479 | 0.512 | 0.529 | 0.477 | 8.54 |
| 29) | T | carbon tetrach... | 0.604 | 0.517 | 0.553 | 0.520 | 0.512 | 0.548 | 0.561 | 0.545 | 5.93 |
| 30) | S | 1,2-dichloroet... | 0.261 | 0.253 | 0.254 | 0.253 | 0.239 | 0.247 | 0.241 | 0.250 | 3.14 |
| 31) | M | benzene | 1.267 | 1.086 | 1.139 | 1.096 | 1.029 | 1.108 | 1.115 | 1.120 | 6.54 |
| 32) | T | 1,1-dichloropr... | 0.468 | 0.408 | 0.441 | 0.420 | 0.402 | 0.440 | 0.455 | 0.433 | 5.63 |
| 33) | T | 1,2-dichloroet... | 0.410 | 0.342 | 0.352 | 0.347 | 0.304 | 0.337 | 0.334 | 0.346 | 9.30 |
| 34) | M | trichloroethene | 0.371 | 0.319 | 0.343 | 0.327 | 0.304 | 0.339 | 0.348 | 0.336 | 6.50 |
| 35) | T | ethyl acrylate | PQL=2 | 0.125 | 0.142 | 0.143 | 0.118 | 0.145 | 0.146 | 0.136 | 8.86 |
| 36) | T,C | 1,2-dichloropr... | 0.284 | 0.246 | 0.258 | 0.255 | 0.230 | 0.253 | 0.259 | 0.255 | 6.35 |
| 37) | T | methyl methacr... | PQL=2 | 0.099 | 0.115 | 0.114 | 0.093 | 0.114 | 0.112 | 0.108 | 8.64 |
| 38) | T | dibromomethane | 0.126 | 0.110 | 0.117 | 0.111 | 0.096 | 0.108 | 0.109 | 0.111 | 8.23 |

Aver %RSD < 15%.
2-Ceve 46%

CB 4/18/04

mm 4/18/01

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0403.M

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 39) | T | bromodichlorom... | 0.435 | 0.373 | 0.410 | 0.398 | 0.356 | 0.398 | 0.400 | 0.396 | 6.43 |
| 40) | T | 2-chloroethyl ... | 0.014 | 0.010 | 0.014 | 0.012 | 0.006 | 0.009 | 0.002 | 0.010 | 45.72 |
| 41) | I | chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | |
| 42) | T | cis-1,3-dichlo... | 0.428 | 0.373 | 0.407 | 0.414 | 0.381 | 0.427 | 0.444 | 0.411 | 6.27 |
| 43) | T | 4-methyl-2-pen... | 0.144 | 0.114 | 0.126 | 0.122 | 0.111 | 0.123 | 0.122 | 0.123 | 8.58 |
| 44) | S | toluene-d8 | 1.211 | 1.201 | 1.205 | 1.203 | 1.245 | 1.226 | 1.212 | 1.215 | 1.30 |
| 45) | M,C | toluene | 0.971 | 0.831 | 0.881 | 0.848 | 0.827 | 0.863 | 0.875 | 0.871 | 5.58 |
| 46) | T | 1,1,2-trichlor... | 0.152 | 0.135 | 0.136 | 0.134 | 0.122 | 0.137 | 0.138 | 0.136 | 6.38 |
| 47) | T | 1,3-dichloropr... | 0.315 | 0.273 | 0.295 | 0.296 | 0.266 | 0.299 | 0.301 | 0.292 | 5.79 |
| 48) | T | tetrachloroethene | 0.343 | 0.305 | 0.324 | 0.304 | 0.306 | 0.315 | 0.332 | 0.318 | 4.77 |
| 49) | T | trans-1,3-dich... | 0.315 | 0.279 | 0.311 | 0.322 | 0.286 | 0.325 | 0.339 | 0.311 | 6.90 |
| 50) | T | 2-hexanone | 0.080 | 0.065 | 0.072 | 0.075 | 0.065 | 0.080 | 0.082 | 0.074 | 9.52 |
| 51) | T | dibromochlorom... | 0.254 | 0.223 | 0.244 | 0.243 | 0.217 | 0.246 | 0.254 | 0.240 | 6.13 |
| 52) | T | 1,2-dibromoethane | 0.170 | 0.153 | 0.166 | 0.161 | 0.147 | 0.166 | 0.171 | 0.162 | 5.63 |
| 53) | M,P | chlorobenzene | 1.017 | 0.844 | 0.883 | 0.879 | 0.819 | 0.869 | 0.880 | 0.884 | 7.13 |
| 54) | T | 1,1,1,2-tetrac... | 0.357 | 0.313 | 0.326 | 0.329 | 0.306 | 0.330 | 0.337 | 0.328 | 5.06 |
| 55) | T,C | ethylbenzene | 1.858 | 1.648 | 1.804 | 1.751 | 1.711 | 1.777 | 1.811 | 1.766 | 3.96 |
| 56) | T | m,p-xylene | 0.690 | 0.619 | 0.662 | 0.625 | 0.621 | 0.645 | 0.646 | 0.644 | 4.00 |
| 57) | T | butyl acrylate | 0.320 | 0.363 | 0.374 | 0.326 | 0.372 | 0.359 | 0.352 | | 6.69 |
| 58) | T | o-xylene | 0.639 | 0.549 | 0.626 | 0.610 | 0.575 | 0.614 | 0.608 | 0.603 | 5.11 |
| 59) | T | styrene | 1.023 | 0.916 | 0.981 | 0.976 | 0.914 | 0.988 | 0.969 | 0.967 | 4.07 |
| 60) | T | isopropylbenzene | 1.473 | 1.363 | 1.497 | 1.470 | 1.486 | 1.569 | 1.589 | 1.492 | 4.97 |
| 61) | T | bromobenzene | 0.410 | 0.364 | 0.389 | 0.384 | 0.354 | 0.388 | 0.384 | 0.382 | 4.76 |
| 62) | T,P | bromoform | 0.134 | 0.120 | 0.134 | 0.140 | 0.121 | 0.142 | 0.145 | 0.134 | 7.41 |
| 63) | S | 4-bromofluorob... | 0.508 | 0.513 | 0.512 | 0.512 | 0.509 | 0.521 | 0.506 | 0.512 | 0.96 |
| 64) | | 1,2,3-trichlor... | 0.170 | 0.148 | 0.151 | 0.145 | 0.133 | 0.144 | 0.141 | 0.148 | 7.73 |
| 65) | T | n-propylbenzene | 2.090 | 1.883 | 2.040 | 1.955 | 2.000 | 2.090 | 2.089 | 2.021 | 3.96 |
| 66) | T | 2-chlorotoluene | 1.316 | 1.183 | 1.257 | 1.228 | 1.203 | 1.289 | 1.263 | 1.248 | 3.77 |
| 67) | T | 4-chlorotoluene | 1.624 | 1.358 | 1.476 | 1.435 | 1.414 | 1.479 | 1.464 | 1.464 | 5.61 |
| 68) | T | 1,3,5-trimethy... | 1.454 | 1.328 | 1.459 | 1.410 | 1.435 | 1.487 | 1.496 | 1.438 | 3.95 |
| 69) | I | 1,4-dichlorobenzen... | ----------ISTD---------- | | | | | | | | |
| 70) | T | 1,1,2,2-tetrac... | 0.301 | 0.275 | 0.285 | 0.277 | 0.247 | 0.274 | 0.291 | 0.278 | 6.04 |
| 71) | T | tert-butylbenzene | 2.037 | 1.844 | 2.030 | 1.927 | 2.009 | 2.122 | 2.274 | 2.035 | 6.77 |
| 72) | T | sec-butylbenzene | 2.955 | 2.707 | 2.966 | 2.840 | 2.985 | 3.078 | 3.312 | 2.977 | 6.35 |
| 73) | T | 1,2,4-trimethy... | 2.718 | 2.404 | 2.621 | 2.560 | 2.554 | 2.633 | 2.769 | 2.608 | 4.57 |
| 74) | T | 1,3-dichlorobe... | 1.465 | 1.270 | 1.362 | 1.287 | 1.238 | 1.297 | 1.363 | 1.326 | 5.78 |
| 75) | T | p-isopropyltol... | 2.465 | 2.299 | 2.463 | 2.387 | 2.487 | 2.545 | 2.772 | 2.488 | 5.94 |
| 76) | T | dicyclopentadiene | 2.938 | 2.515 | 2.730 | 2.513 | 2.613 | 2.787 | 2.915 | 2.716 | 6.50 |
| 77) | T | 1,4-dichlorobe... | 1.535 | 1.324 | 1.337 | 1.277 | 1.217 | 1.250 | 1.295 | 1.319 | 7.84 |
| 78) | T | 1,2-dichlorobe... | 1.218 | 1.046 | 1.123 | 1.065 | 0.991 | 1.049 | 1.071 | 1.081 | 6.69 |
| 79) | T | n-butylbenzene | 2.280 | 2.169 | 2.326 | 2.265 | 2.418 | 2.470 | 2.638 | 2.367 | 6.58 |
| 80) | T | 1,2-dibromo-3-... | 0.073 | 0.048 | 0.055 | 0.051 | 0.045 | 0.051 | 0.052 | 0.053 | 16.74 |
| 81) | T | 1,2,4-trichlor... | 0.721 | 0.641 | 0.684 | 0.655 | 0.624 | 0.658 | 0.699 | 0.669 | 5.14 |
| 82) | T | hexachlorobuta... | 0.639 | 0.579 | 0.561 | 0.528 | 0.557 | 0.572 | 0.637 | 0.582 | 7.15 |
| 83) | T | naphthalene | 0.716 | 0.675 | 0.727 | 0.724 | 0.664 | 0.706 | 0.751 | 0.709 | 4.30 |
| 84) | T | 1,2,3-trichlor... | 0.586 | 0.516 | 0.543 | 0.497 | 0.460 | 0.488 | 0.507 | 0.514 | 7.94 |

Method Path : C:\msdchem\1\METHODS\
Method File : 25ML0403.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 85) | T | 2-methyl napht... | 0.396 | 0.366 | 0.403 | 0.351 | 0.299 | 0.295 | 0.314 | 0.346 | 12.90 |

(#) = Out of Range

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040307.D
Acq On : 3 Apr 2008 11:44 am
Sample : ,ical,ical_w25-1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 03 12:08:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:32:57 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 572325 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 493126 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 280475 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 154106 | 10.96 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.60% | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 149534 | 11.50 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.00% | | | |
| 44) toluene-d8 | 9.244 | 98 | 597184 | 9.80 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.00% | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 250479 | 10.40 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.606 | 85 | 12352 | 1.42 | ug/L | 92 |
| 3) chloromethane | 1.819 | 50 | 21787 | 1.40 | ug/L | 86 |
| 4) vinyl chloride | 1.935 | 62 | 21943 | 1.31 | ug/L | 97 |
| 5) 1,3-butadiene | 1.971 | 39 | 21213 | 1.34 | ug/L | 87 |
| 6) bromomethane | 2.324 | 94 | 8253 | 1.45 | ug/L | 94 |
| 7) chloroethane | 2.451 | 64 | 14235 | 1.45 | ug/L | 93 |
| 8) trichlorofluoromethane | 2.731 | 101 | 38566 | 1.37 | ug/L | 97 |
| 9) acrolein | 3.279 | 56 | 2963 | 16.26 | ug/L | 93 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 18248 | 1.38 | ug/L | 94 |
| 11) acetone | 3.473 | 43 | 4488 | 2.62 | ug/L | 99 |
| 12) carbon disulfide | 3.589 | 76 | 59571 | 1.39 | ug/L | 100 |
| 13) methylene chloride | 3.966 | 84 | 34694 | 2.03 | ug/L | 97 |
| 14) acrylonitrile | 4.300 | 53 | 23199 | 12.62 | ug/L | 99 |
| 15) trans-1,2-dichloroethene | 4.270 | 96 | 19033 | 1.21 | ug/L | 95 |
| 16) methyl-t-butyl ether | 4.264 | 73 | 30765 | 1.25 | ug/L | 99 |
| 17) acetonitrile | 3.826 | 41 | 11397 | 14.98 | ug/L | 94 |
| 18) hexane | 4.550 | 57 | 22124 | 1.13 | ug/L | 89 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 39061 | 1.26 | ug/L | 96 |
| 20) vinyl acetate | 4.872 | 43 | 10211 | 1.16 | ug/L | 90 |
| 21) cis-1,2-dichloroethene | 5.535 | 96 | 19716 | 1.20 | ug/L | 96 |
| 22) 2,2-dichloropropane | 5.504 | 77 | 36521 | 1.24 | ug/L | 100 |
| 23) 2-butanone | 5.589 | 72 | 325 | 0.77 | ug/L # | 71 |
| 24) methyl acrylate | 5.693 | 55 | 5657 | 1.13 | ug/L | 86 |
| 25) chloroform | 5.954 | 83 | 38976 | 1.25 | ug/L | 95 |
| 27) 1,1,1-trichloroethane | 6.137 | 97 | 39459 | 1.24 | ug/L | 99 |
| 28) cyclohexane | 6.167 | 56 | 27302 | 1.08 | ug/L | 93 |
| 29) carbon tetrachloride | 6.337 | 117 | 34563 | 1.29 | ug/L | 96 |
| 31) benzene | 6.629 | 78 | 72521 | 1.21 | ug/L | 95 |
| 32) 1,1-dichloropropene | 6.356 | 75 | 26788 | 1.19 | ug/L | 87 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 23483 | 1.34 | ug/L | 93 |
| 34) trichloroethene | 7.511 | 95 | 21255 | 1.20 | ug/L | 96 |
| 35) ethyl acrylate | 7.694 | 55 | 7353 | 0.98 | ug/L | 90 |
| 36) 1,2-dichloropropane | 7.833 | 63 | 16251 | 1.16 | ug/L | 100 |
| 37) methyl methacrylate | 8.016 | 41 | 6356 | 1.10 | ug/L | 87 |
| 38) dibromomethane | 8.034 | 93 | 7199 | 1.23 | ug/L | 88 |

4/8/08

A040307.D 25ML0403.M Thu Apr 03 12:08:02 2008 voa1 Page: 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040307.D
Acq On : 3 Apr 2008 11:44 am
Sample : ,ical,ical_w25-1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 03 12:08:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:32:57 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

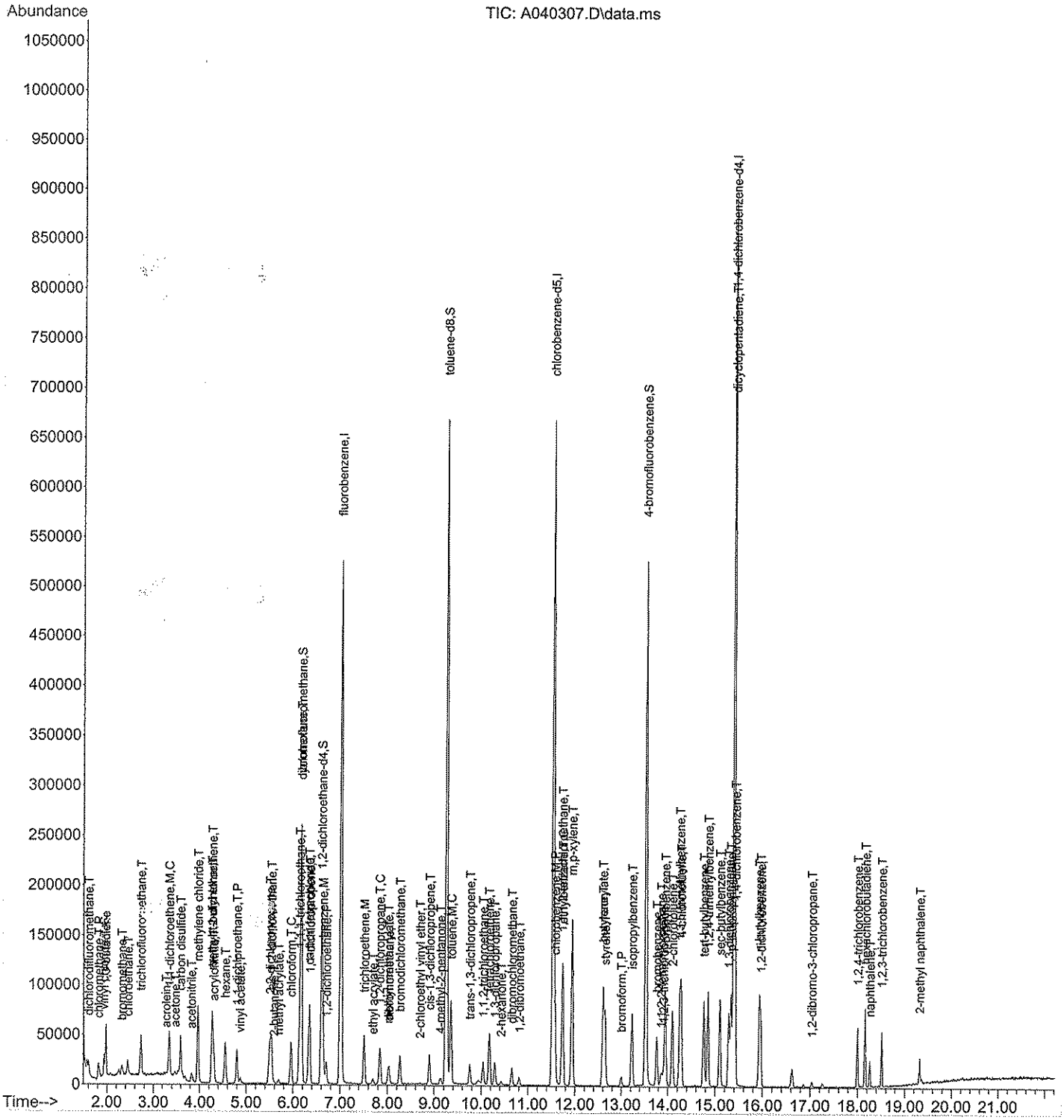
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.265 | 83 | 24875 | 1.21 ug/L | 94 |
| 40) 2-chloroethyl vinyl ether | 8.697 | 63 | 796 | 1.16 ug/L # | 47 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 21124 | 1.03 ug/L | 96 |
| 43) 4-methyl-2-pentanone | 9.129 | 43 | 7090 | 1.18 ug/L | 96 |
| 45) toluene | 9.354 | 92 | 47879 | 1.12 ug/L | 93 |
| 46) 1,1,2-trichloroethane | 10.035 | 83 | 7479 | 1.11 ug/L | 92 |
| 47) 1,3-dichloropropane | 10.284 | 76 | 15533 | 1.07 ug/L | 99 |
| 48) tetrachloroethene | 10.163 | 164 | 16892 | 1.08 ug/L | 95 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 15518 | 1.01 ug/L | 99 |
| 50) 2-hexanone | 10.424 | 43 | 3956 | 1.05 ug/L | 93 |
| 51) dibromochloromethane | 10.649 | 129 | 12505 | 1.07 ug/L | 95 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 8363 | 1.03 ug/L | 95 |
| 53) chlorobenzene | 11.573 | 112 | 50159 | 1.14 ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.725 | 131 | 17618 | 1.11 ug/L | 92 |
| 55) ethylbenzene | 11.738 | 91 | 91636 | 1.07 ug/L | 98 |
| 56) m,p-xylene | 11.932 | 106 | 68043 | 2.15 ug/L | 90 |
| 57) butyl acrylate | 12.601 | 55 | 16007 | 0.92 ug/L | 88 |
| 58) o-xylene | 12.601 | 106 | 31499 | 1.05 ug/L | 97 |
| 59) styrene | 12.644 | 104 | 50437 | 1.05 ug/L | 99 |
| 60) isopropylbenzene | 13.228 | 105 | 72614 | 1.00 ug/L | 94 |
| 61) bromobenzene | 13.763 | 156 | 20227 | 1.06 ug/L | 95 |
| 62) bromoform | 12.996 | 173 | 6594 | 1.00 ug/L | 96 |
| 64) 1,2,3-trichloropropane | 13.903 | 75 | 8388 | 1.18 ug/L | 93 |
| 65) n-propylbenzene | 13.939 | 91 | 103076 | 1.07 ug/L | 100 |
| 66) 2-chlorotoluene | 14.091 | 91 | 64896 | 1.08 ug/L | 97 |
| 67) 4-chlorotoluene | 14.274 | 91 | 80084 | 1.16 ug/L | 100 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 71696 | 1.04 ug/L | 91 |
| 70) 1,1,2,2-tetrachloroethane | 13.854 | 83 | 8437 | 1.01 ug/L | 87 |
| 71) tert-butylbenzene | 14.760 | 119 | 57128 | 0.98 ug/L | 98 |
| 72) sec-butylbenzene | 15.101 | 105 | 82889 | 0.97 ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.851 | 105 | 76223 | 1.02 ug/L | 96 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 41098 | 1.07 ug/L | 99 |
| 75) p-isopropyltoluene | 15.332 | 119 | 69147 | 0.97 ug/L | 99 |
| 76) dicyclopentadiene | 15.399 | 66 | 82416 | 1.07 ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 43042 | 1.13 ug/L | 95 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 34175 | 1.09 ug/L | 95 |
| 79) n-butylbenzene | 15.922 | 91 | 63936 | 0.96 ug/L | 97 |
| 80) 1,2-dibromo-3-chloropr... | 17.034 | 75 | 2039 | 1.41 ug/L | 88 |
| 81) 1,2,4-trichlorobenzene | 18.001 | 180 | 20231 | 1.00 ug/L | 89 |
| 82) hexachlorobutadiene | 18.160 | 225 | 17924 | 1.13 ug/L | 97 |
| 83) naphthalene | 18.257 | 128 | 20085 | 0.85 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 16443 | 1.07 ug/L | 98 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 11110 | 1.02 ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040307.D
Acq On : 3 Apr 2008 11:44 am
Sample : ,ical,ical_w25-1 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 03 12:08:01 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:32:57 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040306.D
Acq On : 3 Apr 2008 10:53 am
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 11:32:32 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.014 | 96 | 582681 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.533 | 117 | 509493 | 10.00 | ug/L | | 0.01 |
| 69) 1,4-dichlorobenzene-d4 | 15.388 | 152 | 295062 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.169 | 113 | 153464 | 11.25 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 112.50% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.601 | 65 | 147699 | 12.24 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 122.40% | | | | |
| 44) toluene-d8 | 9.252 | 98 | 611845 | 9.59 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 95.90% | | | | |
| 63) 4-bromofluorobenzene | 13.521 | 95 | 261220 | 10.95 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.50% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.602 | 85 | 22570 | 3.73 | ug/L | | 98 |
| 3) chloromethane | 1.815 | 50 | 41071 | 3.29 | ug/L | | 92 |
| 4) vinyl chloride | 1.930 | 62 | 40887 | 3.03 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.973 | 39 | 36775 | 2.81 | ug/L | | 90 |
| 6) bromomethane | 2.320 | 94 | 14740 | 3.77 | ug/L | | 97 |
| 7) chloroethane | 2.441 | 64 | 24156 | 3.00 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.727 | 101 | 67522 | 3.15 | ug/L | | 89 |
| 9) acrolein | 3.274 | 56 | 4486 | 35.49 | ug/L | | 96 |
| 10) 1,1-dichloroethene | 3.341 | 96 | 30736 | 2.76 | ug/L | # | 83 |
| 11) acetone | 3.475 | 43 | 6889 | 4.83 | ug/L | | 96 |
| 12) carbon disulfide | 3.591 | 76 | 101524 | 2.77 | ug/L | | 99 |
| 13) methylene chloride | 3.961 | 84 | 49513 | 3.13 | ug/L | # | 82 |
| 14) acrylonitrile | 4.302 | 53 | 41303 | 25.02 | ug/L | | 82 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 35066 | 2.42 | ug/L | # | 86 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 54260 | 2.30 | ug/L | | 95 |
| 17) acetonitrile | 3.828 | 41 | 19429 | 29.72 | ug/L | | 96 |
| 18) hexane | 4.545 | 57 | 41599 | 2.36 | ug/L | | 100 |
| 19) 1,1-dichloroethane | 4.801 | 63 | 66470 | 2.33 | ug/L | | 95 |
| 20) vinyl acetate | 4.874 | 43 | 18160 | 2.17 | ug/L | | 95 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 34403 | 2.19 | ug/L | | 88 |
| 22) 2,2-dichloropropane | 5.500 | 77 | 66299 | 2.55 | ug/L | | 98 |
| 23) 2-butanone | 5.603 | 72 | 1127m3 | 2.79 | ug/L | | |
| 24) methyl acrylate | 5.689 | 55 | 10260 | 2.11 | ug/L | | 87 |
| 25) chloroform | 5.956 | 83 | 68613 | 2.40 | ug/L | | 96 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 71467 | 2.56 | ug/L | | 89 |
| 28) cyclohexane | 6.163 | 56 | 50287 | 2.19 | ug/L | | 92 |
| 29) carbon tetrachloride | 6.339 | 117 | 60263 | 2.62 | ug/L | | 91 |
| 31) benzene | 6.631 | 78 | 126559 | 2.22 | ug/L | | 90 |
| 32) 1,1-dichloropropene | 6.345 | 75 | 47555 | 2.33 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.704 | 62 | 39800 | 2.54 | ug/L | | 96 |
| 34) trichloroethene | 7.507 | 95 | 37229 | 2.25 | ug/L | | 91 |
| 35) ethyl acrylate | 7.695 | 55 | 14515 | 1.96 | ug/L | | 92 |
| 36) 1,2-dichloropropane | 7.847 | 63 | 28704 | 2.12 | ug/L | | 81 |
| 37) methyl methacrylate | 8.018 | 41 | 11573 | 2.10 | ug/L | | 96 |
| 38) dibromomethane | 8.042 | 93 | 12855 | 2.32 | ug/L | # | 82 |

4/8/08

4/8/08

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040306.D
Acq On : 3 Apr 2008 10:53 am
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 11:32:32 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

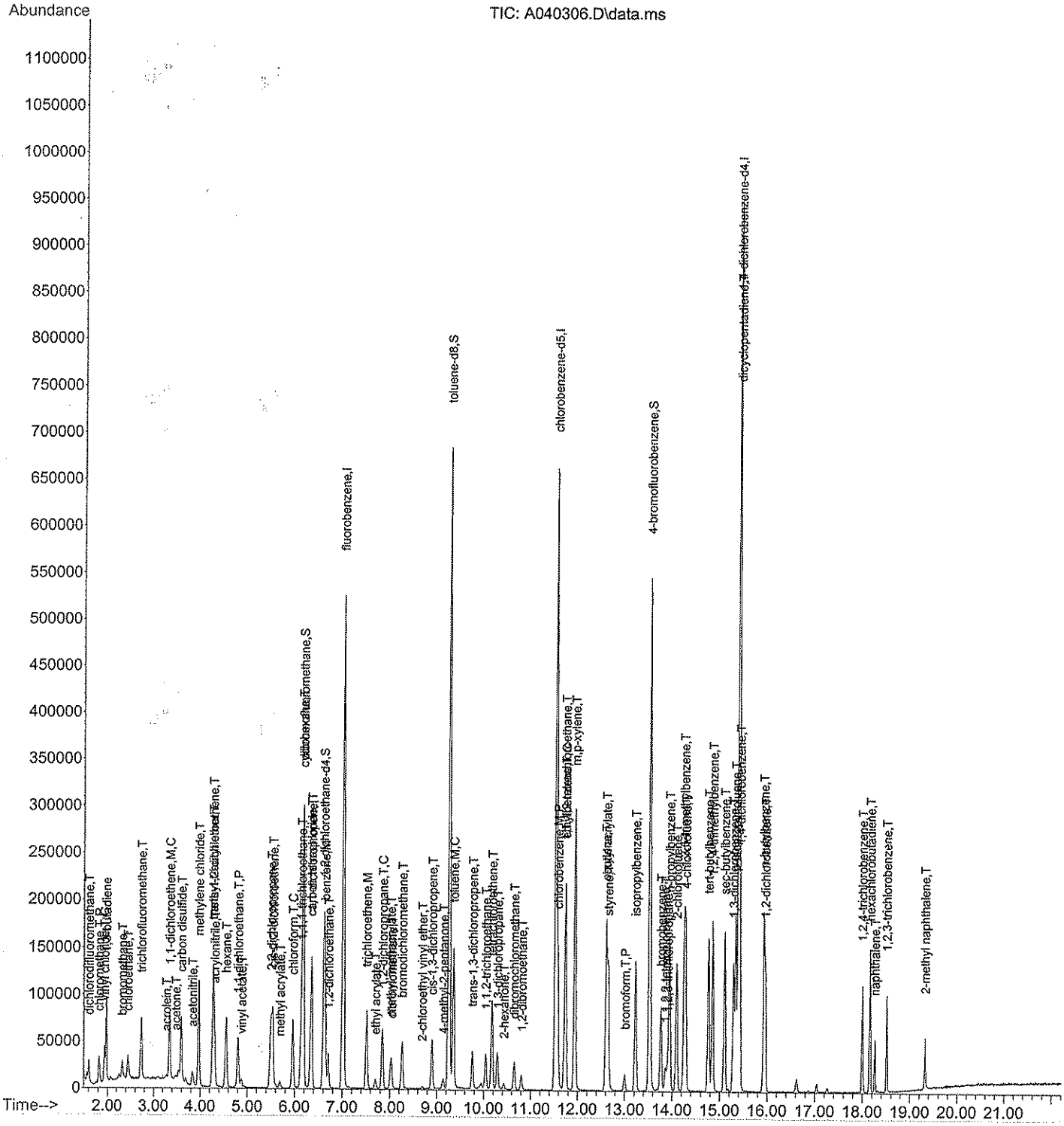
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.261 | 83 | 43476 | 2.27 | ug/L | | 97 |
| 40) | 2-chloroethyl vinyl ether | 8.687 | 63 | 1176 | 1.47 | ug/L | # | 72 |
| 42) | cis-1,3-dichloropropene | 8.893 | 75 | 38046 | 1.79 | ug/L | | 93 |
| 43) | 4-methyl-2-pentanone | 9.137 | 43 | 11658 | 1.89 | ug/L | | 99 |
| 45) | toluene | 9.350 | 92 | 84728 | 1.95 | ug/L | # | 85 |
| 46) | 1,1,2-trichloroethane | 10.037 | 83 | 13753 | 1.96 | ug/L | | 91 |
| 47) | 1,3-dichloropropane | 10.292 | 76 | 27771 | 1.84 | ug/L | | 92 |
| 48) | tetrachloroethene | 10.171 | 164 | 31045 | 2.01 | ug/L | | 93 |
| 49) | trans-1,3-dichloropropene | 9.757 | 75 | 28453 | 1.80 | ug/L | | 98 |
| 50) | 2-hexanone | 10.426 | 43 | 6633 | 1.66 | ug/L | # | 59 |
| 51) | dibromochloromethane | 10.645 | 129 | 22686 | 1.94 | ug/L | | 96 |
| 52) | 1,2-dibromoethane | 10.815 | 107 | 15558 | 1.83 | ug/L | | 96 |
| 53) | chlorobenzene | 11.575 | 112 | 85971 | 1.90 | ug/L | | 98 |
| 54) | 1,1,1,2-tetrachloroethane | 11.733 | 131 | 31855 | 2.01 | ug/L | | 86 |
| 55) | ethylbenzene | 11.740 | 91 | 167947 | 1.95 | ug/L | | 93 |
| 56) | m,p-xylene | 11.940 | 106 | 126068 | 3.92 | ug/L | # | 86 |
| 57) | butyl acrylate | 12.603 | 55 | 32599 | 1.83 | ug/L | | 92 |
| 58) | o-xylene | 12.597 | 106 | 55969 | 1.82 | ug/L | # | 81 |
| 59) | styrene | 12.646 | 104 | 93359 | 1.89 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.223 | 105 | 138870 | 1.91 | ug/L | | 96 |
| 61) | bromobenzene | 13.765 | 156 | 37140 | 1.89 | ug/L | | 96 |
| 62) | bromoform | 13.004 | 173 | 12187 | 1.84 | ug/L | | 98 |
| 64) | 1,2,3-trichloropropane | 13.904 | 75 | 15031 | 2.11 | ug/L | | 80 |
| 65) | n-propylbenzene | 13.941 | 91 | 191885 | 2.01 | ug/L | | 94 |
| 66) | 2-chlorotoluene | 14.093 | 91 | 120533 | 2.01 | ug/L | | 90 |
| 67) | 4-chlorotoluene | 14.281 | 91 | 138409 | 2.02 | ug/L | | 92 |
| 68) | 1,3,5-trimethylbenzene | 14.251 | 105 | 135296 | 1.96 | ug/L | | 91 |
| 70) | 1,1,2,2-tetrachloroethane | 13.856 | 83 | 16211 | 1.78 | ug/L | | 97 |
| 71) | tert-butylbenzene | 14.762 | 119 | 108795 | 1.75 | ug/L | | 92 |
| 72) | sec-butylbenzene | 15.096 | 105 | 159722 | 1.79 | ug/L | | 93 |
| 73) | 1,2,4-trimethylbenzene | 14.847 | 105 | 141893 | 1.78 | ug/L | | 86 |
| 74) | 1,3-dichlorobenzene | 15.285 | 146 | 74974 | 1.81 | ug/L | | 93 |
| 75) | p-isopropyltoluene | 15.327 | 119 | 135669 | 1.82 | ug/L | | 94 |
| 76) | dicyclopentadiene | 15.400 | 66 | 148392 | 1.86 | ug/L | | 96 |
| 77) | 1,4-dichlorobenzene | 15.425 | 146 | 78137 | 1.92 | ug/L | | 88 |
| 78) | 1,2-dichlorobenzene | 15.954 | 146 | 61746 | 1.83 | ug/L | | 92 |
| 79) | n-butylbenzene | 15.923 | 91 | 128024 | 1.83 | ug/L | | 89 |
| 80) | 1,2-dibromo-3-chloropr... | 17.036 | 75 | 2836 | 1.84 | ug/L | # | 63 |
| 81) | 1,2,4-trichlorobenzene | 17.997 | 180 | 37808 | 1.66 | ug/L | | 92 |
| 82) | hexachlorobutadiene | 18.161 | 225 | 34172 | 2.08 | ug/L | | 90 |
| 83) | naphthalene | 18.259 | 128 | 39813 | 1.42 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.508 | 180 | 30445 | 1.78 | ug/L | | 95 |
| 85) | 2-methyl naphthalene | 19.323 | 142 | 21609 | 1.75 | ug/L | | 86 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040306.D
Acq On : 3 Apr 2008 10:53 am
Sample : ,ical,ical_w25 2 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 11:27:03 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040306.D 25ML0403.M Thu Apr 03 11:27:04 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040305.D
Acq On : 3 Apr 2008 10:18 am
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 11:26:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 595747 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 516987 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 297014 | 10.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 155096 | 11.12 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 111.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 151055 | 12.25 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 122.50% | | | | |
| 44) toluene-d8 | 9.254 | 98 | 622910 | 9.62 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.20% | | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 264699 | 10.94 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.40% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 52147 | 8.42 | ug/L | | 93 |
| 3) chloromethane | 1.822 | 50 | 83387 | 6.54 | ug/L | | 98 |
| 4) vinyl chloride | 1.938 | 62 | 88429 | 6.41 | ug/L | | 95 |
| 5) 1,3-butadiene | 1.974 | 39 | 80401 | 6.01 | ug/L | | 85 |
| 6) bromomethane | 2.321 | 94 | 35415 | 8.85 | ug/L | | 99 |
| 7) chloroethane | 2.449 | 64 | 52106 | 6.32 | ug/L | | 93 |
| 8) trichlorofluoromethane | 2.729 | 101 | 150808 | 6.89 | ug/L | | 93 |
| 9) acrolein | 3.276 | 56 | 9440 | 73.05 | ug/L | | 92 |
| 10) 1,1-dichloroethene | 3.349 | 96 | 68734 | 6.04 | ug/L | # | 87 |
| 11) acetone | 3.470 | 43 | 10777 | 7.39 | ug/L | | 97 |
| 12) carbon disulfide | 3.592 | 76 | 209916 | 5.61 | ug/L | | 99 |
| 13) methylene chloride | 3.969 | 84 | 90087 | 5.57 | ug/L | | 92 |
| 14) acrylonitrile | 4.304 | 53 | 89860 | 53.24 | ug/L | | 89 |
| 15) trans-1,2-dichloroethene | 4.273 | 96 | 73010 | 4.93 | ug/L | | 90 |
| 16) methyl-t-butyl ether | 4.267 | 73 | 115031 | 4.76 | ug/L | | 96 |
| 17) acetonitrile | 3.835 | 41 | 39035 | 58.40 | ug/L | | 96 |
| 18) hexane | 4.553 | 57 | 89647 | 4.98 | ug/L | | 96 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 143945 | 4.93 | ug/L | | 97 |
| 20) vinyl acetate | 4.875 | 43 | 41508 | 4.86 | ug/L | | 90 |
| 21) cis-1,2-dichloroethene | 5.538 | 96 | 74164 | 4.62 | ug/L | | 90 |
| 22) 2,2-dichloropropane | 5.502 | 77 | 143140 | 5.39 | ug/L | | 98 |
| 23) 2-butanone | 5.593 | 72 | 1762 | 4.27 | ug/L | # | 62 |
| 24) methyl acrylate | 5.690 | 55 | 22585 | 4.55 | ug/L | | 92 |
| 25) chloroform | 5.964 | 83 | 146816 | 5.01 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.140 | 97 | 155627 | 5.46 | ug/L | | 87 |
| 28) cyclohexane | 6.171 | 56 | 118155 | 5.04 | ug/L | | 96 |
| 29) carbon tetrachloride | 6.341 | 117 | 131704 | 5.61 | ug/L | | 91 |
| 31) benzene | 6.633 | 78 | 271427 | 4.66 | ug/L | | 93 |
| 32) 1,1-dichloropropene | 6.353 | 75 | 105048 | 5.04 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.706 | 62 | 83996 | 5.23 | ug/L | | 97 |
| 34) trichloroethene | 7.508 | 95 | 81828 | 4.84 | ug/L | | 89 |
| 35) ethyl acrylate | 7.697 | 55 | 33734 | 4.46 | ug/L | | 96 |
| 36) 1,2-dichloropropane | 7.843 | 63 | 61559 | 4.44 | ug/L | | 92 |
| 37) methyl methacrylate | 8.019 | 41 | 27364 | 4.85 | ug/L | | 94 |
| 38) dibromomethane | 8.038 | 93 | 27877 | 4.92 | ug/L | # | 81 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040305.D
Acq On : 3 Apr 2008 10:18 am
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 11:26:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

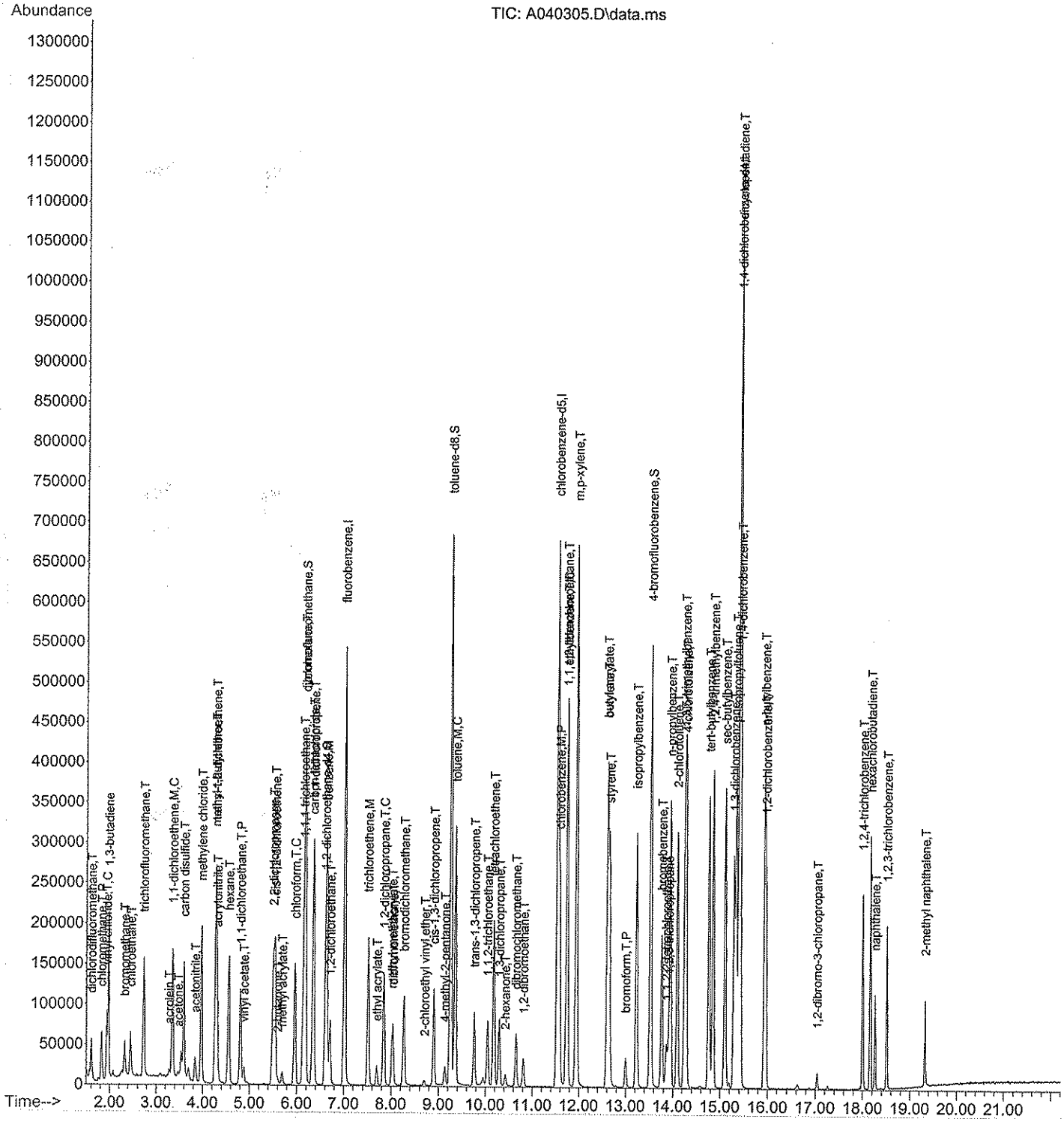
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.269 | 83 | 97741 | 4.99 | ug/L | | 96 |
| 40) | 2-chloroethyl vinyl ether | 8.706 | 63 | 3414 | 4.17 | ug/L | | 85 |
| 42) | cis-1,3-dichloropropene | 8.895 | 75 | 84179 | 3.91 | ug/L | | 95 |
| 43) | 4-methyl-2-pentanone | 9.132 | 43 | 26069 | 4.16 | ug/L | | 90 |
| 45) | toluene | 9.351 | 92 | 182170 | 4.14 | ug/L | # | 84 |
| 46) | 1,1,2-trichloroethane | 10.038 | 83 | 28073 | 3.95 | ug/L | | 92 |
| 47) | 1,3-dichloropropane | 10.294 | 76 | 60971 | 3.99 | ug/L | | 100 |
| 48) | tetrachloroethene | 10.172 | 164 | 67100 | 4.28 | ug/L | | 90 |
| 49) | trans-1,3-dichloropropene | 9.759 | 75 | 64376 | 4.01 | ug/L | | 90 |
| 50) | 2-hexanone | 10.421 | 43 | 14849 | 3.67 | ug/L | # | 50 |
| 51) | dibromochloromethane | 10.646 | 129 | 50560 | 4.26 | ug/L | | 97 |
| 52) | 1,2-dibromoethane | 10.811 | 107 | 34257 | 3.97 | ug/L | | 98 |
| 53) | chlorobenzene | 11.577 | 112 | 182658 | 3.97 | ug/L | | 99 |
| 54) | 1,1,1,2-tetrachloroethane | 11.729 | 131 | 67504 | 4.20 | ug/L | | 94 |
| 55) | ethylbenzene | 11.741 | 91 | 373051 | 4.27 | ug/L | | 96 |
| 56) | m,p-xylene | 11.936 | 106 | 273948 | 8.39 | ug/L | # | 77 |
| 57) | butyl acrylate | 12.599 | 55 | 75059 | 4.16 | ug/L | | 95 |
| 58) | o-xylene | 12.605 | 106 | 129441 | 4.14 | ug/L | # | 86 |
| 59) | styrene | 12.647 | 104 | 202956 | 4.05 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.225 | 105 | 309582 | 4.19 | ug/L | | 92 |
| 61) | bromobenzene | 13.760 | 156 | 80418 | 4.03 | ug/L | | 93 |
| 62) | bromoform | 13.000 | 173 | 27757 | 4.14 | ug/L | | 95 |
| 64) | 1,2,3-trichloropropane | 13.906 | 75 | 31252 | 4.32 | ug/L | | 93 |
| 65) | n-propylbenzene | 13.936 | 91 | 421897 | 4.37 | ug/L | | 95 |
| 66) | 2-chlorotoluene | 14.088 | 91 | 259935 | 4.28 | ug/L | | 89 |
| 67) | 4-chlorotoluene | 14.277 | 91 | 305288 | 4.39 | ug/L | | 92 |
| 68) | 1,3,5-trimethylbenzene | 14.247 | 105 | 301667 | 4.30 | ug/L | | 83 |
| 70) | 1,1,2,2-tetrachloroethane | 13.857 | 83 | 33814 | 3.69 | ug/L | | 95 |
| 71) | tert-butylbenzene | 14.763 | 119 | 241120 | 3.86 | ug/L | | 93 |
| 72) | sec-butylbenzene | 15.098 | 105 | 352325 | 3.93 | ug/L | | 98 |
| 73) | 1,2,4-trimethylbenzene | 14.849 | 105 | 311377 | 3.88 | ug/L | | 87 |
| 74) | 1,3-dichlorobenzene | 15.280 | 146 | 161780 | 3.89 | ug/L | | 88 |
| 75) | p-isopropyltoluene | 15.329 | 119 | 292621 | 3.90 | ug/L | | 94 |
| 76) | dicyclopentadiene | 15.396 | 66 | 324384 | 4.03 | ug/L | | 97 |
| 77) | 1,4-dichlorobenzene | 15.420 | 146 | 158807 | 3.87 | ug/L | | 92 |
| 78) | 1,2-dichlorobenzene | 15.955 | 146 | 133476 | 3.94 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.925 | 91 | 276322 | 3.93 | ug/L | | 94 |
| 80) | 1,2-dibromo-3-chloropr... | 17.038 | 75 | 6484 | 4.19 | ug/L | # | 53 |
| 81) | 1,2,4-trichlorobenzene | 17.999 | 180 | 81262 | 3.54 | ug/L | | 91 |
| 82) | hexachlorobutadiene | 18.157 | 225 | 66646 | 4.03 | ug/L | | 95 |
| 83) | naphthalene | 18.260 | 128 | 86372 | 3.05 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.510 | 180 | 64462 | 3.75 | ug/L | | 93 |
| 85) | 2-methyl naphthalene | 19.324 | 142 | 47881 | 3.84 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040305.D
Acq On : 3 Apr 2008 10:18 am
Sample : ,ical,ical_w25 4 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 11:26:59 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040305.D 25ML0403.M Thu Apr 03 11:27:00 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040304.D
Acq On : 3 Apr 2008 9:43 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 11:26:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth: VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 619228 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 529142 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 305040 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 162725 | 11.23 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 112.30% | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 156668 | 12.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 122.20% | | | |
| 44) toluene-d8 | 9.247 | 98 | 636646 | 9.61 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 96.10% | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 270938 | 10.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 109.40% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 105691 | 16.42 | ug/L | 98 |
| 3) chloromethane | 1.816 | 50 | 164348 | 12.40 | ug/L | 96 |
| 4) vinyl chloride | 1.937 | 62 | 179342 | 12.50 | ug/L | 98 |
| 5) 1,3-butadiene | 1.974 | 39 | 142290 | 10.23 | ug/L | 90 |
| 6) bromomethane | 2.320 | 94 | 71692 | 17.23 | ug/L | 96 |
| 7) chloroethane | 2.448 | 64 | 105597 | 12.33 | ug/L | 97 |
| 8) trichlorofluoromethane | 2.728 | 101 | 319219 | 14.02 | ug/L | 93 |
| 9) acrolein | 3.275 | 56 | 19371 | 144.22 | ug/L | 94 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 127600 | 10.78 | ug/L # | 82 |
| 11) acetone | 3.470 | 43 | 18327 | 12.09 | ug/L | 70 |
| 12) carbon disulfide | 3.591 | 76 | 416799 | 10.72 | ug/L | 100 |
| 13) methylene chloride | 3.962 | 84 | 156241 | 9.29 | ug/L | 90 |
| 14) acrylonitrile | 4.297 | 53 | 180974 | 103.16 | ug/L | 92 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 143530 | 9.33 | ug/L | 90 |
| 16) methyl-t-butyl ether | 4.266 | 73 | 235179 | 9.37 | ug/L | 97 |
| 17) acetonitrile | 3.829 | 41 | 72626 | 104.53 | ug/L | 94 |
| 18) hexane | 4.546 | 57 | 155572 | 8.31 | ug/L | 99 |
| 19) 1,1-dichloroethane | 4.802 | 63 | 292524 | 9.65 | ug/L | 95 |
| 20) vinyl acetate | 4.874 | 43 | 85273 | 9.60 | ug/L | 96 |
| 21) cis-1,2-dichloroethene | 5.531 | 96 | 147695 | 8.84 | ug/L # | 87 |
| 22) 2,2-dichloropropane | 5.495 | 77 | 284921 | 10.32 | ug/L | 94 |
| 23) 2-butanone | 5.586 | 72 | 3816 | 8.90 | ug/L # | 91 |
| 24) methyl acrylate | 5.689 | 55 | 46229 | 8.96 | ug/L | 97 |
| 25) chloroform | 5.957 | 83 | 290782 | 9.55 | ug/L | 98 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 302703 | 10.21 | ug/L | 90 |
| 28) cyclohexane | 6.164 | 56 | 206417 | 8.46 | ug/L | 95 |
| 29) carbon tetrachloride | 6.340 | 117 | 257660 | 10.56 | ug/L | 93 |
| 31) benzene | 6.632 | 78 | 543144 | 8.96 | ug/L | 95 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 208032 | 9.59 | ug/L | 98 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 171827 | 10.30 | ug/L | 95 |
| 34) trichloroethene | 7.508 | 95 | 161824 | 9.20 | ug/L | 92 |
| 35) ethyl acrylate | 7.690 | 55 | 70687 | 8.98 | ug/L | 94 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 126279 | 8.77 | ug/L | 96 |
| 37) methyl methacrylate | 8.012 | 41 | 56301 | 9.60 | ug/L | 92 |
| 38) dibromomethane | 8.031 | 93 | 54945 | 9.33 | ug/L # | 88 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040304.D
Acq On : 3 Apr 2008 9:43 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 11:26:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

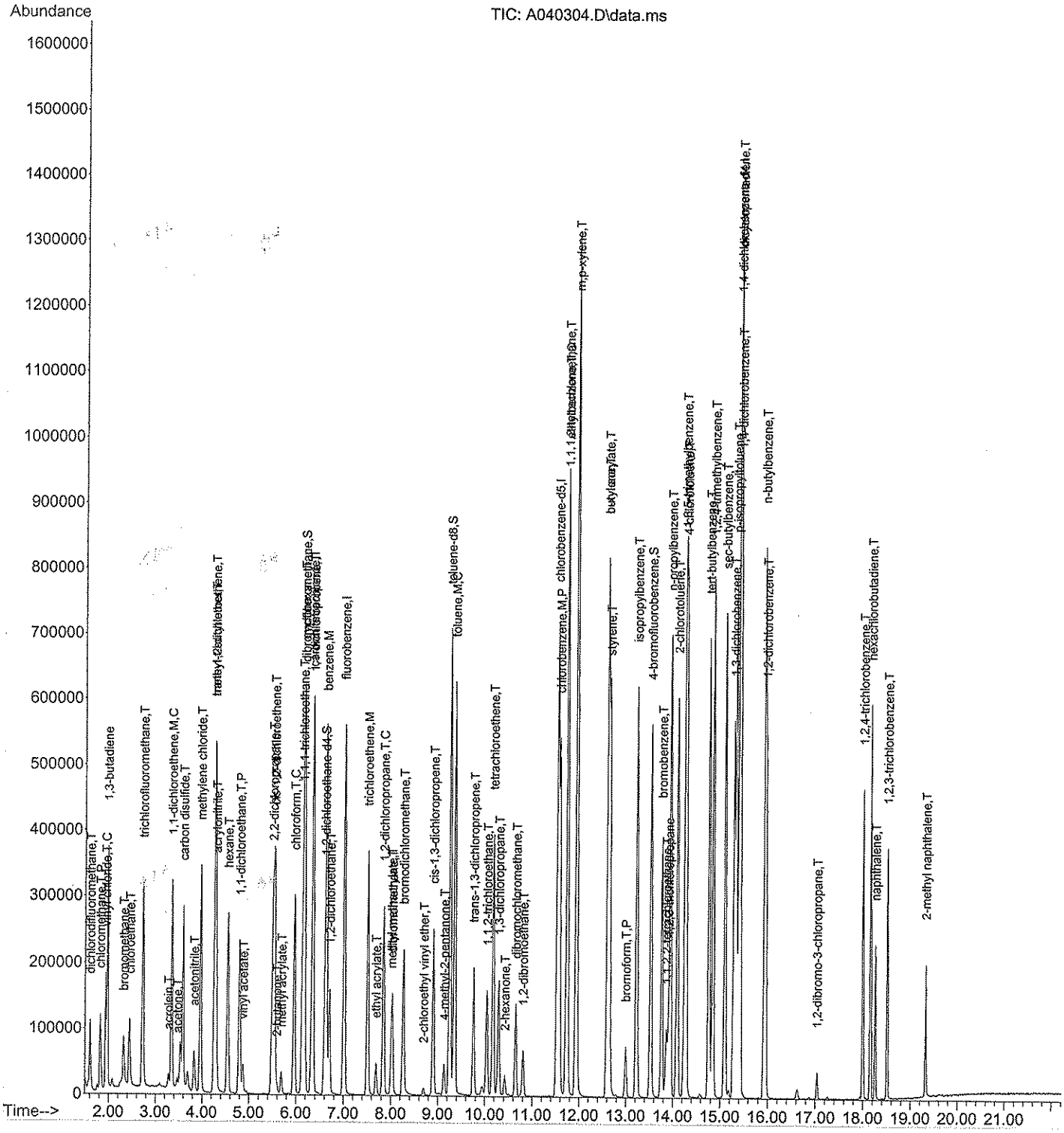
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | bromodichloromethane | 8.262 | 83 | 197374 | 9.69 | ug/L | | 93 |
| 40) | 2-chloroethyl vinyl ether | 8.694 | 63 | 5742 | 6.74 | ug/L | | 90 |
| 42) | cis-1,3-dichloropropene | 8.894 | 75 | 175080 | 7.94 | ug/L | | 90 |
| 43) | 4-methyl-2-pentanone | 9.131 | 43 | 51753 | 8.08 | ug/L | | 95 |
| 45) | toluene | 9.350 | 92 | 358796 | 7.96 | ug/L | | 87 |
| 46) | 1,1,2-trichloroethane | 10.044 | 83 | 56620 | 7.78 | ug/L | | 88 |
| 47) | 1,3-dichloropropane | 10.287 | 76 | 125271 | 8.01 | ug/L | | 93 |
| 48) | tetrachloroethene | 10.171 | 164 | 128592 | 8.01 | ug/L | | 93 |
| 49) | trans-1,3-dichloropropene | 9.752 | 75 | 136494 | 8.31 | ug/L | | 98 |
| 50) | 2-hexanone | 10.421 | 43 | 31911 | 7.71 | ug/L | # | 56 |
| 51) | dibromochloromethane | 10.652 | 129 | 102808 | 8.45 | ug/L | | 93 |
| 52) | 1,2-dibromoethane | 10.804 | 107 | 67991 | 7.69 | ug/L | | 99 |
| 53) | chlorobenzene | 11.570 | 112 | 372136 | 7.91 | ug/L | | 98 |
| 54) | 1,1,1,2-tetrachloroethane | 11.728 | 131 | 139416 | 8.47 | ug/L | | 91 |
| 55) | ethylbenzene | 11.740 | 91 | 741087 | 8.28 | ug/L | | 94 |
| 56) | m,p-xylene | 11.935 | 106 | 529561 | 15.84 | ug/L | # | 69 |
| 57) | butyl acrylate | 12.598 | 55 | 158250 | 8.57 | ug/L | | 93 |
| 58) | o-xylene | 12.598 | 106 | 258030 | 8.06 | ug/L | # | 82 |
| 59) | styrene | 12.646 | 104 | 413264 | 8.05 | ug/L | | 93 |
| 60) | isopropylbenzene | 13.224 | 105 | 622456 | 8.24 | ug/L | | 92 |
| 61) | bromobenzene | 13.759 | 156 | 162356 | 7.94 | ug/L | | 91 |
| 62) | bromoform | 12.999 | 173 | 59079 | 8.61 | ug/L | | 95 |
| 64) | 1,2,3-trichloropropane | 13.905 | 75 | 61557 | 8.32 | ug/L | | 99 |
| 65) | n-propylbenzene | 13.942 | 91 | 827616 | 8.37 | ug/L | | 95 |
| 66) | 2-chlorotoluene | 14.088 | 91 | 519856 | 8.36 | ug/L | | 91 |
| 67) | 4-chlorotoluene | 14.276 | 91 | 607383 | 8.53 | ug/L | | 87 |
| 68) | 1,3,5-trimethylbenzene | 14.246 | 105 | 596769 | 8.31 | ug/L | | 83 |
| 70) | 1,1,2,2-tetrachloroethane | 13.857 | 83 | 67689 | 7.19 | ug/L | | 93 |
| 71) | tert-butylbenzene | 14.757 | 119 | 470230 | 7.33 | ug/L | | 90 |
| 72) | sec-butylbenzene | 15.097 | 105 | 693080 | 7.52 | ug/L | | 97 |
| 73) | 1,2,4-trimethylbenzene | 14.848 | 105 | 624763 | 7.59 | ug/L | | 84 |
| 74) | 1,3-dichlorobenzene | 15.286 | 146 | 314022 | 7.35 | ug/L | | 90 |
| 75) | p-isopropyltoluene | 15.328 | 119 | 582601 | 7.56 | ug/L | | 95 |
| 76) | dicyclopentadiene | 15.401 | 66 | 613241 | 7.42 | ug/L | | 97 |
| 77) | 1,4-dichlorobenzene | 15.420 | 146 | 311676 | 7.40 | ug/L | | 91 |
| 78) | 1,2-dichlorobenzene | 15.955 | 146 | 259887 | 7.46 | ug/L | | 93 |
| 79) | n-butylbenzene | 15.924 | 91 | 552724 | 7.66 | ug/L | | 90 |
| 80) | 1,2-dibromo-3-chloropr... | 17.037 | 75 | 12533 | 7.88 | ug/L | # | 64 |
| 81) | 1,2,4-trichlorobenzene | 17.998 | 180 | 159778 | 6.79 | ug/L | | 94 |
| 82) | hexachlorobutadiene | 18.156 | 225 | 128749 | 7.58 | ug/L | | 96 |
| 83) | naphthalene | 18.259 | 128 | 176767 | 6.09 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 18.509 | 180 | 121247 | 6.87 | ug/L | | 92 |
| 85) | 2-methyl naphthalene | 19.324 | 142 | 85737 | 6.70 | ug/L | | 98 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040304.D
Acq On : 3 Apr 2008 9:43 am
Sample : ,ical,ical_w25 8 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 03 11:26:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040304.D 25ML0403.M Thu Apr 03 11:26:57 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040303.D
Acq On : 3 Apr 2008 9:08 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 03 11:26:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 609711 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.522 | 117 | 500750 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.384 | 152 | 287117 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.165 | 113 | 154807 | 10.85 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 108.50% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.597 | 65 | 145797 | 11.55 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.50% | | | | |
| 44) toluene-d8 | 9.248 | 98 | 623514 | 9.94 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.40% | | | | |
| 63) 4-bromofluorobenzene | 13.517 | 95 | 254852 | 10.87 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 108.70% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.604 | 85 | 125823 | 19.85 | ug/L | | 94 |
| 3) chloromethane | 1.817 | 50 | 187232 | 14.35 | ug/L | | 92 |
| 4) vinyl chloride | 1.932 | 62 | 204100 | 14.45 | ug/L | | 99 |
| 5) 1,3-butadiene | 1.975 | 39 | 204668 | 14.95 | ug/L | | 91 |
| 6) bromomethane | 2.315 | 94 | 81101 | 19.80 | ug/L | | 92 |
| 7) chloroethane | 2.443 | 64 | 119673 | 14.19 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.723 | 101 | 368690 | 16.45 | ug/L | | 94 |
| 9) acrolein | 3.276 | 56 | 20777 | 157.11 | ug/L | | 100 |
| 10) 1,1-dichloroethene | 3.343 | 96 | 153949 | 13.21 | ug/L | # | 86 |
| 11) acetone | 3.471 | 43 | 19911 | 13.34 | ug/L | | 83 |
| 12) carbon disulfide | 3.586 | 76 | 517792 | 13.53 | ug/L | | 98 |
| 13) methylene chloride | 3.963 | 84 | 169377 | 10.23 | ug/L | | 92 |
| 14) acrylonitrile | 4.298 | 53 | 185803 | 107.57 | ug/L | | 90 |
| 15) trans-1,2-dichloroethene | 4.261 | 96 | 167557 | 11.06 | ug/L | | 89 |
| 16) methyl-t-butyl ether | 4.261 | 73 | 243975 | 9.87 | ug/L | | 94 |
| 17) acetonitrile | 3.824 | 41 | 79945 | 116.86 | ug/L | | 98 |
| 18) hexane | 4.547 | 57 | 233925 | 12.69 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.797 | 63 | 331680 | 11.11 | ug/L | | 95 |
| 20) vinyl acetate | 4.863 | 43 | 89617 | 10.25 | ug/L | | 95 |
| 21) cis-1,2-dichloroethene | 5.532 | 96 | 167573 | 10.19 | ug/L | # | 87 |
| 22) 2,2-dichloropropane | 5.496 | 77 | 334723 | 12.31 | ug/L | | 96 |
| 23) 2-butanone | 5.575 | 72 | 4380 | 10.38 | ug/L | # | 76 |
| 24) methyl acrylate | 5.684 | 55 | 47034 | 9.26 | ug/L | | 99 |
| 25) chloroform | 5.952 | 83 | 333159 | 11.11 | ug/L | | 97 |
| 27) 1,1,1-trichloroethane | 6.134 | 97 | 357138 | 12.24 | ug/L | | 89 |
| 28) cyclohexane | 6.165 | 56 | 291844 | 12.15 | ug/L | | 94 |
| 29) carbon tetrachloride | 6.335 | 117 | 312362 | 13.00 | ug/L | | 92 |
| 31) benzene | 6.627 | 78 | 627503 | 10.52 | ug/L | | 95 |
| 32) 1,1-dichloropropene | 6.347 | 75 | 244935 | 11.47 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.700 | 62 | 185158 | 11.28 | ug/L | | 94 |
| 34) trichloroethene | 7.503 | 95 | 185203 | 10.69 | ug/L | | 92 |
| 35) ethyl acrylate | 7.691 | 55 | 71653 | 9.25 | ug/L | | 96 |
| 36) 1,2-dichloropropane | 7.837 | 63 | 140199 | 9.88 | ug/L | | 99 |
| 37) methyl methacrylate | 8.007 | 41 | 56690 | 9.82 | ug/L | | 89 |
| 38) dibromomethane | 8.026 | 93 | 58350 | 10.06 | ug/L | # | 86 |

A040303.D 25ML0403.M Thu Apr 03 11:26:53 2008 voa1 Page: 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040303.D
Acq On : 3 Apr 2008 9:08 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 03 11:26:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

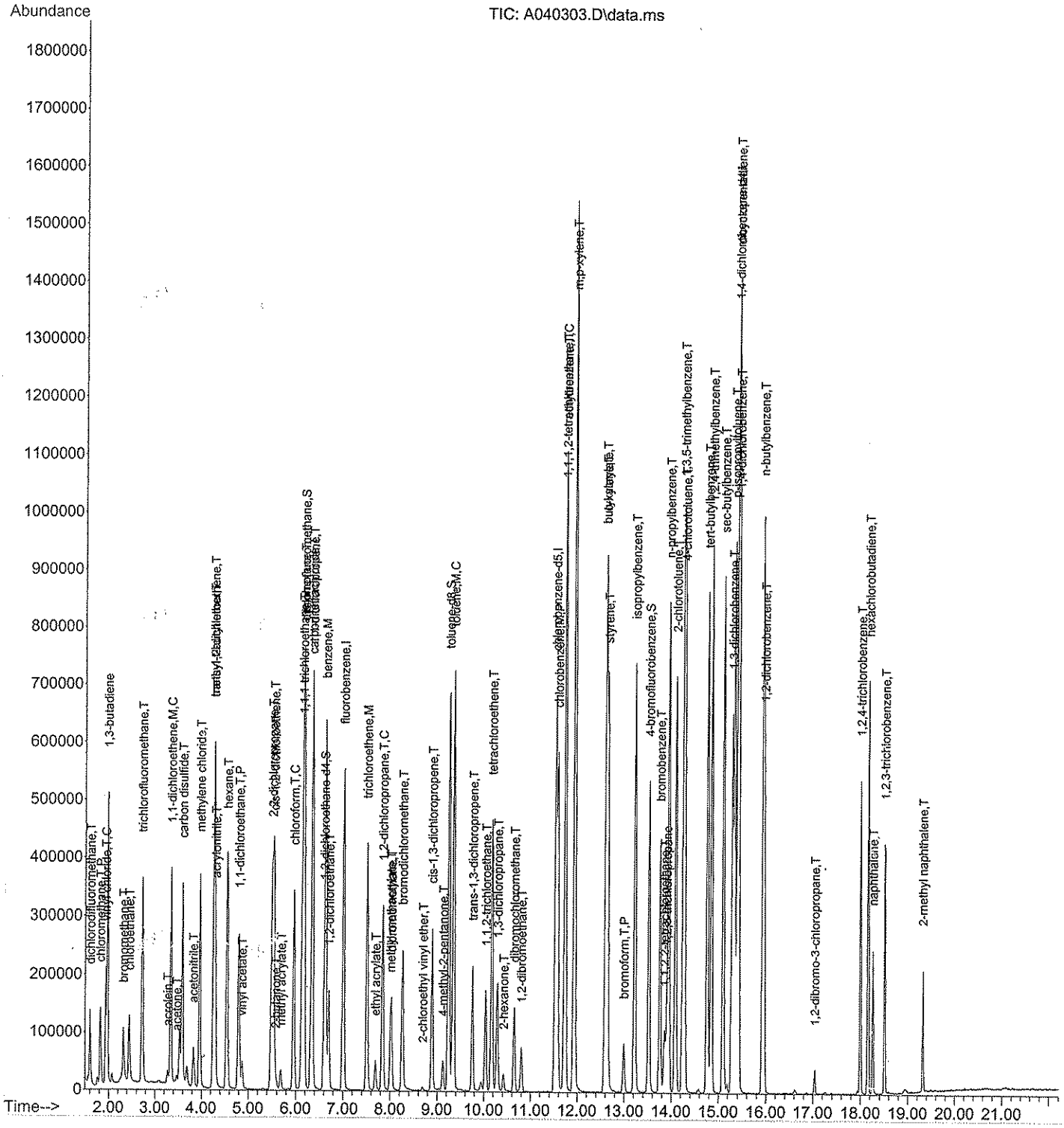
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.257 | 83 | 216794 | 10.81 | ug/L | | 94 |
| 40) 2-chloroethyl vinyl ether | 8.695 | 63 | 3489 | 4.16 | ug/L | | 81 |
| 42) cis-1,3-dichloropropene | 8.889 | 75 | 190915 | 9.15 | ug/L | | 93 |
| 43) 4-methyl-2-pentanone | 9.126 | 43 | 55407 | 9.14 | ug/L | | 88 |
| 45) toluene | 9.345 | 92 | 414343 | 9.71 | ug/L | | 86 |
| 46) 1,1,2-trichloroethane | 10.039 | 83 | 61059 | 8.87 | ug/L | | 91 |
| 47) 1,3-dichloropropane | 10.288 | 76 | 133425 | 9.01 | ug/L | | 95 |
| 48) tetrachloroethene | 10.166 | 164 | 153091 | 10.08 | ug/L | | 92 |
| 49) trans-1,3-dichloropropene | 9.753 | 75 | 143443 | 9.23 | ug/L | | 94 |
| 50) 2-hexanone | 10.422 | 43 | 32568 | 8.31 | ug/L | | 70 |
| 51) dibromochloromethane | 10.647 | 129 | 108427 | 9.42 | ug/L | | 92 |
| 52) 1,2-dibromoethane | 10.799 | 107 | 73433 | 8.78 | ug/L | | 95 |
| 53) chlorobenzene | 11.571 | 112 | 409924 | 9.20 | ug/L | | 99 |
| 54) 1,1,1,2-tetrachloroethane | 11.723 | 131 | 153322 | 9.84 | ug/L | | 90 |
| 55) ethylbenzene | 11.735 | 91 | 856669 | 10.12 | ug/L | | 95 |
| 56) m,p-xylene | 11.930 | 106 | 621755 | 19.66 | ug/L | # | 71 |
| 57) butyl acrylate | 12.593 | 55 | 163120 | 9.33 | ug/L | | 93 |
| 58) o-xylene | 12.599 | 106 | 287744 | 9.50 | ug/L | # | 79 |
| 59) styrene | 12.641 | 104 | 457480 | 9.41 | ug/L | | 90 |
| 60) isopropylbenzene | 13.219 | 105 | 744301 | 10.41 | ug/L | | 92 |
| 61) bromobenzene | 13.754 | 156 | 177252 | 9.16 | ug/L | # | 86 |
| 62) bromoform | 12.994 | 173 | 60697 | 9.35 | ug/L | | 100 |
| 64) 1,2,3-trichloropropane | 13.900 | 75 | 66718 | 9.53 | ug/L | | 95 |
| 65) n-propylbenzene | 13.937 | 91 | 1001304 | 10.70 | ug/L | | 96 |
| 66) 2-chlorotoluene | 14.089 | 91 | 602162 | 10.24 | ug/L | | 90 |
| 67) 4-chlorotoluene | 14.277 | 91 | 708028 | 10.51 | ug/L | | 90 |
| 68) 1,3,5-trimethylbenzene | 14.247 | 105 | 718340 | 10.57 | ug/L | | 83 |
| 70) 1,1,2,2-tetrachloroethane | 13.852 | 83 | 70980 | 8.01 | ug/L | | 96 |
| 71) tert-butylbenzene | 14.758 | 119 | 576922 | 9.56 | ug/L | | 90 |
| 72) sec-butylbenzene | 15.098 | 105 | 856965 | 9.88 | ug/L | | 97 |
| 73) 1,2,4-trimethylbenzene | 14.843 | 105 | 733372 | 9.46 | ug/L | | 84 |
| 74) 1,3-dichlorobenzene | 15.281 | 146 | 355364 | 8.84 | ug/L | | 90 |
| 75) p-isopropyltoluene | 15.323 | 119 | 713975 | 9.85 | ug/L | | 93 |
| 76) dicyclopentadiene | 15.396 | 66 | 750103 | 9.64 | ug/L | | 96 |
| 77) 1,4-dichlorobenzene | 15.421 | 146 | 349476 | 8.82 | ug/L | | 91 |
| 78) 1,2-dichlorobenzene | 15.956 | 146 | 284640 | 8.68 | ug/L | | 91 |
| 79) n-butylbenzene | 15.919 | 91 | 694264 | 10.22 | ug/L | | 90 |
| 80) 1,2-dibromo-3-chloropr... | 17.038 | 75 | 13022 | 8.70 | ug/L | # | 66 |
| 81) 1,2,4-trichlorobenzene | 17.993 | 180 | 179026 | 8.08 | ug/L | | 90 |
| 82) hexachlorobutadiene | 18.157 | 225 | 159959 | 10.00 | ug/L | | 95 |
| 83) naphthalene | 18.255 | 128 | 190599 | 6.97 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.504 | 180 | 132030 | 7.94 | ug/L | | 92 |
| 85) 2-methyl naphthalene | 19.319 | 142 | 85859 | 7.13 | ug/L | | 96 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040303.D
Acq On : 3 Apr 2008 9:08 am
Sample : ,ical,ical_w25 10 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 03 11:26:52 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 11:23:03 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040303.D 25ML0403.M Thu Apr 03 11:26:53 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040308.D
Acq On : 3 Apr 2008 12:31 pm
Sample : ,ical,ical_w25-20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 03 13:09:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:09:32 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.006 | 96 | 636403 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.531 | 117 | 538672 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 314672 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 166143 | 10.44 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.40% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 156883 | 10.53 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.30% | | | | |
| 44) toluene-d8 | 9.250 | 98 | 660414 | 9.96 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.60% | | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 280840 | 10.54 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.40% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 241802 | 22.68 | ug/L | | 98 |
| 3) chloromethane | 1.819 | 50 | 371463 | 20.46 | ug/L | | 98 |
| 4) vinyl chloride | 1.934 | 62 | 416256 | 21.27 | ug/L | | 98 |
| 5) 1,3-butadiene | 1.971 | 39 | 420959 | 22.74 | ug/L | | 99 |
| 6) bromomethane | 2.311 | 94 | 113926 | 16.30 | ug/L | | 99 |
| 7) chloroethane | 2.439 | 64 | 244620 | 21.13 | ug/L | | 96 |
| 8) trichlorofluoromethane | 2.725 | 101 | 781680 | 23.27 | ug/L | | 99 |
| 9) acrolein | 3.278 | 56 | 46057 | 200.90 | ug/L | | 95 |
| 10) 1,1-dichloroethene | 3.339 | 96 | 332816 | 21.41 | ug/L | | 97 |
| 11) acetone | 3.473 | 43 | 43244 | 22.72 | ug/L | | 98 |
| 12) carbon disulfide | 3.588 | 76 | 1096322 | 21.78 | ug/L | | 99 |
| 13) methylene chloride | 3.959 | 84 | 349065 | 18.40 | ug/L | | 94 |
| 14) acrylonitrile | 4.300 | 53 | 437615 | 207.00 | ug/L | | 100 |
| 15) trans-1,2-dichloroethene | 4.263 | 96 | 370232 | 20.81 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.263 | 73 | 573250 | 20.55 | ug/L | | 100 |
| 17) acetonitrile | 3.825 | 41 | 177781 | 200.29 | ug/L | | 98 |
| 18) hexane | 4.543 | 57 | 509855 | 22.89 | ug/L | | 96 |
| 19) 1,1-dichloroethane | 4.798 | 63 | 744301 | 21.11 | ug/L | | 99 |
| 20) vinyl acetate | 4.871 | 43 | 207861 | 20.98 | ug/L | | 100 |
| 21) cis-1,2-dichloroethene | 5.534 | 96 | 385248 | 20.88 | ug/L | | 99 |
| 22) 2,2-dichloropropane | 5.498 | 77 | 744338 | 21.96 | ug/L | | 100 |
| 23) 2-butanone | 5.583 | 72 | 8949 | 18.46 | ug/L | # | 28 |
| 24) methyl acrylate | 5.680 | 55 | 117557 | 21.17 | ug/L | | 96 |
| 25) chloroform | 5.954 | 83 | 747101 | 21.13 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.136 | 97 | 805319 | 21.95 | ug/L | | 99 |
| 28) cyclohexane | 6.167 | 56 | 651395 | 22.80 | ug/L | | 99 |
| 29) carbon tetrachloride | 6.337 | 117 | 697082 | 22.26 | ug/L | | 99 |
| 31) benzene | 6.623 | 78 | 1409643 | 20.91 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.349 | 75 | 559480 | 21.78 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 428522 | 21.28 | ug/L | | 98 |
| 34) trichloroethene | 7.505 | 95 | 432060 | 21.53 | ug/L | | 98 |
| 35) ethyl acrylate | 7.693 | 55 | 184129 | 22.04 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.839 | 63 | 321899 | 20.69 | ug/L | | 96 |
| 37) methyl methacrylate | 8.009 | 41 | 145089 | 22.58 | ug/L | | 92 |
| 38) dibromomethane | 8.034 | 93 | 137981 | 20.78 | ug/L | | 94 |

4/8/08

A040308.D 25ML0403.M Thu Apr 03 13:09:57 2008 voa1 Page: 1

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040308.D
Acq On : 3 Apr 2008 12:31 pm
Sample : ,ical,ical_w25-20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 03 13:09:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:09:32 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

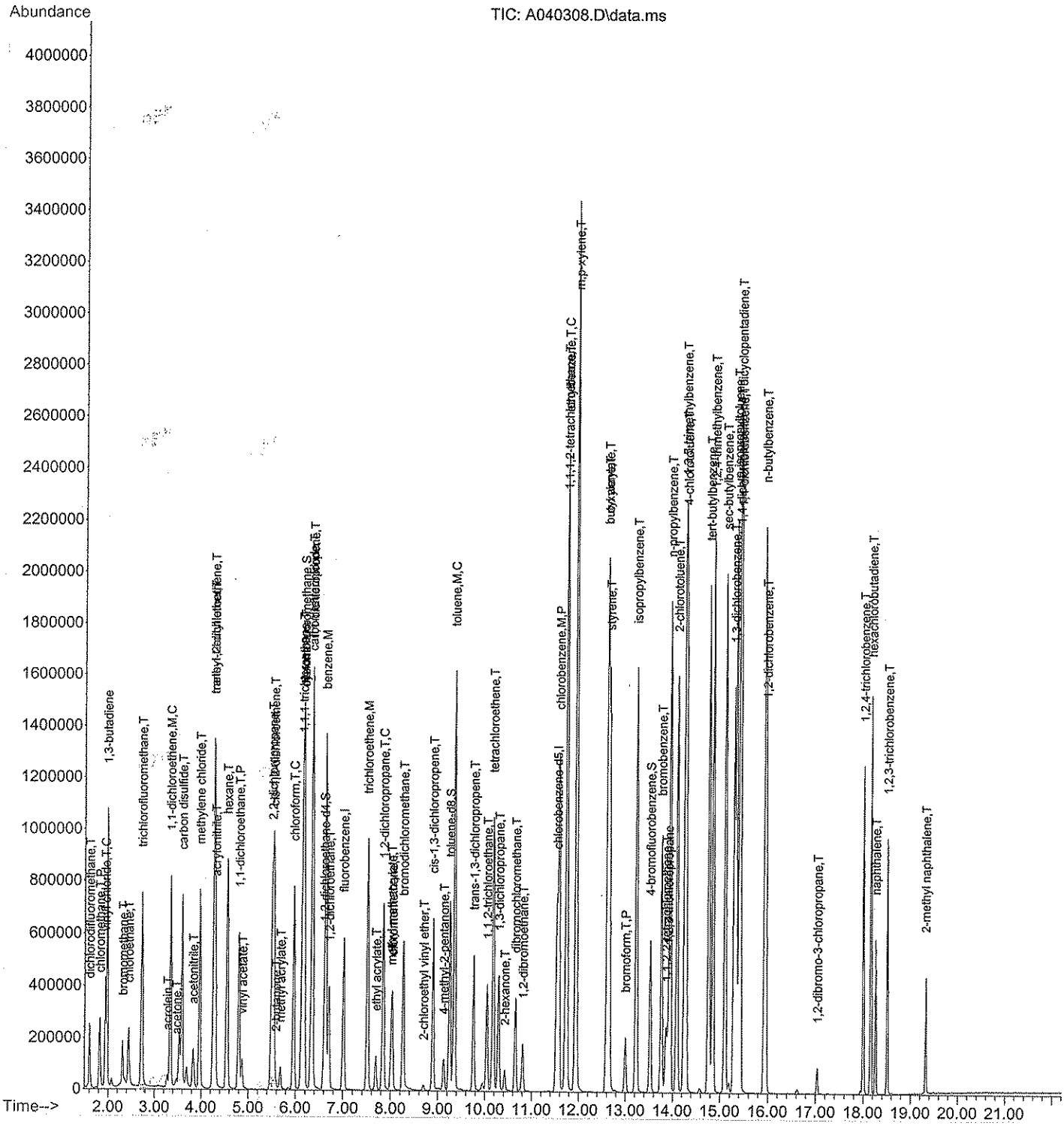
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.259 | 83 | 506387 | 21.62 | ug/L | 100 |
| 40) 2-chloroethyl vinyl ether | 8.691 | 63 | 10882 | 14.47 | ug/L | 84 |
| 42) cis-1,3-dichloropropene | 8.891 | 75 | 460529 | 20.81 | ug/L | 98 |
| 43) 4-methyl-2-pentanone | 9.122 | 43 | 132270 | 20.01 | ug/L | 95 |
| 45) toluene | 9.347 | 92 | 929818 | 20.05 | ug/L | 97 |
| 46) 1,1,2-trichloroethane | 10.041 | 83 | 147766 | 20.18 | ug/L | 99 |
| 47) 1,3-dichloropropane | 10.290 | 76 | 322533 | 20.51 | ug/L | 99 |
| 48) tetrachloroethene | 10.168 | 164 | 339201 | 19.99 | ug/L | 95 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 350404 | 21.07 | ug/L | 98 |
| 50) 2-hexanone | 10.418 | 43 | 86356 | 21.28 | ug/L | 95 |
| 51) dibromochloromethane | 10.649 | 129 | 265517 | 20.82 | ug/L | 97 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 178842 | 20.40 | ug/L | 96 |
| 53) chlorobenzene | 11.573 | 112 | 936492 | 19.69 | ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.725 | 131 | 355085 | 20.49 | ug/L | 99 |
| 55) ethylbenzene | 11.737 | 91 | 1914631 | 20.60 | ug/L | 99 |
| 56) m,p-xylene | 11.932 | 106 | 1390218 | 40.67 | ug/L | 99 |
| 57) butyl acrylate | 12.595 | 55 | 401260 | 21.21 | ug/L | 100 |
| 58) o-xylene | 12.601 | 106 | 661803 | 20.58 | ug/L | 99 |
| 59) styrene | 12.643 | 104 | 1064837 | 20.55 | ug/L | 98 |
| 60) isopropylbenzene | 13.221 | 105 | 1690484 | 21.61 | ug/L | 99 |
| 61) bromobenzene | 13.756 | 156 | 418309 | 20.40 | ug/L | 96 |
| 62) bromoform | 12.996 | 173 | 153107 | 21.46 | ug/L | 98 |
| 64) 1,2,3-trichloropropane | 13.902 | 75 | 155632 | 19.97 | ug/L | 99 |
| 65) n-propylbenzene | 13.939 | 91 | 2251715 | 21.44 | ug/L | 100 |
| 66) 2-chlorotoluene | 14.091 | 91 | 1388369 | 21.37 | ug/L | 99 |
| 67) 4-chlorotoluene | 14.273 | 91 | 1593103 | 21.03 | ug/L | 97 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 1601551 | 21.40 | ug/L | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.860 | 83 | 172277 | 18.87 | ug/L | 97 |
| 71) tert-butylbenzene | 14.760 | 119 | 1335707 | 20.81 | ug/L | 100 |
| 72) sec-butylbenzene | 15.100 | 105 | 1937140 | 20.73 | ug/L | 100 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 1656776 | 20.13 | ug/L | 98 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 816448 | 19.27 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.325 | 119 | 1601780 | 20.53 | ug/L | 99 |
| 76) dicyclopentadiene | 15.398 | 66 | 1753826 | 20.77 | ug/L | 100 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 786751 | 18.78 | ug/L | 100 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 660045 | 19.10 | ug/L | 98 |
| 79) n-butylbenzene | 15.921 | 91 | 1554308 | 21.14 | ug/L | 100 |
| 80) 1,2-dibromo-3-chloropr... | 17.040 | 75 | 31904 | 18.96 | ug/L | 98 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 414040 | 19.01 | ug/L | 94 |
| 82) hexachlorobutadiene | 18.159 | 225 | 359723 | 20.17 | ug/L | 99 |
| 83) naphthalene | 18.256 | 128 | 444086 | 18.49 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 307173 | 18.37 | ug/L | 99 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 185748 | 16.24 | ug/L | 95 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040308.D
Acq On : 3 Apr 2008 12:31 pm
Sample : ,ical,ical_w25-20 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 03 13:09:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:09:32 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040308.D 25ML0403.M Thu Apr 03 13:09:58 2008 voa1 Page: 3

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040309.D
Acq On : 3 Apr 2008 1:18 pm
Sample : ,ical,ical_w25-40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 03 13:46:50 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:11:01 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.013 | 96 | 734079 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 611872 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.387 | 152 | 332450 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 185071 | 9.93 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.30% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 177001 | 10.07 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.70% | | | | |
| 44) toluene-d8 | 9.251 | 98 | 741366 | 9.89 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.90% | | | | |
| 63) 4-bromofluorobenzene | 13.520 | 95 | 309777 | 10.09 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.90% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 605961 | 46.07 | ug/L | | 97 |
| 3) chloromethane | 1.813 | 50 | 858835 | 39.23 | ug/L | | 96 |
| 4) vinyl chloride | 1.935 | 62 | 983730 | 41.76 | ug/L | | 97 |
| 5) 1,3-butadiene | 1.971 | 39 | 996600 | 44.57 | ug/L | | 97 |
| 6) bromomethane | 2.306 | 94 | 246823 | 30.04 | ug/L | | 98 |
| 7) chloroethane | 2.421 | 64 | 524934 | 37.57 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.719 | 101 | 1762908 | 42.95 | ug/L | | 99 |
| 9) acrolein | 3.273 | 56 | 111850 | 412.01 | ug/L | | 92 |
| 10) 1,1-dichloroethene | 3.340 | 96 | 790471 | 42.60 | ug/L | | 99 |
| 11) acetone | 3.473 | 43 | 88839 | 37.74 | ug/L | | 94 |
| 12) carbon disulfide | 3.583 | 76 | 2579664 | 42.77 | ug/L | | 100 |
| 13) methylene chloride | 3.960 | 84 | 778785 | 34.90 | ug/L | | 96 |
| 14) acrylonitrile | 4.300 | 53 | 1013385 | 406.40 | ug/L | | 98 |
| 15) trans-1,2-dichloroethene | 4.264 | 96 | 881484 | 42.14 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.258 | 73 | 1240676 | 37.89 | ug/L | | 99 |
| 17) acetonitrile | 3.826 | 41 | 390796 | 369.42 | ug/L | | 96 |
| 18) hexane | 4.544 | 57 | 1244695 | 47.10 | ug/L | | 99 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 1753058 | 42.15 | ug/L | | 100 |
| 20) vinyl acetate | 4.866 | 43 | 492828 | 42.30 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.529 | 96 | 907131 | 42.01 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.498 | 77 | 1802839 | 44.65 | ug/L | | 99 |
| 23) 2-butanone | 5.584 | 72 | 24082 | 43.54 | ug/L | # | 73 |
| 24) methyl acrylate | 5.681 | 55 | 275514 | 42.30 | ug/L | | 99 |
| 25) chloroform | 5.955 | 83 | 1741268 | 41.66 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.131 | 97 | 1894570 | 43.38 | ug/L | | 98 |
| 28) cyclohexane | 6.167 | 56 | 1552714 | 46.00 | ug/L | | 99 |
| 29) carbon tetrachloride | 6.338 | 117 | 1647862 | 44.11 | ug/L | | 99 |
| 31) benzene | 6.630 | 78 | 3273357 | 41.34 | ug/L | | 100 |
| 32) 1,1-dichloropropene | 6.350 | 75 | 1334808 | 44.04 | ug/L | | 98 |
| 33) 1,2-dichloroethane | 6.703 | 62 | 980095 | 40.90 | ug/L | | 99 |
| 34) trichloroethene | 7.505 | 95 | 1021221 | 43.24 | ug/L | | 99 |
| 35) ethyl acrylate | 7.688 | 55 | 429320 | 43.74 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.840 | 63 | 761657 | 41.90 | ug/L | | 95 |
| 37) methyl methacrylate | 8.010 | 41 | 329893 | 43.33 | ug/L | | 95 |
| 38) dibromomethane | 8.034 | 93 | 319724 | 40.93 | ug/L | | 95 |

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040309.D
Acq On : 3 Apr 2008 1:18 pm
Sample : ,ical,ical_w25-40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 03 13:46:50 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:11:01 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

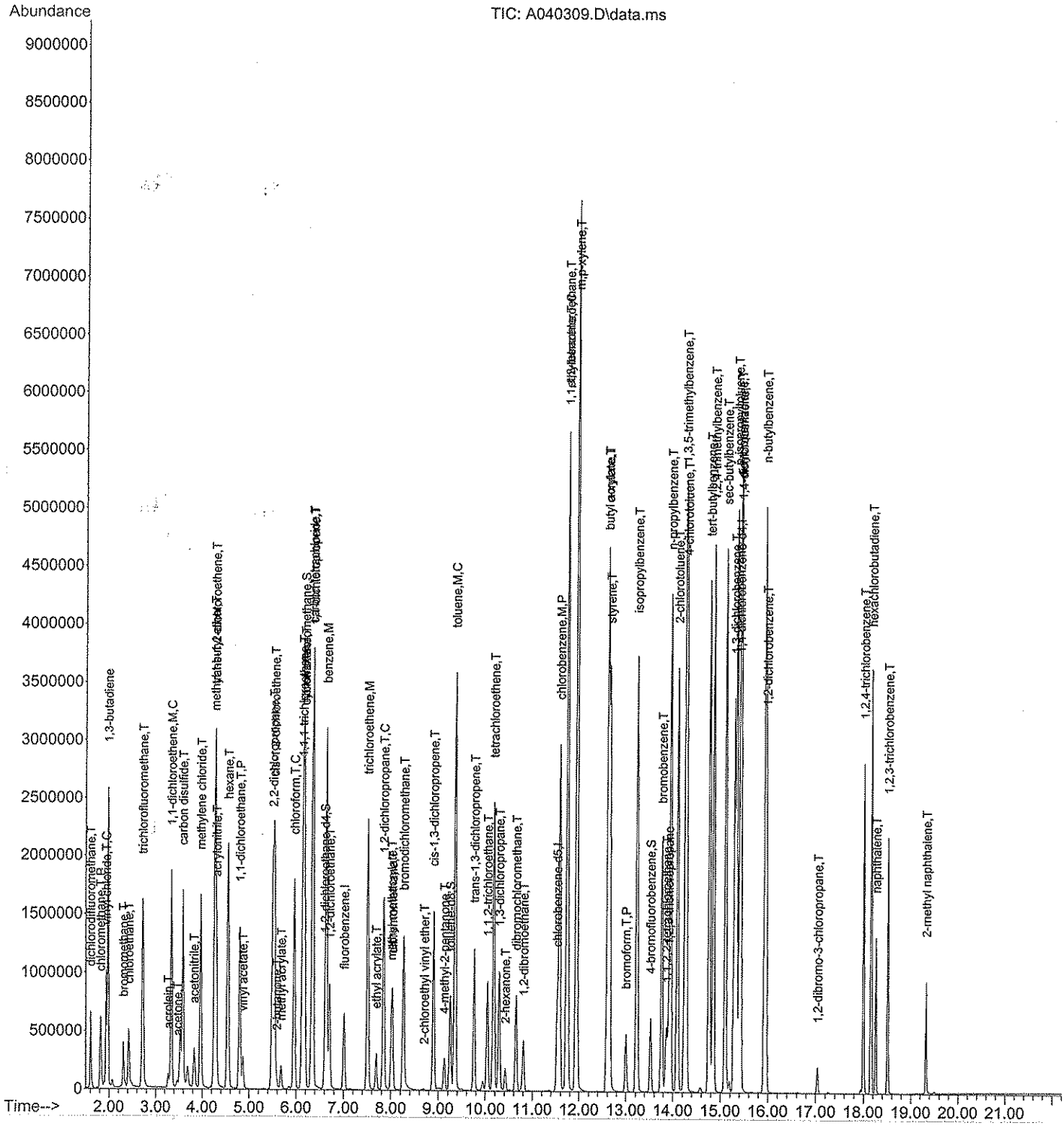
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.265 | 83 | 1174913 | 42.43 | ug/L | 99 |
| 40) 2-chloroethyl vinyl ether | 8.703 | 63 | 6974 | 8.58 | ug/L | 73 |
| 42) cis-1,3-dichloropropene | 8.892 | 75 | 1086425 | 43.22 | ug/L | 99 |
| 43) 4-methyl-2-pentanone | 9.123 | 43 | 298084 | 39.62 | ug/L | 96 |
| 45) toluene | 9.348 | 92 | 2142474 | 40.60 | ug/L | 97 |
| 46) 1,1,2-trichloroethane | 10.041 | 83 | 336608 | 40.42 | ug/L | 98 |
| 47) 1,3-dichloropropane | 10.284 | 76 | 736374 | 41.20 | ug/L | 100 |
| 48) tetrachloroethene | 10.169 | 164 | 812967 | 42.20 | ug/L | 98 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 830863 | 43.82 | ug/L | 98 |
| 50) 2-hexanone | 10.418 | 43 | 199529 | 43.36 | ug/L | 88 |
| 51) dibromochloromethane | 10.649 | 129 | 621272 | 42.69 | ug/L | 94 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 419358 | 42.20 | ug/L | 99 |
| 53) chlorobenzene | 11.574 | 112 | 2154356 | 39.97 | ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.732 | 131 | 825230 | 41.67 | ug/L | 98 |
| 55) ethylbenzene | 11.738 | 91 | 4432216 | 41.72 | ug/L | 99 |
| 56) m,p-xylene | 11.939 | 106 | 3161736 | 81.20 | ug/L | 96 |
| 57) butyl acrylate | 12.595 | 55 | 877966 | 40.61 | ug/L | 99 |
| 58) o-xylene | 12.601 | 106 | 1487187 | 40.61 | ug/L | 97 |
| 59) styrene | 12.644 | 104 | 2372249 | 40.21 | ug/L | 98 |
| 60) isopropylbenzene | 13.228 | 105 | 3889253 | 43.37 | ug/L | 98 |
| 61) bromobenzene | 13.763 | 156 | 941046 | 40.33 | ug/L | 94 |
| 62) bromoform | 12.997 | 173 | 355015 | 43.59 | ug/L | 98 |
| 64) 1,2,3-trichloropropane | 13.903 | 75 | 345392 | 38.76 | ug/L | 97 |
| 65) n-propylbenzene | 13.939 | 91 | 5112657 | 42.34 | ug/L | 99 |
| 66) 2-chlorotoluene | 14.091 | 91 | 3091219 | 41.36 | ug/L | 99 |
| 67) 4-chlorotoluene | 14.280 | 91 | 3582409 | 41.08 | ug/L | 99 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 3661701 | 42.62 | ug/L | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.860 | 83 | 386505 | 40.72 | ug/L | 99 |
| 71) tert-butylbenzene | 14.760 | 119 | 3024572 | 44.76 | ug/L | 99 |
| 72) sec-butylbenzene | 15.101 | 105 | 4403808 | 44.74 | ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 3682384 | 42.50 | ug/L | 99 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 1812690 | 40.87 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.326 | 119 | 3686652 | 44.82 | ug/L | 99 |
| 76) dicyclopentadiene | 15.399 | 66 | 3876697 | 43.27 | ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.423 | 146 | 1722219 | 39.24 | ug/L | 99 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 1423562 | 39.36 | ug/L | 98 |
| 79) n-butylbenzene | 15.922 | 91 | 3508447 | 45.12 | ug/L | 99 |
| 80) 1,2-dibromo-3-chloropr... | 17.041 | 75 | 68777 | 38.78 | ug/L | 90 |
| 81) 1,2,4-trichlorobenzene | 17.996 | 180 | 929979 | 41.12 | ug/L | 95 |
| 82) hexachlorobutadiene | 18.160 | 225 | 846536 | 44.86 | ug/L | 99 |
| 83) naphthalene | 18.257 | 128 | 998133 | 40.47 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 674184 | 38.84 | ug/L | 99 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 418035 | 35.51 | ug/L | 100 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040308\A040309.D
Acq On : 3 Apr 2008 1:18 pm
Sample : ,ical,ical_w25-40 ppb,1, Inst : VOA1
Misc : 8260+_w25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 03 13:46:50 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Thu Apr 03 13:11:01 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# CONTINUING CALIBRATION RAW DATA

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

4-6-08 JB

ok full 8260

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.206 | 0.332 | -61.2# | 171# | 0.00 |
| 3 | T,P | chloromethane | 0.329 | 0.465 | -41.3# | 161# | 0.00 |
| 4 | T,C | vinyl chloride | 0.352 | 0.421 | -19.6 | 133 | 0.00 |
| 5 | | 1,3-butadiene | 0.331 | 0.263 | 20.5# | 83 | 0.00 |
| 6 | T | bromomethane | 0.124 | 0.146 | -17.7 | 117 | 0.00 |
| 7 | T | chloroethane | 0.208 | 0.230 | -10.6 | 124 | 0.00 |
| 8 | T | trichlorofluoromethane | 0.621 | 0.710 | -14.3 | 125 | 0.00 |
| 9 | T | acrolein | 0.004 | 0.003 | 25.0# | 92 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.273 | 0.221 | 19.0 | 93 | 0.00 |
| 11 | T | acetone | 0.036 | 0.030 | 16.7 | 97 | 0.00 |
| 12 | T | carbon disulfide | 0.889 | 0.633 | 28.8# | 79 | 0.00 |
| 13 | T | methylene chloride | 0.323 | 0.240 | 25.7# | 92 | 0.00 |
| 14 | T | acrylonitrile | 0.036 | 0.030 | 16.7 | 104 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.299 | 0.245 | 18.1 | 94 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.462 | 0.380 | 17.7 | 101 | 0.00 |
| 17 | T | acetonitrile | 0.015 | 0.012 | 20.0 | 100 | 0.00 |
| 18 | T | hexane | 0.377 | 0.363 | 3.7 | 100 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.596 | 0.500 | 16.1 | 97 | 0.00 |
| 20 | T | vinyl acetate | 0.166 | 0.136 | 18.1 | 98 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.305 | 0.258 | 15.4 | 99 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.590 | 0.531 | 10.0 | 102 | 0.00 |
| 23 | T | 2-butanone | 0.008 | 0.007 | 12.5 | 97 | -0.02 |
| 24 | T | methyl acrylate | 0.091 | 0.079 | 13.2 | 109 | 0.00 |
| 25 | T,C | chloroform | 0.600 | 0.527 | 12.2 | 102 | 0.00 |
| 26 | S | dibromofluoromethane | 0.260 | 0.253 | 2.7 | 106 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.633 | 0.578 | 8.7 | 105 | 0.00 |
| 28 | T | cyclohexane | 0.477 | 0.454 | 4.8 | 101 | 0.00 |
| 29 | T | carbon tetrachloride | 0.545 | 0.490 | 10.1 | 101 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.250 | 0.254 | -1.6 | 112 | 0.00 |
| 31 | M | benzene | 1.120 | 0.959 | 14.4 | 99 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.433 | 0.386 | 10.9 | 102 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.346 | 0.303 | 12.4 | 106 | 0.00 |
| 34 | M | trichloroethene | 0.336 | 0.299 | 11.0 | 104 | 0.00 |
| 35 | T | ethyl acrylate | 0.136 | 0.114 | 16.2 | 103 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.255 | 0.222 | 12.9 | 102 | 0.00 |
| 37 | T | methyl methacrylate | 0.108 | 0.094 | 13.0 | 107 | 0.00 |
| 38 | T | dibromomethane | 0.111 | 0.097 | 12.6 | 107 | -0.01 |
| 39 | T | bromodichloromethane | 0.396 | 0.355 | 10.4 | 106 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.010 | 0.000 | 100.0# | 2# | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 89 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.411 | 0.448 | -9.0 | 104 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.123 | 0.124 | -0.8 | 100 | 0.00 |
| 44 | S | toluene-d8 | 1.215 | 1.410 | -16.0 | 100 | 0.00 |
| 45 | M,C | toluene | 0.871 | 0.953 | -9.4 | 102 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.136 | 0.143 | -5.1 | 104 | 0.00 |

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.292 | 0.311 | -6.5 | 104 | 0.00 |
| 48 | T | tetrachloroethene | 0.318 | 0.360 | -13.2 | 104 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.340 | -9.3 | 105 | 0.00 |
| 50 | T | 2-hexanone | 0.074 | 0.083 | -12.2 | 113 | -0.01 |
| 51 | T | dibromochloromethane | 0.240 | 0.267 | -11.3 | 109 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.162 | 0.173 | -6.8 | 104 | -0.01 |
| 53 | M,P | chlorobenzene | 0.884 | 0.978 | -10.6 | 106 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.328 | 0.367 | -11.9 | 106 | 0.00 |
| 55 | T,C | ethylbenzene | 1.766 | 2.030 | -14.9 | 105 | 0.00 |
| 56 | T | m,p-xylene | 0.644 | 0.731 | -13.5 | 104 | 0.00 |
| 57 | T | butyl acrylate | 0.352 | 0.368 | -4.5 | 100 | 0.00 |
| 58 | T | o-xylene | 0.603 | 0.689 | -14.3 | 106 | 0.00 |
| 59 | T | styrene | 0.967 | 1.076 | -11.3 | 104 | 0.00 |
| 60 | T | isopropylbenzene | 1.492 | 1.780 | -19.3 | 106 | 0.00 |
| 61 | T | bromobenzene | 0.382 | 0.424 | -11.0 | 106 | 0.00 |
| 62 | T,P | bromoform | 0.134 | 0.147 | -9.7 | 108 | -0.01 |
| 63 | S | 4-bromofluorobenzene | 0.512 | 0.520 | -1.6 | 91 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.148 | 0.153 | -3.4 | 102 | 0.00 |
| 65 | T | n-propylbenzene | 2.021 | 2.381 | -17.8 | 106 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.248 | 1.426 | -14.3 | 105 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.464 | 1.671 | -14.1 | 105 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.438 | 1.703 | -18.4 | 105 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 85 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.278 | 0.306 | -10.1 | 105 | 0.00 |
| 71 | T | tert-butylbenzene | 2.035 | 2.574 | -26.5# | 108 | 0.00 |
| 72 | T | sec-butylbenzene | 2.977 | 3.841 | -29.0# | 109 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.608 | 3.182 | -22.0# | 105 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.326 | 1.562 | -17.8 | 107 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.488 | 3.198 | -28.5# | 109 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 3.103 | -14.2 | 100 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.319 | 1.489 | -12.9 | 103 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.081 | 1.247 | -15.4 | 106 | 0.00 |
| 79 | T | n-butylbenzene | 2.367 | 3.018 | -27.5# | 105 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.053 | 0.056 | -5.7 | 105 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.669 | 0.760 | -13.6 | 103 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.582 | 0.743 | -27.7# | 113 | 0.00 |
| 83 | T | naphthalene | 0.709 | 0.772 | -8.9 | 98 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.514 | 0.567 | -10.3 | 104 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.346 | 0.362 | -4.6 | 102 | 0.00 |

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

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.009 | 96 | 646461 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.527 | 117 | 443830 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 242707 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.164 | 113 | 163573 | 9.72 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 97.20% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 163891 | 10.15 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.50% | | | | |
| 44) toluene-d8 | 9.247 | 98 | 625800 | 11.61 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 116.10% | | | | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 230988 | 10.17 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.70% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.603 | 85 | 214661 | 16.09 | ug/L | | 96 |
| 3) chloromethane | 1.816 | 50 | 300518 | 14.11 | ug/L | | 94 |
| 4) vinyl chloride | 1.937 | 62 | 272310 | 11.97 | ug/L | | 99 |
| 5) 1,3-butadiene | 1.974 | 39 | 170290 | 7.96 | ug/L | | 97 |
| 6) bromomethane | 2.314 | 94 | 94659 | 11.77 | ug/L | | 97 |
| 7) chloroethane | 2.442 | 64 | 148598 | 11.06 | ug/L | | 96 |
| 8) trichlorofluoromethane | 2.728 | 101 | 459181 | 11.43 | ug/L | | 99 |
| 9) acrolein | 3.275 | 56 | 19129 | 74.69 | ug/L | | 93 |
| 10) 1,1-dichloroethene | 3.342 | 96 | 142551 | 8.07 | ug/L | | 97 |
| 11) acetone | 3.476 | 43 | 19330 | 8.35 | ug/L | | 99 |
| 12) carbon disulfide | 3.585 | 76 | 409180 | 7.12 | ug/L | | 100 |
| 13) methylene chloride | 3.962 | 84 | 155089 | 7.44 | ug/L | | 91 |
| 14) acrylonitrile | 4.297 | 53 | 193272 | 83.85 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.266 | 96 | 158212 | 8.18 | ug/L | | 98 |
| 16) methyl-t-butyl ether | 4.260 | 73 | 245802 | 8.23 | ug/L | | 98 |
| 17) acetonitrile | 3.822 | 41 | 80214 | 80.41 | ug/L | | 95 |
| 18) hexane | 4.546 | 57 | 234404 | 9.61 | ug/L | | 98 |
| 19) 1,1-dichloroethane | 4.795 | 63 | 323199 | 8.39 | ug/L | | 99 |
| 20) vinyl acetate | 4.874 | 43 | 88079 | 8.23 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.537 | 96 | 166631 | 8.45 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.495 | 77 | 343021 | 8.99 | ug/L | | 98 |
| 23) 2-butanone | 5.586 | 72 | 4227 | 8.66 | ug/L | # | 85 |
| 24) methyl acrylate | 5.683 | 55 | 51102 | 8.67 | ug/L | | 94 |
| 25) chloroform | 5.957 | 83 | 340751 | 8.79 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.133 | 97 | 373762 | 9.13 | ug/L | | 99 |
| 28) cyclohexane | 6.164 | 56 | 293775 | 9.52 | ug/L | | 97 |
| 29) carbon tetrachloride | 6.334 | 117 | 317025 | 9.00 | ug/L | | 99 |
| 31) benzene | 6.626 | 78 | 620195 | 8.57 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.352 | 75 | 249441 | 8.91 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.705 | 62 | 195909 | 8.75 | ug/L | | 98 |
| 34) trichloroethene | 7.508 | 95 | 193024 | 8.89 | ug/L | | 99 |
| 35) ethyl acrylate | 7.690 | 55 | 73685 | 8.37 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.842 | 63 | 143365 | 8.69 | ug/L | | 91 |
| 37) methyl methacrylate | 8.012 | 41 | 60733 | 8.71 | ug/L | | 91 |
| 38) dibromomethane | 8.031 | 93 | 62469 | 8.71 | ug/L | | 96 |

4-6-08 JS

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

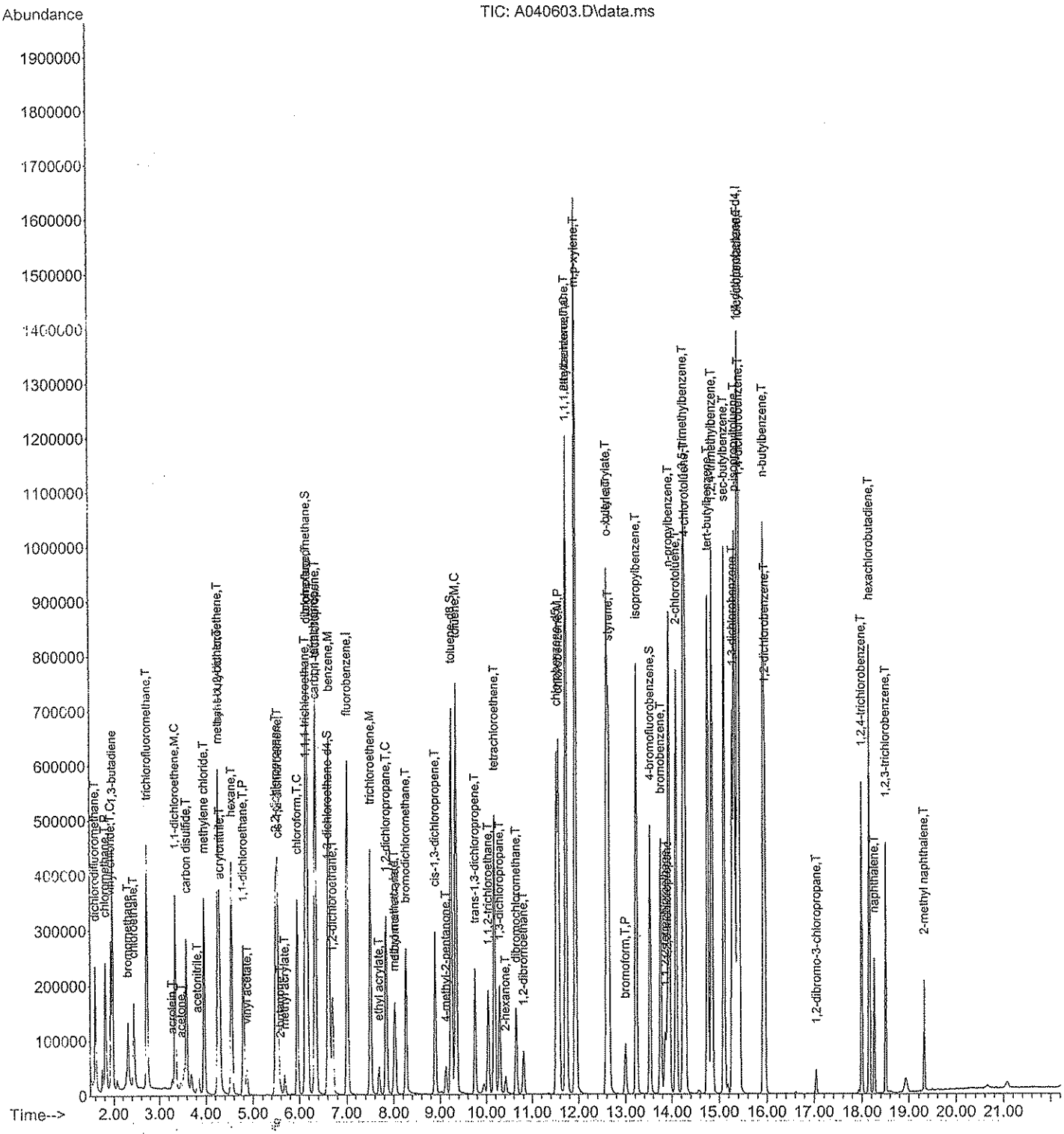
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.262 | 83 | 229467 | 8.97 | ug/L | 99 |
| 42) cis-1,3-dichloropropene | 8.894 | 75 | 198963 | 10.91 | ug/L | 97 |
| 43) 4-methyl-2-pentanone | 9.131 | 43 | 55136 | 10.09 | ug/L | 96 |
| 45) toluene | 9.344 | 92 | 423149 | 10.95 | ug/L | 99 |
| 46) 1,1,2-trichloroethane | 10.037 | 83 | 63367 | 10.49 | ug/L | 98 |
| 47) 1,3-dichloropropane | 10.287 | 76 | 138183 | 10.66 | ug/L | 98 |
| 48) tetrachloroethene | 10.171 | 164 | 159892 | 11.32 | ug/L | 95 |
| 49) trans-1,3-dichloropropene | 9.752 | 75 | 151032 | 10.93 | ug/L | 95 |
| 50) 2-hexanone | 10.415 | 43 | 36645 | 11.13 | ug/L | 95 |
| 51) dibromochloromethane | 10.646 | 129 | 118514 | 11.12 | ug/L | 95 |
| 52) 1,2-dibromoethane | 10.804 | 107 | 76709 | 10.68 | ug/L | 98 |
| 53) chlorobenzene | 11.570 | 112 | 434184 | 11.06 | ug/L | 96 |
| 54) 1,1,1,2-tetrachloroethane | 11.728 | 131 | 162720 | 11.16 | ug/L | 96 |
| 55) ethylbenzene | 11.734 | 91 | 900972 | 11.50 | ug/L | 97 |
| 56) m,p-xylene | 11.935 | 106 | 648820 | 22.70 | ug/L | 96 |
| 57) butyl acrylate | 12.598 | 55 | 163389 | 10.45 | ug/L | 98 |
| 58) o-xylene | 12.604 | 106 | 305833 | 11.43 | ug/L | 95 |
| 59) styrene | 12.640 | 104 | 477557 | 11.13 | ug/L | 98 |
| 60) isopropylbenzene | 13.224 | 105 | 790173 | 11.93 | ug/L | 100 |
| 61) bromobenzene | 13.759 | 156 | 188362 | 11.11 | ug/L | 96 |
| 62) bromoform | 12.993 | 173 | 65283 | 11.01 | ug/L | 97 |
| 64) 1,2,3-trichloropropane | 13.899 | 75 | 68018 | 10.39 | ug/L | 99 |
| 65) n-propylbenzene | 13.936 | 91 | 1056838 | 11.78 | ug/L | 100 |
| 66) 2-chlorotoluene | 14.088 | 91 | 633016 | 11.43 | ug/L | 100 |
| 67) 4-chlorotoluene | 14.276 | 91 | 741536 | 11.41 | ug/L | 97 |
| 68) 1,3,5-trimethylbenzene | 14.246 | 105 | 755989 | 11.84 | ug/L | 98 |
| 70) 1,1,2,2-tetrachloroethane | 13.857 | 83 | 74370 | 11.00 | ug/L | 99 |
| 71) tert-butylbenzene | 14.763 | 119 | 624793 | 12.65 | ug/L | 100 |
| 72) sec-butylbenzene | 15.097 | 105 | 932207 | 12.90 | ug/L | 99 |
| 73) 1,2,4-trimethylbenzene | 14.848 | 105 | 772220 | 12.20 | ug/L | 99 |
| 74) 1,3-dichlorobenzene | 15.286 | 146 | 379153 | 11.78 | ug/L | 99 |
| 75) p-isopropyltoluene | 15.328 | 119 | 776148 | 12.85 | ug/L | 99 |
| 76) dicyclopentadiene | 15.401 | 66 | 753237 | 11.43 | ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.419 | 146 | 361388 | 11.29 | ug/L | 98 |
| 78) 1,2-dichlorobenzene | 15.955 | 146 | 302709 | 11.54 | ug/L | 99 |
| 79) n-butylbenzene | 15.924 | 91 | 732402 | 12.75 | ug/L | 100 |
| 80) 1,2-dibromo-3-chloropr... | 17.043 | 75 | 13688 | 10.54 | ug/L | 90 |
| 81) 1,2,4-trichlorobenzene | 17.998 | 180 | 184397 | 11.36 | ug/L | 96 |
| 82) hexachlorobutadiene | 18.156 | 225 | 180257 | 12.77 | ug/L | 98 |
| 83) naphthalene | 18.259 | 128 | 187250 | 10.88 | ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.509 | 180 | 137562 | 11.03 | ug/L | 98 |
| 85) 2-methyl naphthalene | 19.318 | 142 | 87792 | 10.44 | ug/L | 97 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040603.D
Acq On : 6 Apr 2008 3:54 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : jdb
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 16:16:47 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 122 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.206 | 0.280 | -35.9# | 165# | 0.00 |
| 3 | T,P | chloromethane | 0.329 | 0.392 | -19.1 | 155# | 0.00 |
| 4 | T,C | vinyl chloride | 0.352 | 0.384 | -9.1 | 139 | 0.00 |
| 5 | | 1,3-butadiene | 0.331 | 0.202 | 39.0# | 73 | 0.00 |
| 6 | T | bromomethane | 0.124 | 0.175 | -41.1# | 160# | 0.00 |
| 7 | T | chloroethane | 0.208 | 0.207 | 0.5 | 128 | 0.00 |
| 8 | T | trichlorofluoromethane | 0.621 | 0.660 | -6.3 | 133 | 0.00 |
| 9 | T | acrolein | 0.004 | 0.003 | 25.0# | 97 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.273 | 0.254 | 7.0 | 123 | 0.00 |
| 11 | T | acetone | 0.036 | 0.033 | 8.3 | 122 | 0.00 |
| 12 | T | carbon disulfide | 0.889 | 0.801 | 9.9 | 115 | 0.00 |
| 13 | T | methylene chloride | 0.323 | 0.240 | 25.7# | 105 | 0.00 |
| 14 | T | acrylonitrile | 0.036 | 0.027 | 25.0# | 109 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.299 | 0.253 | 15.4 | 112 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.462 | 0.360 | 22.1# | 109 | 0.00 |
| 17 | T | acetonitrile | 0.015 | 0.012 | 20.0 | 109 | 0.00 |
| 18 | T | hexane | 0.377 | 0.308 | 18.3 | 98 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.596 | 0.506 | 15.1 | 113 | 0.00 |
| 20 | T | vinyl acetate | 0.166 | 0.136 | 18.1 | 113 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.305 | 0.254 | 16.7 | 112 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.590 | 0.538 | 8.8 | 119 | 0.00 |
| 23 | T | 2-butanone | 0.008 | 0.007 | 12.5 | 111 | -0.03 |
| 24 | T | methyl acrylate | 0.091 | 0.073 | 19.8 | 115 | 0.00 |
| 25 | T,C | chloroform | 0.600 | 0.526 | 12.3 | 117 | 0.00 |
| 26 | S | dibromofluoromethane | 0.260 | 0.259 | 0.4 | 124 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.633 | 0.581 | 8.2 | 121 | 0.00 |
| 28 | T | cyclohexane | 0.477 | 0.409 | 14.3 | 104 | 0.00 |
| 29 | T | carbon tetrachloride | 0.545 | 0.510 | 6.4 | 121 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.250 | 0.255 | -2.0 | 130 | 0.00 |
| 31 | M | benzene | 1.120 | 0.945 | 15.6 | 112 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.433 | 0.386 | 10.9 | 117 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.346 | 0.306 | 11.6 | 123 | 0.00 |
| 34 | M | trichloroethene | 0.336 | 0.295 | 12.2 | 118 | 0.00 |
| 35 | T | ethyl acrylate | 0.136 | 0.108 | 20.6# | 112 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.255 | 0.215 | 15.7 | 114 | 0.00 |
| 37 | T | methyl methacrylate | 0.108 | 0.092 | 14.8 | 120 | 0.00 |
| 38 | T | dibromomethane | 0.111 | 0.095 | 14.4 | 121 | -0.01 |
| 39 | T | bromodichloromethane | 0.396 | 0.354 | 10.6 | 121 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.010 | 0.000 | 100.0# | 2# | 0.01 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.411 | 0.437 | -6.3 | 115 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.123 | 0.122 | 0.8 | 111 | -0.01 |
| 44 | S | toluene-d8 | 1.215 | 1.421 | -17.0 | 115 | 0.00 |
| 45 | M,C | toluene | 0.871 | 0.921 | -5.7 | 112 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.136 | 0.139 | -2.2 | 115 | 0.00 |

CR 4/8/08



4/4/08

# Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.292 | 0.303 | -3.8 | 114 | 0.00 |
| 48 | T | tetrachloroethene | 0.318 | 0.352 | -10.7 | 116 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.339 | -9.0 | 119 | 0.00 |
| 50 | T | 2-hexanone | 0.074 | 0.078 | -5.4 | 121 | 0.00 |
| 51 | T | dibromochloromethane | 0.240 | 0.265 | -10.4 | 123 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.162 | 0.176 | -8.6 | 120 | -0.01 |
| 53 | M,P | chlorobenzene | 0.884 | 0.938 | -6.1 | 115 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.328 | 0.360 | -9.8 | 118 | 0.00 |
| 55 | T,C | ethylbenzene | 1.766 | 1.949 | -10.4 | 114 | 0.00 |
| 56 | T | m,p-xylene | 0.644 | 0.699 | -8.5 | 113 | -0.01 |
| 57 | T | butyl acrylate | 0.352 | 0.345 | 2.0 | 106 | 0.00 |
| 58 | T | o-xylene | 0.603 | 0.653 | -8.3 | 114 | 0.00 |
| 59 | T | styrene | 0.967 | 1.024 | -5.9 | 113 | 0.00 |
| 60 | T | isopropylbenzene | 1.492 | 1.731 | -16.0 | 117 | 0.00 |
| 61 | T | bromobenzene | 0.382 | 0.418 | -9.4 | 119 | 0.00 |
| 62 | T,P | bromoform | 0.134 | 0.148 | -10.4 | 123 | 0.00 |
| 63 | S | 4-bromofluorobenzene | 0.512 | 0.527 | -2.9 | 104 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.148 | 0.153 | -3.4 | 115 | 0.00 |
| 65 | T | n-propylbenzene | 2.021 | 2.298 | -13.7 | 115 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.248 | 1.386 | -11.1 | 116 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.464 | 1.615 | -10.3 | 115 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.438 | 1.666 | -15.9 | 117 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.278 | 0.295 | -6.1 | 117 | 0.00 |
| 71 | T | tert-butylbenzene | 2.035 | 2.438 | -19.8 | 119 | 0.00 |
| 72 | T | sec-butylbenzene | 2.977 | 3.545 | -19.1 | 117 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.608 | 3.016 | -15.6 | 116 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.326 | 1.465 | -10.5 | 116 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.488 | 2.953 | -18.7 | 117 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 2.866 | -5.5 | 108 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.319 | 1.427 | -8.2 | 115 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.081 | 1.175 | -8.7 | 116 | 0.00 |
| 79 | T | n-butylbenzene | 2.367 | 2.773 | -17.2 | 113 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.053 | 0.058 | -9.4 | 127 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.669 | 0.734 | -9.7 | 116 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.582 | 0.662 | -13.7 | 117 | 0.00 |
| 83 | T | naphthalene | 0.709 | 0.761 | -7.3 | 113 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.514 | 0.535 | -4.1 | 114 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.346 | 0.269 | 22.3# | 88 | 0.00 |

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

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.006 | 96 | 741636 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.525 | 117 | 502757 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 281954 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 191730 | 9.93 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.30% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.599 | 65 | 189438 | 10.23 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 102.30% | | | | |
| 44) toluene-d8 | 9.244 | 98 | 714493 | 11.70 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 117.00% | | | | |
| 63) 4-bromofluorobenzene | 13.519 | 95 | 265006 | 10.30 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 103.00% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.600 | 85 | 208008 | 13.59 | ug/L | | 99 |
| 3) chloromethane | 1.813 | 50 | 291033 | 11.91 | ug/L | | 98 |
| 4) vinyl chloride | 1.935 | 62 | 284612 | 10.90 | ug/L | | 99 |
| 5) 1,3-butadiene | 1.971 | 39 | 149506 | 6.09 | ug/L | | 97 |
| 6) bromomethane | 2.312 | 94 | 129511 | 14.04 | ug/L | | 100 |
| 7) chloroethane | 2.439 | 64 | 153568 | 9.96 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.725 | 101 | 489549 | 10.62 | ug/L | | 100 |
| 9) acrolein | 3.279 | 56 | 20110 | 68.44 | ug/L | | 99 |
| 10) 1,1-dichloroethene | 3.339 | 96 | 188626 | 9.31 | ug/L | | 99 |
| 11) acetone | 3.473 | 43 | 24198 | 9.11 | ug/L | | 97 |
| 12) carbon disulfide | 3.589 | 76 | 594114 | 9.01 | ug/L | | 100 |
| 13) methylene chloride | 3.960 | 84 | 177757 | 7.43 | ug/L | | 90 |
| 14) acrylonitrile | 4.300 | 53 | 202901 | 76.73 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.264 | 96 | 187325 | 8.44 | ug/L | | 98 |
| 16) methyl-t-butyl ether | 4.264 | 73 | 266819 | 7.79 | ug/L | | 98 |
| 17) acetonitrile | 3.826 | 41 | 86833 | 75.88 | ug/L | | 96 |
| 18) hexane | 4.543 | 57 | 228206 | 8.15 | ug/L | | 97 |
| 19) 1,1-dichloroethane | 4.799 | 63 | 375155 | 8.48 | ug/L | | 99 |
| 20) vinyl acetate | 4.872 | 43 | 101069 | 8.23 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.535 | 96 | 188220 | 8.32 | ug/L | | 99 |
| 22) 2,2-dichloropropane | 5.498 | 77 | 398822 | 9.11 | ug/L | | 99 |
| 23) 2-butanone | 5.577 | 72 | 4873 | 8.70 | ug/L | # | 87 |
| 24) methyl acrylate | 5.681 | 55 | 53913 | 7.97 | ug/L | | 97 |
| 25) chloroform | 5.954 | 83 | 390325 | 8.77 | ug/L | | 98 |
| 27) 1,1,1-trichloroethane | 6.137 | 97 | 431092 | 9.18 | ug/L | | 99 |
| 28) cyclohexane | 6.161 | 56 | 303630 | 8.58 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.337 | 117 | 378473 | 9.36 | ug/L | | 99 |
| 31) benzene | 6.629 | 78 | 700995 | 8.44 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.350 | 75 | 286045 | 8.90 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 227010 | 8.83 | ug/L | | 99 |
| 34) trichloroethene | 7.505 | 95 | 218880 | 8.78 | ug/L | | 99 |
| 35) ethyl acrylate | 7.688 | 55 | 80067 | 7.93 | ug/L | | 95 |
| 36) 1,2-dichloropropane | 7.840 | 63 | 159494 | 8.43 | ug/L | | 94 |
| 37) methyl methacrylate | 8.010 | 41 | 68027 | 8.50 | ug/L | | 92 |
| 38) dibromomethane | 8.028 | 93 | 70352 | 8.55 | ug/L | | 95 |

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

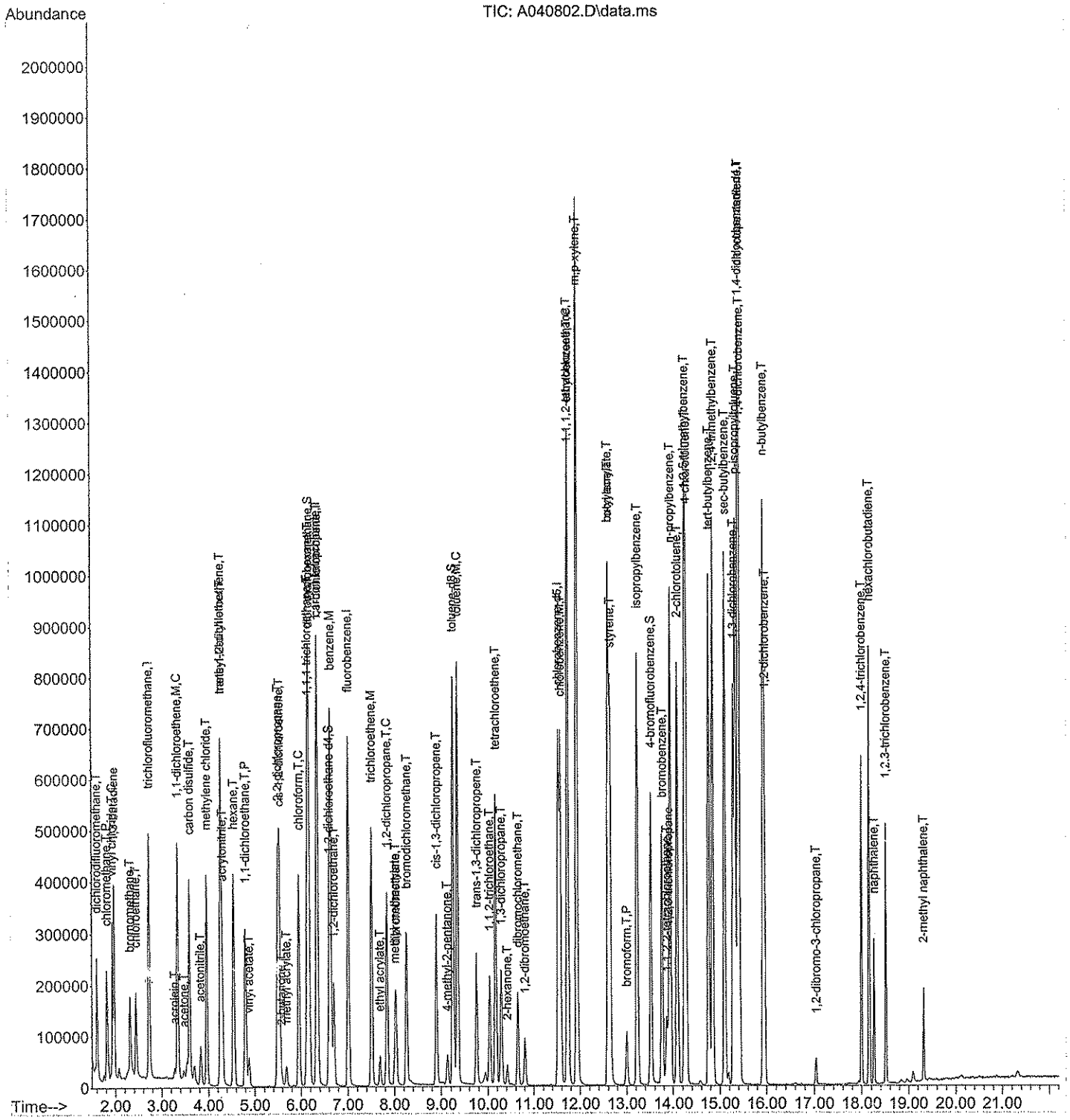
| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.265 | 83 | 262416 | 8.94 ug/L | 99 |
| 42) cis-1,3-dichloropropene | 8.898 | 75 | 219938 | 10.65 ug/L | 95 |
| 43) 4-methyl-2-pentanone | 9.123 | 43 | 61439 | 9.93 ug/L | 95 |
| 45) toluene | 9.348 | 92 | 463245 | 10.58 ug/L | 100 |
| 46) 1,1,2-trichloroethane | 10.035 | 83 | 70102 | 10.24 ug/L | 97 |
| 47) 1,3-dichloropropane | 10.284 | 76 | 152262 | 10.37 ug/L | 96 |
| 48) tetrachloroethene | 10.169 | 164 | 177089 | 11.07 ug/L | 97 |
| 49) trans-1,3-dichloropropene | 9.755 | 75 | 170524 | 10.90 ug/L | 96 |
| 50) 2-hexanone | 10.418 | 43 | 39327 | 10.55 ug/L | 93 |
| 51) dibromochloromethane | 10.649 | 129 | 133469 | 11.06 ug/L | 92 |
| 52) 1,2-dibromoethane | 10.801 | 107 | 88338 | 10.86 ug/L | 96 |
| 53) chlorobenzene | 11.573 | 112 | 471472 | 10.60 ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.726 | 131 | 180807 | 10.95 ug/L | 96 |
| 55) ethylbenzene | 11.738 | 91 | 979681 | 11.04 ug/L | 100 |
| 56) m,p-xylene | 11.926 | 106 | 702558 | 21.70 ug/L | 95 |
| 57) butyl acrylate | 12.595 | 55 | 173212 | 9.78 ug/L | 99 |
| 58) o-xylene | 12.601 | 106 | 328209 | 10.83 ug/L | 95 |
| 59) styrene | 12.644 | 104 | 514768 | 10.59 ug/L | 98 |
| 60) isopropylbenzene | 13.222 | 105 | 870246 | 11.60 ug/L | 100 |
| 61) bromobenzene | 13.763 | 156 | 210124 | 10.94 ug/L | 90 |
| 62) bromoform | 12.996 | 173 | 74362 | 11.07 ug/L | 98 |
| 64) 1,2,3-trichloropropane | 13.903 | 75 | 76820 | 10.35 ug/L | 98 |
| 65) n-propylbenzene | 13.939 | 91 | 1155455 | 11.37 ug/L | 100 |
| 66) 2-chlorotoluene | 14.085 | 91 | 696642 | 11.10 ug/L | 97 |
| 67) 4-chlorotoluene | 14.274 | 91 | 811895 | 11.03 ug/L | 98 |
| 68) 1,3,5-trimethylbenzene | 14.243 | 105 | 837356 | 11.58 ug/L | 99 |
| 70) 1,1,2,2-tetrachloroethane | 13.860 | 83 | 83315 | 10.61 ug/L | 94 |
| 71) tert-butylbenzene | 14.760 | 119 | 687393 | 11.98 ug/L | 100 |
| 72) sec-butylbenzene | 15.101 | 105 | 999445 | 11.91 ug/L | 98 |
| 73) 1,2,4-trimethylbenzene | 14.845 | 105 | 850292 | 11.56 ug/L | 98 |
| 74) 1,3-dichlorobenzene | 15.283 | 146 | 413047 | 11.05 ug/L | 99 |
| 75) p-isopropyltoluene | 15.326 | 119 | 832714 | 11.87 ug/L | 99 |
| 76) dicyclopentadiene | 15.399 | 66 | 808013 | 10.55 ug/L | 99 |
| 77) 1,4-dichlorobenzene | 15.417 | 146 | 402283 | 10.81 ug/L | 98 |
| 78) 1,2-dichlorobenzene | 15.958 | 146 | 331247 | 10.87 ug/L | 97 |
| 79) n-butylbenzene | 15.922 | 91 | 781861 | 11.72 ug/L | 100 |
| 80) 1,2-dibromo-3-chloropr... | 17.041 | 75 | 16482 | 10.93 ug/L | 92 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 206848 | 10.97 ug/L | 95 |
| 82) hexachlorobutadiene | 18.153 | 225 | 186606 | 11.38 ug/L | 98 |
| 83) naphthalene | 18.257 | 128 | 214681 | 10.74 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 18.506 | 180 | 150938 | 10.42 ug/L | 98 |
| 85) 2-methyl naphthalene | 19.321 | 142 | 75891 | 7.77 ug/L | 100 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040802.D
Acq On : 8 Apr 2008 7:21 am
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : BR
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 08 07:46:55 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040808\A040819.D
Acq On : 8 Apr 2008 5:59 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : CR
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 08 18:27:31 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 2 | T | dichlorodifluoromethane | 0.206 | 0.254 | -23.3# | 118 | 0.00 |
| 3 | T,P | chloromethane | 0.329 | 0.378 | -14.9 | 118 | 0.00 |
| 4 | T,C | vinyl chloride | 0.352 | 0.373 | -6.0 | 107 | 0.00 |
| 5 | | 1,3-butadiene | 0.331 | 0.167 | 49.5# | 48# | 0.00 |
| 6 | T | bromomethane | 0.124 | 0.185 | -49.2# | 133 | 0.00 |
| 7 | T | chloroethane | 0.208 | 0.220 | -5.8 | 107 | 0.00 |
| 8 | T | trichlorofluoromethane | 0.621 | 0.713 | -14.8 | 113 | 0.00 |
| 9 | T | acrolein | 0.004 | 0.003 | 25.0# | 74 | 0.00 |
| 10 | M,C | 1,1-dichloroethene | 0.273 | 0.276 | -1.1 | 105 | 0.00 |
| 11 | T | acetone | 0.036 | 0.040 | -11.1 | 116 | 0.00 |
| 12 | T | carbon disulfide | 0.889 | 0.888 | 0.1 | 100 | 0.00 |
| 13 | T | methylene chloride | 0.323 | 0.276 | 14.6 | 95 | 0.00 |
| 14 | T | acrylonitrile | 0.036 | 0.029 | 19.4 | 91 | 0.00 |
| 15 | T | trans-1,2-dichloroethene | 0.299 | 0.268 | 10.4 | 93 | 0.00 |
| 16 | T | methyl-t-butyl ether | 0.462 | 0.392 | 15.2 | 94 | 0.00 |
| 17 | T | acetonitrile | 0.015 | 0.013 | 13.3 | 92 | 0.00 |
| 18 | T | hexane | 0.377 | 0.276 | 26.8# | 69 | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.596 | 0.542 | 9.1 | 95 | 0.00 |
| 20 | T | vinyl acetate | 0.166 | 0.141 | 15.1 | 91 | 0.00 |
| 21 | T | cis-1,2-dichloroethene | 0.305 | 0.269 | 11.8 | 94 | 0.00 |
| 22 | T | 2,2-dichloropropane | 0.590 | 0.571 | 3.2 | 100 | 0.00 |
| 23 | T | 2-butanone | 0.008 | 0.006 | 25.0# | 83 | 0.00 |
| 24 | T | methyl acrylate | 0.091 | 0.074 | 18.7 | 92 | 0.00 |
| 25 | T,C | chloroform | 0.600 | 0.560 | 6.7 | 98 | 0.00 |
| 26 | S | dibromofluoromethane | 0.260 | 0.261 | -0.4 | 98 | 0.00 |
| 27 | T | 1,1,1-trichloroethane | 0.633 | 0.621 | 1.9 | 101 | 0.00 |
| 28 | T | cyclohexane | 0.477 | 0.378 | 20.8# | 75 | 0.00 |
| 29 | T | carbon tetrachloride | 0.545 | 0.526 | 3.5 | 98 | 0.00 |
| 30 | S | 1,2-dichloroethane-d4 | 0.250 | 0.269 | -7.6 | 108 | 0.00 |
| 31 | M | benzene | 1.120 | 0.990 | 11.6 | 92 | 0.00 |
| 32 | T | 1,1-dichloropropene | 0.433 | 0.406 | 6.2 | 97 | 0.00 |
| 33 | T | 1,2-dichloroethane | 0.346 | 0.329 | 4.9 | 104 | 0.00 |
| 34 | M | trichloroethene | 0.336 | 0.308 | 8.3 | 97 | 0.00 |
| 35 | T | ethyl acrylate | 0.136 | 0.109 | 19.9 | 89 | 0.00 |
| 36 | T,C | 1,2-dichloropropane | 0.255 | 0.228 | 10.6 | 95 | 0.00 |
| 37 | T | methyl methacrylate | 0.108 | 0.091 | 15.7 | 94 | 0.00 |
| 38 | T | dibromomethane | 0.111 | 0.101 | 9.0 | 101 | 0.00 |
| 39 | T | bromodichloromethane | 0.396 | 0.380 | 4.0 | 102 | 0.00 |
| 40 | T | 2-chloroethyl vinyl ether | 0.010 | 0.000 | 100.0# | 2# | 0.00 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 80 | 0.00 |
| 42 | T | cis-1,3-dichloropropene | 0.411 | 0.453 | -10.2 | 95 | 0.00 |
| 43 | T | 4-methyl-2-pentanone | 0.123 | 0.127 | -3.3 | 92 | 0.00 |
| 44 | S | toluene-d8 | 1.215 | 1.406 | -15.7 | 91 | 0.00 |
| 45 | M,C | toluene | 0.871 | 0.953 | 9.4 | 92 | 0.00 |
| 46 | T | 1,1,2-trichloroethane | 0.136 | 0.146 | 7.4 | 96 | 0.00 |

4/8/08

Evaluate Continuing Calibration Report

Data File: C:\msdchem\1\DATA\A040808\A040819.D
Acq On : 8 Apr 2008 5:59 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : CR
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 08 18:27:31 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 47 | T | 1,3-dichloropropane | 0.292 | 0.322 | -10.3 | 97 | 0.00 |
| 48 | T | tetrachloroethene | 0.318 | 0.357 | -12.3 | 94 | 0.00 |
| 49 | T | trans-1,3-dichloropropene | 0.311 | 0.356 | -14.5 | 100 | 0.00 |
| 50 | T | 2-hexanone | 0.074 | 0.078 | -5.4 | 96 | 0.00 |
| 51 | T | dibromochloromethane | 0.240 | 0.275 | -14.6 | 102 | 0.00 |
| 52 | T | 1,2-dibromoethane | 0.162 | 0.179 | -10.5 | 98 | 0.00 |
| 53 | M,P | chlorobenzene | 0.884 | 0.964 | -9.0 | 94 | 0.00 |
| 54 | T | 1,1,1,2-tetrachloroethane | 0.328 | 0.376 | -14.6 | 98 | 0.00 |
| 55 | T,C | ethylbenzene | 1.766 | 2.028 | -14.8 | 95 | 0.00 |
| 56 | T | m,p-xylene | 0.644 | 0.728 | -13.0 | 94 | 0.00 |
| 57 | T | butyl acrylate | 0.352 | 0.369 | -4.8 | 91 | 0.00 |
| 58 | T | o-xylene | 0.603 | 0.691 | -14.6 | 96 | 0.00 |
| 59 | T | styrene | 0.967 | 1.095 | -13.2 | 96 | 0.00 |
| 60 | T | isopropylbenzene | 1.492 | 1.801 | -20.7# | 97 | 0.00 |
| 61 | T | bromobenzene | 0.382 | 0.428 | -12.0 | 97 | 0.00 |
| 62 | T,P | bromoform | 0.134 | 0.152 | -13.4 | 101 | 0.00 |
| 63 | S | 4-bromofluorobenzene | 0.512 | 0.540 | -5.5 | 85 | 0.00 |
| 64 | | 1,2,3-trichloropropane | 0.148 | 0.166 | -12.2 | 100 | 0.00 |
| 65 | T | n-propylbenzene | 2.021 | 2.453 | -21.4# | 98 | 0.00 |
| 66 | T | 2-chlorotoluene | 1.248 | 1.474 | -18.1 | 98 | 0.00 |
| 67 | T | 4-chlorotoluene | 1.464 | 1.758 | -20.1# | 100 | 0.00 |
| 68 | T | 1,3,5-trimethylbenzene | 1.438 | 1.768 | -22.9# | 99 | 0.00 |
| 69 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 81 | 0.00 |
| 70 | T | 1,1,2,2-tetrachloroethane | 0.278 | 0.297 | -6.8 | 98 | 0.00 |
| 71 | T | tert-butylbenzene | 2.035 | 2.440 | -19.9 | 99 | 0.00 |
| 72 | T | sec-butylbenzene | 2.977 | 3.592 | -20.7# | 98 | 0.00 |
| 73 | T | 1,2,4-trimethylbenzene | 2.608 | 3.118 | -19.6 | 99 | 0.00 |
| 74 | T | 1,3-dichlorobenzene | 1.326 | 1.489 | -12.3 | 98 | 0.00 |
| 75 | T | p-isopropyltoluene | 2.488 | 3.020 | -21.4# | 99 | 0.00 |
| 76 | T | dicyclopentadiene | 2.716 | 2.949 | -8.6 | 92 | 0.00 |
| 77 | T | 1,4-dichlorobenzene | 1.319 | 1.470 | -11.4 | 98 | 0.00 |
| 78 | T | 1,2-dichlorobenzene | 1.081 | 1.207 | -11.7 | 99 | 0.00 |
| 79 | T | n-butylbenzene | 2.367 | 2.783 | -17.6 | 94 | 0.00 |
| 80 | T | 1,2-dibromo-3-chloropropane | 0.053 | 0.055 | -3.8 | 100 | 0.00 |
| 81 | T | 1,2,4-trichlorobenzene | 0.669 | 0.700 | -4.6 | 91 | 0.00 |
| 82 | T | hexachlorobutadiene | 0.582 | 0.656 | -12.7 | 96 | 0.00 |
| 83 | T | naphthalene | 0.709 | 0.691 | 2.5 | 85 | 0.00 |
| 84 | T | 1,2,3-trichlorobenzene | 0.514 | 0.517 | -0.6 | 92 | 0.00 |
| 85 | T | 2-methyl naphthalene | 0.346 | 0.273 | 21.1# | 74 | 0.00 |

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

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040819.D
Acq On : 8 Apr 2008 5:59 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : CR
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 08 18:27:31 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 583054 | 10.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.530 | 117 | 401520 | 10.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.386 | 152 | 233853 | 10.00 | ug/L | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 26) dibromofluoromethane | 6.166 | 113 | 152221 | 10.03 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.30% | | | | |
| 30) 1,2-dichloroethane-d4 | 6.598 | 65 | 157000 | 10.78 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.80% | | | | |
| 44) toluene-d8 | 9.250 | 98 | 564394 | 11.57 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 115.70% | | | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 216675 | 10.55 | ug/L | | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.50% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.599 | 85 | 148023 | 12.30 | ug/L | | 98 |
| 3) chloromethane | 1.818 | 50 | 220191 | 11.46 | ug/L | | 99 |
| 4) vinyl chloride | 1.934 | 62 | 217618 | 10.60 | ug/L | | 98 |
| 5) 1,3-butadiene | 1.970 | 39 | 97419 | 5.05 | ug/L | | 94 |
| 6) bromomethane | 2.317 | 94 | 107747 | 14.86 | ug/L | | 96 |
| 7) chloroethane | 2.439 | 64 | 128514 | 10.60 | ug/L | | 91 |
| 8) trichlorofluoromethane | 2.724 | 101 | 415832 | 11.48 | ug/L | | 98 |
| 9) acrolein | 3.278 | 56 | 15358 | 66.48 | ug/L | | 97 |
| 10) 1,1-dichloroethene | 3.345 | 96 | 160975 | 10.11 | ug/L | | 93 |
| 11) acetone | 3.472 | 43 | 23109 | 11.06 | ug/L | | 91 |
| 12) carbon disulfide | 3.588 | 76 | 517935 | 9.99 | ug/L | | 99 |
| 13) methylene chloride | 3.965 | 84 | 160738 | 8.55 | ug/L | # | 87 |
| 14) acrylonitrile | 4.299 | 53 | 168407 | 81.01 | ug/L | | 97 |
| 15) trans-1,2-dichloroethene | 4.269 | 96 | 155977 | 8.94 | ug/L | | 96 |
| 16) methyl-t-butyl ether | 4.263 | 73 | 228541 | 8.49 | ug/L | | 100 |
| 17) acetonitrile | 3.825 | 41 | 73271 | 81.44 | ug/L | | 95 |
| 18) hexane | 4.549 | 57 | 160675 | 7.30 | ug/L | | 98 |
| 19) 1,1-dichloroethane | 4.798 | 63 | 315800 | 9.09 | ug/L | | 100 |
| 20) vinyl acetate | 4.871 | 43 | 81936 | 8.49 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.534 | 96 | 156924 | 8.82 | ug/L | | 97 |
| 22) 2,2-dichloropropane | 5.497 | 77 | 333054 | 9.68 | ug/L | | 99 |
| 23) 2-butanone | 5.577 | 72 | 3646 | 8.28 | ug/L | # | 70 |
| 24) methyl acrylate | 5.686 | 55 | 43245 | 8.13 | ug/L | | 96 |
| 25) chloroform | 5.960 | 83 | 326428 | 9.33 | ug/L | | 98 |
| 27) 1,1,1-trichloroethane | 6.136 | 97 | 362239 | 9.82 | ug/L | | 98 |
| 28) cyclohexane | 6.166 | 56 | 220106 | 7.91 | ug/L | | 96 |
| 29) carbon tetrachloride | 6.337 | 117 | 306685 | 9.65 | ug/L | | 97 |
| 31) benzene | 6.629 | 78 | 577005 | 8.84 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.355 | 75 | 236534 | 9.36 | ug/L | | 95 |
| 33) 1,2-dichloroethane | 6.702 | 62 | 191931 | 9.50 | ug/L | | 98 |
| 34) trichloroethene | 7.510 | 95 | 179605 | 9.17 | ug/L | | 97 |
| 35) ethyl acrylate | 7.693 | 55 | 63716 | 8.02 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.839 | 63 | 132816 | 8.93 | ug/L | | 97 |
| 37) methyl methacrylate | 8.015 | 41 | 53046 | 8.44 | ug/L | | 91 |
| 38) dibromomethane | 8.027 | 93 | 58983 | 9.11 | ug/L | | 94 |

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040819.D
Acq On : 8 Apr 2008 5:59 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : CR
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 08 18:27:31 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

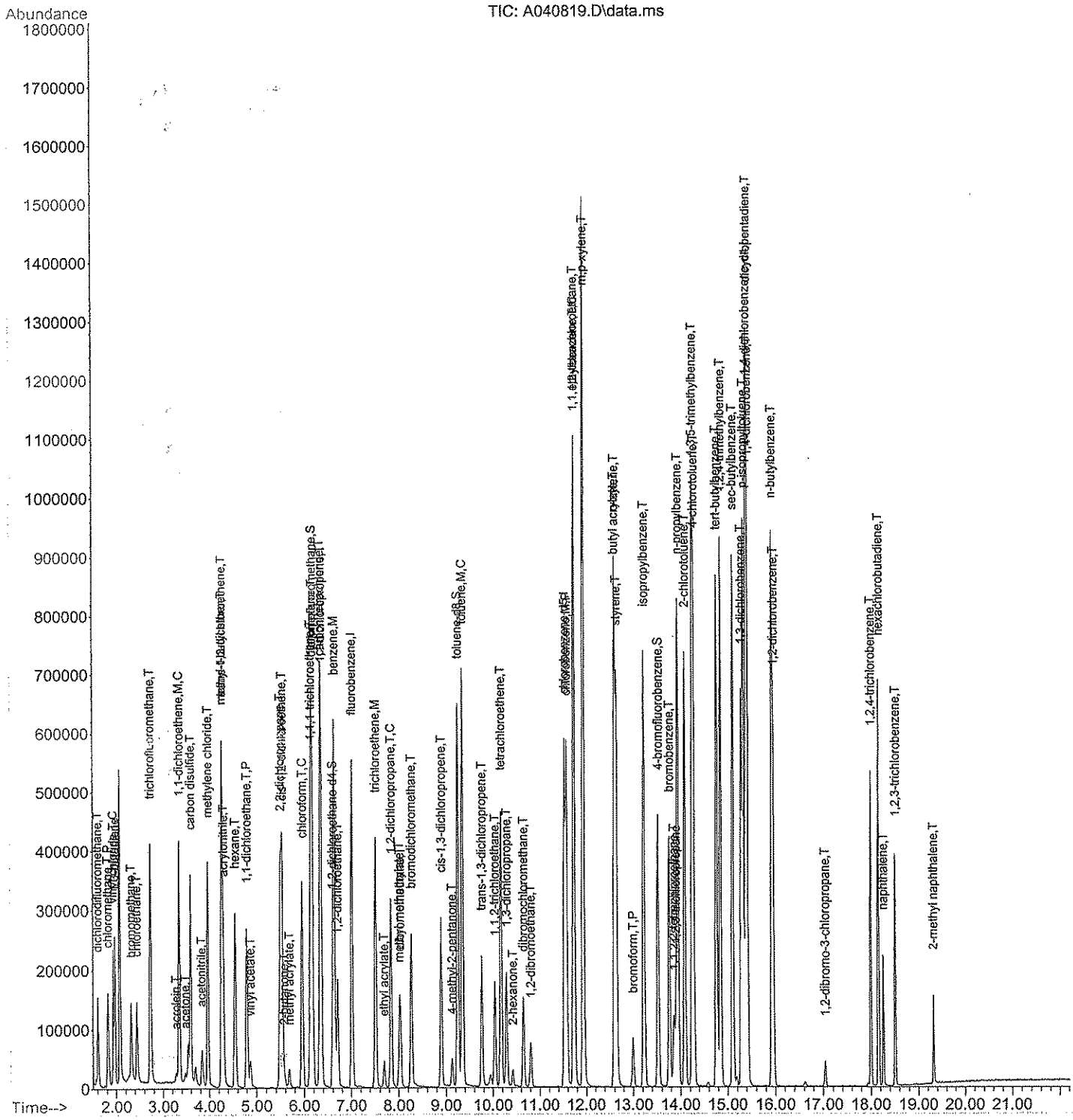
| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 39) bromodichloromethane | 8.265 | 83 | 221627 | 9.61 | ug/L | | 100 |
| 42) cis-1,3-dichloropropene | 8.897 | 75 | 182025 | 11.04 | ug/L | | 93 |
| 43) 4-methyl-2-pentanone | 9.128 | 43 | 51191 | 10.36 | ug/L | | 95 |
| 45) toluene | 9.347 | 92 | 382608 | 10.94 | ug/L | | 97 |
| 46) 1,1,2-trichloroethane | 10.040 | 83 | 58807 | 10.76 | ug/L | | 96 |
| 47) 1,3-dichloropropane | 10.290 | 76 | 129487 | 11.04 | ug/L | | 98 |
| 48) tetrachloroethene | 10.168 | 164 | 143169 | 11.20 | ug/L | | 97 |
| 49) trans-1,3-dichloropropene | 9.754 | 75 | 143013 | 11.44 | ug/L | | 95 |
| 50) 2-hexanone | 10.423 | 43 | 31180 | 10.47 | ug/L | | 90 |
| 51) dibromochloromethane | 10.648 | 129 | 110365 | 11.45 | ug/L | | 94 |
| 52) 1,2-dibromoethane | 10.807 | 107 | 71765 | 11.05 | ug/L | | 97 |
| 53) chlorobenzene | 11.573 | 112 | 387037 | 10.90 | ug/L | | 97 |
| 54) 1,1,1,2-tetrachloroethane | 11.731 | 131 | 150950 | 11.45 | ug/L | | 96 |
| 55) ethylbenzene | 11.737 | 91 | 814212 | 11.48 | ug/L | | 100 |
| 56) m,p-xylene | 11.938 | 106 | 584410 | 22.60 | ug/L | | 96 |
| 57) butyl acrylate | 12.594 | 55 | 148318 | 10.49 | ug/L | | 94 |
| 58) o-xylene | 12.601 | 106 | 277342 | 11.46 | ug/L | | 97 |
| 59) styrene | 12.643 | 104 | 439514 | 11.32 | ug/L | | 96 |
| 60) isopropylbenzene | 13.227 | 105 | 723099 | 12.07 | ug/L | | 99 |
| 61) bromobenzene | 13.762 | 156 | 172016 | 11.22 | ug/L | | 97 |
| 62) bromoform | 13.002 | 173 | 61142 | 11.39 | ug/L | | 97 |
| 64) 1,2,3-trichloropropane | 13.902 | 75 | 66734 | 11.26 | ug/L | | 98 |
| 65) n-propylbenzene | 13.938 | 91 | 984835 | 12.14 | ug/L | | 99 |
| 66) 2-chlorotoluene | 14.090 | 91 | 591760 | 11.81 | ug/L | | 100 |
| 67) 4-chlorotoluene | 14.279 | 91 | 705769 | 12.00 | ug/L | | 97 |
| 68) 1,3,5-trimethylbenzene | 14.249 | 105 | 709784 | 12.29 | ug/L | | 100 |
| 70) 1,1,2,2-tetrachloroethane | 13.859 | 83 | 69432 | 10.66 | ug/L | | 98 |
| 71) tert-butylbenzene | 14.759 | 119 | 570590 | 11.99 | ug/L | | 97 |
| 72) sec-butylbenzene | 15.100 | 105 | 839961 | 12.06 | ug/L | | 99 |
| 73) 1,2,4-trimethylbenzene | 14.851 | 105 | 729246 | 11.96 | ug/L | | 97 |
| 74) 1,3-dichlorobenzene | 15.282 | 146 | 348267 | 11.23 | ug/L | | 99 |
| 75) p-isopropyltoluene | 15.331 | 119 | 706218 | 12.14 | ug/L | | 100 |
| 76) dicyclopentadiene | 15.398 | 66 | 689523 | 10.86 | ug/L | | 98 |
| 77) 1,4-dichlorobenzene | 15.422 | 146 | 343666 | 11.14 | ug/L | | 97 |
| 78) 1,2-dichlorobenzene | 15.957 | 146 | 282324 | 11.17 | ug/L | | 100 |
| 79) n-butylbenzene | 15.921 | 91 | 650785 | 11.76 | ug/L | | 100 |
| 80) 1,2-dibromo-3-chloropr... | 17.040 | 75 | 12962 | 10.36 | ug/L | # | 89 |
| 81) 1,2,4-trichlorobenzene | 17.995 | 180 | 163701 | 10.47 | ug/L | | 96 |
| 82) hexachlorobutadiene | 18.159 | 225 | 153456 | 11.28 | ug/L | | 99 |
| 83) naphthalene | 18.256 | 128 | 161571 | 9.75 | ug/L | | 100 |
| 84) 1,2,3-trichlorobenzene | 18.512 | 180 | 120964 | 10.07 | ug/L | | 98 |
| 85) 2-methyl naphthalene | 19.320 | 142 | 63881 | 7.88 | ug/L | | 99 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040819.D
Acq On : 8 Apr 2008 5:59 pm
Sample : ,CCV,CCV_W25 10 ppb,1, Inst : VOA1
Misc : 8260_W25
Operator : CR
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 08 18:27:31 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



# SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040610.D
Acq On : 6 Apr 2008 8:33 pm
Sample : ,SAMP,ME0803C07-01A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 07 09:21:17 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 518044 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.533 | 117 | 365275 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 183239 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.176 | 113 | 140402 | 10.41 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 104.10% | | |
| 30) 1,2-dichloroethane-d4 | 6.607 | 65 | 145138 | 11.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.20% | | |
| 44) toluene-d8 | 9.253 | 98 | 503658 | 11.35 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 113.50% | | |
| 63) 4-bromofluorobenzene | 13.528 | 95 | 179418 | 9.60 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.00% | | |
| Target Compounds | | | | | | Qvalue |
| 13) methylene chloride | 3.968 | 84 | 16863 | 1.01 | ug/L # | 84 |
| 25) chloroform | 5.969 | 83 | 33110 | 1.07 | ug/L | 92 |

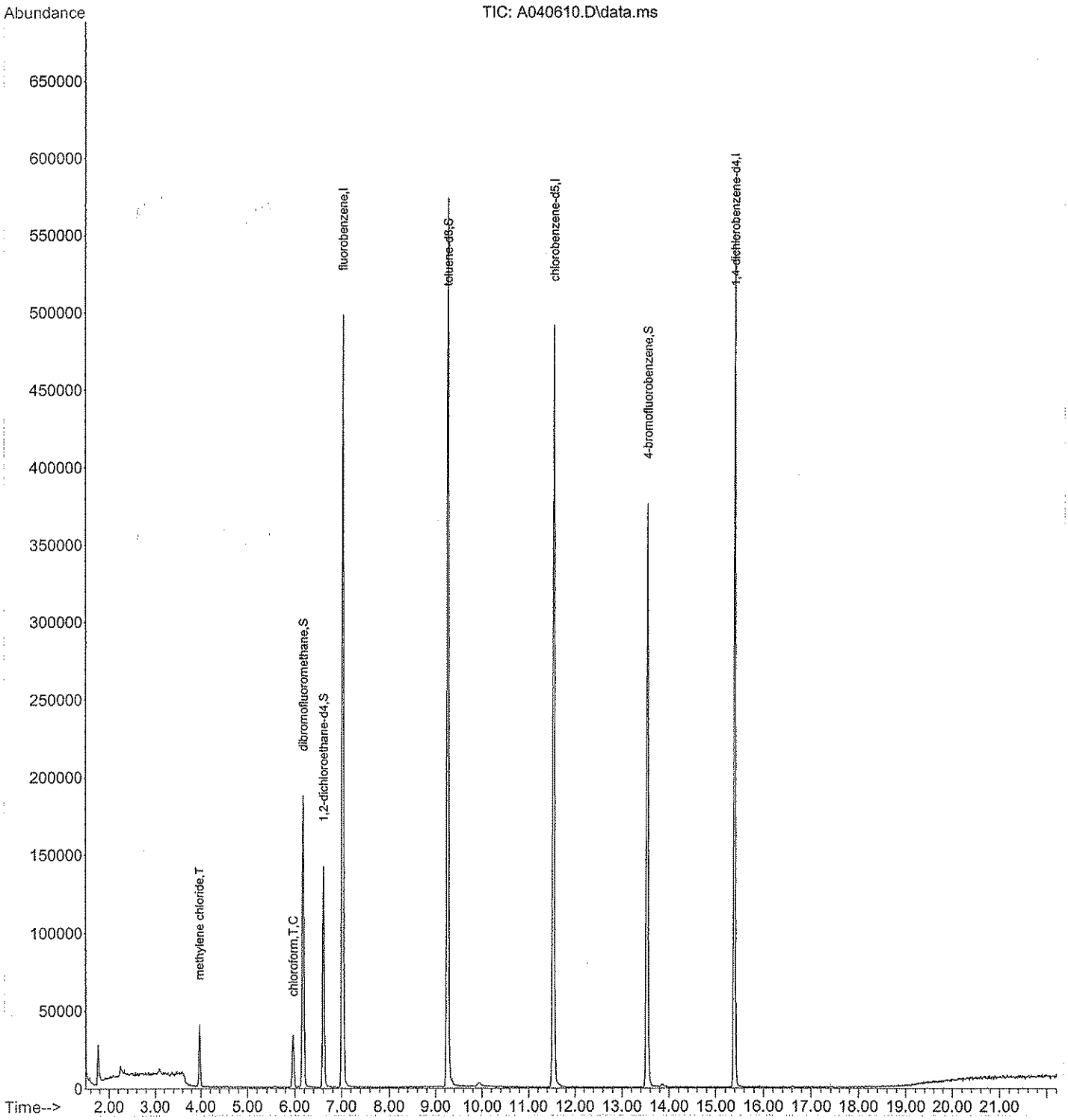
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040610.D
Acq On : 6 Apr 2008 8:33 pm
Sample : ,SAMP,ME0803C07-01A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 07 09:21:17 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M




A040610.D 25ML0403.M Mon Apr 07 09:21:18 2008 voa1 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040608\\
Data File : A040610.D
Acq On : 6 Apr 2008 8:33 pmm
Operator : jdbb
Sample : ,SAMP,ME0803C07-01A,1,,
Misc : 8260+_W255
ALS Vial : 9 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

Raw Reads [illegible] 4/08/08

No Library Search Compounds Detected
**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040610.D
Acq On : 6 Apr 2008 8:33 pm
Operator : jdb
Sample : ,SAMP,ME0803C07-01A,1,
Misc : 8260+_W25
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040610.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.755 | 38 | 44 | 57 | rBV | 25685 | 62102 | 4.18% | 0.856% |
| 2 | 3.968 | 400 | 408 | 421 | rVB2 | 39916 | 89565 | 6.03% | 1.235% |
| 3 | 5.963 | 725 | 736 | 748 | rVB2 | 33596 | 86110 | 5.80% | 1.187% |
| 4 | 6.176 | 760 | 771 | 787 | rBV2 | 187330 | 480334 | 32.36% | 6.623% |
| 5 | 6.601 | 828 | 841 | 857 | rBV | 142166 | 362170 | 24.40% | 4.994% |
| 6 | 7.015 | 896 | 909 | 931 | rBV | 497794 | 1254234 | 84.49% | 17.294% |
| 7 | 9.253 | 1262 | 1277 | 1300 | rBV | 573474 | 1484536 | 100.00% | 20.470% |
| 8 | 11.527 | 1639 | 1651 | 1681 | rBV | 491165 | 1284794 | 86.55% | 17.716% |
| 9 | 13.528 | 1968 | 1980 | 1998 | rBV | 375886 | 955760 | 64.38% | 13.179% |
| 10 | 15.389 | 2277 | 2286 | 2306 | rBV | 551998 | 1192759 | 80.35% | 16.446% |

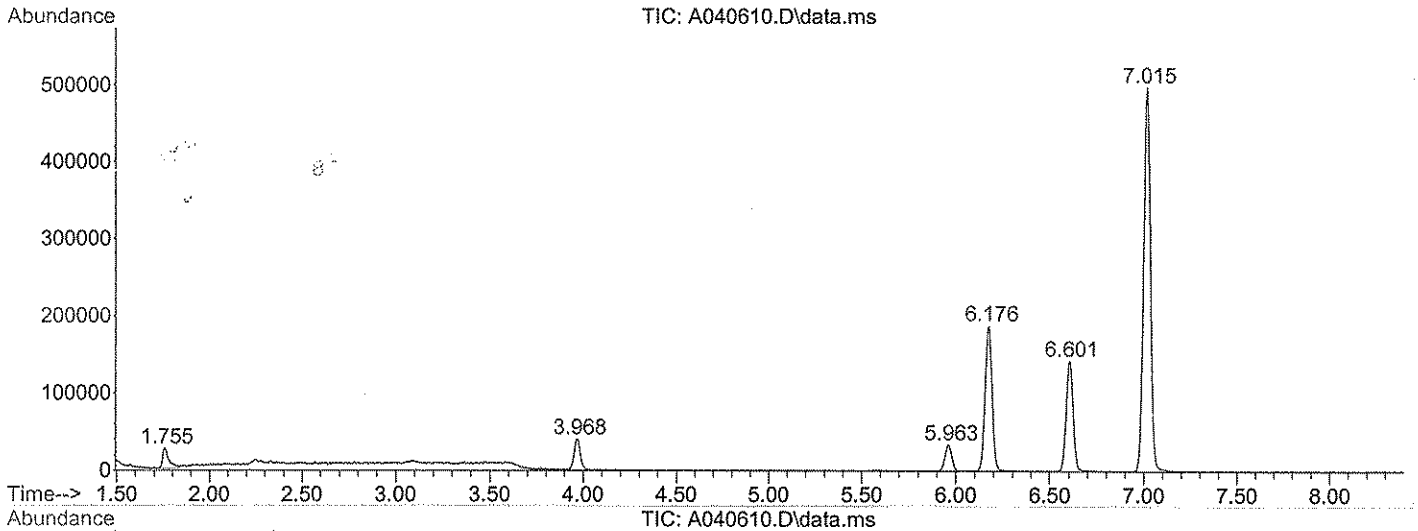
Sum of corrected areas: 7252364

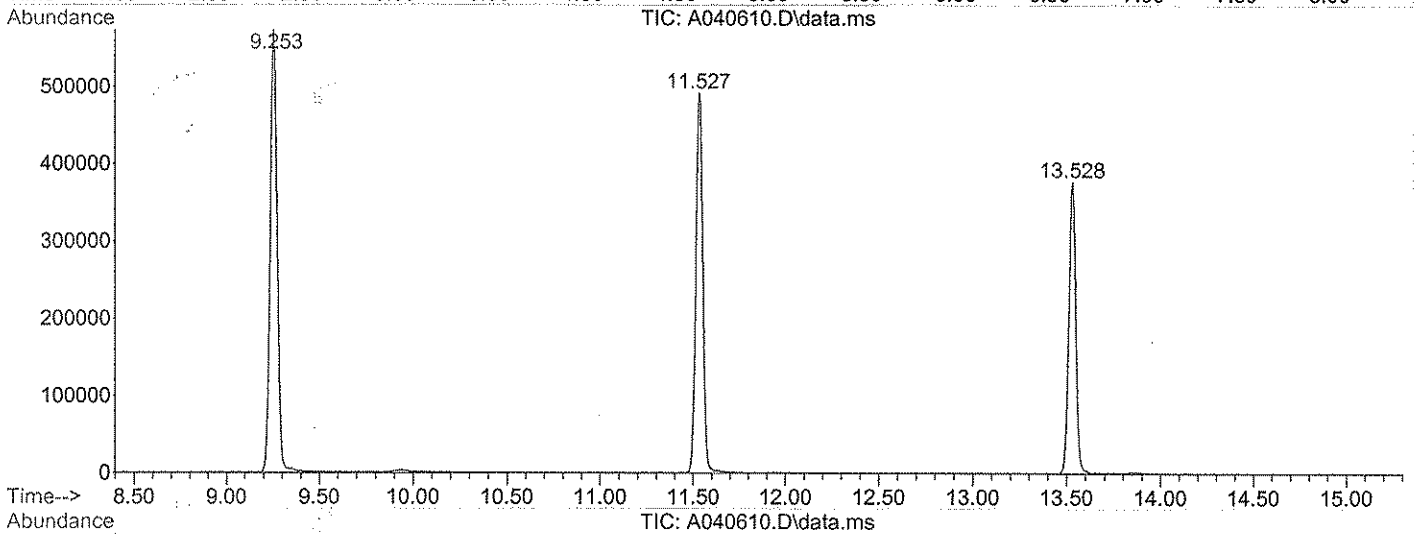
LSC Report - Integrated Chromatogram

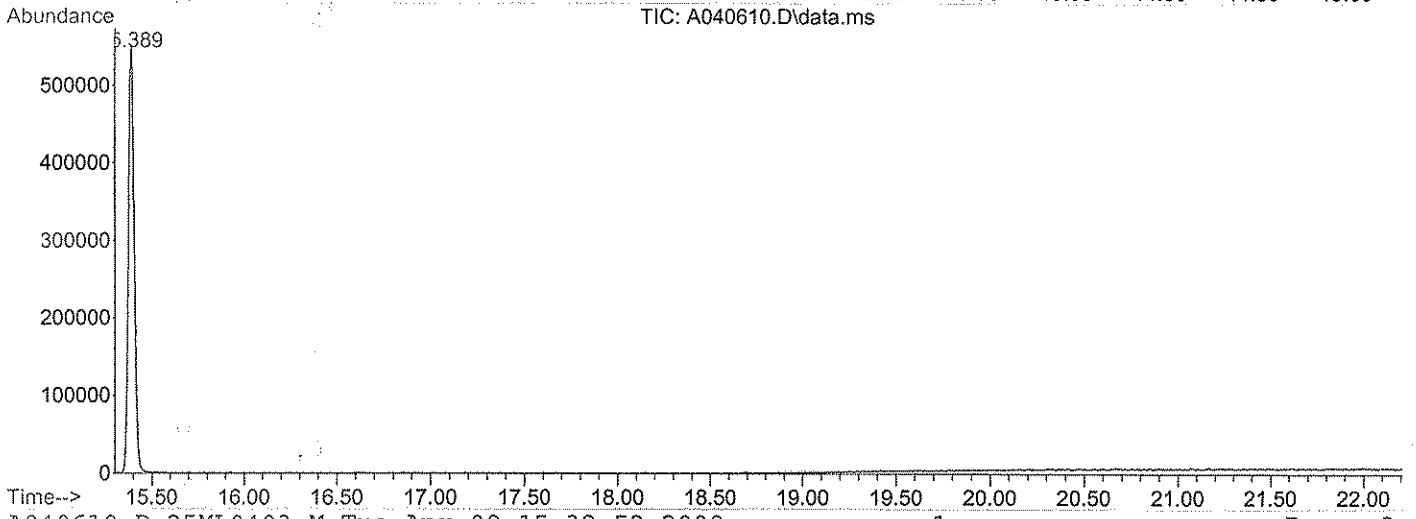
Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040610.D
Acq On : 6 Apr 2008 8:33 pm
Operator : jdb
Sample : ,SAMP,ME0803C07-01A,1,
Misc : 8260+_W25
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040610.D 25ML0403.M Tue Apr 08 15:32:52 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040611.D
Acq On : 6 Apr 2008 9:08 pm
Sample : ,SAMP,ME0803C07-02A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 07 09:21:21 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.010 | 96 | 513795 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 350455 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 177596 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.171 | 113 | 135058 | 10.09 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.90% | | | |
| 30) 1,2-dichloroethane-d4 | 6.596 | 65 | 145265 | 11.32 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 113.20% | | | |
| 44) toluene-d8 | 9.248 | 98 | 487056 | 11.44 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 114.40% | | | |
| 63) 4-bromofluorobenzene | 13.523 | 95 | 176579 | 9.85 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 98.50% | | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.443 | 64 | 32940 | 3.08 | ug/L | 94 |
| 20) vinyl acetate | 4.857 | 43 | 7745 | 0.91 | ug/L | 80 |
| 43) 4-methyl-2-pentanone | 9.248 | 43 | 3557 | 0.82 | ug/L # | 1 |

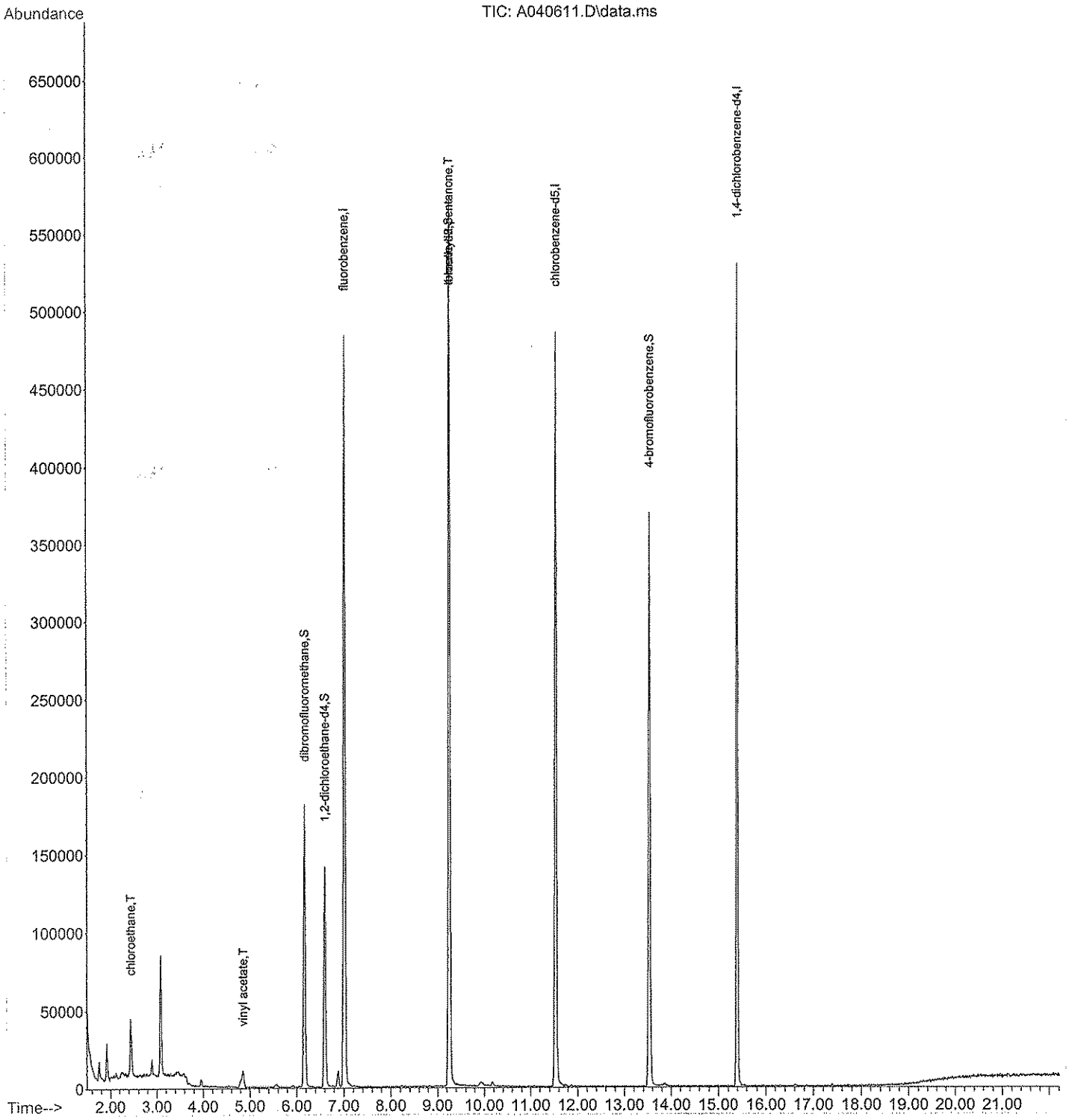
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040608\A040611.D
Acq On : 6 Apr 2008 9:08 pm
Sample : ,SAMP,ME0803C07-02A,1, Inst : VOA1
Misc : 8260+_W25
Operator : jdb
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 07 09:21:21 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Fri Apr 04 10:20:24 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040611.D
Acq On : 6 Apr 2008 9:08 pm
Operator : jdb
Sample : ,SAMP,ME0803C07-02A,1,
Misc : 8260+_W25
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|
| Ether | 3.087 | 1.4 | ug/L | 175362 | 1 | 7.010 | 1231750 | 10.0 |

Pam Reeves 4/10/08

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040611.D
Acq On : 6 Apr 2008 9:08 pm
Operator : jdb
Sample : ,SAMP,ME0803C07-02A,1,
Misc : 8260+_W25
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040611.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.920 | 64 | 71 | 81 | rVB | 24299 | 49357 | 3.40% | 0.688% |
| 2 | 2.437 | 148 | 156 | 169 | rBV | 37457 | 89447 | 6.16% | 1.246% |
| 3 | 3.087 | 255 | 263 | 271 | rBV2 | 77678 | 175362 | 12.08% | 2.443% |
| 4 | 6.164 | 759 | 769 | 788 | rBV | 181382 | 468507 | 32.27% | 6.526% |
| 5 | 6.596 | 831 | 840 | 855 | rBV | 141385 | 367173 | 25.29% | 5.115% |
| 6 | 7.010 | 897 | 908 | 925 | rBV | 483453 | 1231746 | 84.83% | 17.158% |
| 7 | 9.248 | 1261 | 1276 | 1300 | rBV | 572822 | 1452057 | 100.00% | 20.227% |
| 8 | 11.528 | 1639 | 1651 | 1681 | rBV | 486052 | 1242714 | 85.58% | 17.310% |
| 9 | 13.523 | 1967 | 1979 | 1998 | rBV2 | 369649 | 941950 | 64.87% | 13.121% |
| 10 | 15.390 | 2272 | 2286 | 2303 | rBV | 529782 | 1160648 | 79.93% | 16.167% |

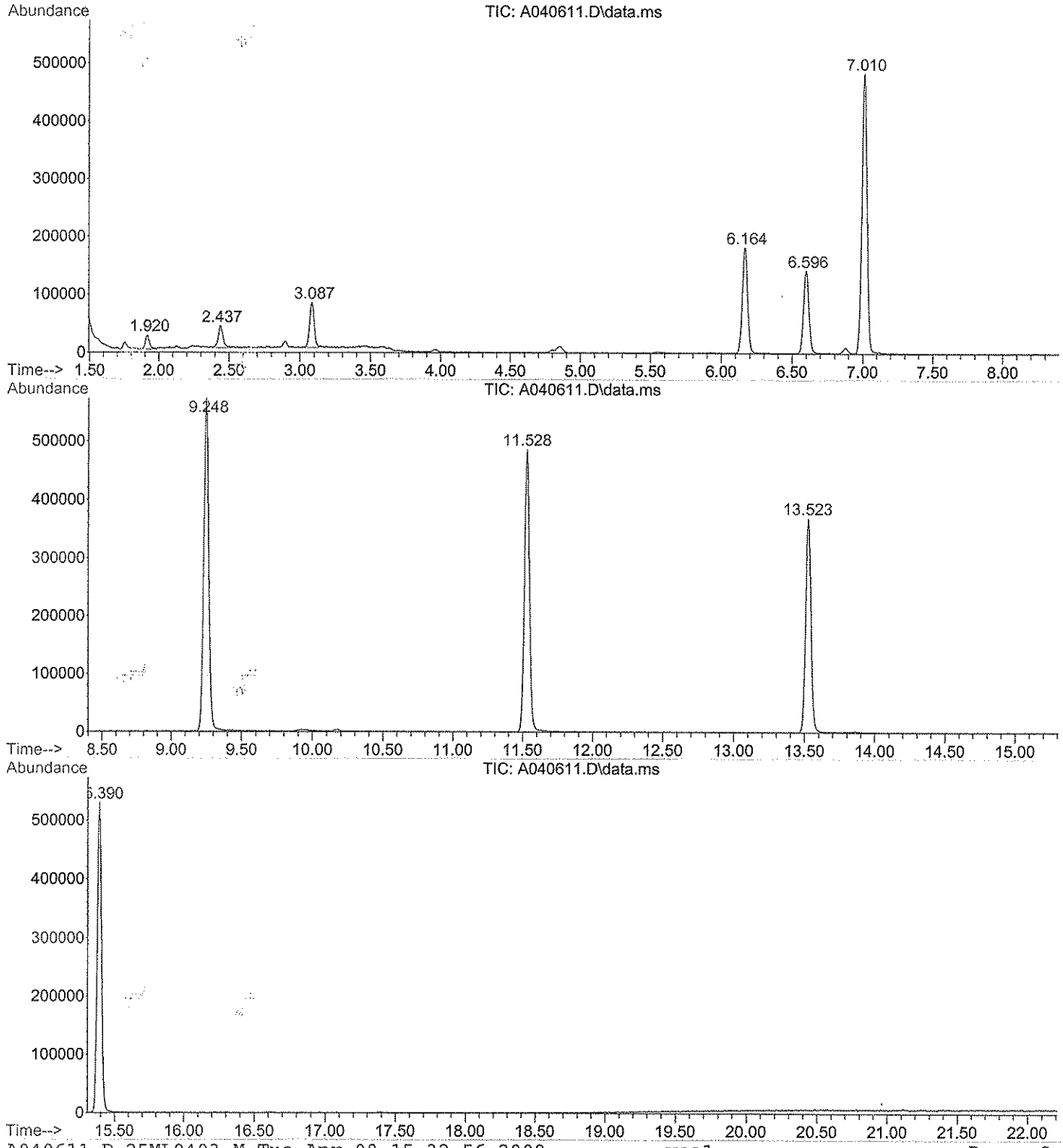
Sum of corrected areas: 7178961

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040611.D
Acq On : 6 Apr 2008 9:08 pm
Operator : jdb
Sample : ,SAMP,ME0803C07-02A,1,
Misc : 8260+_W25
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Data Path : C:\msdchem\1\DATA\A040608\
Data File : A040611.D
Acq On : 6 Apr 2008 9:08 pm
Operator : jdb
Sample : ,SAMP,ME0803C07-02A,1,
Misc : 8260+_W25
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

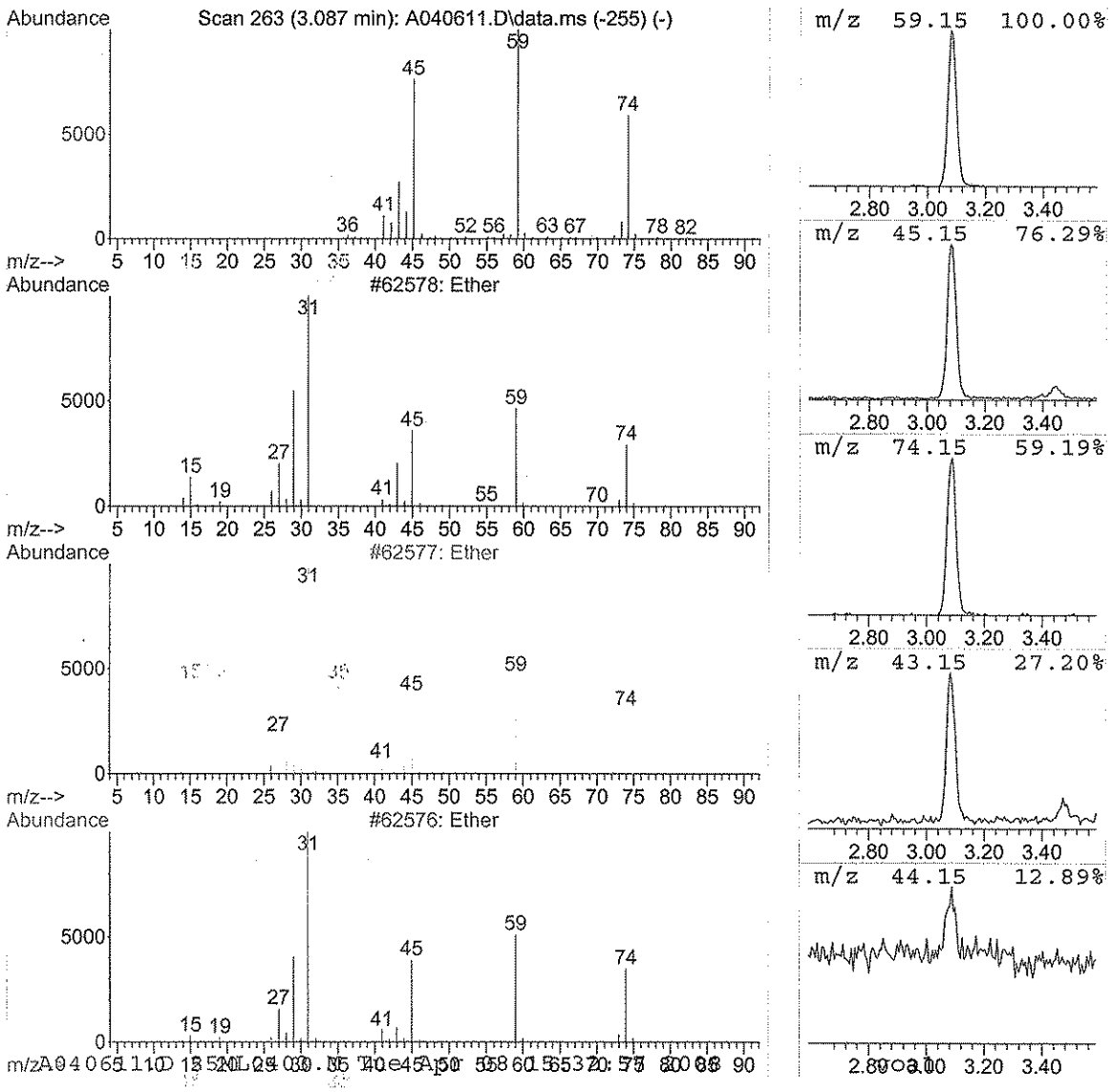
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 Ether Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.087 | 1.42 ug/L | 175362 | fluorobenzene | 7.010 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 2 | Ether | 74 | C4H10O | 000060-29-7 | 90 |
| 3 | Ether | 74 | C4H10O | 000060-29-7 | 86 |
| 4 | Ether | 74 | C4H10O | 000060-29-7 | 83 |
| 5 | Ethane, 1,2-diethoxy- | 118 | C6H14O2 | 000629-14-1 | 56 |



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040808.D
Acq On : 8 Apr 2008 11:34 am
Sample : ,samp,me0803c07-03a,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 08 12:04:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.012 | 96 | 638627 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.531 | 117 | 418134 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.392 | 152 | 208885 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.167 | 113 | 155353 | 9.34 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 93.40% | | |
| 30) 1,2-dichloroethane-d4 | 6.605 | 65 | 173067 | 10.85 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 108.50% | | |
| 44) toluene-d8 | 9.250 | 98 | 581959 | 11.46 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 114.60% | | |
| 63) 4-bromofluorobenzene | 13.525 | 95 | 209907 | 9.81 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 98.10% | | |
| Target Compounds | | | | | | Qvalue |
| 7) chloroethane | 2.445 | 64 | 111330 | 8.39 | ug/L | 96 |
| 11) acetone | 3.479 | 43 | 5121 | 2.24 | ug/L | 90 |
| 31) benzene | 6.635 | 78 | 10019817 | 140.09 | ug/L E | 97 |
| 33) 1,2-dichloroethane | 6.629 | 62 | 135892 | 6.14 | ug/L | 88 |
| 43) 4-methyl-2-pentanone | 9.244 | 43 | 4313 | 0.84 | ug/L # | 1 |

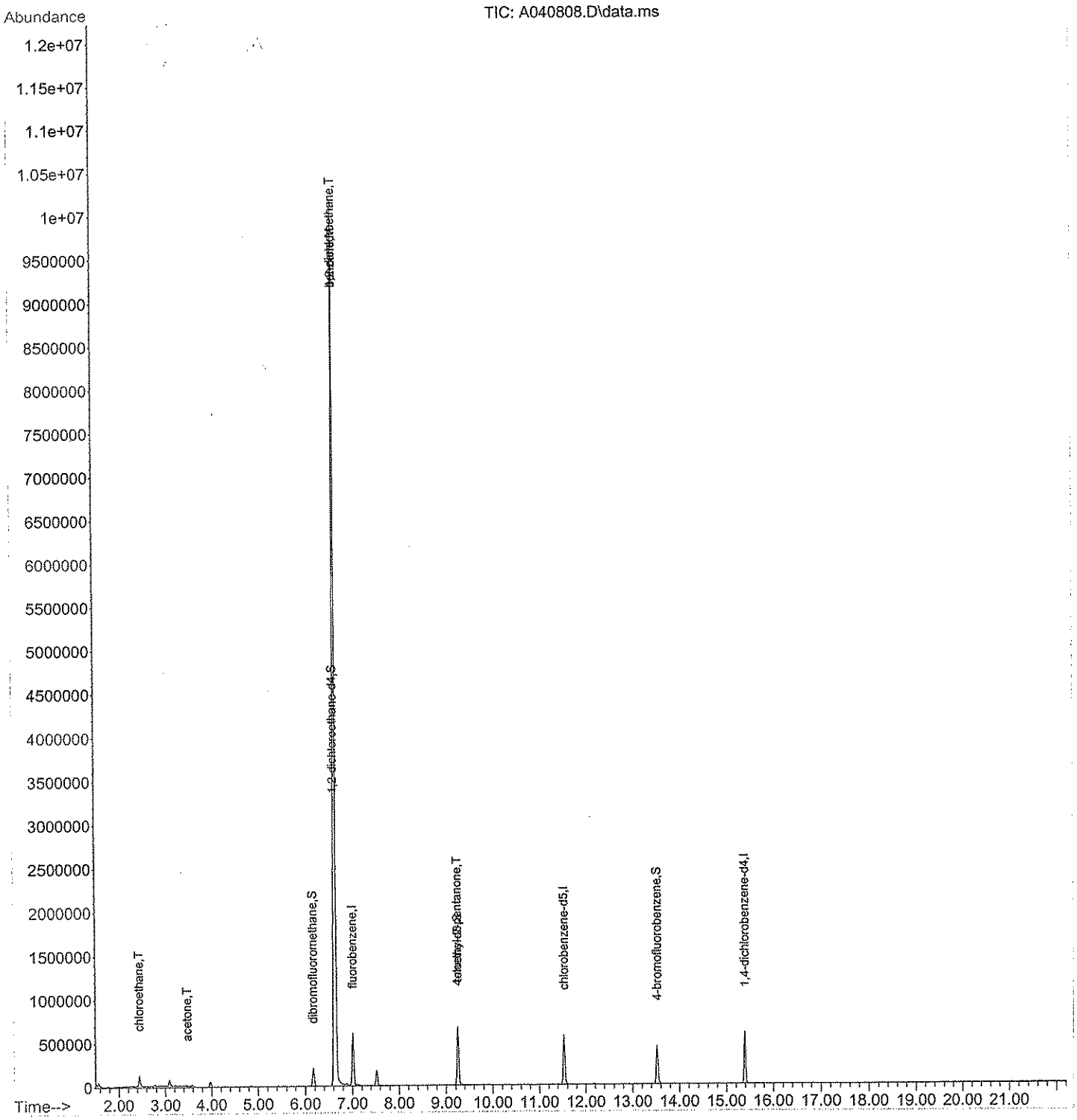
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040808.D
Acq On : 8 Apr 2008 11:34 am
Sample : ,samp,me0803c07-03a,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 08 12:04:56 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040808\\
Data File : A040808.D
Acq On : 8 Apr 2008 11:34 amm
Operator : BRR
Sample : ,samp,me0803c07-03a,1,,
Misc : 8260+_W255
ALS Vial : 9 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

Raw Results on 4/08/08

No Library Search Compounds Detected

**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040808.D
Acq On : 8 Apr 2008 11:34 am
Operator : BR
Sample : ,samp,me0803c07-03a,1,
Misc : 8260+_W25
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040808.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.629 | 825 | 845 | 880 | rBV | 10191253 | 27028245 | 100.00% | 78.954% |
| 2 | 7.012 | 898 | 908 | 920 | rBV | 597091 | 1518819 | 5.62% | 4.437% |
| 3 | 9.250 | 1263 | 1276 | 1289 | rBV | 667024 | 1716501 | 6.35% | 5.014% |
| 4 | 11.531 | 1640 | 1651 | 1681 | rBV | 567513 | 1479123 | 5.47% | 4.321% |
| 5 | 13.525 | 1967 | 1979 | 1999 | rBV | 442678 | 1128301 | 4.17% | 3.296% |
| 6 | 15.386 | 2272 | 2285 | 2300 | rBV | 588405 | 1361917 | 5.04% | 3.978% |

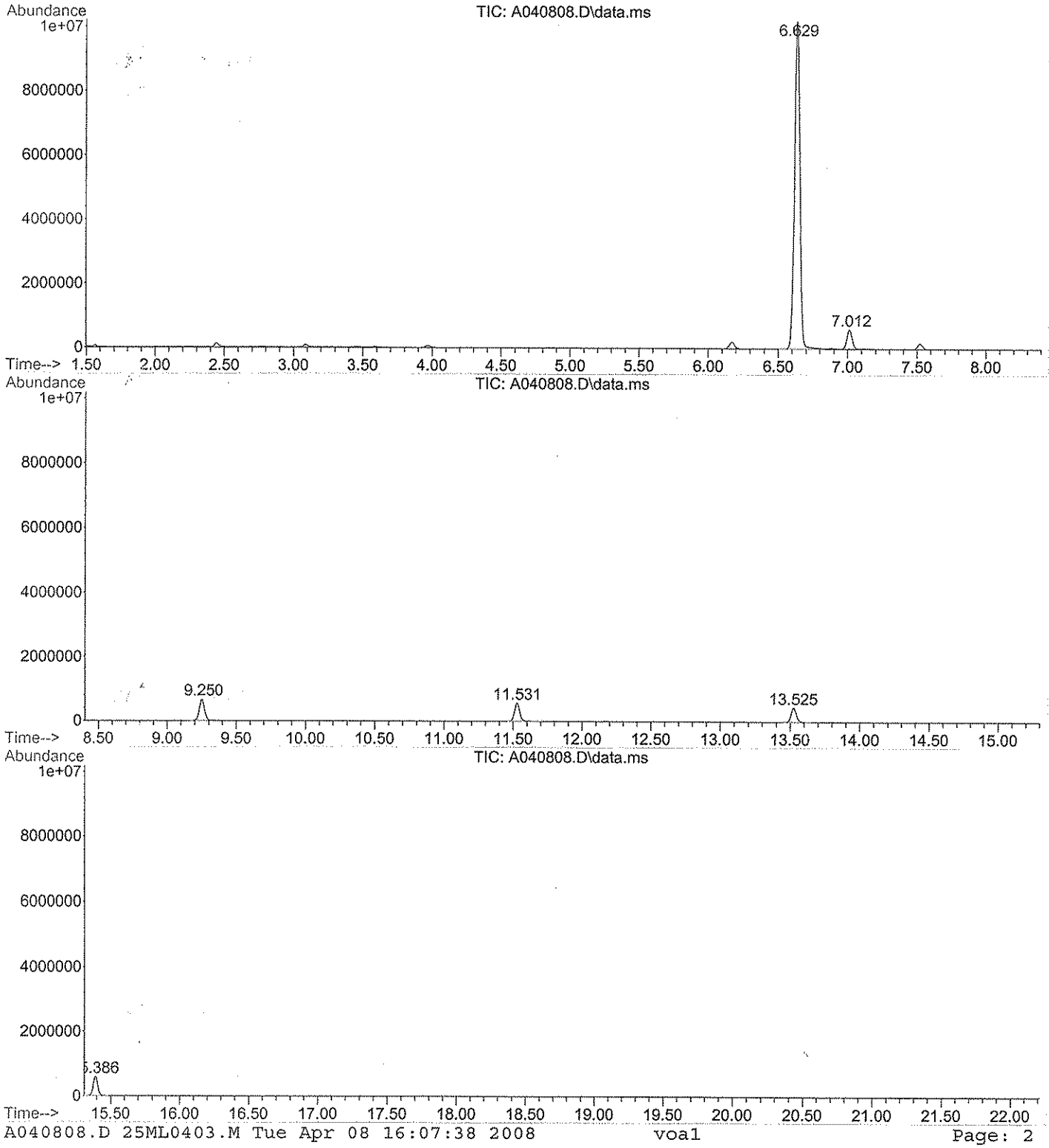
Sum of corrected areas: 34232906

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040808.D
Acq On : 8 Apr 2008 11:34 am
Operator : BR
Sample : ,samp,me0803c07-03a,1,
Misc : 8260+_W25
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040811.D
Acq On : 8 Apr 2008 1:19 pm
Sample : ,samp,me0803c07-03a,20,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 08 14:30:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) fluorobenzene | 7.016 | 96 | 546254 | 10.00 | ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 378347 | 10.00 | ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.390 | 152 | 186346 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 26) dibromofluoromethane | 6.177 | 113 | 144307 | 10.14 | ug/L | 0.01 |
| Spiked Amount 10.000 | | | Recovery = | 101.40% | | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 153023 | 11.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 112.20% | | |
| 44) toluene-d8 | 9.254 | 98 | 521134 | 11.34 | ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 113.40% | | |
| 63) 4-bromofluorobenzene | 13.529 | 95 | 187358 | 9.68 | ug/L | 0.01 |
| Spiked Amount 10.000 | | | Recovery = | 96.80% | | |
| Target Compounds | | | | | | Qvalue |
| 31) benzene | 6.633 | 78 | 408409 | 6.68 | ug/L | 98 |
| 43) 4-methyl-2-pentanone | 9.254 | 43 | 3795 | 0.81 | ug/L # | 1 |

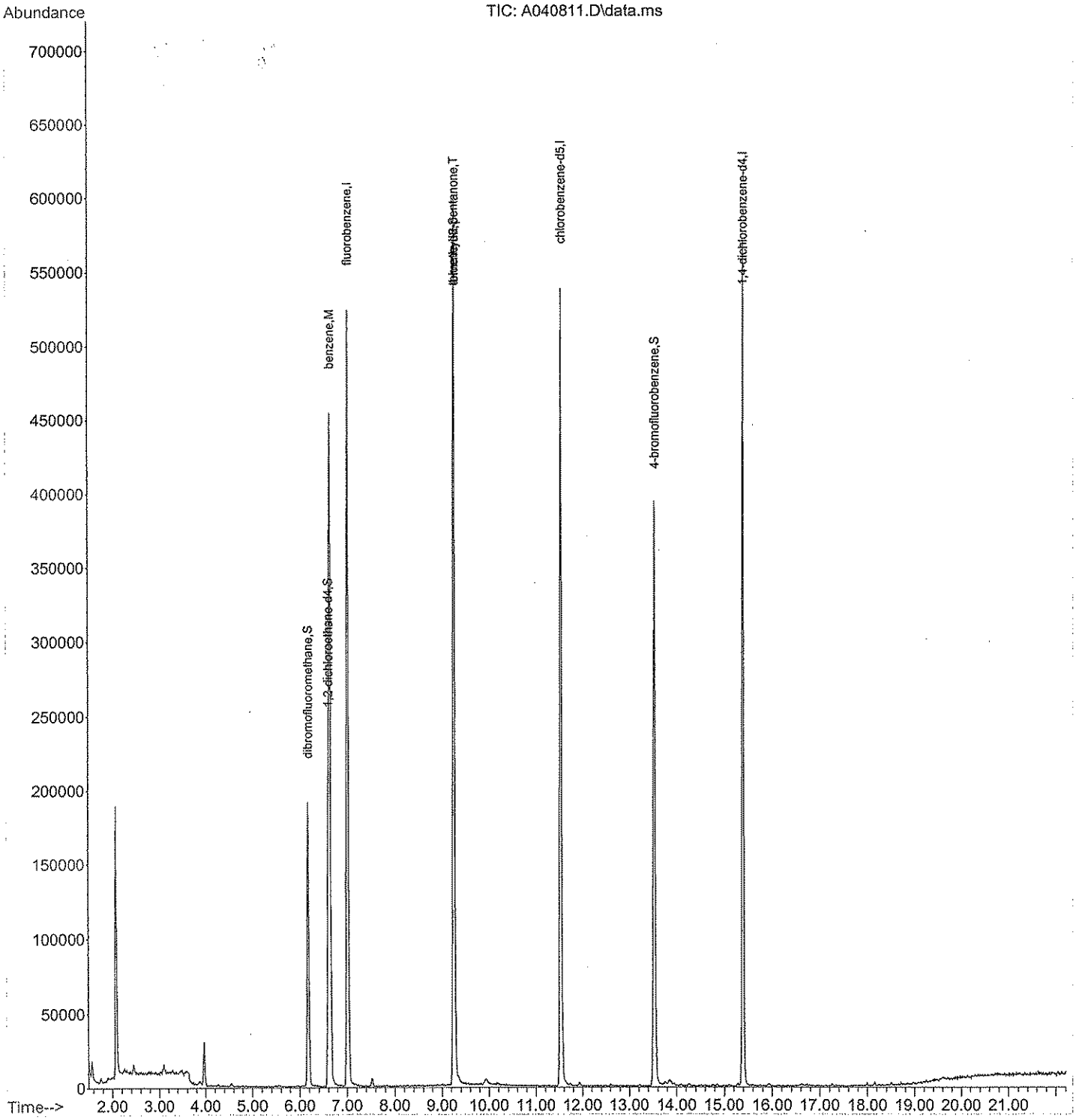
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/18/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040811.D
Acq On : 8 Apr 2008 1:19 pm
Sample : ,samp,me0803c07-03a,20,RA, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 08 14:30:43 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040822.D
Acq On : 8 Apr 2008 7:55 pm
Sample : ,samp,me0803c07-04a,1,RA, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 09 06:33:41 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 560605 | 10.00 ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 379036 | 10.00 ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 183612 | 10.00 ug/L | 0.00 |
| System Monitoring Compounds | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 142433 | 9.76 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 97.60% | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 154751 | 11.05 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 110.50% | |
| 44) toluene-d8 | 9.247 | 98 | 520287 | 11.30 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 113.00% | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 184081 | 9.49 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 94.90% | |
| Target Compounds | | | | | Qvalue |
| 31) benzene | 6.632 | 78 | 2484167 | 39.56 ug/L | 98 |
| 33) 1,2-dichloroethane | 6.632 | 62 | 32127 | 1.65 ug/L | 96 |
| 43) 4-methyl-2-pentanone | 9.253 | 43 | 3766 | 0.81 ug/L # | 1 |

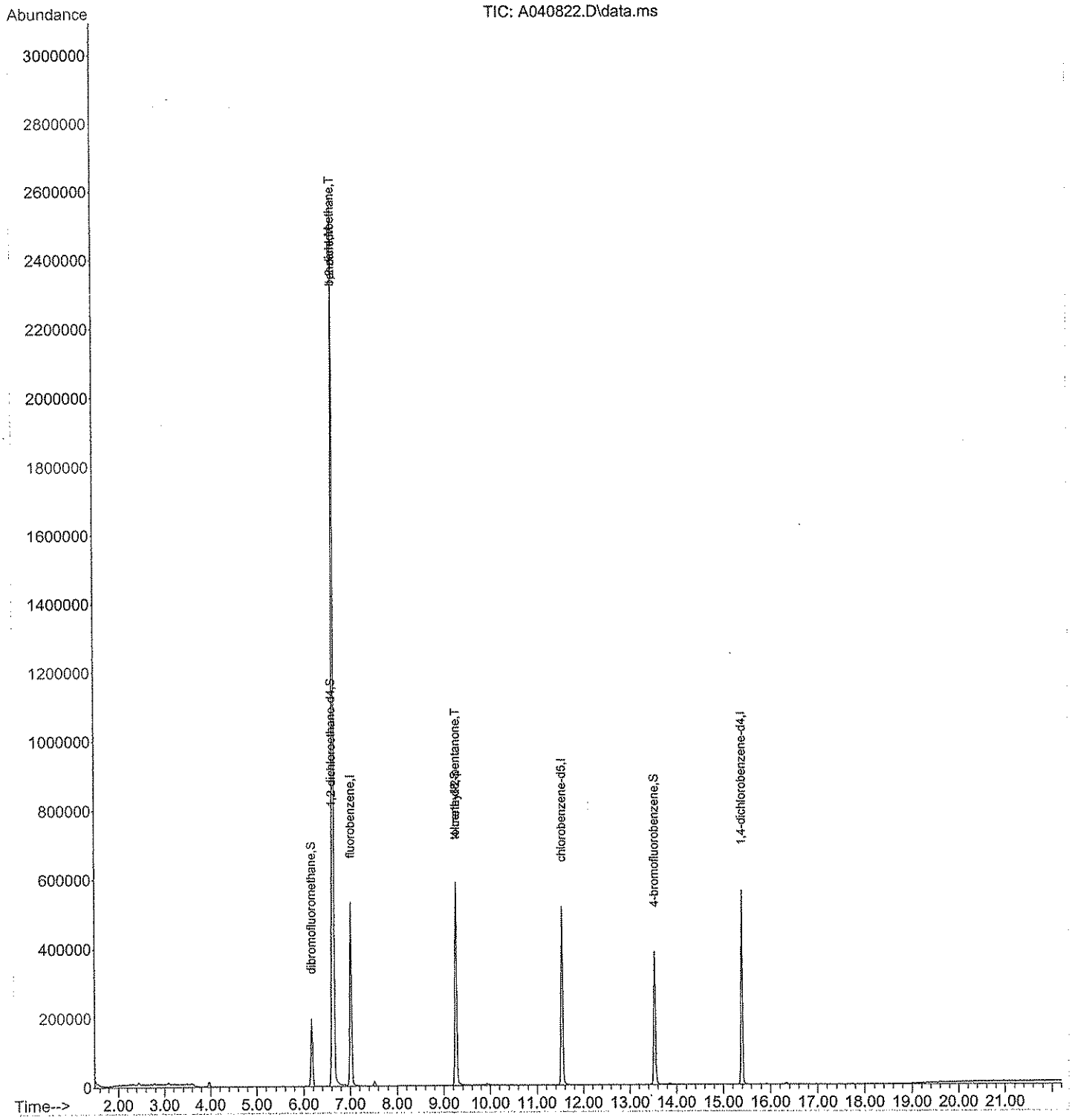
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/9/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040822.D
Acq On : 8 Apr 2008 7:55 pm
Sample : ,samp,me0803c07-04a,1,RA, Inst : VOA1
Misc : 8260+_W25
Operator : CR
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 09 06:33:41 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040808\\
Data File : A040822.D
Acq On : 8 Apr 2008 7:55 pmm
Operator : CRR
Sample : ,samp,me0803c07-04a,1,RA,,
Misc : 8260+_W255
ALS Vial : 23 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

Raw Results on 4/08/08

No Library Search Compounds Detected
**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040822.D
Acq On : 8 Apr 2008 7:55 pm
Operator : CR
Sample : ,samp,me0803c07-04a,1,RA,
Misc : 8260+_W25
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040822.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.170 | 760 | 770 | 787 | rBV | 195138 | 495285 | 7.15% | 3.560% |
| 2 | 6.632 | 830 | 846 | 881 | rBV | 2577407 | 6922250 | 100.00% | 49.760% |
| 3 | 7.015 | 898 | 909 | 925 | rBV | 528168 | 1356523 | 19.60% | 9.751% |
| 4 | 9.253 | 1264 | 1277 | 1300 | rBV | 586398 | 1555412 | 22.47% | 11.181% |
| 5 | 11.528 | 1640 | 1651 | 1684 | rBV | 514402 | 1348211 | 19.48% | 9.691% |
| 6 | 13.528 | 1969 | 1980 | 1999 | rBV | 384324 | 1005763 | 14.53% | 7.230% |
| 7 | 15.389 | 2274 | 2286 | 2306 | rBV | 560499 | 1227855 | 17.74% | 8.826% |

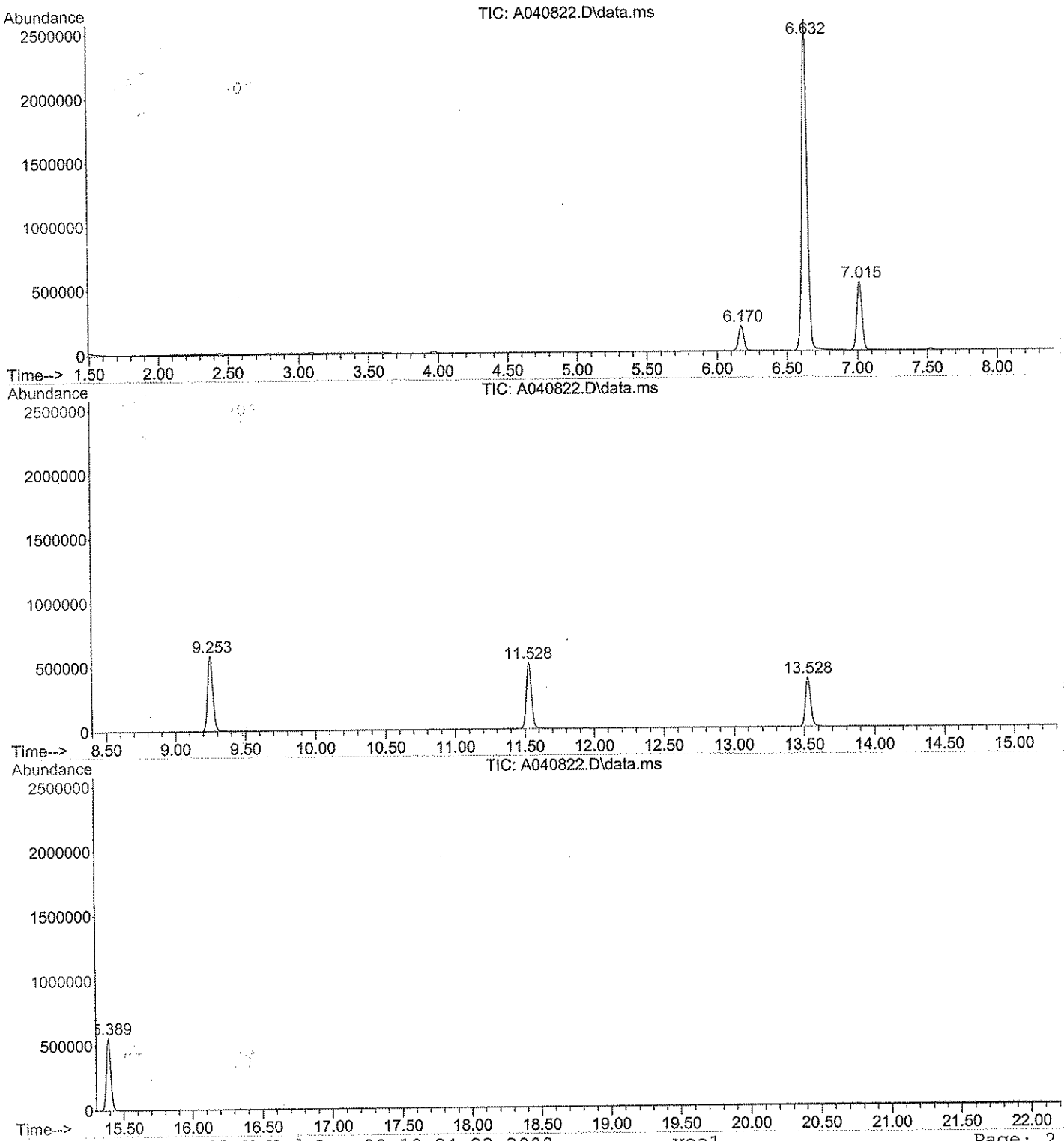
Sum of corrected areas: 13911299

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040822.D
Acq On : 8 Apr 2008 7:55 pm
Operator : CR
Sample : ,samp,me0803c07-04a,1,RA,
Misc : 8260+_W25
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040822.D 25ML0403.M Wed Apr 09 10:24:22 2008 voa1 Page: 2

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040810.D
Acq On : 8 Apr 2008 12:44 pm
Sample : ,samp,me0803c07-05a,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 08 14:30:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) fluorobenzene | 7.015 | 96 | 552273 | 10.00 ug/L | 0.00 |
| 41) chlorobenzene-d5 | 11.528 | 117 | 390749 | 10.00 ug/L | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.389 | 152 | 193073 | 10.00 ug/L | 0.00 |
| System Monitoring Compounds | | | | | |
| 26) dibromofluoromethane | 6.170 | 113 | 149752 | 10.41 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 104.10% | |
| 30) 1,2-dichloroethane-d4 | 6.602 | 65 | 156989 | 11.38 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 113.80% | |
| 44) toluene-d8 | 9.253 | 98 | 530561 | 11.18 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 111.80% | |
| 63) 4-bromofluorobenzene | 13.522 | 95 | 191883 | 9.60 ug/L | 0.00 |
| Spiked Amount 10.000 | | | Recovery = | 96.00% | |
| Target Compounds | | | | | Qvalue |
| 11) acetone | 3.482 | 43 | 8504 | 4.30 ug/L | 92 |
| 43) 4-methyl-2-pentanone | 9.253 | 43 | 4376 | 0.91 ug/L # | 1 |

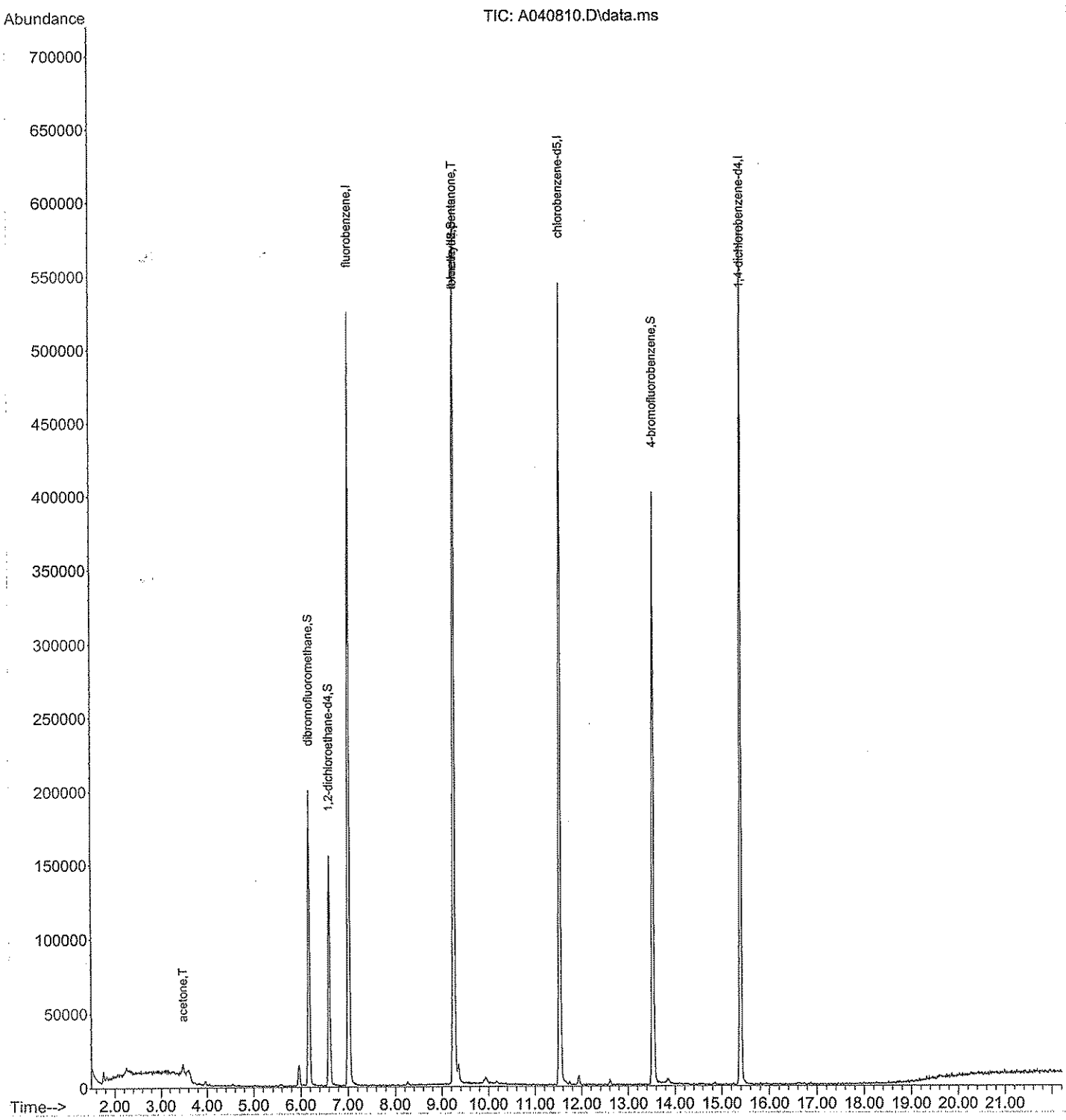
(#) = qualifier out of range (m) = manual integration (+) = signals summed

4/8/08

Quantitation Report (Not Reviewed)

Data File: C:\msdchem\1\DATA\A040808\A040810.D
Acq On : 8 Apr 2008 12:44 pm
Sample : ,samp,me0803c07-05a,1, Inst : VOA1
Misc : 8260+_W25
Operator : BR
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 08 14:30:40 2008
Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounds
QLast Update : Tue Apr 08 10:25:16 2008
Response via : Initial Calibration
DataAcq Meth:VOA-AQ.M



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\A040808\\
Data File : A040810.D
Acq On : 8 Apr 2008 12:44 pmm
Operator : BRR
Sample : ,samp,me0803c07-05a,1,,
Misc : 8260+_W255
ALS Vial : 11 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0403.MM
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard-- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

Raw Results 4/10/08

No Library Search Compounds Detected

**********

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040810.D
Acq On : 8 Apr 2008 12:44 pm
Operator : BR
Sample : ,samp,me0803c07-05a,1,
Misc : 8260+_W25
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0403.M
Title : 25 mlW ICAL 04/03/08 - MISC Compounds

Signal : TIC: A040810.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.170 | 757 | 770 | 783 | rBV | 199526 | 516287 | 32.91% | 6.862% |
| 2 | 6.602 | 831 | 841 | 855 | rBV | 154967 | 395272 | 25.19% | 5.254% |
| 3 | 7.015 | 897 | 909 | 924 | rBV | 524671 | 1337280 | 85.24% | 17.775% |
| 4 | 9.253 | 1265 | 1277 | 1288 | rBV | 598403 | 1568881 | 100.00% | 20.853% |
| 5 | 11.528 | 1640 | 1651 | 1667 | rBV | 543670 | 1376363 | 87.73% | 18.294% |
| 6 | 13.522 | 1963 | 1979 | 1997 | rBV | 401051 | 1045527 | 66.64% | 13.897% |
| 7 | 15.389 | 2273 | 2286 | 2309 | rBV | 583403 | 1283900 | 81.84% | 17.065% |

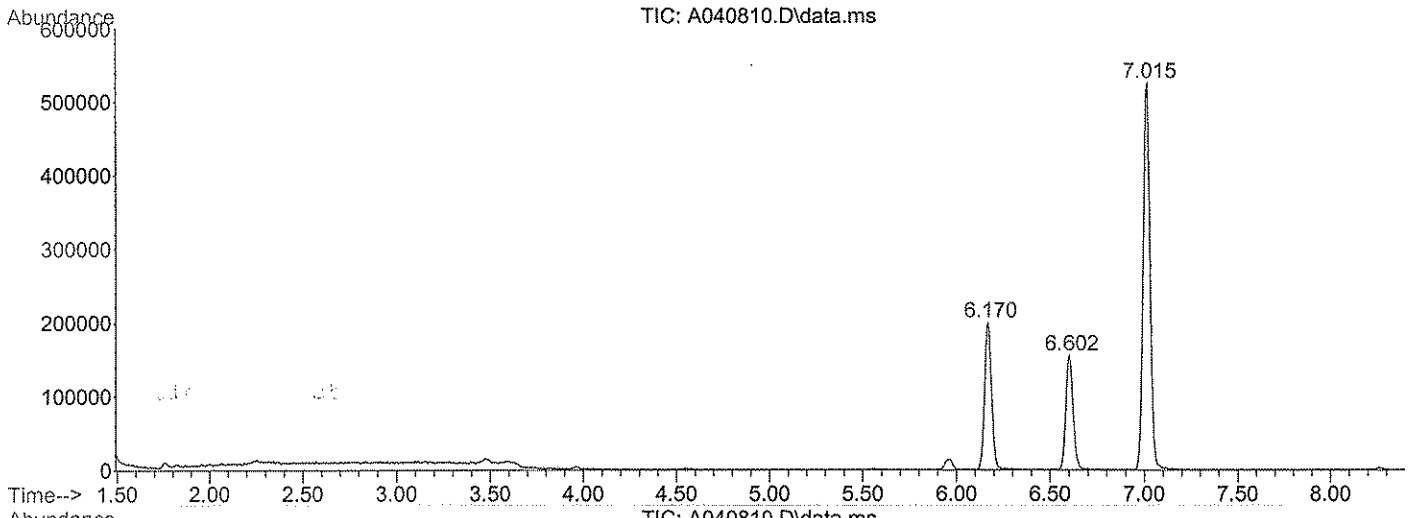
Sum of corrected areas: 7523510

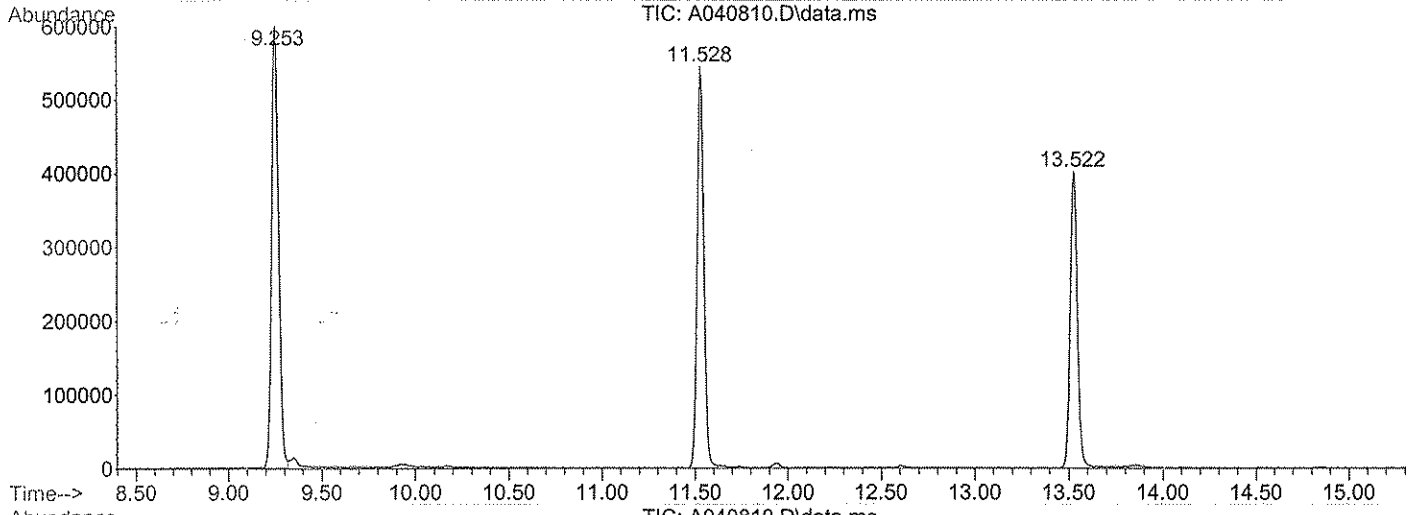
LSC Report - Integrated Chromatogram

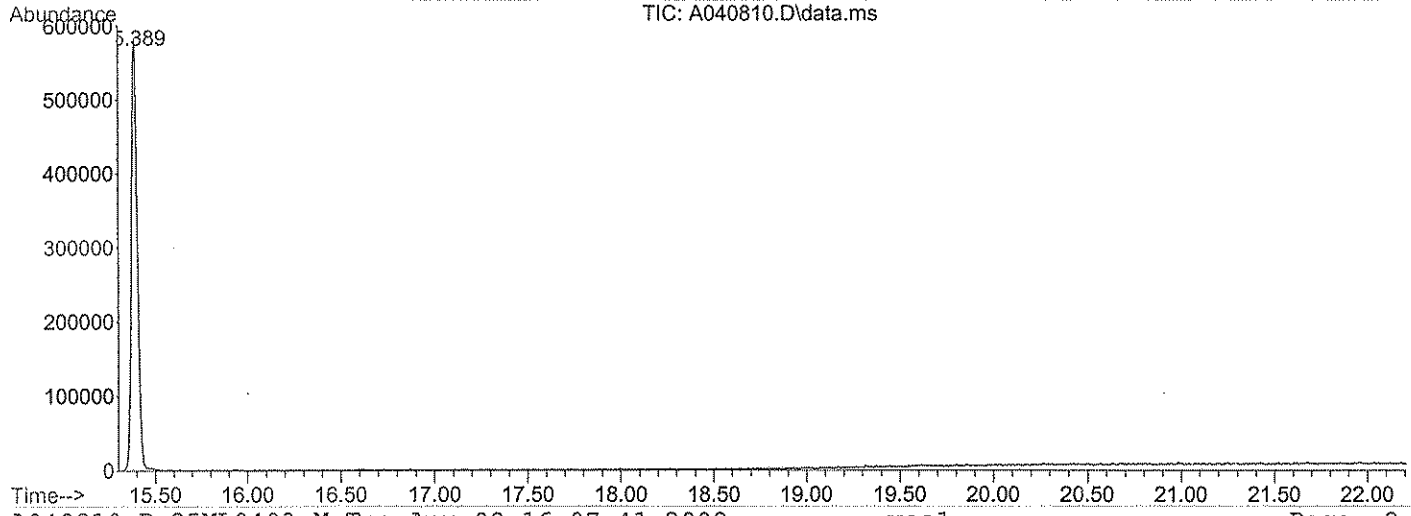
Data Path : C:\msdchem\1\DATA\A040808\
Data File : A040810.D
Acq On : 8 Apr 2008 12:44 pm
Operator : BR
Sample : ,samp,me0803c07-05a,1,
Misc : 8260+_W25
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0403.M
Quant Title : 25 mlW ICAL 04/03/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P




A040810.D 25ML0403.M Tue Apr 08 16:07:41 2008 voa1 Page: 2

# INJECTION LOG(S)

# Injection Log

Directory: h:\a040608

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | a040601.d | 1. | ,TUNE,BFB TUNE,1, | BFB | 6 Apr 08 13:46 |
| 2 | 2 | a040602.d | 1. | ,CCV,CCV_W25 10 ppb,1, | 8260_W25 | 6 Apr 08 15:14 |
| 3 | 2 | a040603.d | 1. | ,CCV,CCV_W25 10 ppb,1, | 8260_W25 | 6 Apr 08 15:54 |
| 4 | 3 | a040604.d | 1. | ,MBLK,MB_W25 4/6,1, | 8260+_W25 | 6 Apr 08 16:41 |
| 5 | 4 | a040605.d | 1. | ,LCS,LCS_W25 10 PPB,1, | 8260+_W25 | 6 Apr 08 17:16 |
| 6 | 5 | a040606.d | 1. | ,SAMP,ME0803B85-16A,1, | 8260+_W25 | 6 Apr 08 18:13 |
| 7 | 6 | a040607.d | 1. | ,SAMP,ME0803B85-17A,1, | 8260+_W25 | 6 Apr 08 18:48 |
| 8 | 7 | a040608.d | 1. | ,SAMP,ME0803B85-18A,1, | 8260+_W25 | 6 Apr 08 19:23 |
| 9 | 8 | a040609.d | 1. | ,SAMP,ME0803B85-19A,1, | 8260+_W25 | 6 Apr 08 19:58 |
| 10 | 9 | a040610.d | 1. | ,SAMP,ME0803C07-01A,1, | 8260+_W25 | 6 Apr 08 20:33 |
| 11 | 10 | a040611.d | 1. | ,SAMP,ME0803C07-02A,1, | 8260+_W25 | 6 Apr 08 21:08 |
| 12 | | a040612.d | 1. | | | |

# Injection Log

Directory: h:\a040808

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | a040801.d | 1. | ,TUNE,BFB TUNE,1, | BFB | 8 Apr 08 06:51 |
| 2 | 2 | a040802.d | 1. | ,CCV,CCV_W25 10 ppb,1, | 8260_W25 | 8 Apr 08 07:21 |
| 3 | 3 | a040803.d | 1. | ,MBLK,MB_W25 4/8,1, | 8260+_W25 | 8 Apr 08 08:11 |
| 4 | 4 | a040804.d | 1. | ,LCS,LCS_W25 10 PPB,1, | 8260+_W25 | 8 Apr 08 08:46 |
| 5 | 6 | a040805.d | 1. | ,samp,me0803b85-09a,25,ra, | 8260+_W25 | 8 Apr 08 09:30 |
| 6 | 7 | a040806.d | 1. | ,samp,me0803b85-11a,1,ra, | 8260+_W25 | 8 Apr 08 10:05 |
| 7 | 8 | a040807.d | 1. | ,samp,me0803b85-15a,5,ra, | 8260+_W25 | 8 Apr 08 10:59 |
| 8 | 9 | a040808.d | 1. | ,samp,me0803c07-03a,1, | 8260+_W25 | 8 Apr 08 11:34 |
| 9 | 10 | a040809.d | 1. | ,samp,me0803c07-04a,1, | 8260+_W25 | 8 Apr 08 12:09 |
| 10 | 11 | a040810.d | 1. | ,samp,me0803c07-05a,1, | 8260+_W25 | 8 Apr 08 12:44 |
| 11 | 12 | a040811.d | 1. | ,samp,me0803c07-03a,20,RA, | 8260+_W25 | 8 Apr 08 13:19 |
| 12 | 13 | a040812.d | 1. | ,samp,me0803A73-01A,1,RA, | 8260_W25 | 8 Apr 08 13:54 |
| 13 | 14 | a040813.d | 1. | ,samp,me0803b85-11a,1,ra, | 8260+_W25 | 8 Apr 08 14:30 |
| 14 | 15 | a040814.d | 1. | ,samp,me0803c07-04a,1,RA,1, | 8260+_W25 | 8 Apr 08 15:16 |
| 15 | 16 | a040815.d | 1. | ,MS,me0803c07-02AMS,1, | 8260+_W25 | 8 Apr 08 15:51 |
| 16 | 17 | a040816.d | 1. | ,MSD,me0803c07-02AMSD,1, | 8260+_W25 | 8 Apr 08 16:26 |
| 17 | 18 | a040817.d | 1. | ,samp,me0803c07-04a,10,RA,1, | 8260+_W25 | 8 Apr 08 17:01 |
| 18 | 19 | a040818.d | 1. | ,TUNE,BFB TUNE,1, | BFB | 8 Apr 08 17:38 |
| 19 | 20 | a040819.d | 1. | ,CCV,CCV_W25 10 ppb,1, | 8260_W25 | 8 Apr 08 17:59 |
| 20 | 21 | a040820.d | 1. | ,samp,me0804053-01b,1, | 624_W25 | 8 Apr 08 18:44 |
| 21 | 22 | a040821.d | 1. | ,samp,me0804107-01b,1, | 624+_W25 | 8 Apr 08 19:20 |
| 22 | 23 | a040822.d | 1. | ,samp,me0803c07-04a,1,RA, | 8260+_W25 | 8 Apr 08 19:55 |
| 23 | 24 | a040823.d | 1. | ,samp,me0804193-02a,1, | 8260_W25 | 8 Apr 08 20:30 |
| 24 | 25 | a040824.d | 1. | ,samp,me0804194-02a,1, | 8260_W25 | 8 Apr 08 21:10 |
| 25 | 26 | a040825.d | 1. | ,samp,me0804195-03a,1, | 8260_W25 | 8 Apr 08 21:49 |
| 26 | 27 | a040826.d | 1. | ,samp,me0804196-02a,1, | 8260_W25 | 8 Apr 08 22:29 |
| 27 | 28 | a040827.d | 1. | ,samp,me0804193-01a,1, | 8260_W25 | 8 Apr 08 23:04 |
| 28 | 29 | a040828.d | 1. | ms,me0804193-01ams,1, | 8260+_W25 | 8 Apr 08 23:40 |
| 29 | 30 | a040829.d | 1. | msd,me0804193-01amsd,1, | 8260+_W25 | 9 Apr 08 00:15 |
| 30 | 31 | a040830.d | 1. | ,samp,me0804194-01a,1, | 8260_W25 | 9 Apr 08 00:50 |
| 31 | 32 | a040831.d | 1. | ,samp,me0804195-01a,1, | 8260_W25 | 9 Apr 08 01:25 |
| 32 | 33 | a040832.d | 1. | ,samp,me0804195-02a,1, | 8260_W25 | 9 Apr 08 02:00 |
| 33 | 34 | a040833.d | 1. | ,samp,me0804196-01a,1, | 8260_W25 | 9 Apr 08 02:35 |
| 34 | 35 | a040834.d | 1. | ,samp,me0804340-01a,1, | 8260_W25 | 9 Apr 08 03:10 |
| 35 | 36 | a040835.d | 1. | rinse | 8260_W25 | 9 Apr 08 03:45 |
| 36 | 37 | a040836.d | 1. | rinse | 8260_W25 | 9 Apr 08 04:20 |
| 37 | 38 | a040837.d | 1. | rinse | 8260_W25 | 9 Apr 08 04:55 |

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

MWH Americas, Inc.
175 West Jackson Blvd, Suite 1900
Chicago, IL 60604-2814
ATTN: Mr. Justin Finger

May 22, 2008

SUBJECT: ACS GW Semi Annual, Data Validation

Dear Mr. Finger,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on May 8, 2008. Attachment 1 is a summary of the samples that were reviewed for each analysis.

**LDC Project # 18716:**

| SDG # | Fraction |
|---|---|
| ME0803A55, ME0803A91, ME0803B85, ME0803C07 | Volatiles, Bis(2-chloroethyl)ether, Arsenic |

The data validation was performed under EPA Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan, April 2007
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

RTC PARCC

# LDC #18716 (MWH Americas, Inc.-Chicago IL / ACS GW Semi-Annual)

| LDC | SDG# | DATE REC'D | (3) DATE DUE | VOA (8260B) | | BCEE (8270C) | | As (6010B) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix: | Water/Soil | | | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S |
| A | ME0803A55 | 05/08/08 | 05/29/08 | 10 | 0 | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | ME0803A91 | 05/08/08 | 05/29/08 | 6 | 0 | 1 | 0 | 3 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | ME0803A91 | 05/08/08 | 05/29/08 | 5 | 0 | 1 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | ME0803B85 | 05/08/08 | 05/29/08 | 19 | 0 | 2 | 0 | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | ME0803C07 | 05/08/08 | 05/29/08 | 5 | 0 | 1 | 0 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | T/LR | | | 45 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB04-31 | **Work Order / ID:** | ME0803C07-01 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **MLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/06/08 20:33 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/06/08 20:33 | |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/06/08 20:33 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/06/08 20:33 | UJ |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/06/08 20:33 | |
| Chloroform | A | 1.1 | 0.9 | 5.0 | J | µg/L | 1 | 04/06/08 20:33 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/06/08 20:33 | UJ |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | UJ |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/06/08 20:33 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/06/08 20:33 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/06/08 20:33 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/06/08 20:33 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/06/08 20:33 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/06/08 20:33 | |
| *Surr: 4-Bromofluorobenzene* | S | 96.0 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 20:33 | |

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5/20/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB04-31 | **Work Order / ID:** | ME0803C07-01 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 08:00 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **MLT** |
| *Surr: Dibromofluoromethane* | S | 104 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 20:33 |
| *Surr: 1,2-Dichloroethane-d4* | S | 112 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 20:33 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 20:33 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW06-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803C07-02
**Collection Date:** 03/31/08 09:10
**Date Received:** 03/31/08 15:00

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **TOTAL METALS** | Method: **SW6010B** | | | Prep Date/Time: **04/01/08 07:20** | | Analyst: **AVC** | | | |
| Arsenic | A | *7.5* | 2.5 | 10 | Jb | µg/L | 1 | 04/01/08 13:31 | UB |
| **SEMIVOLATILE ORGANICS** | Method: **SW8270C** | | | Prep Date/Time: **04/02/08 06:22** | | Analyst: **BEM** | | | |
| Bis(2-chloroethyl)ether | A | *ND* | 0.93 | 10 | | µg/L | 1 | 04/04/08 04:12 | |
| *Surr: Nitrobenzene-d5* | S | 40.6 | 0 | 10-121 | | %REC | 1 | 04/04/08 04:12 | |
| *Surr: 2-Fluorobiphenyl* | S | 51.9 | 0 | 10-109 | | %REC | 1 | 04/04/08 04:12 | |
| *Surr: Terphenyl-d14* | S | 62.0 | 0 | 10-130 | | %REC | 1 | 04/04/08 04:12 | |
| *Surr: Phenol-d5* | S | 15.2 | 0 | 10-100 | | %REC | 1 | 04/04/08 04:12 | |
| *Surr: 2-Fluorophenol* | S | 21.7 | 0 | 10-84.7 | | %REC | 1 | 04/04/08 04:12 | |
| *Surr: 2,4,6-Tribromophenol* | S | 67.1 | 0 | 10-120 | | %REC | 1 | 04/04/08 04:12 | |
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | Analyst: **MLT** | | | |
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/06/08 21:08 | UJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/06/08 21:08 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/06/08 21:08 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 21:08 | ↓ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| Chloroethane | A | *3.1* | 2.3 | 10 | J | µg/L | 1 | 04/06/08 21:08 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/06/08 21:08 | UJ |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/06/08 21:08 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/06/08 21:08 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/06/08 21:08 | |

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5/30/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

**Client:** MWH, Inc.
**Client Project:** ACS Groundwater / Griffith, IN
**Client Sample ID:** ACS-GW-MW06-31
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0803C07-02
**Collection Date:** 03/31/08 09:10
**Date Received:** 03/31/08 15:00

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **MLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/06/08 21:08 |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/06/08 21:08 |
| *Surr: 4-Bromofluorobenzene* | S | 98.5 | 0 | 75.2-115 | | %REC | 1 | 04/06/08 21:08 |
| *Surr: Dibromofluoromethane* | S | 101 | 0 | 92.7-119 | | %REC | 1 | 04/06/08 21:08 |
| *Surr: 1,2-Dichloroethane-d4* | S | 113 | 0 | 88.2-132 | | %REC | 1 | 04/06/08 21:08 |
| *Surr: Toluene-d8* | S | 114 | 0 | 89.3-116 | | %REC | 1 | 04/06/08 21:08 |

UJ

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5/20/08

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW48-31 | **Work Order / ID:** | ME0803C07-03 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | *ND* | 5.8 | 50 | | µg/L | 1 | 04/08/08 11:34 | UJ |
| Benzene | A | *130* | 16 | 100 | | µg/L | 20 | 04/08/08 13:19 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 04/08/08 11:34 | UJ |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 04/08/08 11:34 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/08/08 11:34 | |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| Chloroethane | A | *8.4* | 2.3 | 10 | J | µg/L | 1 | 04/08/08 11:34 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 04/08/08 11:34 | |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | UJ |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 04/08/08 11:34 | |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 04/08/08 11:34 | |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 04/08/08 11:34 | UJ |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | UJ |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/08/08 11:34 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 04/08/08 11:34 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 04/08/08 11:34 | |
| *Surr: 4-Bromofluorobenzene* | S | 98.1 | 0 | 75.2-115 | | %REC | 1 | 04/08/08 11:34 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW48-31 | **Work Order / ID:** | ME0803C07-03 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| *Surr: Dibromofluoromethane* | S | 93.4 | 0 | 92.7-119 | | %REC | 1 | 04/08/08 11:34 |
| *Surr: 1,2-Dichloroethane-d4* | S | 108 | 0 | 88.2-132 | | %REC | 1 | 04/08/08 11:34 |
| *Surr: Toluene-d8* | S | 115 | 0 | 89.3-116 | | %REC | 1 | 04/08/08 11:34 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW49-31 | **Work Order / ID:** | ME0803C07-04 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 11:35 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/08/08 19:55 | UJ |
| Benzene | A | 40 | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/08/08 19:55 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/08/08 19:55 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | UJ |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/08/08 19:55 | |
| *Surr: 4-Bromofluorobenzene* | S | 94.9 | 0 | 75.2-115 | | %REC | 1 | 04/08/08 19:55 | |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW49-31 | **Work Order / ID:** | ME0803C07-04 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 11:35 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 97.6 | 0 | 92.7-119 | | %REC | 1 | 04/08/08 19:55 |
| *Surr: 1,2-Dichloroethane-d4* | S | 110 | 0 | 88.2-132 | | %REC | 1 | 04/08/08 19:55 |
| *Surr: Toluene-d8* | S | 113 | 0 | 89.3-116 | | %REC | 1 | 04/08/08 19:55 |

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# ANALYTICAL RESULTS

**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB04-31 | **Work Order / ID:** | ME0803C07-05 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 13:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

**VOC'S** Method: **SW8260B** Prep Date/Time: Analyst: **NLT**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | ND | 5.8 | 50 | | µg/L | 1 | 04/08/08 12:44 | UJ |
| Benzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Bromodichloromethane | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Bromoform | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Bromomethane | A | ND | 1.8 | 10 | | µg/L | 1 | 04/08/08 12:44 | UJ |
| 2-Butanone | A | ND | 3.6 | 10 | | µg/L | 1 | 04/08/08 12:44 | UJ |
| Carbon Disulfide | A | ND | 1.7 | 10 | | µg/L | 1 | 04/08/08 12:44 | |
| Carbon tetrachloride | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Chlorobenzene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Chloroethane | A | ND | 2.3 | 10 | | µg/L | 1 | 04/08/08 12:44 | |
| Chloroform | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Chloromethane | A | ND | 1 | 10 | | µg/L | 1 | 04/08/08 12:44 | |
| Dibromochloromethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,1-Dichloroethane | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,2-Dichloroethane | A | ND | 1.2 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,1-Dichloroethene | A | ND | 1.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | UJ |
| cis-1,2-Dichloroethene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| trans-1,2-Dichloroethene | A | ND | 1.1 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,2-Dichloropropane | A | ND | 1 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| trans-1,3-Dichloropropene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| cis-1,3-Dichloropropene | A | ND | 0.8 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Ethylbenzene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 2-Hexanone | A | ND | 2.4 | 10 | | µg/L | 1 | 04/08/08 12:44 | |
| 4-Methyl-2-Pentanone | A | ND | 1.7 | 10 | | µg/L | 1 | 04/08/08 12:44 | |
| Methylene chloride | A | ND | 3.1 | 10 | | µg/L | 1 | 04/08/08 12:44 | UJ |
| Styrene | A | ND | 0.7 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,1,2,2-Tetrachloroethane | A | ND | 1.4 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | UJ |
| Tetrachloroethene | A | ND | 1.3 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Toluene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,1,1-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,1,2-Trichloroethane | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Trichloroethene | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| Vinyl chloride | A | ND | 0.9 | 10 | | µg/L | 1 | 04/08/08 12:44 | |
| Total Xylenes | A | ND | 0.9 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,2,4-Trichlorobenzene | A | ND | 2 | 5.0 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,2-Dichlorobenzene | A | ND | 1 | 10 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,3-Dichlorobenzene | A | ND | 0.9 | 10 | | µg/L | 1 | 04/08/08 12:44 | |
| 1,4-Dichlorobenzene | A | ND | 0.7 | 10 | | µg/L | 1 | 04/08/08 12:44 | |
| *Surr: 4-Bromofluorobenzene* | S | 96.0 | 0 | 75.2-115 | | %REC | 1 | 04/08/08 12:44 | |

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# ANALYTICAL RESULTS

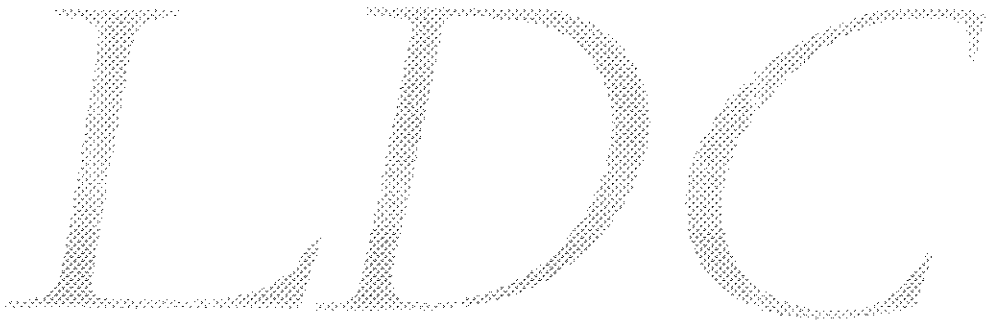
**Date:** *Thursday, April 10, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | ACS Groundwater / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB04-31 | **Work Order / ID:** | ME0803C07-05 |
| **Sample Description:** | | **Collection Date:** | 03/31/08 13:10 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 03/31/08 15:00 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOC'S** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **NLT** |
| *Surr: Dibromofluoromethane* | S | 104 | 0 | 92.7-119 | | %REC | 1 | 04/08/08 12:44 |
| *Surr: 1,2-Dichloroethane-d4* | S | 114 | 0 | 88.2-132 | | %REC | 1 | 04/08/08 12:44 |
| *Surr: Toluene-d8* | S | 112 | 0 | 89.3-116 | | %REC | 1 | 04/08/08 12:44 |

**ACS GW Semi Annual**
**Data Validation Reports**
**LDC# 18716**

ME0803C07



# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS GW Semi-Annual

**Collection Date:** March 31, 2008

**LDC Report Date:** May 19, 2008

**Matrix:** Water

**Parameters:** Volatiles

**Validation Level:** EPA Level III

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** ME0803C07

**Sample Identification**

ACS-GW-TB04-31
ACS-GW-MW06-31
ACS-GW-MW48-31
ACS-GW-MW49-31
ACS-GW-EB04-31
ACS-GW-MW06-31MS
ACS-GW-MW06-31MSD

## Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/3/08 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.036 (≥0.05)<br>0.008 (≥0.05)<br>0.278 (≥0.3) | All samples in SDG ME0803C07 | J (all detects)<br>UJ (all non-detects) | P |

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/6/08 (A040603) | Chloromethane<br>Carbon disulfide<br>Acetone | 41.3<br>28.8<br>25.7 | ACS-GW-TB04-31<br>ACS-GW-MW06-31<br>R110762-Blk | J (all detects)<br>UJ (all non-detects) | A |
| 4/8/08 (A040802) | Bromomethane<br><br>Methylene chloride | 41.1<br><br>25.7 | ACS-GW-MW48-31<br>ACS-GW-EB04-31<br>R110781-Blk | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | P |
| 4/8/08 (A040819) | Bromomethane | 49.2 | ACS-GW-MW49-31 | J (all detects)<br>UJ (all non-detects) | P |

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/3/08 (a040310) | 1,1-Dichloroethene | 31.6 | All samples in SDG ME0803C07 | J (all detects)<br>UJ (all non-detects) | A |

All of the continuing calibration RRF values were within validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 4/6/08 (A040402) | Acetone<br><br>2-Butanone | 0.030 (≥0.05)<br><br>0.007 (≥0.05) | ACS-GW-TB04-31<br>ACS-GW-MW06-31<br>R110762-Blk | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A |
| 4/8/08 (A040802) | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.033 (≥0.05)<br>0.007 (≥0.05)<br>0.295 (≥0.3) | ACS-GW-MW48-31<br>ACS-GW-EB04-31<br>R110781-Blk | J (all detects)<br>UJ (all non-detects) | P |
| 4/8/08 (A040819) | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | 0.040 (≥0.05)<br>0.006 (≥0.05)<br>0.297 (≥0.3) | ACS-GW-MW49-31 | J (all detects)<br>UJ (all non-detects) | P |

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

| Method Blank ID | Analysis Date | Compound TIC (RT in minutes) | Concentration | Associated Samples |
|---|---|---|---|---|
| R110762-Blk | 4/6/08 | 1,2,4-Trichlorobenzene | 0.33 ug/L | ACS-GW-TB04-31<br>ACS-GW-MW06-31 |
| R110781-Blk | 4/8/08 | 1,2,4-Trichlorobenzene | 0.47 ug/L | ACS-GW-MW48-31<br>ACS-GW-MW49-31<br>ACS-GW-EB04-31 |

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

Sample ACS-GW-TB04-31 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

| Trip Blank ID | Sampling Date | Compound | Concentration | Associated Samples |
|---|---|---|---|---|
| ACS-GW-TB04-31 | 3/31/08 | Chloroform | 1.1 ug/L | ACS-GW-MW06-31<br>ACS-GW-MW48-31<br>ACS-GW-MW49-31<br>ACS-GW-EB04-31<br>ACS-GW-MW06-31MS<br>ACS-GW-MW06-31MSD |

Sample ACS-GW-EB04-31 was identified as an equipment blank.. No volatile contaminants were found in this blank.

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

| LCS ID | Compound | %R (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| R110781 LCS | Chloromethane | 133 (34.7-130) | ACS-GW-MW48-31<br>ACS-GW-MW49-31<br>ACS-GW-EB04-31<br>R110781-Blk | J (all detects) | P |

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

All internal standard areas and retention times were within QC limits.

## XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

## XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

## XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

## XIV. System Performance

Raw data were not reviewed for this SDG.

## XV. Overall Assessment of Data

Data flags have been summarized at the end of the report if data has been qualified.

## XVI. Field Duplicates

No field blanks were identified in this SDG.

## ACS GW Semi-Annual
## Volatiles - Data Qualification Summary - SDG ME0803C07

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| ME0803C07 | ACS-GW-TB04-31<br>ACS-GW-MW06-31<br>ACS-GW-MW48-31<br>ACS-GW-MW49-31<br>ACS-GW-EB04-31 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Initial calibration (RRF) |
| ME0803C07 | ACS-GW-TB04-31<br>ACS-GW-MW06-31 | Chloromethane<br>Carbon disulfide<br>Acetone | J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (%D) |
| ME0803C07 | ACS-GW-MW48-31<br>ACS-GW-EB04-31 | Bromomethane<br><br>Methylene chloride | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (%D) |
| ME0803C07 | ACS-GW-MW49-31 | Bromomethane | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (%D) |
| ME0803C07 | ACS-GW-TB04-31<br>ACS-GW-MW06-31<br>ACS-GW-MW48-31<br>ACS-GW-MW49-31<br>ACS-GW-EB04-31 | 1,1-Dichloroethene | J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (ICV %D) |
| ME0803C07 | ACS-GW-TB04-31<br>ACS-GW-MW06-31 | Acetone<br><br>2-Butanone | J (all detects)<br>UJ (all non-detects)<br>J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (RRF) |
| ME0803C07 | ACS-GW-MW48-31<br>ACS-GW-EB04-31 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (RRF) |
| ME0803C07 | ACS-GW-MW49-31 | Acetone<br>2-Butanone<br>1,1,2,2-Tetrachloroethane | J (all detects)<br>UJ (all non-detects) | P | Continuing calibration (RRF) |
| ME0803C07 | ACS-GW-MW48-31<br>ACS-GW-MW49-31<br>ACS-GW-EB04-31 | Chloromethane | J (all detects) | P | Laboratory control samples (%R) |

## ACS GW Semi-Annual
## Volatiles - Laboratory Blank Data Qualification Summary - SDG ME0803C07

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Volatiles - Field Blank Data Qualification Summary - SDG ME0803C07**

No Sample Data Qualified in this SDG

LDC #: 18716D1
SDG #: ME0803C07
Laboratory: Microbac

# VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 5/16/08
Page: 1 of 1
Reviewer: JVC
2nd Reviewer:

**METHOD:** GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 3/31/08 |
| II. | GC/MS Instrument performance check | A | |
| III. | Initial calibration | SW | |
| IV. | Continuing calibration/ICV | SW | ICV ≤ 25% |
| V. | Blanks | SW | |
| VI. | Surrogate spikes | A | |
| VII. | Matrix spike/Matrix spike duplicates | A | |
| VIII. | Laboratory control samples | SW | LCS |
| IX. | Regional Quality Assurance and Quality Control | N | |
| X. | Internal standards | A | |
| XI. | Target compound identification | N | |
| XII. | Compound quantitation/CRQLs | N | |
| XIII. | Tentatively identified compounds (TICs) | N | |
| XIV. | System performance | N | |
| XV. | Overall assessment of data | A | |
| XVI. | Field duplicates | N | |
| XVII. | Field blanks | SW | TB = 1 *EB = 5 |

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
* ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

Water

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | ACS-GW-TB04-31 | 11 | R110762-Blk | 21 | | 31 | |
| 2 | ACS-GW-MW06-31 | 12 | R110781-Blk | 22 | | 32 | |
| 3 | ACS-GW-MW48-31 | 13 | | 23 | | 33 | |
| 4 | ACS-GW-MW49-31 | 14 | | 24 | | 34 | |
| 5 | ACS-GW-EB04-31 | 15 | | 25 | | 35 | |
| 6 | ACS-GW-MW06-31MS | 16 | | 26 | | 36 | |
| 7 | ACS-GW-MW06-31MSD | 17 | | 27 | | 37 | |
| 8 | | 18 | | 28 | | 38 | |
| 9 | | 19 | | 29 | | 39 | |
| 10 | | 20 | | 30 | | 40 | |

# TARGET COMPOUND WORKSHEET

## METHOD: VOA (EPA SW 846 Method 8260B)

| | | | | |
|---|---|---|---|---|
| A. Chloromethane* | U. 1,1,2-Trichloroethane | OO. 2,2-Dichloropropane | III. n-Butylbenzene | CCCC.1-Chlorohexane |
| B. Bromomethane | V. Benzene | PP. Bromochloromethane | JJJ. 1,2-Dichlorobenzene | DDDD. Isopropyl alcohol |
| C. Vinyl choride** | W. trans-1,3-Dichloropropene | QQ. 1,1-Dichloropropene | KKK. 1,2,4-Trichlorobenzene | EEEE. Acetonitrile |
| D. Chloroethane | X. Bromoform* | RR. Dibromomethane | LLL. Hexachlorobutadiene | FFFF. Acrolein |
| E. Methylene chloride | Y. 4-Methyl-2-pentanone | SS. 1,3-Dichloropropane | MMM. Naphthalene | GGGG. Acrylonitrile |
| F. Acetone | Z. 2-Hexanone | TT. 1,2-Dibromoethane | NNN. 1,2,3-Trichlorobenzene | HHHH. 1,4-Dioxane |
| G. Carbon disulfide | AA. Tetrachloroethene | UU. 1,1,1,2-Tetrachloroethane | OOO. 1,3,5-Trichlorobenzene | IIII. Isobutyl alcohol |
| H. 1,1-Dichloroethene** | BB. 1,1,2,2-Tetrachloroethane* | VV. Isopropylbenzene | PPP. trans-1,2-Dichloroethene | JJJJ. Methacrylonitrile |
| I. 1,1-Dichloroethane* | CC. Toluene** | WW. Bromobenzene | QQQ. cis-1,2-Dichloroethene | KKKK. Propionitrile |
| J. 1,2-Dichloroethene, total | DD. Chlorobenzene* | XX. 1,2,3-Trichloropropane | RRR. m,p-Xylenes | LLLL. Ethyl ether |
| K. Chloroform** | EE. Ethylbenzene** | YY. n-Propylbenzene | SSS. o-Xylene | MMMM. Benzyl chloride |
| L. 1,2-Dichloroethane | FF. Styrene | ZZ. 2-Chlorotoluene | TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane | NNNN. |
| M. 2-Butanone | GG. Xylenes, total | AAA. 1,3,5-Trimethylbenzene | UUU. 1,2-Dichlorotetrafluoroethane | OOOO. |
| N. 1,1,1-Trichloroethane | HH. Vinyl acetate | BBB. 4-Chlorotoluene | VVV. 4-Ethyltoluene | PPPP. |
| O. Carbon tetrachloride | II. 2-Chloroethylvinyl ether | CCC. tert-Butylbenzene | WWW. Ethanol | QQQQ. |
| P. Bromodichloromethane | JJ. Dichlorodifluoromethane | DDD. 1,2,4-Trimethylbenzene | XXX. Di-isopropyl ether | RRRR. |
| Q. 1,2-Dichloropropane** | KK. Trichlorofluoromethane | EEE. sec-Butylbenzene | YYY. tert-Butanol | SSSS. |
| R. cis-1,3-Dichloropropene | LL. Methyl-tert-butyl ether | FFF. 1,3-Dichlorobenzene | ZZZ. tert-Butyl alcohol | TTTT. |
| S. Trichloroethene | MM. 1,2-Dibromo-3-chloropropane | GGG. p-Isopropyltoluene | AAAA. Ethyl tert-butyl ether | UUUU. |
| T. Dibromochloromethane | NN. Methyl ethyl ketone | HHH. 1,4-Dichlorobenzene | BBBB. tert-Amyl methyl ether | VVVV. |

*** = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.**

LDC #: 18716 D1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Initial Calibration

Page: 1 of 1
Reviewer: JV6
2nd Reviewer: [illegible]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y (N) N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N (N/A) Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?_____
Y N N/A Did the initial calibration meet the acceptance criteria?
(Y) N N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

| # | Date | Standard ID | Compound | Finding %RSD (Limit: <30.0%) | Finding RRF (Limit: >0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 4/03/08 | ICAL | F | | 0.636 | All + BLKs | J/NJ/R |
| | | | M | | 0.008 | ↓ | ↓ |
| | | | BB | | 0.278 (20.3) SPCC | ↓ | ↓ |

INICAL.1SB

LDC #: 18716D1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Continuing Calibration

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y (N) N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

| # | Date | Standard ID | Compound | Finding %D (Limit: <25.0%) | Finding RRF (Limit: >0.05) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|
| | 4/06/08 | A040603 | A | 41.3 | | 1, 2, R110762-Blk | J/UJ/A |
| | | | G | 28.8 | | ↓ | ↓ |
| | | | E | 25.7 | | | |
| | | | F | | 0.030 | | |
| | | | M | | 0.007 | ↓ | ↓ |
| | 4/08/08 | A040802 | B | 41.1 | | 3, 5, R110781-Blk | J/UJ/P |
| | | | E | 25.7 | | ↓ | ↓ |
| | | | F | | 0.033 | | |
| | | | M | | 0.007 | | |
| | | | BB | | 0.295 (≥0.3) SPCC | ↓ | ↓ |
| | 4/08/08 | A040819 | B | 49.2 | | 4 | J/UJ/P |
| | | | E | | 0.040 | ↓ | ↓ |
| | | | M | | 0.006 | | |
| | | | BB | | 0.297 (≥0.3) SPCC | ↓ | ↓ |
| | 4/03/08 | a040310 (ICV) | H | 31.6 | | All + Blks | J/UJ/A |

(ICV reported in ME0803A91 package)

LDC #: 18716 D1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Blanks

Page: 1 of 1
Reviewer: JVC
2nd Reviewer: [signature]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

**Blank analysis date:** 4/06/08
**Conc. units:** ug/L Associated Samples: 1, 7 (MD)

| Compound | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | RI10762-BLK | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | | | | | | | | | | |
| kkk | 0.33 | | | | | | | | | |
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| | | | | | | | | | | |
| CRQL | | | | | | | | | | |

**Blank analysis date:** 4/08/08
**Conc. units:** ug/L Associated Samples: 3-5 (MD)

| Compound | Blank ID | Sample Identification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | RI10781-BLK | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | | | | | | | | | | |
| kkk | 0.47 | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| CRQL | | | | | | | | | | |

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 18716 D1
SDG #: 3q Cover

# VALIDATION FINDINGS WORKSHEET
## Field Blanks


Reviewer: JVB
2nd Reviewer: R

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

(Y) N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

**Blank units:** ug/L **Associated sample units:** ug/L
**Field blank type:** (circle one) Field Blank / Rinsate / (Trip Blank) / Other: _____ Associated Samples: All except #1 (ND)

| Compound | Blank ID 1 | Blank ID | Sample Identification | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Date | 3/31/08 | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | | | | | | | | | | |
| Chloroform | 1.1 | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| CRQL | | | | | | | | | | |

**Blank units:** _____ **Associated sample units:** _____
**Field blank type:** (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

| Compound | Blank ID | Blank ID | Sample Identification | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Date | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | |
| Acetone | | | | | | | | | | |
| Chloroform | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| CRQL | | | | | | | | | | |

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 18716 D1
SDG #: See Cover

# VALIDATION FINDINGS WORKSHEET
## Laboratory Control Samples (LCS)


Reviewer: JVB
2nd Reviewer: [signature]

**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Was a LCS required?
Y (N) N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

| # | Date | LCS/LCSD ID | Compound | LCS %R (Limits) | LCSD %R (Limits) | RPD (Limits) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|---|---|
| | | R110781 LCS | A | 133 (34.7-130) | ( ) | ( ) | 3-5, R110781-BLK | J (all detects) / P |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
| | | | | ( ) | ( ) | ( ) | | |
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| | | | | ( ) | ( ) | ( ) | | |
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| | | | | ( ) | ( ) | ( ) | | |

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS GW Semi-Annual

**Collection Date:** March 31, 2008

**LDC Report Date:** May 19, 2008

**Matrix:** Water

**Parameters:** Bis(2-chloroethyl) ether

**Validation Level:** EPA Level III

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** ME0803C07

**Sample Identification**

ACS-GW-MW06-31
ACS-GW-MW06-31MS
ACS-GW-MW06-31MSD

## Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Bis(2-chloroethyl) ether.

The review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05.

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No bis(2-chloroethyl) ether was found in the method blanks.

No field blanks were identified in this SDG.

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

All internal standard areas and retention times were within QC limits.

## XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

## XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

## XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

## XIV. System Performance

Raw data were not reviewed for this SDG.

## XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

## XVI. Field Duplicates

No field duplicates were identified in this SDG.

**ACS GW Semi-Annual**
**Bis(2-chloroethyl) ether - Data Qualification Summary - SDG ME0803C07**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Bis(2-chloroethyl) ether - Laboratory Blank Data Qualification Summary - SDG ME0803C07**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Bis(2-chloroethyl) ether - Field Blank Data Qualification Summary - SDG ME0803C07**

No Sample Data Qualified in this SDG

LDC #: 18716D2
SDG #: ME0803C07
Laboratory: Microbac

# VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 5/16/08
Page: 1 of 1
Reviewer: SW
2nd Reviewer:

**METHOD:** GC/MS Bis(2-chloroethyl)ether (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 3/31/08 |
| II. | GC/MS Instrument performance check | A | |
| III. | Initial calibration | A | %RSD ≤ 30% |
| IV. | Continuing calibration | A | CCV ≤ 25% |
| V. | Blanks | A | |
| VI. | Surrogate spikes | A | |
| VII. | Matrix spike/Matrix spike duplicates | A | |
| VIII. | Laboratory control samples | A | LCS |
| IX. | Regional Quality Assurance and Quality Control | N | |
| X. | Internal standards | A | |
| XI. | Target compound identification | N | |
| XII. | Compound quantitation/CRQLs | N | |
| XIII. | Tentatively identified compounds (TICs) | N | |
| XIV. | System performance | N | |
| XV. | Overall assessment of data | A | |
| XVI. | Field duplicates | N | |
| XVII. | Field blanks | N | |

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Water

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | ACS-GW-MW06-31 | 11 | | 21 | | 31 | |
| 2 | ACS-GW-MW06-31MS | 12 | | 22 | | 32 | |
| 3 | ACS-GW-MW06-31MSD | 13 | | 23 | | 33 | |
| 4 | BK-1-640208 | 14 | | 24 | | 34 | |
| 5 | | 15 | | 25 | | 35 | |
| 6 | | 16 | | 26 | | 36 | |
| 7 | | 17 | | 27 | | 37 | |
| 8 | | 18 | | 28 | | 38 | |
| 9 | | 19 | | 29 | | 39 | |
| 10 | | 20 | | 30 | | 40 | |

(no ICV)

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS GW Semi-Annual

**Collection Date:** March 31, 2008

**LDC Report Date:** May 14, 2008

**Matrix:** Water

**Parameters:** Arsenic

**Validation Level:** EPA Level III

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** ME0803C07

**Sample Identification**

ACS-GW-MW06-31
ACS-GW-MW06-31MS
ACS-GW-MW06-31MSD

## Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Arsenic.

This review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

## III. Blanks

Method blanks were reviewed for each matrix as applicable. No arsenic was found in the initial, continuing and preparation blanks with the following exceptions:

| Method Blank ID | Analyte | Maximum Concentration | Associated Samples |
|---|---|---|---|
| PB (prep blank) | Arsenic | 4.7 ug/L | All samples in SDG ME0803C07 |
| ICB/CCB | Arsenic | 5.0 ug/L | All samples in SDG ME0803C07 |

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

| Sample | Analyte | Reported Concentration | Modified Final Concentration |
|---|---|---|---|
| ACS-GW-MW06-31 | Arsenic | 7.5 ug/L | 7.5UB ug/L |

No field blanks were identified in this SDG.

## IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

## V. Matrix Spike Analysis

## V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

## VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

## VIII. Internal Standards

ICP-MS was not utilized in this SDG.

## IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

## X. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

## XI. Sample Result Verification

Raw data were not reviewed for this SDG.

## XII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

## XIII. Field Duplicates

No field duplicates were identified in this SDG.

**ACS GW Semi-Annual**
**Arsenic - Data Qualification Summary - SDG ME0803C07**

No Sample Data Qualified in this SDG

**ACS GW Semi-Annual**
**Arsenic - Laboratory Blank Data Qualification Summary - SDG ME0803C07**

| SDG | Sample | Analyte | Modified Final Concentration | A or P |
|---|---|---|---|---|
| ME0803C07 | ACS-GW-MW06-31 | Arsenic | 7.5UB ug/L | A |

**ACS GW Semi-Annual**
**Arsenic - Field Blank Data Qualification Summary - SDG ME0803C07**

No Sample Data Qualified in this SDG

LDC #: 18716D4
SDG #: ME0803C07
Laboratory: Microbac

# VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 5/14/08
Page: 1 of 1
Reviewer: W
2nd Reviewer: [signature]

**METHOD:** Arsenic (EPA SW 846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 3/31/08 |
| II. | Calibration | A | |
| III. | Blanks | SW | |
| IV. | ICP Interference Check Sample (ICS) Analysis | A | |
| V. | Matrix Spike Analysis | A | 3MS/MSD |
| VI. | Duplicate Sample Analysis | N | |
| VII. | Laboratory Control Samples (LCS) | A | LCS |
| VIII. | Internal Standard (ICP-MS) | N | Not utilized |
| IX. | Furnace Atomic Absorption QC | N | |
| X. | ICP Serial Dilution | N | Not performed |
| XI. | Sample Result Verification | N | |
| XII. | Overall Assessment of Data | A | |
| XIII. | Field Duplicates | N | |
| XIV. | Field Blanks | N | |

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | ACS-GW-MW06-31 | 11 | | 21 | | 31 | |
| 2 | ACS-GW-MW06-31MS | 12 | | 22 | | 32 | |
| 3 | ACS-GW-MW06-31MSD | 13 | | 23 | | 33 | |
| 4 | PB | 14 | | 24 | | 34 | |
| 5 | | 15 | | 25 | | 35 | |
| 6 | | 16 | | 26 | | 36 | |
| 7 | | 17 | | 27 | | 37 | |
| 8 | | 18 | | 28 | | 38 | |
| 9 | | 19 | | 29 | | 39 | |
| 10 | | 20 | | 30 | | 40 | |

Notes:

LDC #: 187164
SDG #: see cover

**VALIDATION FINDINGS WORKSHEET**
**PB/ICB/CCB QUALIFIED SAMPLES**

Page: 1 of 1
Reviewer: MY
2nd Reviewer: [illegible]

**METHOD:** Trace Metals (EPA SW 846 Method 6010/7000) Soil preparation factor applied: _____
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: HH1

| Analyte | Maximum PB* (mg/Kg) | Maximum PB* (ug/L) | Maximum ICB/CCB* (ug/L) | Blank Action Limit | Sample Identification: 1 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | | | | | | | | | | | | | | | Al |
| Sb | | | | | | | | | | | | | | | Sb |
| As | | 4.7 | 5.0 | 25.0 | 7.5UB | | | | | | | | | | As |
| Ba | | | | | | | | | | | | | | | Ba |
| Be | | | | | | | | | | | | | | | Be |
| Cd | | | | | | | | | | | | | | | Cd |
| Ca | | | | | | | | | | | | | | | Ca |
| Cr | | | | | | | | | | | | | | | Cr |
| Cc | | | | | | | | | | | | | | | Co |
| Cu | | | | | | | | | | | | | | | Cu |
| Fe | | | | | | | | | | | | | | | Fe |
| Pb | | | | | | | | | | | | | | | Pb |
| Mg | | | | | | | | | | | | | | | Mg |
| Mn | | | | | | | | | | | | | | | Mn |
| Hg | | | | | | | | | | | | | | | Hg |
| Nl | | | | | | | | | | | | | | | Ni |
| K | | | | | | | | | | | | | | | K |
| Se | | | | | | | | | | | | | | | Se |
| Ag | | | | | | | | | | | | | | | Ag |
| Na | | | | | | | | | | | | | | | Na |
| Tl | | | | | | | | | | | | | | | Tl |
| V | | | | | | | | | | | | | | | V |
| Zn | | | | | | | | | | | | | | | Zn |
| B | | | | | | | | | | | | | | | B |
| Mo | | | | | | | | | | | | | | | Mo |
| Sr | | | | | | | | | | | | | | | Sr |

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\\
Data File : A040111.D
Acq On : 1 Apr 2008 1:27 pmm
Operator : BRR
Sample : ,SAMP,ME0803A55-01A,1,,
Misc : 8260+_W255
ALS Vial : 11 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********

LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040111.D
Acq On : 1 Apr 2008 1:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-01A,1,
Misc : 8260+_W25
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040111.D\data.ms

| Peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.968 | 401 | 408 | 420 | rBV | 25314 | 54598 | 6.10% | 1.217% |
| 2 | 5.963 | 726 | 736 | 747 | rBV2 | 21094 | 52818 | 5.90% | 1.177% |
| 3 | 6.176 | 759 | 771 | 784 | rBV | 111502 | 285478 | 31.88% | 6.363% |
| 4 | 6.607 | 829 | 842 | 858 | rBV | 81725 | 205360 | 22.94% | 4.577% |
| 5 | 7.015 | 899 | 909 | 922 | rBV | 298783 | 749314 | 83.69% | 16.701% |
| 6 | 9.253 | 1265 | 1277 | 1299 | rBV | 355906 | 895385 | 100.00% | 19.957% |
| 7 | 11.533 | 1639 | 1652 | 1667 | rBV | 324060 | 825824 | 92.23% | 18.406% |
| 8 | 13.528 | 1969 | 1980 | 2000 | rBV | 248967 | 615629 | 68.76% | 13.721% |
| 9 | 15.389 | 2277 | 2286 | 2307 | rBV | 378629 | 802196 | 89.59% | 17.880% |

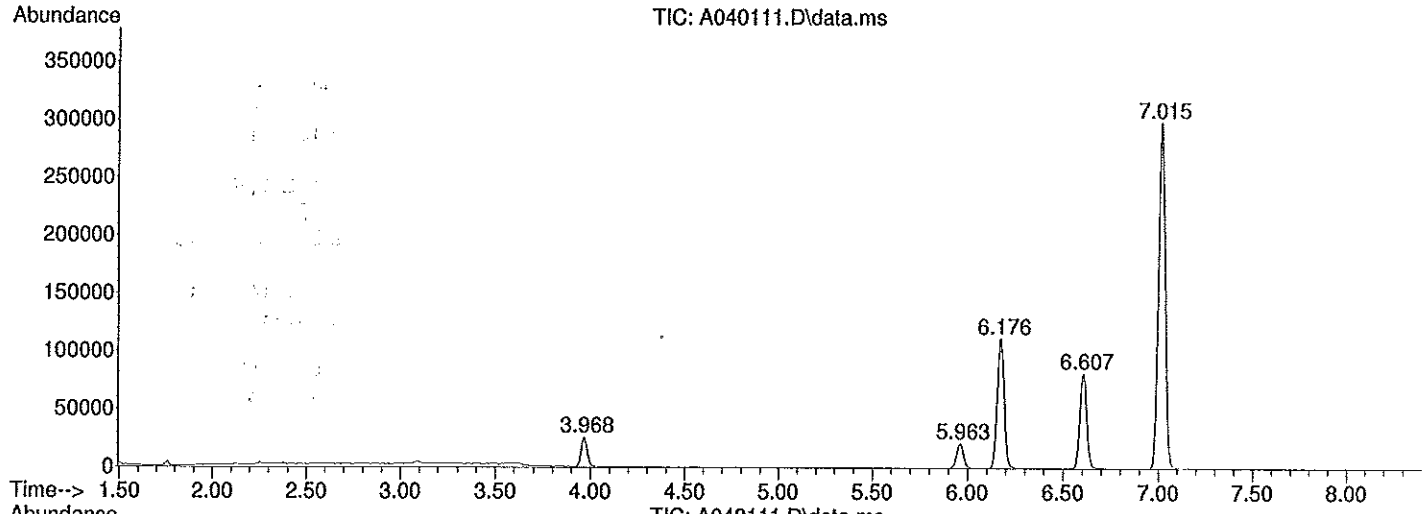
Sum of corrected areas: 4486602

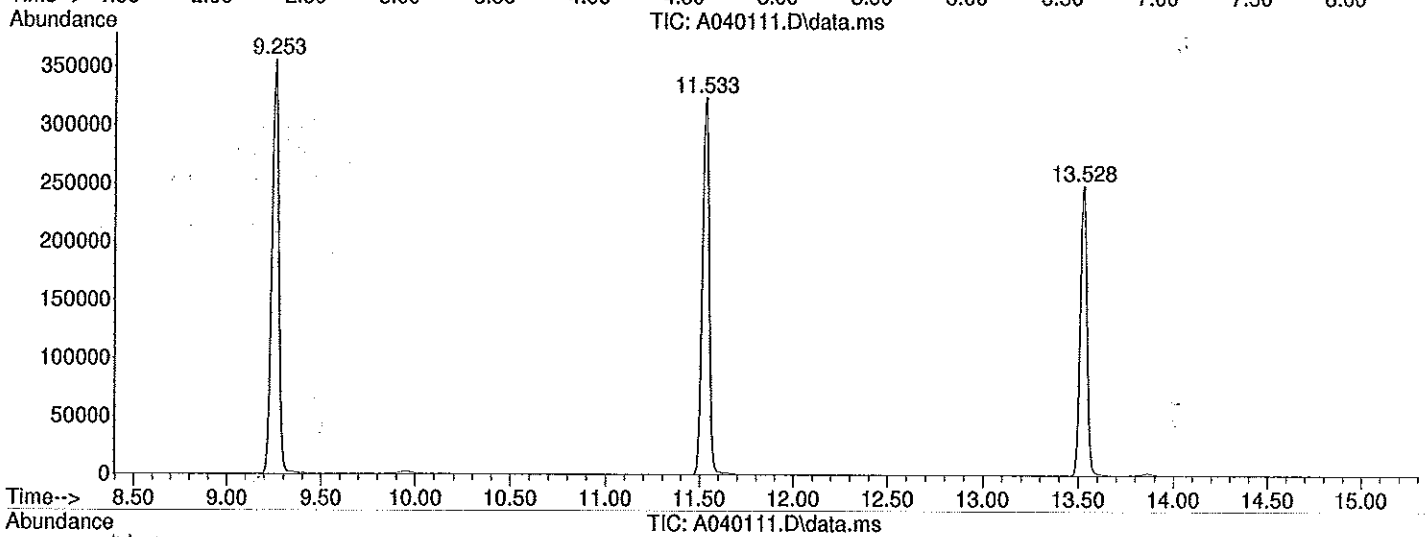
LSC Report - Integrated Chromatogram

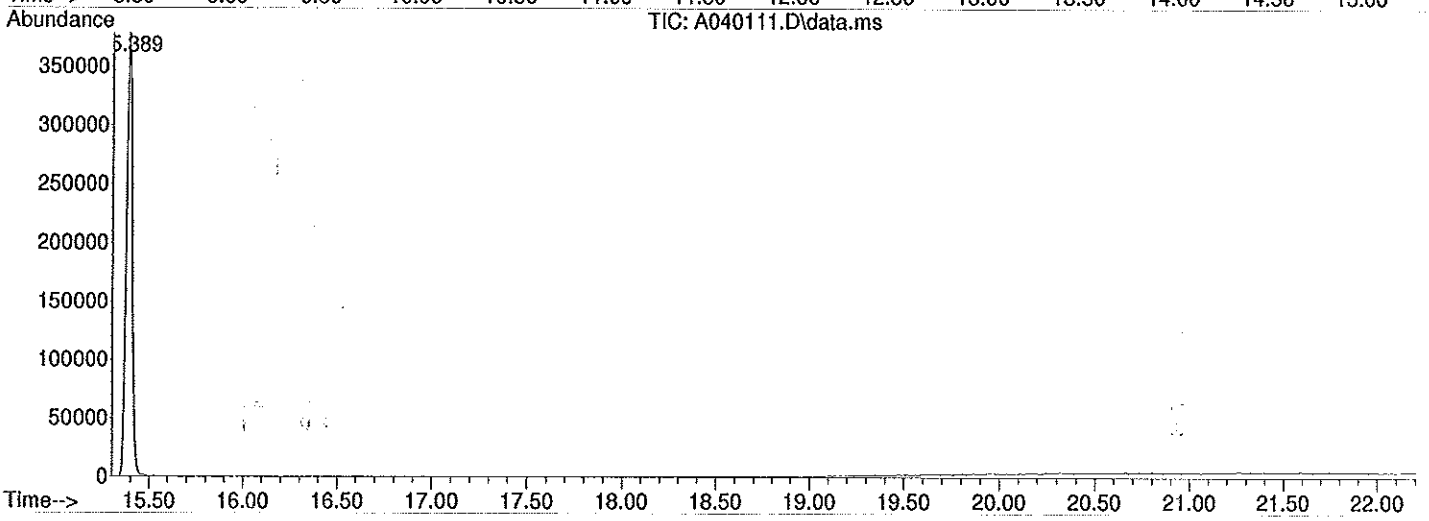
Data Path : D:\msdchem\1\data\A040108\
Data File : A040111.D
Acq On : 1 Apr 2008 1:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-01A,1,
Misc : 8260+_W25
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| | | | | | Internal Standard | | |
|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| enzene, 1,3-di... | 15.773 | 1.0 | ug/L | 82233 | 3 | 15.390 | 813564 | 10.0 |
| enzene, 2-ethy... | 16.284 | 1.1 | ug/L | 85623 | 3 | 15.390 | 813564 | 10.0 |
| enzene, 2-ethy... | 16.424 | 2.9 | ug/L | 231945 | 3 | 15.390 | 813564 | 10.0 |
| enzene, 1,2,3,... | 16.947 | 2.4 | ug/L | 199028 | 3 | 15.390 | 813564 | 10.0 |
| enzene, 1,2,4,... | 17.014 | 4.8 | ug/L | 391951 | 3 | 15.390 | 813564 | 10.0 |
| enzene, (1-met... | 17.549 | 1.6 | ug/L | 132220 | 3 | 15.390 | 813564 | 10.0 |

LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040112.D\data.ms

| Peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.171 | 757 | 770 | 792 | rBV2 | 110438 | 280630 | 31.88% | 4.781% |
| 2 | 6.603 | 830 | 841 | 865 | rVB | 81223 | 204762 | 23.26% | 3.488% |
| 3 | 7.010 | 896 | 908 | 928 | rBV | 289409 | 733921 | 83.37% | 12.503% |
| 4 | 9.254 | 1265 | 1277 | 1290 | rBV | 336961 | 880298 | 100.00% | 14.996% |
| 5 | 10.172 | 1417 | 1428 | 1439 | rVB3 | 19144 | 49803 | 5.66% | 0.848% |
| 6 | 11.528 | 1638 | 1651 | 1669 | rBV | 326025 | 827839 | 94.04% | 14.103% |
| 7 | 13.523 | 1968 | 1979 | 2000 | rBV | 250492 | 626894 | 71.21% | 10.679% |
| 8 | 15.390 | 2276 | 2286 | 2307 | rBV | 383696 | 813564 | 92.42% | 13.859% |
| 9 | 15.773 | 2340 | 2349 | 2362 | rBV2 | 36451 | 82233 | 9.34% | 1.401% |
| 10 | 15.889 | 2363 | 2368 | 2381 | rVB4 | 13624 | 28828 | 3.27% | 0.491% |
| 11 | 16.284 | 2422 | 2433 | 2436 | rBV | 39464 | 85623 | 9.73% | 1.459% |
| 12 | 16.320 | 2436 | 2439 | 2447 | rVB | 45005 | 75485 | 8.57% | 1.286% |
| 13 | 16.424 | 2447 | 2456 | 2471 | rVB | 111525 | 231945 | 26.35% | 3.951% |
| 14 | 16.570 | 2471 | 2480 | 2483 | rBV | 18609 | 37559 | 4.27% | 0.640% |
| 15 | 16.947 | 2526 | 2542 | 2547 | rBV | 104842 | 199028 | 22.61% | 3.391% |
| 16 | 17.014 | 2547 | 2553 | 2564 | rVB | 208455 | 391951 | 44.52% | 6.677% |
| 17 | 17.111 | 2564 | 2569 | 2573 | rBV4 | 14363 | 26868 | 3.05% | 0.458% |
| 18 | 17.488 | 2624 | 2631 | 2636 | rBV2 | 14035 | 27476 | 3.12% | 0.468% |
| 19 | 17.549 | 2636 | 2641 | 2654 | rVV | 65425 | 132220 | 15.02% | 2.252% |
| 20 | 17.962 | 2704 | 2709 | 2711 | rBV2 | 28193 | 45151 | 5.13% | 0.769% |
| 21 | 17.993 | 2712 | 2714 | 2720 | rVB2 | 31630 | 42656 | 4.85% | 0.727% |
| 22 | 18.102 | 2726 | 2732 | 2738 | rVB3 | 23492 | 45404 | 5.16% | 0.773% |

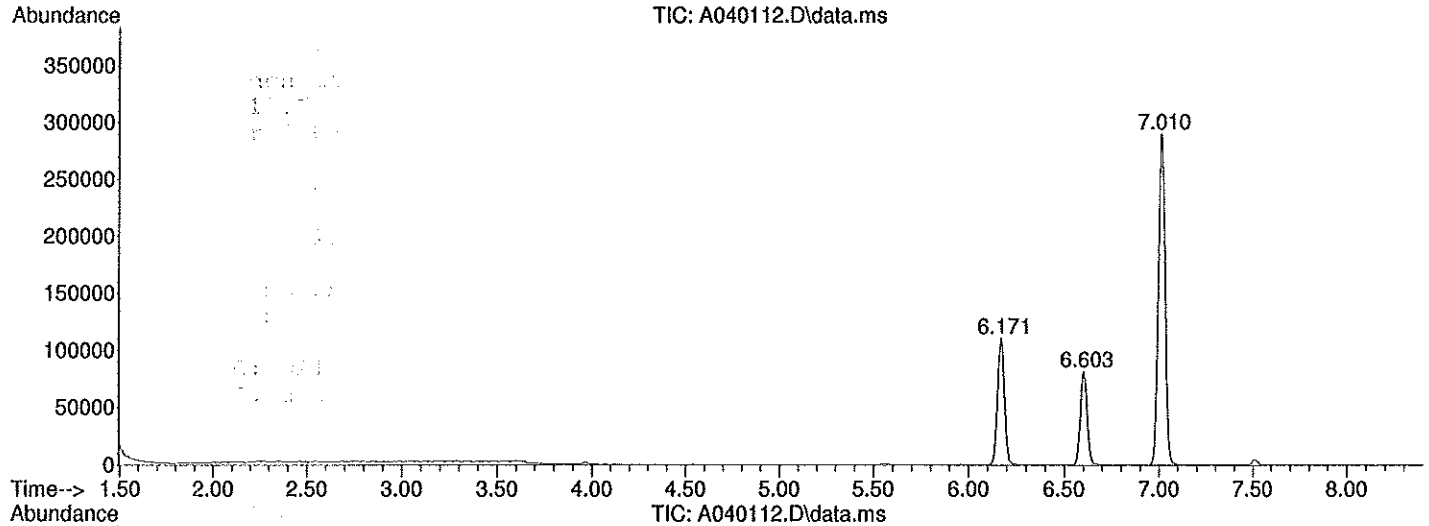
Sum of corrected areas: 5870138

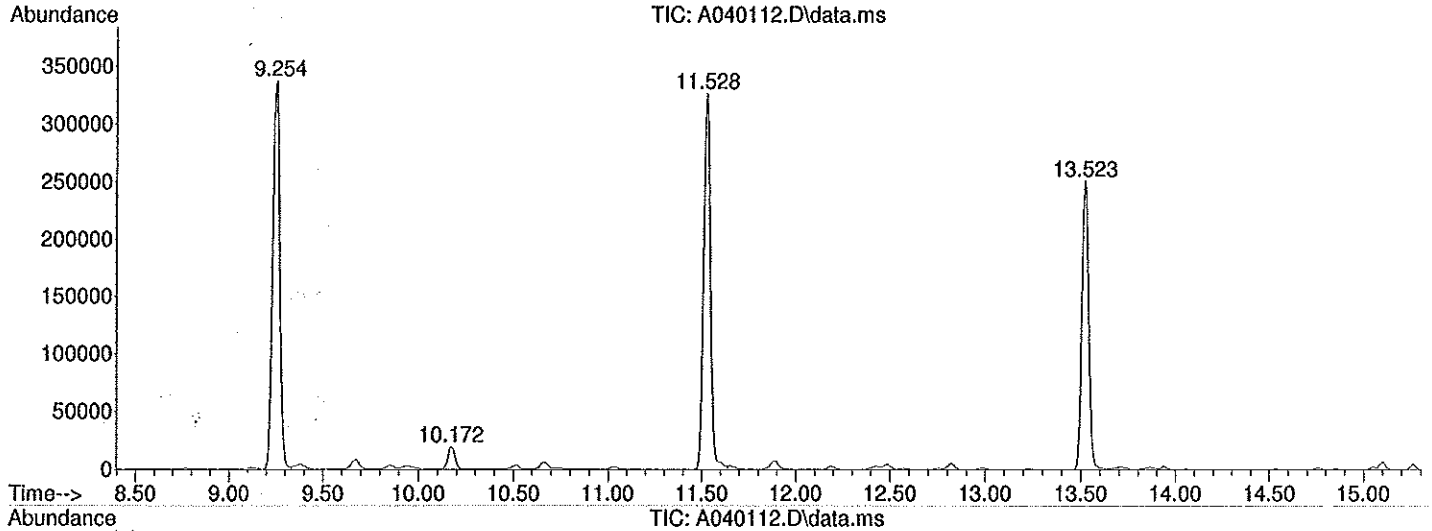
LSC Report - Integrated Chromatogram

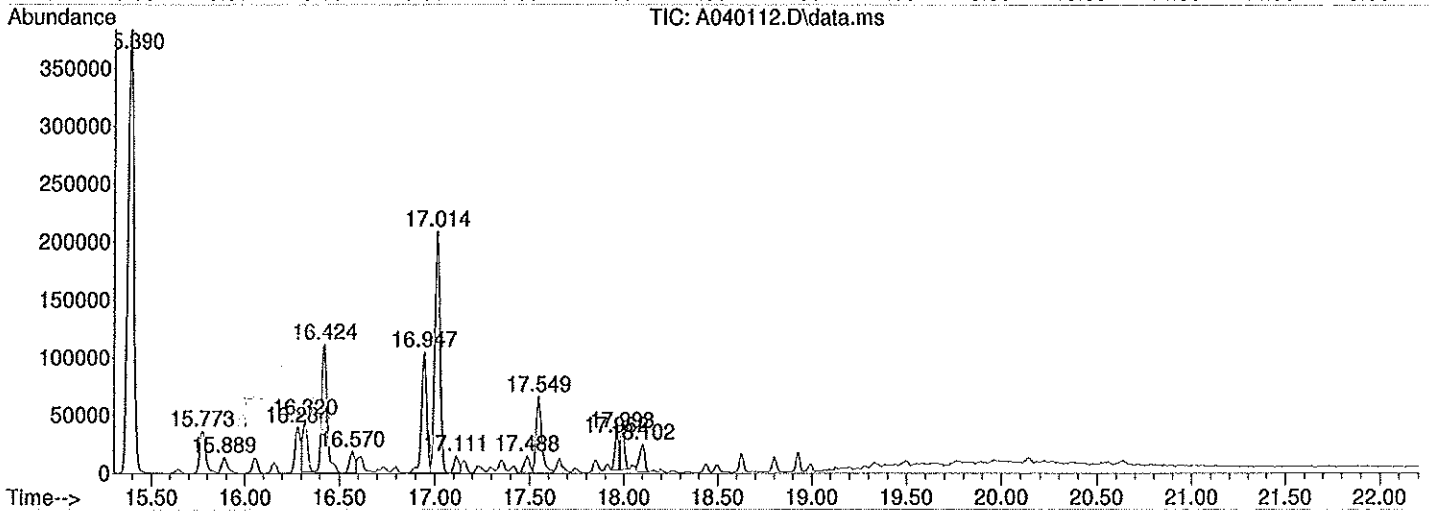
Data Path : D:\msdchem\1\data\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



# Library Search Compound Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

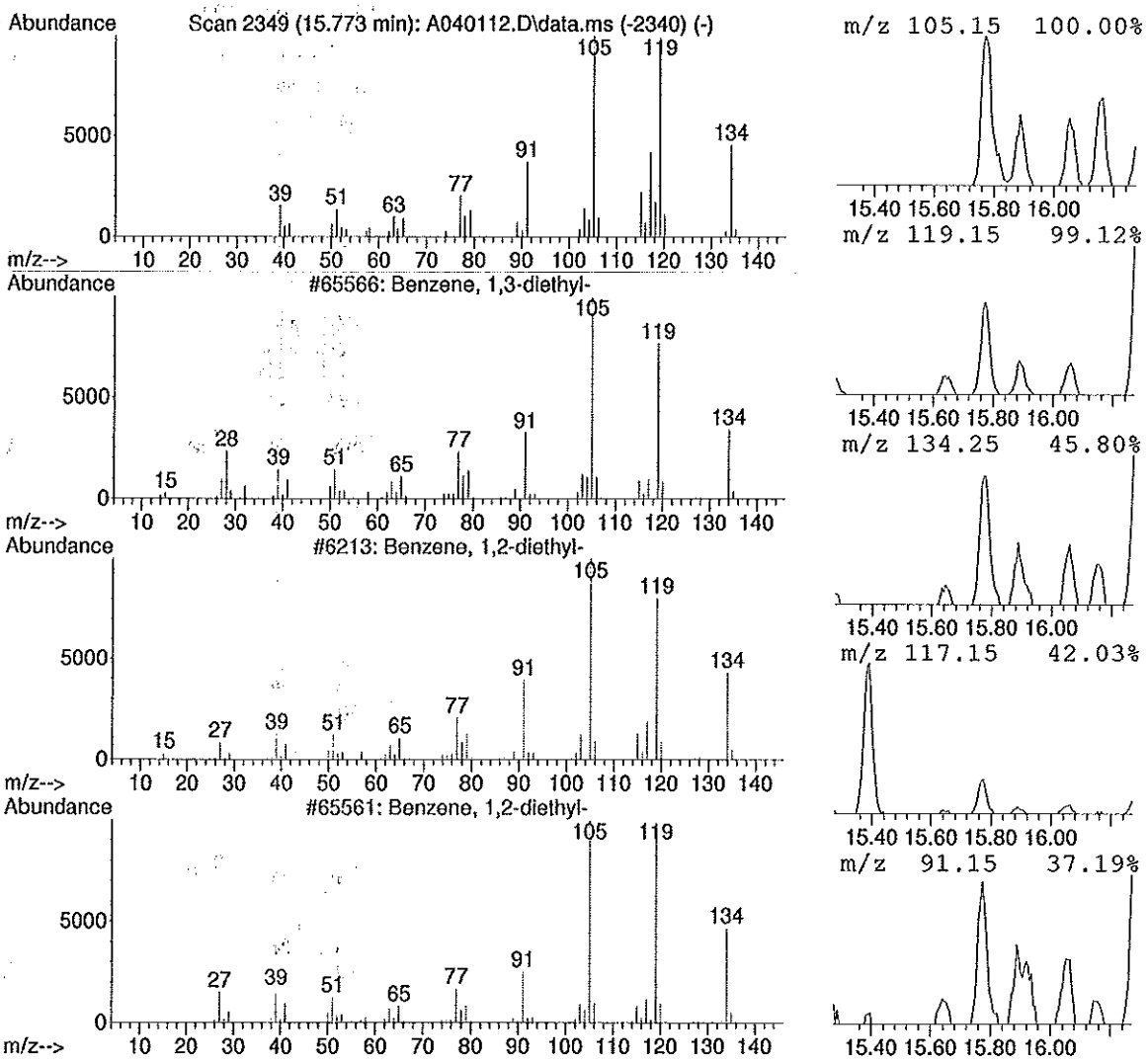
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 Benzene, 1,3-diethyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.773 | 1.01 ug/L | 82233 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 95 |
| 2 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 93 |
| 3 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 81 |
| 4 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 76 |
| 5 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 76 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

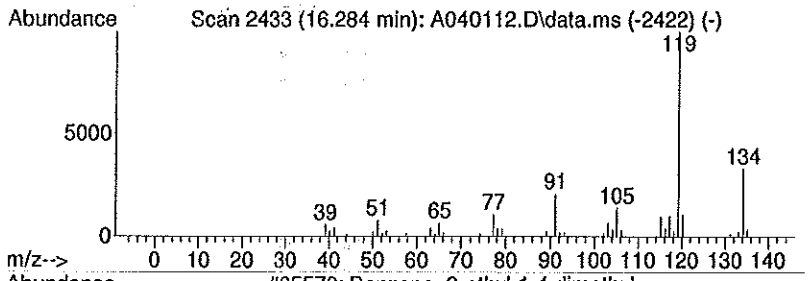
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

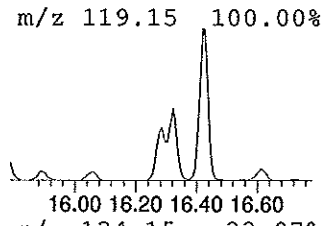
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

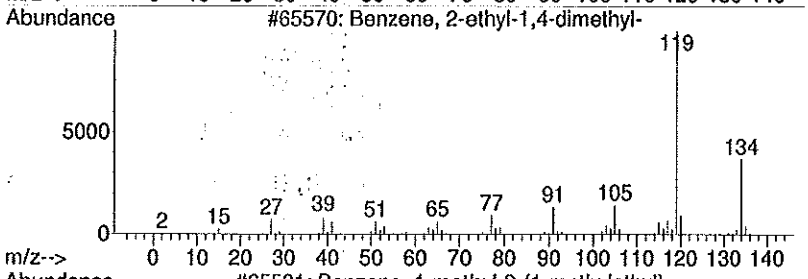
**********
Peak Number 2 Benzene, 2-ethyl-1,4-dimethyl- Concentration Rank 5

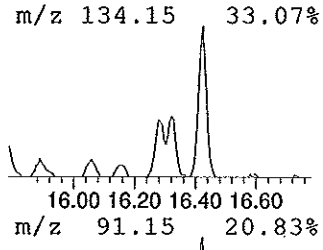
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.284 | 1.05 ug/L | 85623 | 1,4-dichlorobenzene-d4 | 15.390 |

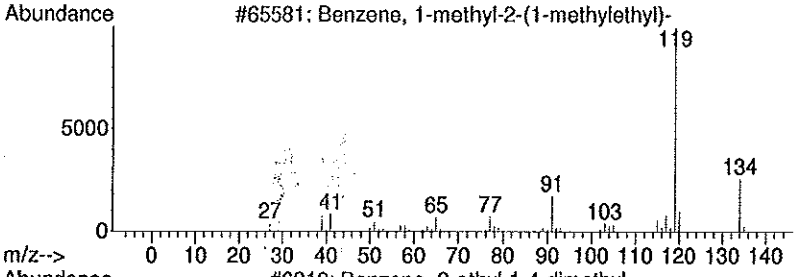
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 95 |
| 2 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 95 |
| 3 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 94 |
| 4 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 94 |
| 5 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 94 |

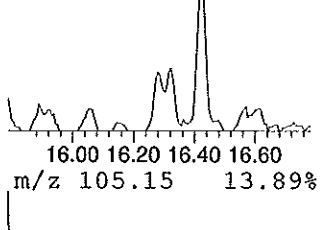


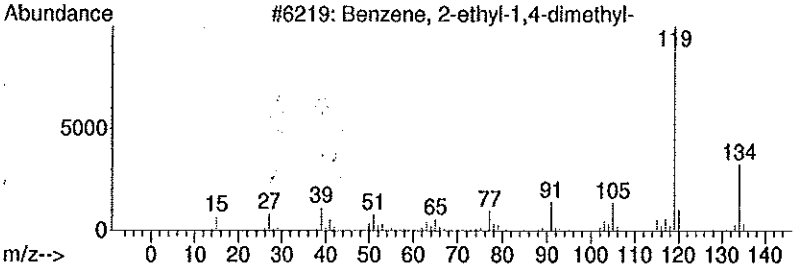



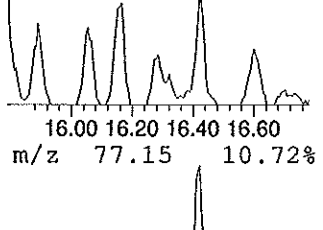



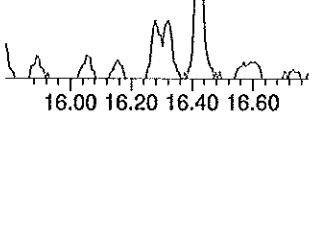



Data Path : D:\msdchem\1\data\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

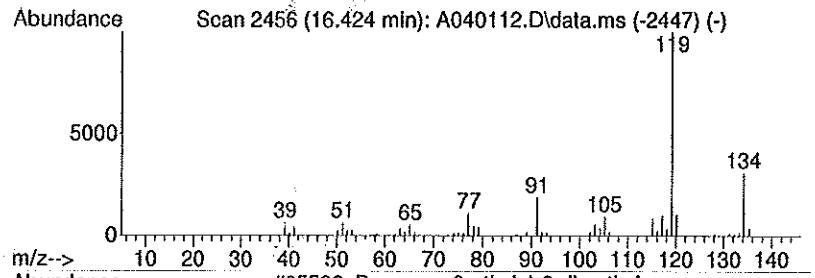
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

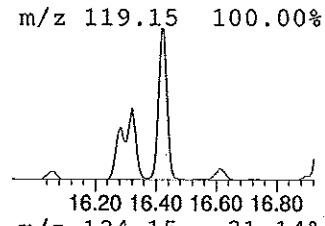
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

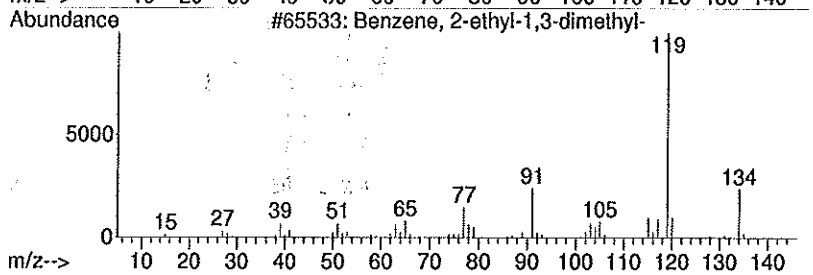
**********
Peak Number 3 Benzene, 2-ethyl-1,3-dimethyl- Concentration Rank 2

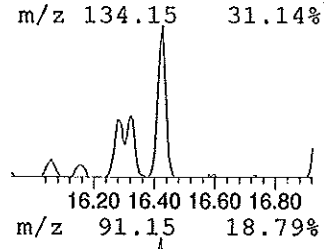
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.424 | 2.85 ug/L | 231945 | 1,4-dichlorobenzene-d4 | 15.390 |

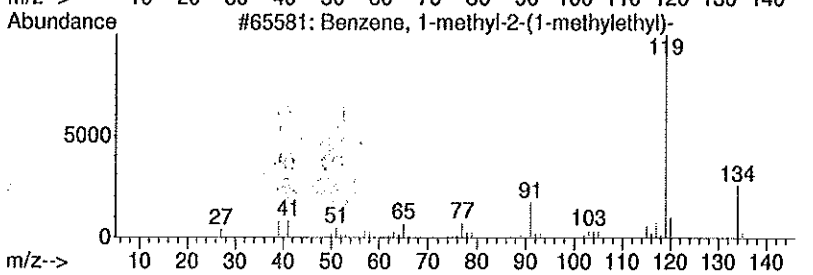
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-ethyl-1,3-dimethyl- | 134 | C10H14 | 002870-04-4 | 95 |
| 2 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 95 |
| 3 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 95 |
| 4 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 95 |
| 5 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 95 |

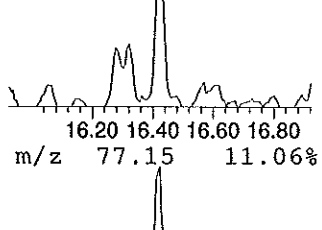


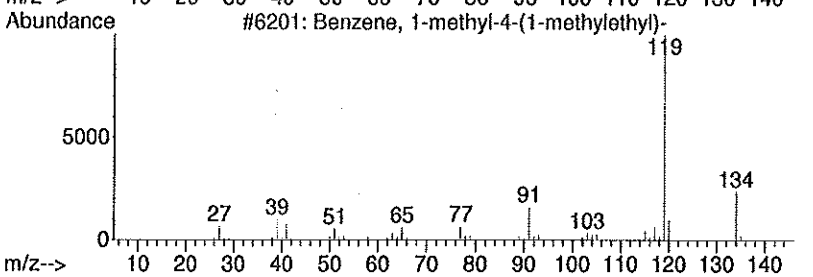



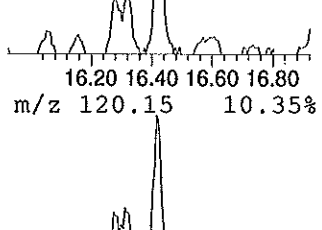



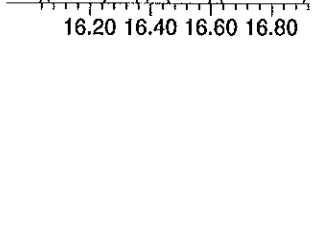



Data Path : D:\msdchem\1\data\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

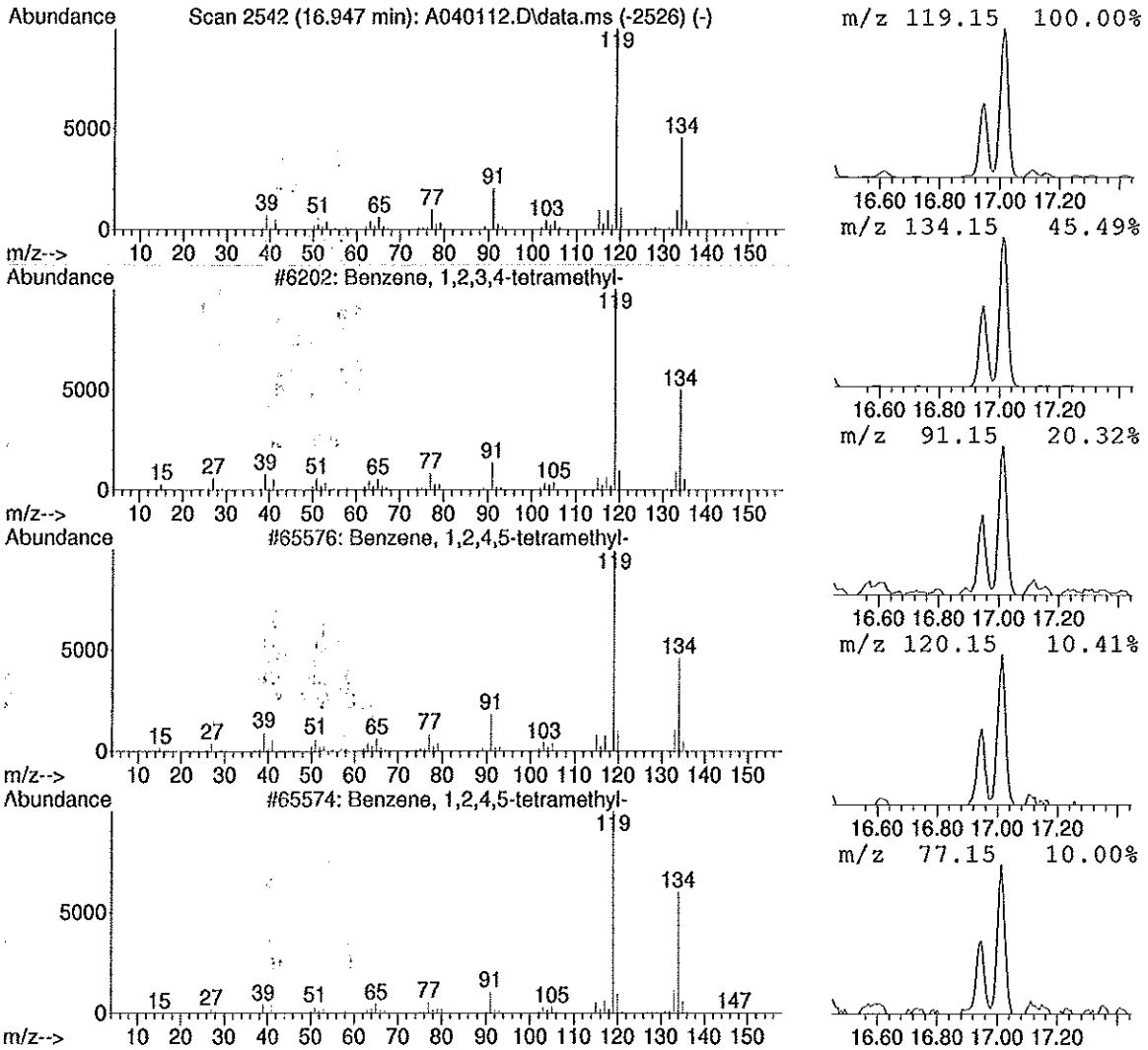
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 4 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.947 | 2.45 ug/L | 199028 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 2 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 95 |
| 3 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 94 |
| 4 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 93 |
| 5 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 93 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

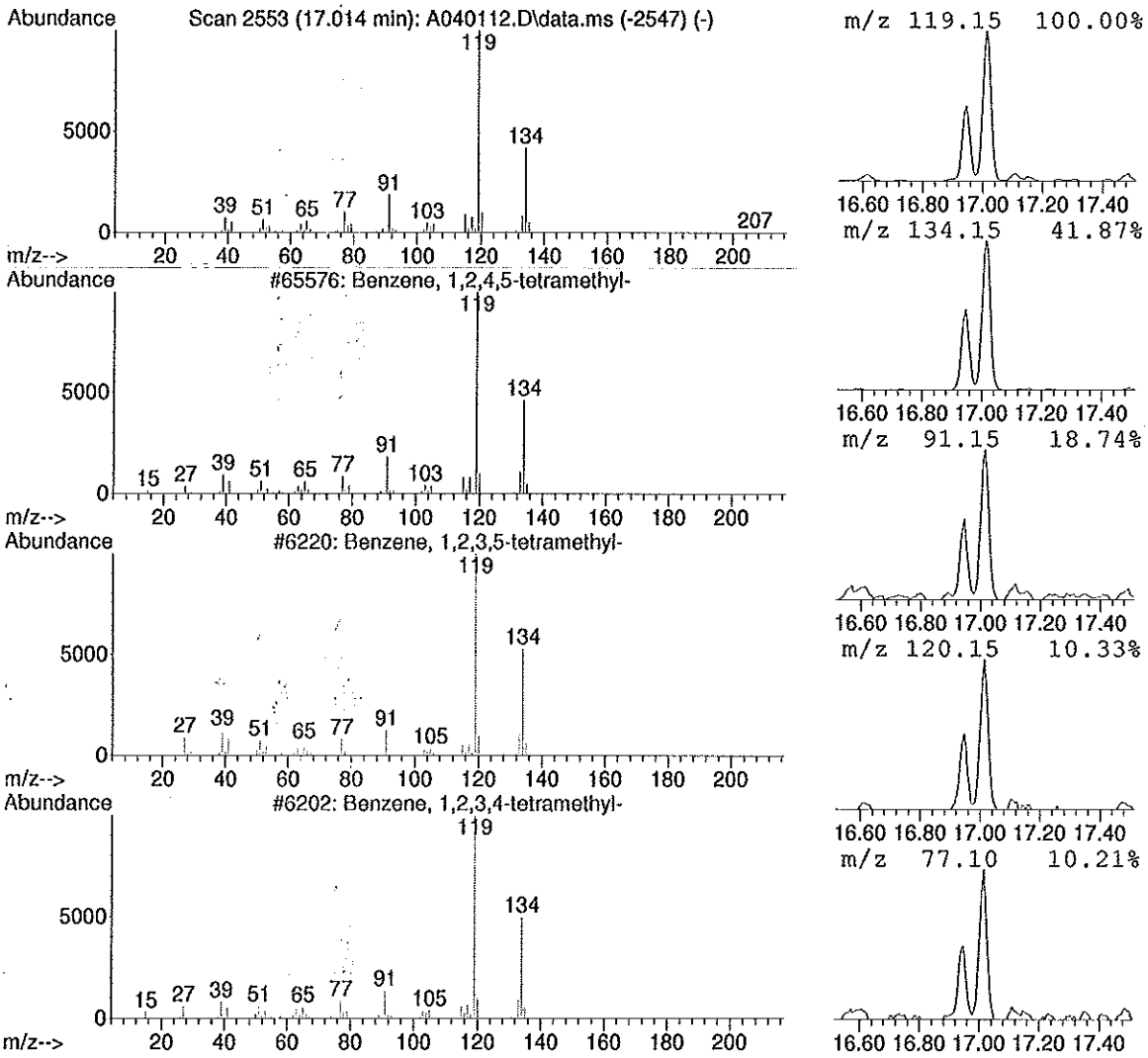
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 5 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.014 | 4.82 ug/L | 391951 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 97 |
| 2 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 96 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 4 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 95 |
| 5 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 95 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040112.D
Acq On : 1 Apr 2008 2:04 pm
Operator : BR
Sample : ,SAMP,ME0803A55-02A,1,
Misc : 8260+_W25
ALS Vial : 12 Sample Multiplier: 1

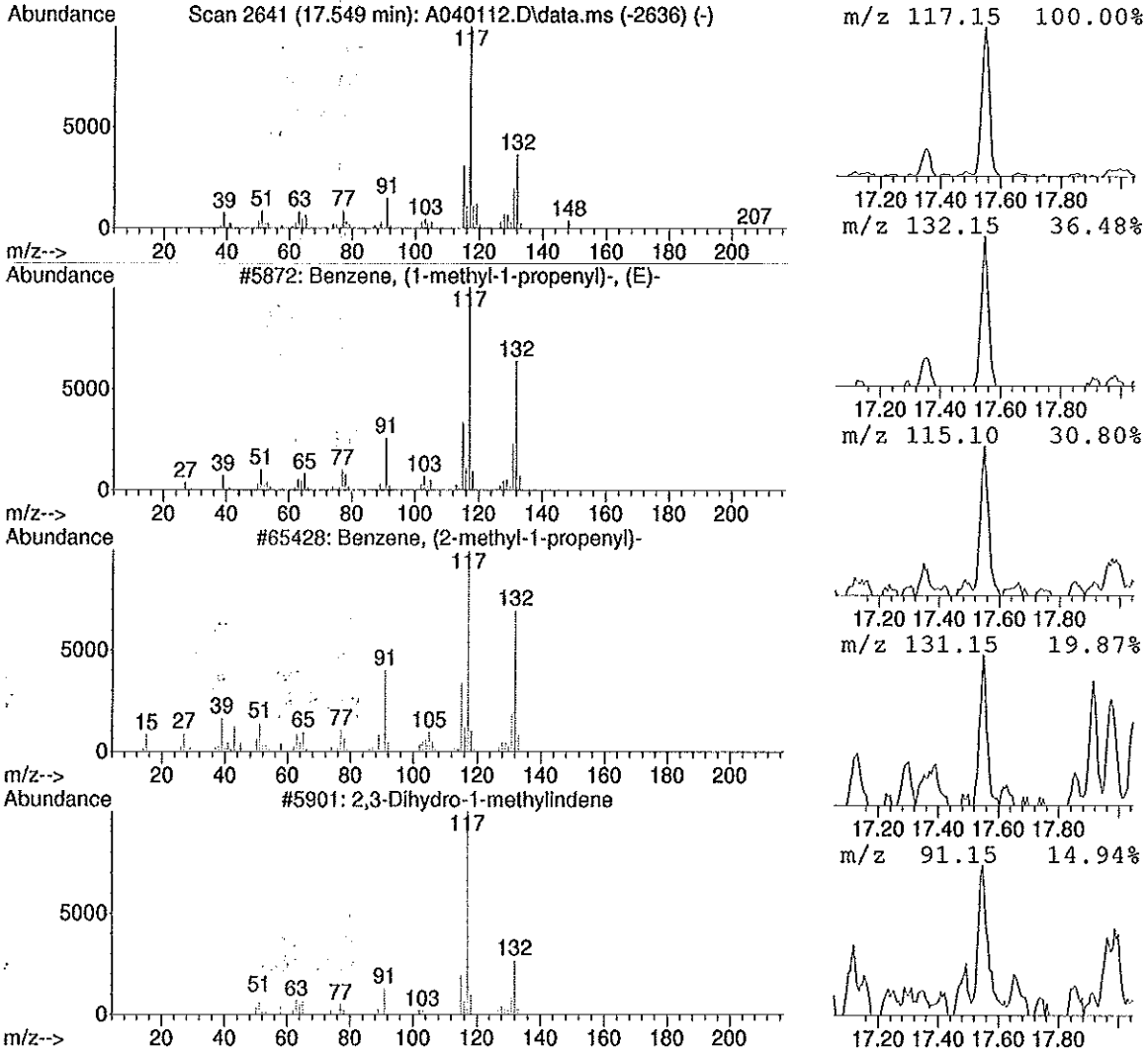
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 6 Benzene, (1-methyl-1-propen... Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.549 | 1.63 ug/L | 132220 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12 | 000768-00-3 | 87 |
| 2 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 83 |
| 3 | 2,3-Dihydro-1-methylindene | 132 | C10H12 | 027133-93-3 | 81 |
| 4 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 74 |
| 5 | Benzene, (2-methyl-2-propenyl)- | 132 | C10H12 | 003290-53-7 | 74 |



Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|
| -Propanol, 2-m... | 4.176 | 3.6 | ug/L | 274339 | 1 | 7.016 | 767235 | 10.0 |
| ,3-Dioxolane | 5.678 | 1.0 | ug/L | 79184 | 1 | 7.016 | 767235 | 10.0 |
| uran, tetrahydro- | 5.915 | 1.3 | ug/L | 103240 | 1 | 7.016 | 767235 | 10.0 |
| ,3-Dioxolane, ... | 6.755 | 1.2 | ug/L | 89462 | 1 | 7.016 | 767235 | 10.0 |
| ,4-Dioxane | 8.068 | 6.1 | ug/L | 471120 | 1 | 7.016 | 767235 | 10.0 |
| exanoic acid, ... | 16.254 | 1.5 | ug/L | 128051 | 3 | 15.390 | 866529 | 10.0 |

LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040113.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.567 | 10 | 13 | 30 | rVB2 | 18673 | 45803 | 4.97% | 0.697% |
| 2 | 1.756 | 36 | 44 | 53 | rVB3 | 16793 | 38340 | 4.16% | 0.583% |
| 3 | 3.446 | 312 | 322 | 337 | rBV | 65016 | 154788 | 16.81% | 2.355% |
| 4 | 4.176 | 427 | 442 | 466 | rBV | 89591 | 274339 | 29.80% | 4.174% |
| 5 | 5.678 | 681 | 689 | 706 | rBV2 | 30682 | 79184 | 8.60% | 1.205% |
| 6 | 5.915 | 719 | 728 | 744 | rVB2 | 38932 | 103240 | 11.21% | 1.571% |
| 7 | 6.171 | 760 | 770 | 782 | rBV | 113694 | 292002 | 31.72% | 4.442% |
| 8 | 6.602 | 830 | 841 | 854 | rBV | 86280 | 219398 | 23.83% | 3.338% |
| 9 | 6.755 | 854 | 866 | 879 | rVB6 | 23825 | 89462 | 9.72% | 1.361% |
| 10 | 7.016 | 898 | 909 | 927 | rBV | 306025 | 767235 | 83.33% | 11.672% |
| 11 | 7.509 | 977 | 990 | 1012 | rBV | 160263 | 407789 | 44.29% | 6.204% |
| 12 | 8.068 | 1063 | 1082 | 1112 | rBV | 138224 | 471120 | 51.17% | 7.167% |
| 13 | 9.248 | 1264 | 1276 | 1287 | rBV | 361945 | 920694 | 100.00% | 14.007% |
| 14 | 11.528 | 1638 | 1651 | 1674 | rBV | 335382 | 853376 | 92.69% | 12.982% |
| 15 | 13.523 | 1968 | 1979 | 1994 | rBV | 264987 | 645977 | 70.16% | 9.827% |
| 16 | 15.305 | 2263 | 2272 | 2278 | rBV2 | 26282 | 52756 | 5.73% | 0.803% |
| 17 | 15.390 | 2278 | 2286 | 2300 | rVB | 409862 | 866529 | 94.12% | 13.183% |
| 18 | 15.828 | 2346 | 2358 | 2363 | rBV2 | 23340 | 56563 | 6.14% | 0.860% |
| 19 | 16.254 | 2419 | 2428 | 2439 | rBV | 70044 | 128051 | 13.91% | 1.948% |
| 20 | 16.886 | 2522 | 2532 | 2540 | rBV | 39583 | 70610 | 7.67% | 1.074% |
| 21 | 18.121 | 2729 | 2735 | 2742 | rVV | 24895 | 36056 | 3.92% | 0.549% |

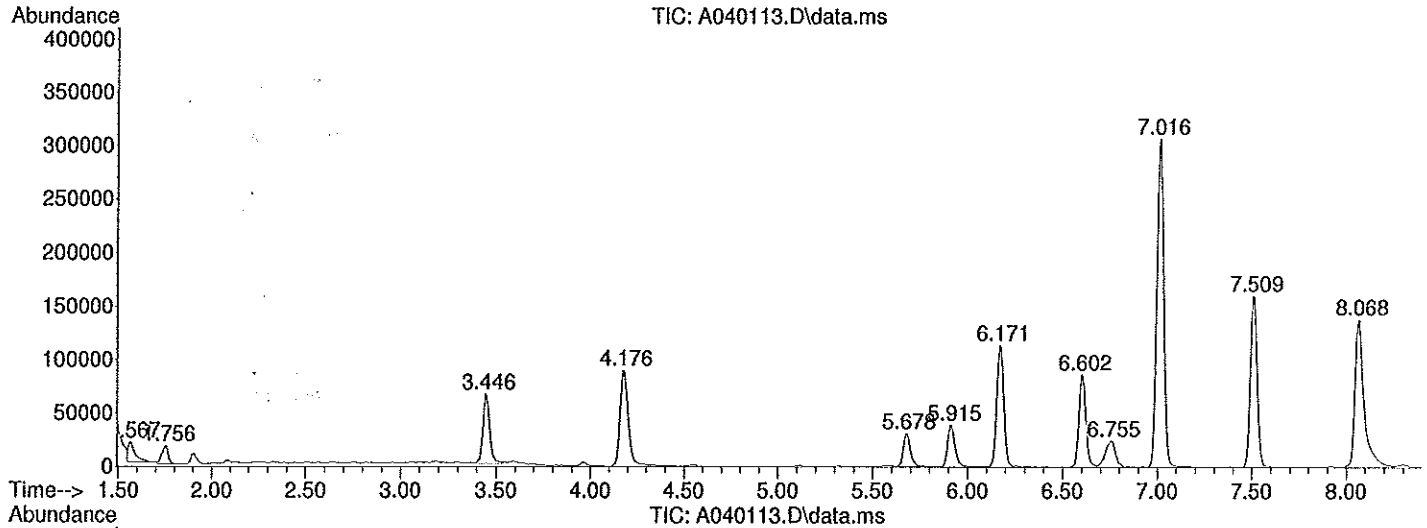
Sum of corrected areas: 6573312

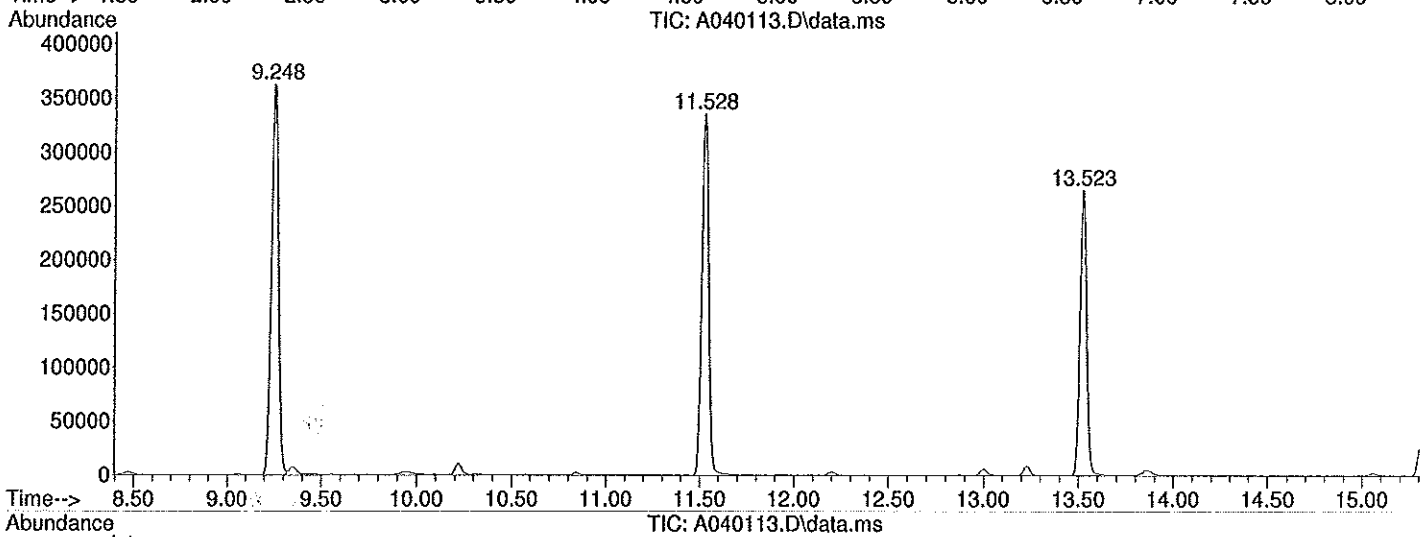
LSC Report - Integrated Chromatogram

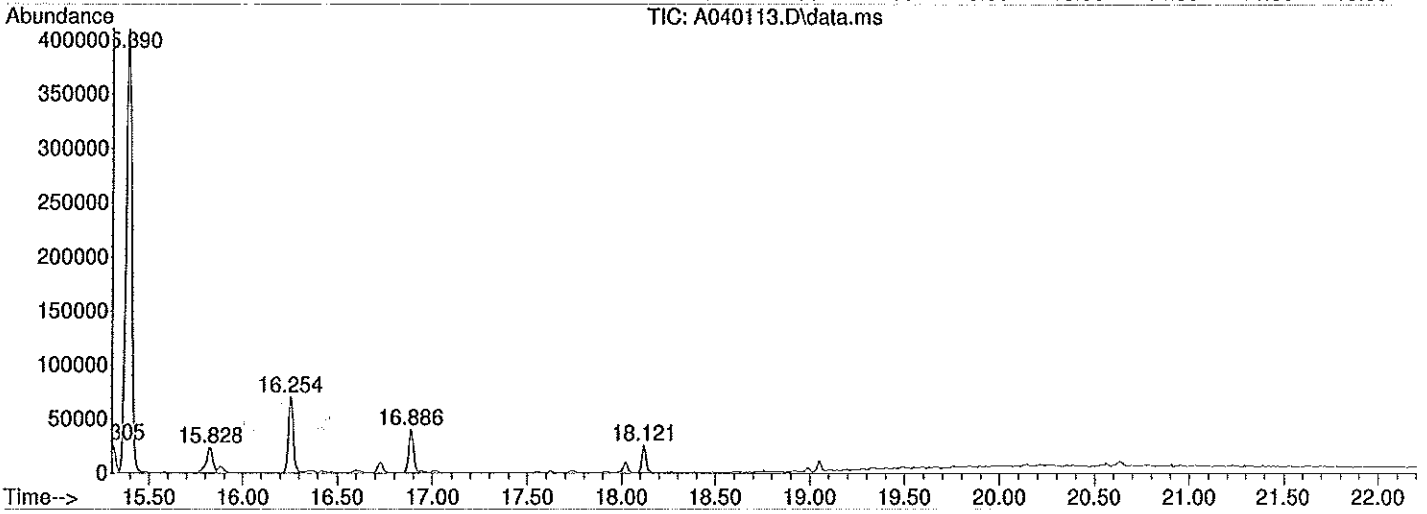
Data Path : D:\msdchem\1\data\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Data Path : D:\msdchem\1\data\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

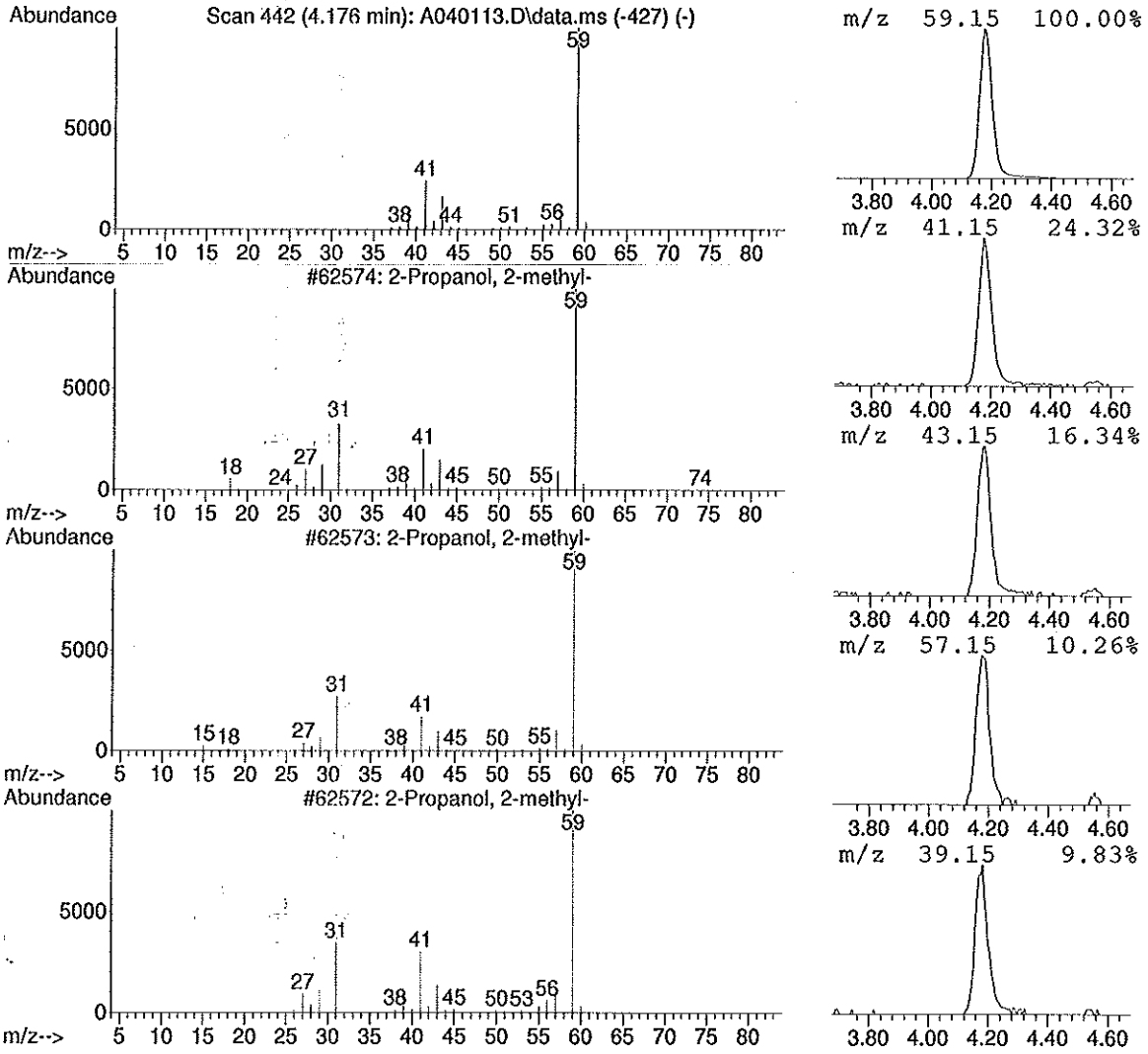
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 2-Propanol, 2-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.176 | 3.58 ug/L | 274339 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 2 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 3 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 72 |
| 4 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 64 |
| 5 | 3-Pentanol | 88 | C5H12O | 000584-02-1 | 64 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

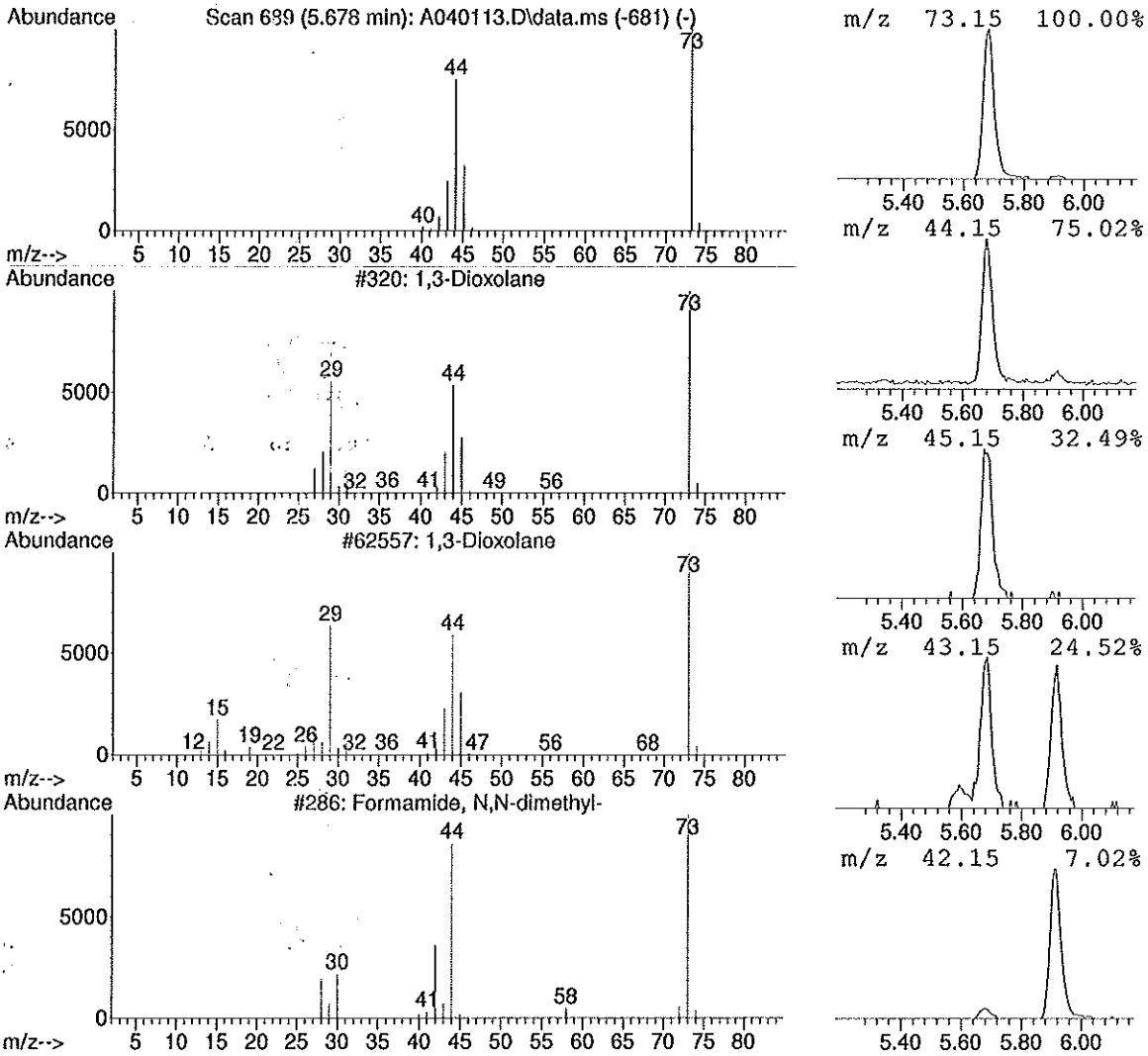
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 2 1,3-Dioxolane Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.678 | 1.03 ug/L | 79184 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 83 |
| 2 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 53 |
| 3 | Formamide, N,N-dimethyl- | 73 | C3H7NO | 000068-12-2 | 9 |
| 4 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 9 |
| 5 | Methanamine, N-methyl- | 45 | C2H7N | 000124-40-3 | 7 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

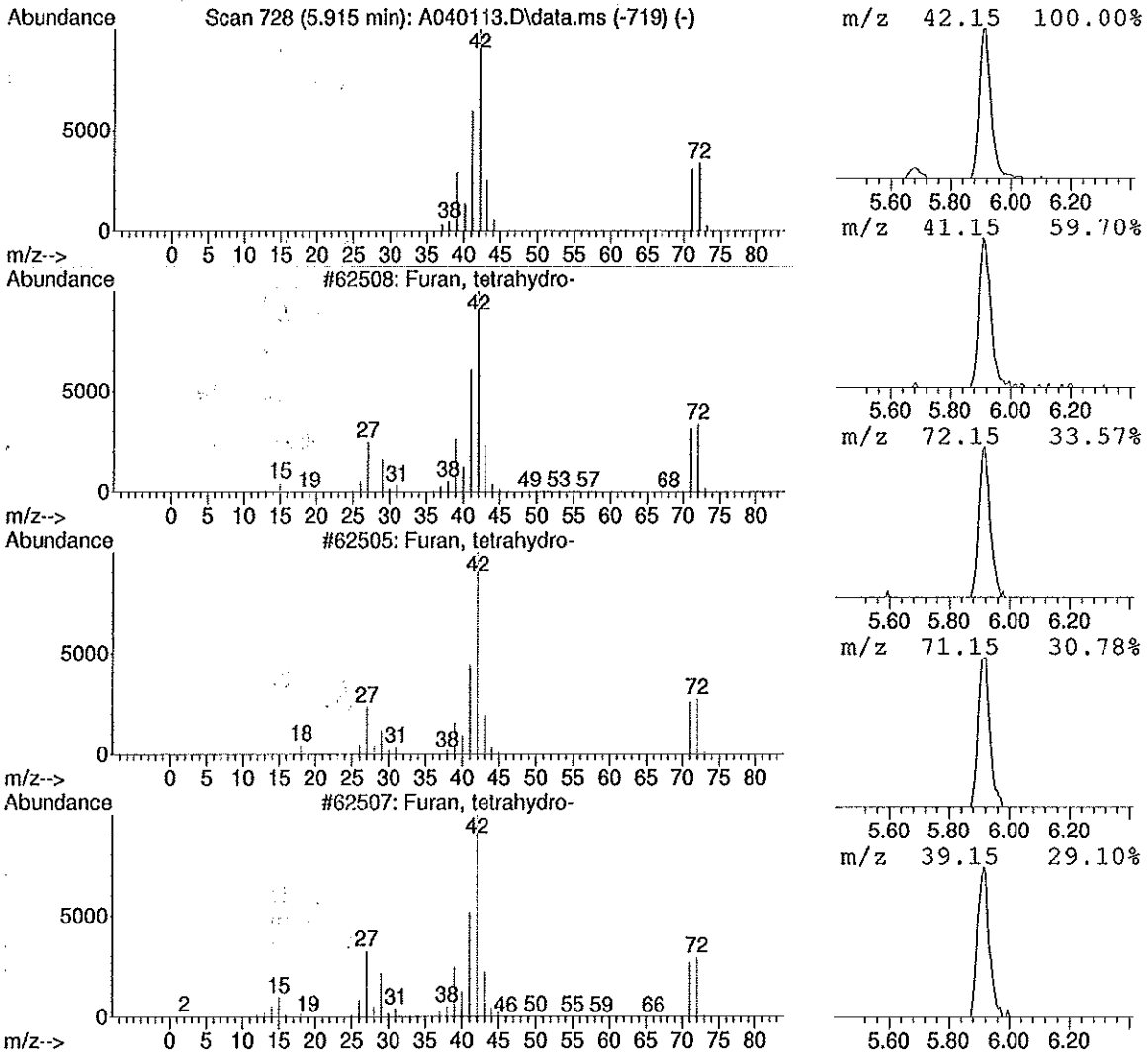
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 3 Furan, tetrahydro- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.915 | 1.35 ug/L | 103240 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 91 |
| 2 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 3 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 4 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 5 | Oxirane, ethyl- | 72 | C4H8O | 000106-88-7 | 83 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

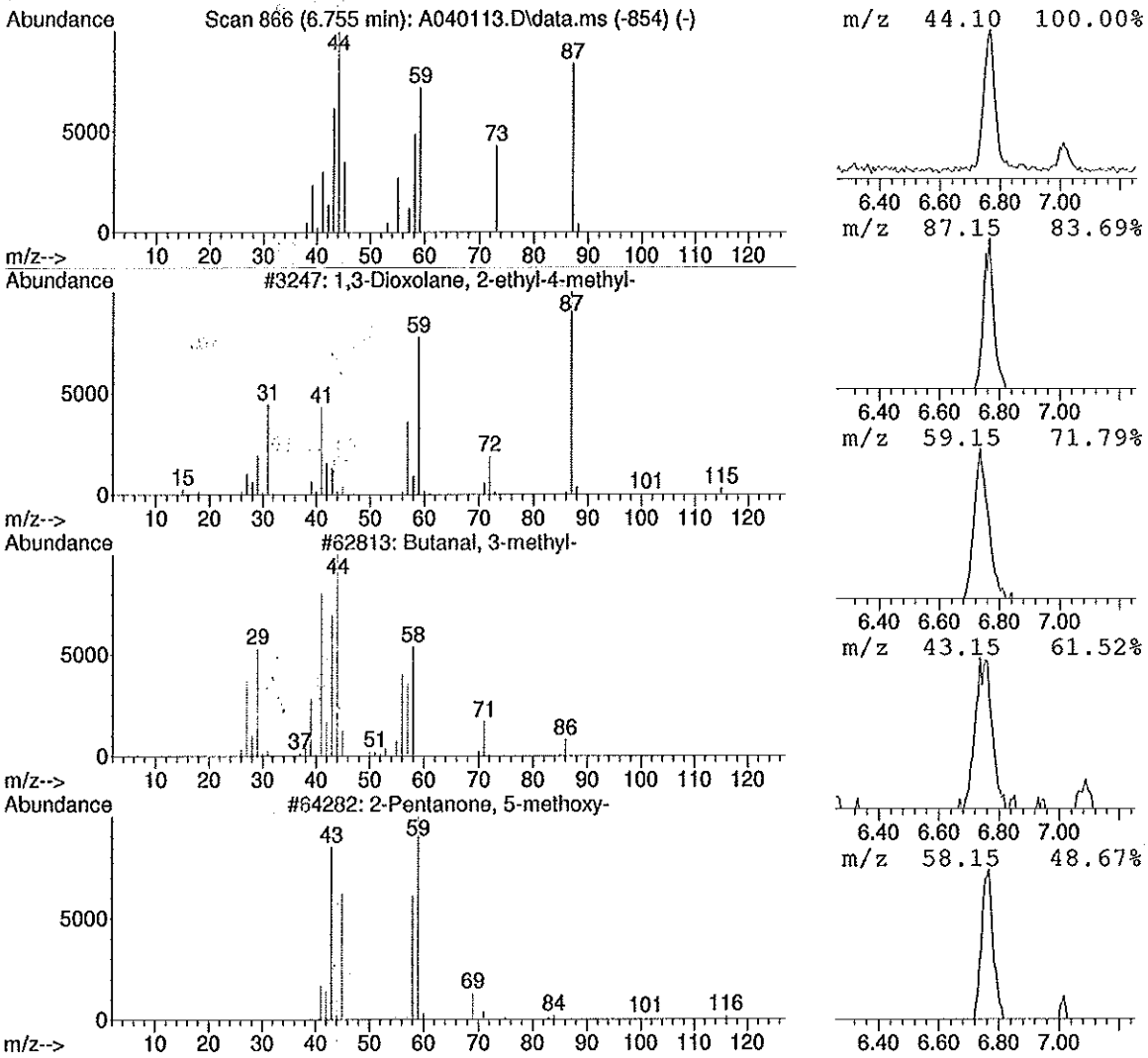
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 4 1,3-Dioxolane, 2-ethyl-4-me... Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.755 | 1.17 ug/L | 89462 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane, 2-ethyl-4-methyl- | 116 | C6H12O2 | 004359-46-0 | 25 |
| 2 | Butanal, 3-methyl- | 86 | C5H10O | 000590-86-3 | 17 |
| 3 | 2-Pentanone, 5-methoxy- | 116 | C6H12O2 | 017429-04-8 | 12 |
| 4 | Methanamine, N-methyl- | 45 | C2H7N | 000124-40-3 | 9 |
| 5 | Guanidine | 59 | CH5N3 | 000113-00-8 | 9 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

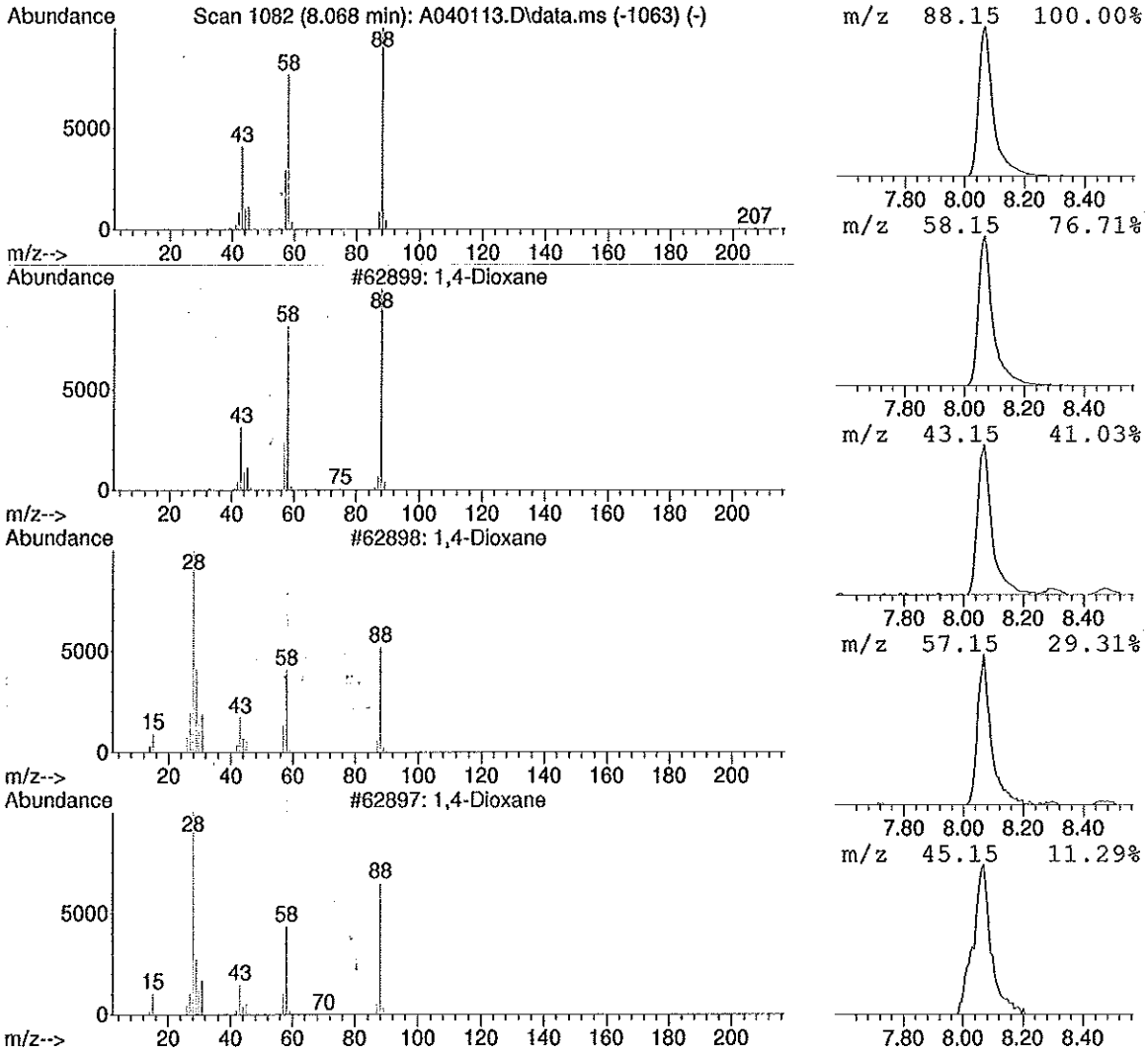
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 5 1,4-Dioxane Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.068 | 6.14 ug/L | 471120 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 5 | 1,3,6-Trioxocane | 118 | C5H10O3 | 001779-19-7 | 39 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040113.D
Acq On : 1 Apr 2008 2:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-03A,1,
Misc : 8260+_W25
ALS Vial : 13 Sample Multiplier: 1

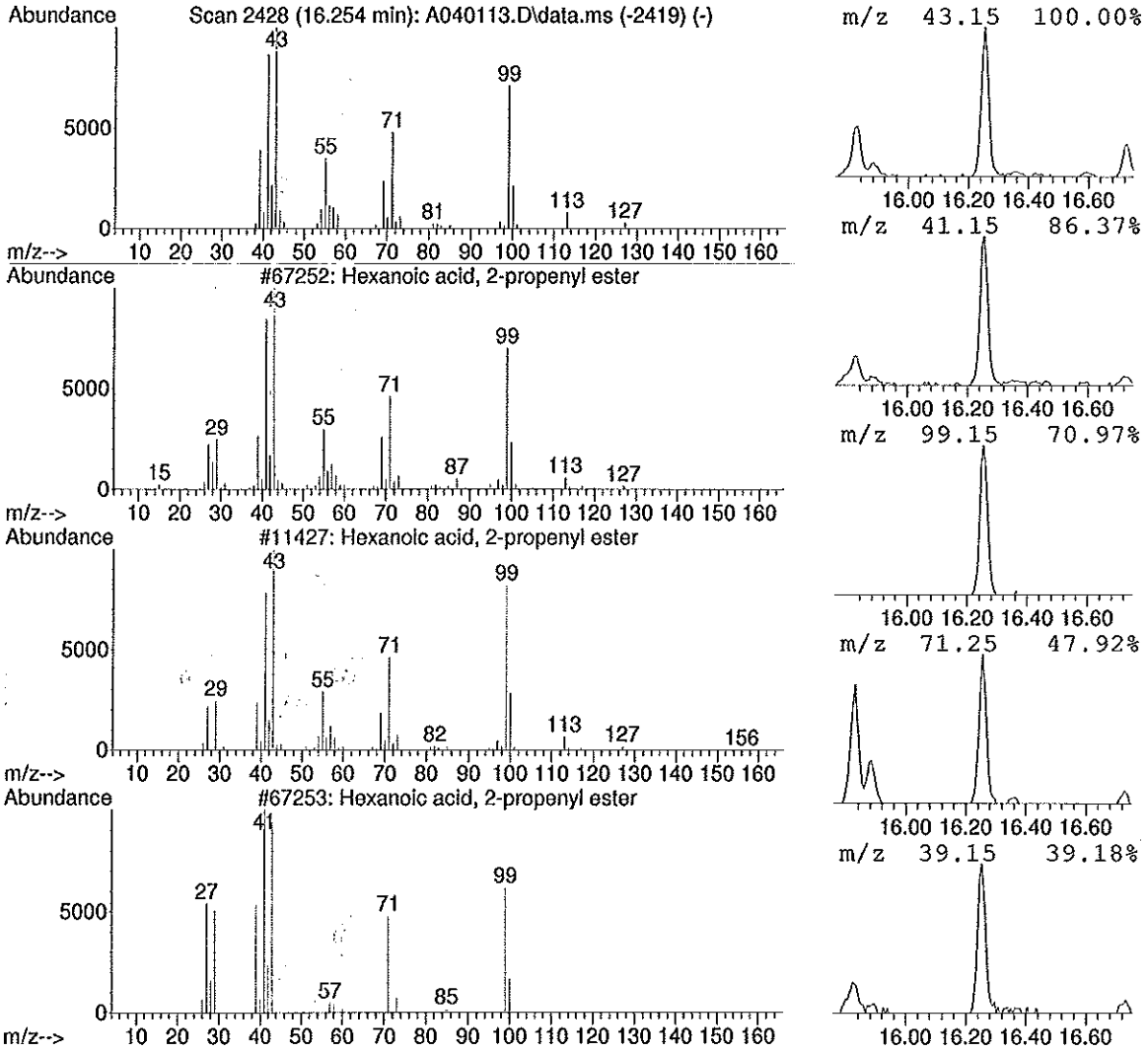
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 6 Hexanoic acid, 2-propenyl e... Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.254 | 1.48 ug/L | 128051 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 58 |
| 2 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 58 |
| 3 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 56 |
| 4 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 50 |
| 5 | 3-Methyl-4-hydroxyoctanoic acid,... | 156 | C9H16O2 | 079081-64-4 | 47 |



Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|
| -Propanol, 2-m... | 4.175 | 5.4 | ug/L | 517496 | 1 | 7.009 | 950855 | 10.0 |
| ,3-Dioxolane | 5.671 | 2.0 | ug/L | 191196 | 1 | 7.009 | 950855 | 10.0 |
| ,3-Dioxolane, ... | 6.753 | 2.2 | ug/L | 207424 | 1 | 7.009 | 950855 | 10.0 |
| ,4-Dioxane | 8.061 | 12.8 | ug/L | 1213380 | 1 | 7.009 | 950855 | 10.0 |
| yclotetrasilox... | 13.862 | 2.7 | ug/L | 267941 | 3 | 15.389 | 1010020 | 10.0 |
| exanoic acid, ... | 16.252 | 2.0 | ug/L | 206662 | 3 | 15.389 | 1010020 | 10.0 |
| ctanoic acid, ... | 16.885 | 1.3 | ug/L | 129910 | 3 | 15.389 | 1010020 | 10.0 |

# LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040121.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.566 | 10 | 13 | 32 | rVB2 | 20432 | 52801 | 4.35% | 0.546% |
| 2 | 1.748 | 35 | 43 | 53 | rVB2 | 32471 | 71876 | 5.92% | 0.743% |
| 3 | 1.894 | 61 | 67 | 75 | rBV3 | 19479 | 38468 | 3.17% | 0.398% |
| 4 | 3.445 | 313 | 322 | 335 | rVB | 65231 | 154608 | 12.74% | 1.598% |
| 5 | 4.175 | 431 | 442 | 463 | rBV | 169357 | 517496 | 42.65% | 5.348% |
| 6 | 5.671 | 679 | 688 | 709 | rVB | 75353 | 191196 | 15.76% | 1.976% |
| 7 | 6.163 | 758 | 769 | 789 | rBV | 139679 | 356556 | 29.39% | 3.685% |
| 8 | 6.601 | 830 | 841 | 853 | rBV | 100022 | 261266 | 21.53% | 2.700% |
| 9 | 6.753 | 853 | 866 | 881 | rVB5 | 58211 | 207424 | 17.09% | 2.144% |
| 10 | 7.009 | 897 | 908 | 924 | rBV | 375097 | 950855 | 78.36% | 9.827% |
| 11 | 7.507 | 979 | 990 | 1009 | rBV | 231251 | 591213 | 48.72% | 6.110% |
| 12 | 8.061 | 1066 | 1081 | 1112 | rBV | 374438 | 1213376 | 100.00% | 12.540% |
| 13 | 9.247 | 1264 | 1276 | 1288 | rBV | 441027 | 1133904 | 93.45% | 11.719% |
| 14 | 11.527 | 1640 | 1651 | 1678 | rBV | 406257 | 1033102 | 85.14% | 10.677% |
| 15 | 13.522 | 1968 | 1979 | 2004 | rBV | 317061 | 772384 | 63.66% | 7.983% |
| 16 | 13.862 | 2022 | 2035 | 2057 | rVB2 | 75782 | 267941 | 22.08% | 2.769% |
| 17 | 15.304 | 2264 | 2272 | 2278 | rBV2 | 43441 | 95164 | 7.84% | 0.984% |
| 18 | 15.389 | 2278 | 2286 | 2299 | rVB | 466633 | 1010017 | 83.24% | 10.439% |
| 19 | 15.821 | 2343 | 2357 | 2364 | rBV2 | 36929 | 97473 | 8.03% | 1.007% |
| 20 | 16.252 | 2418 | 2428 | 2438 | rBV | 113168 | 206662 | 17.03% | 2.136% |
| 21 | 16.623 | 2474 | 2489 | 2499 | rVB2 | 15596 | 45383 | 3.74% | 0.469% |
| 22 | 16.727 | 2499 | 2506 | 2520 | rBV2 | 18319 | 38426 | 3.17% | 0.397% |
| 23 | 16.885 | 2523 | 2532 | 2545 | rVB | 68716 | 129910 | 10.71% | 1.343% |
| 24 | 18.016 | 2709 | 2718 | 2727 | rBV3 | 22529 | 50348 | 4.15% | 0.520% |
| 25 | 18.119 | 2729 | 2735 | 2739 | rBV | 51314 | 79734 | 6.57% | 0.824% |
| 26 | 19.323 | 2929 | 2933 | 2942 | rBV3 | 29802 | 54513 | 4.49% | 0.563% |
| 27 | 20.631 | 3143 | 3148 | 3164 | rVB2 | 20873 | 53644 | 4.42% | 0.554% |

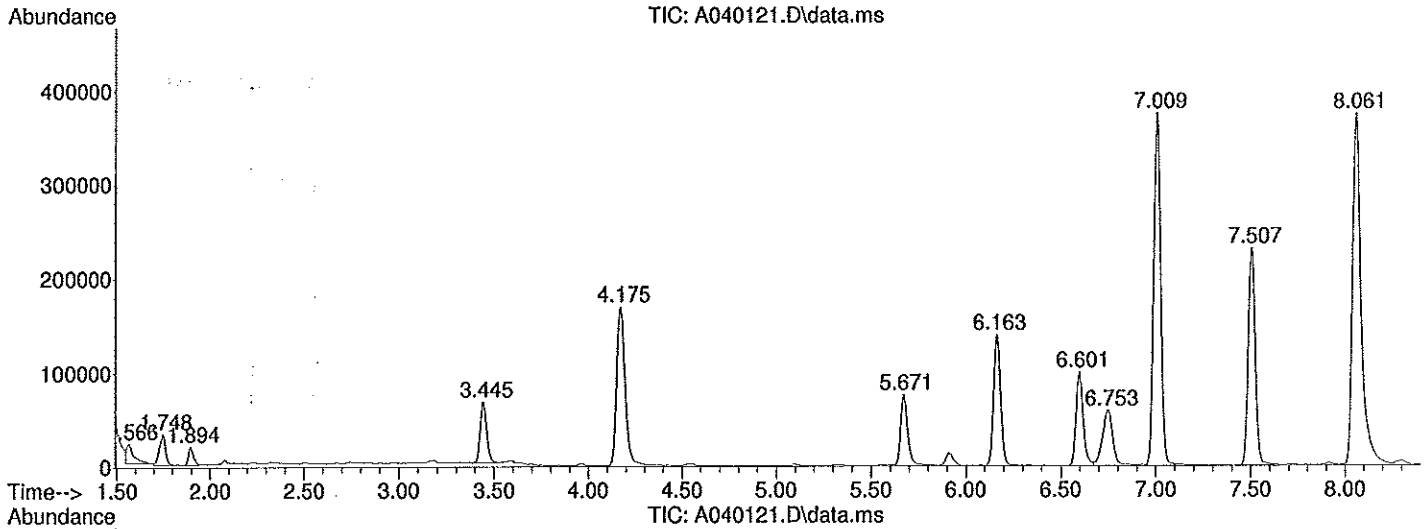
Sum of corrected areas: 9675740

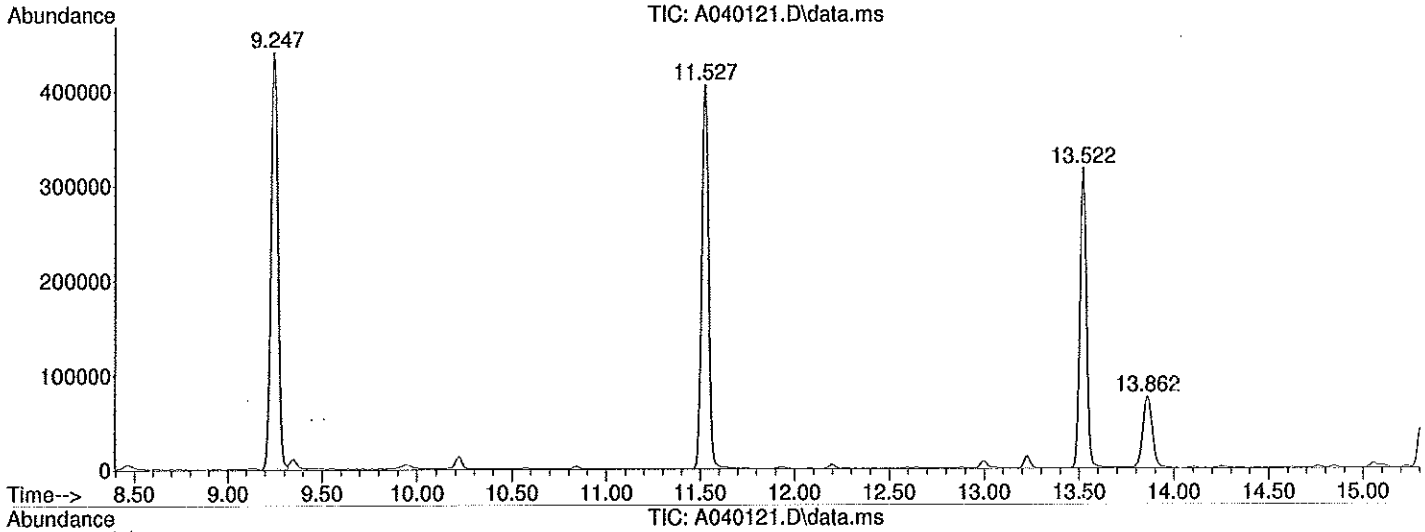
LSC Report - Integrated Chromatogram

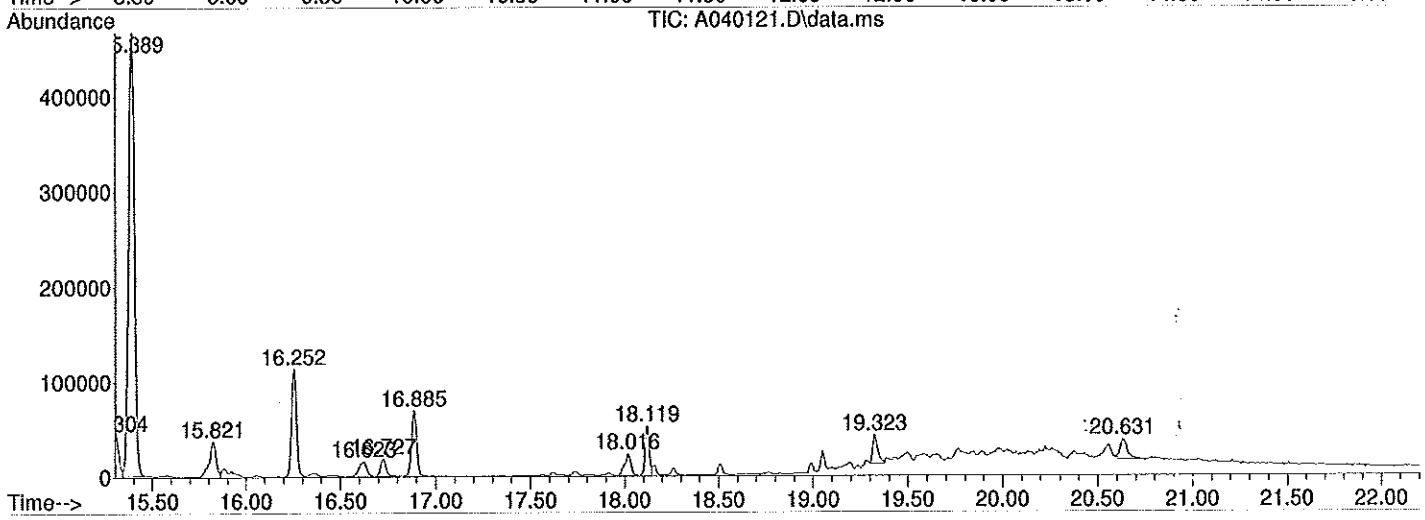
Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

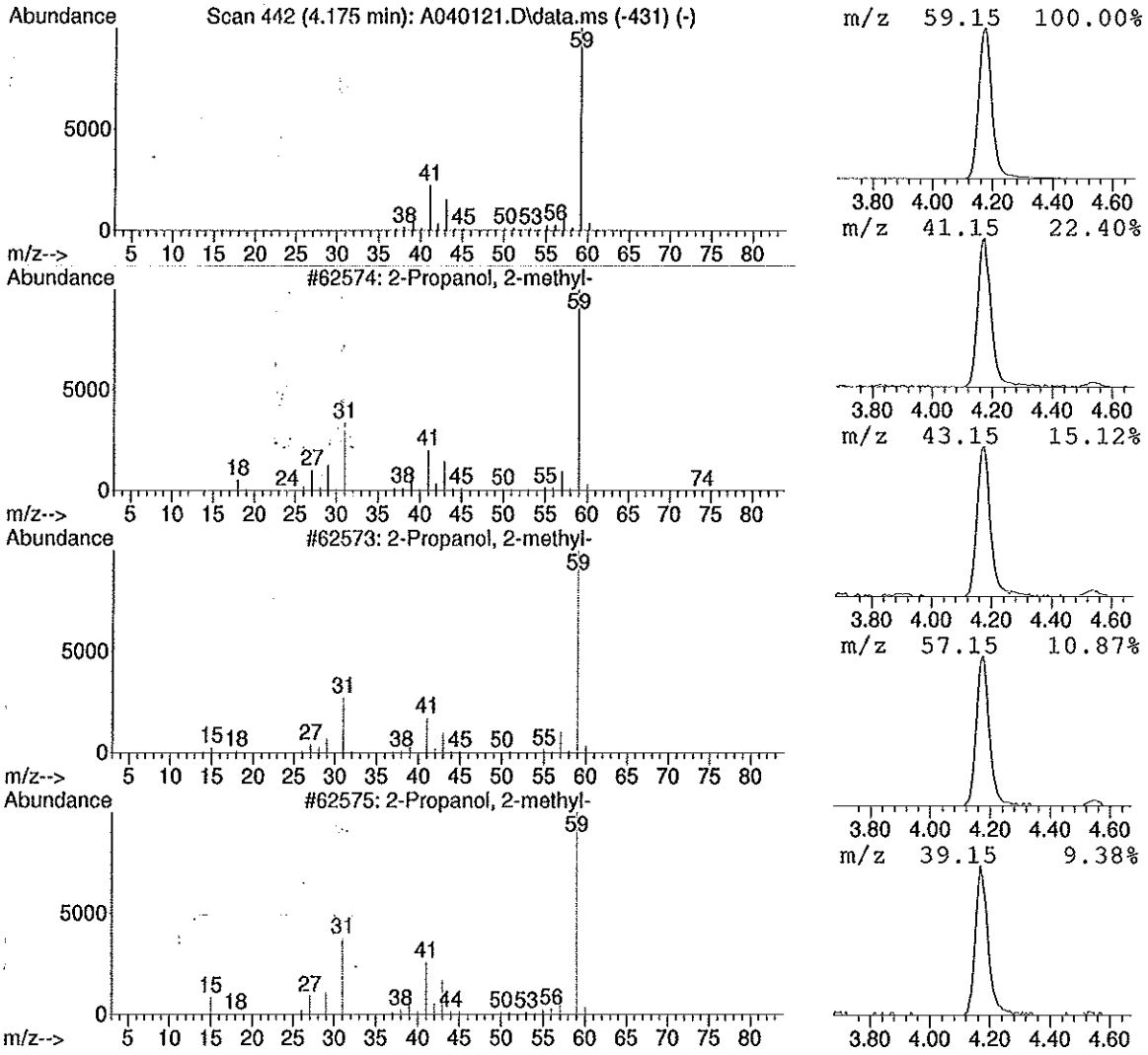
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 2-Propanol, 2-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.175 | 5.44 ug/L | 517496 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 2 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 3 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 4 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 72 |
| 5 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 64 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

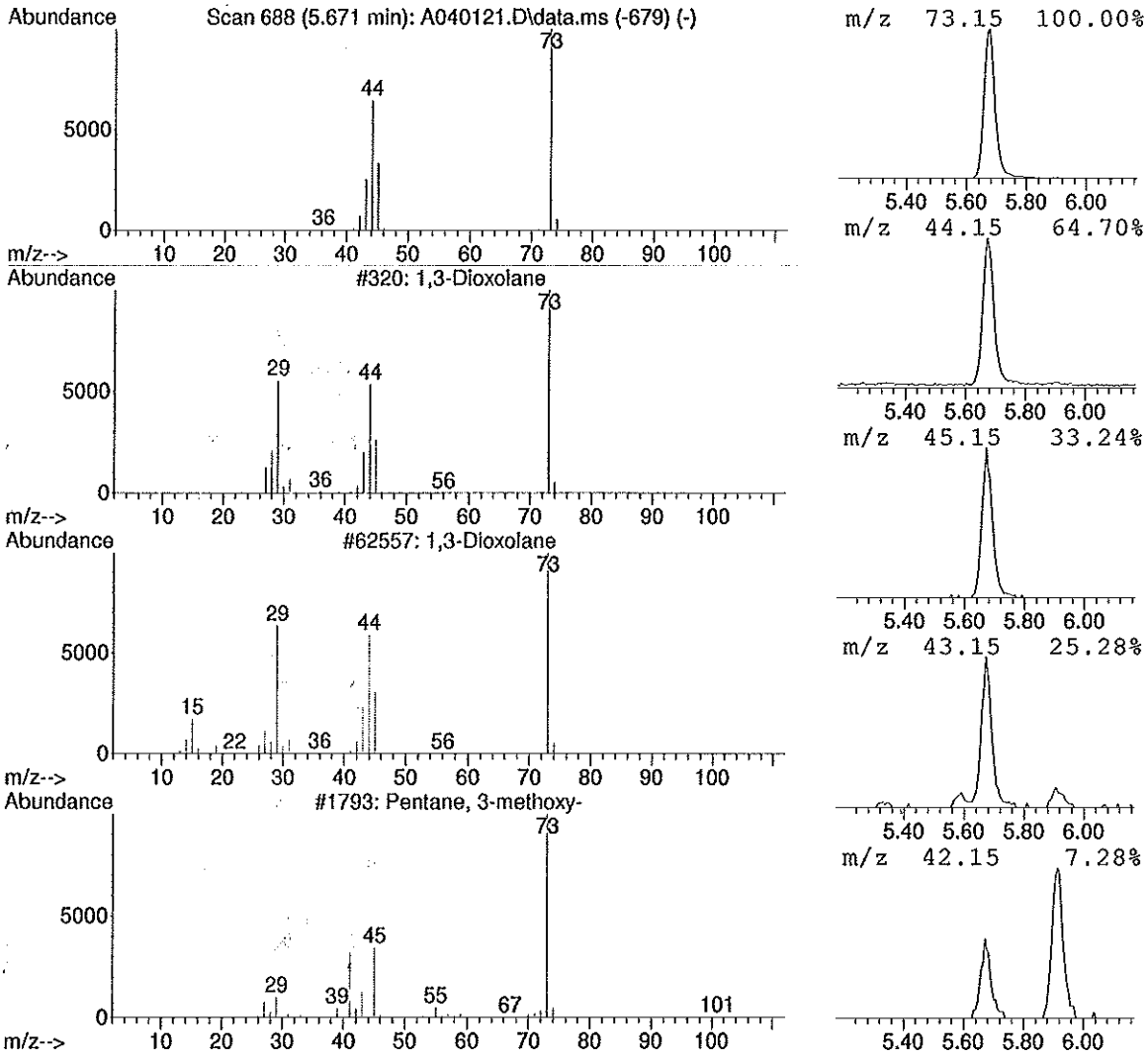
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 2 1,3-Dioxolane Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.671 | 2.01 ug/L | 191196 | fluorobenzene | 7.009 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 90 |
| 2 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 90 |
| 3 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 9 |
| 4 | Methanamine, N-methyl- | 45 | C2H7N | 000124-40-3 | 7 |
| 5 | Formamide, N,N-dimethyl- | 73 | C3H7NO | 000068-12-2 | 7 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

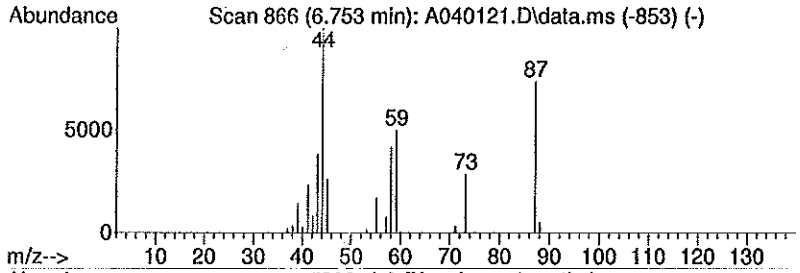
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

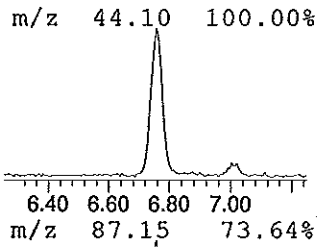
**********

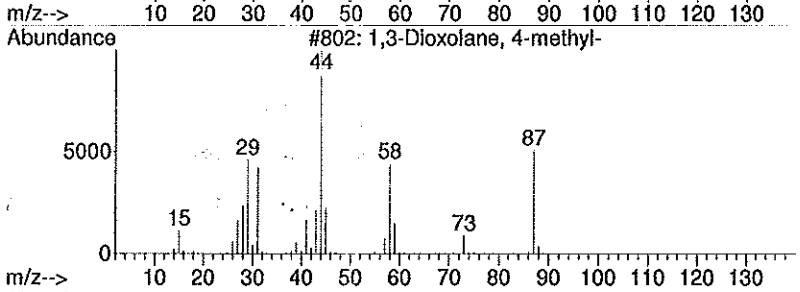
Peak Number 3 1,3-Dioxolane, 4-methyl- Concentration Rank 4

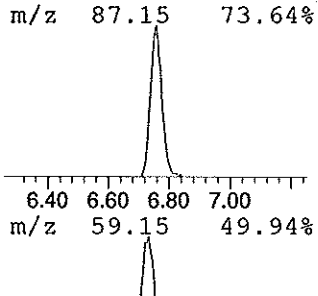
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.753 | 2.18 ug/L | 207424 | fluorobenzene | 7.009 |

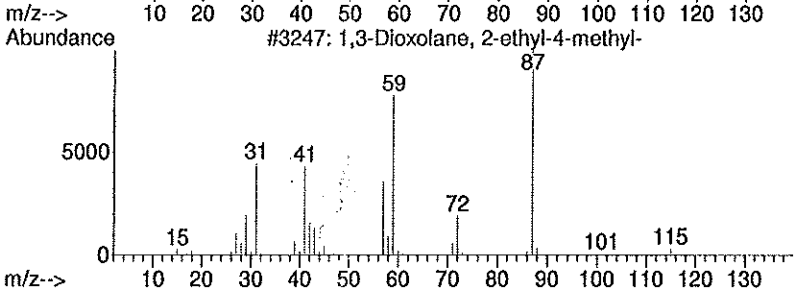
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane, 4-methyl- | 88 | C4H8O2 | 001072-47-5 | 50 |
| 2 | 1,3-Dioxolane, 2-ethyl-4-methyl- | 116 | C6H12O2 | 004359-46-0 | 17 |
| 3 | 3-Pentanol, 2,3,4-trimethyl- | 130 | C8H18O | 003054-92-0 | 17 |
| 4 | Propanamide, 2-methyl- | 87 | C4H9NO | 000563-83-7 | 9 |
| 5 | Ethanamine, N-methyl- | 59 | C3H9N | 000624-78-2 | 9 |

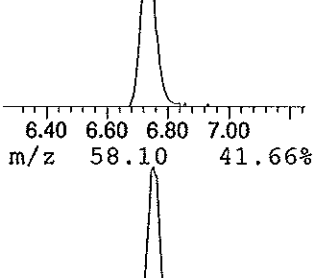


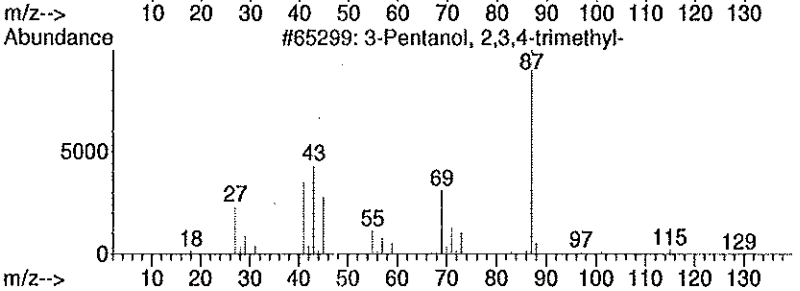



Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

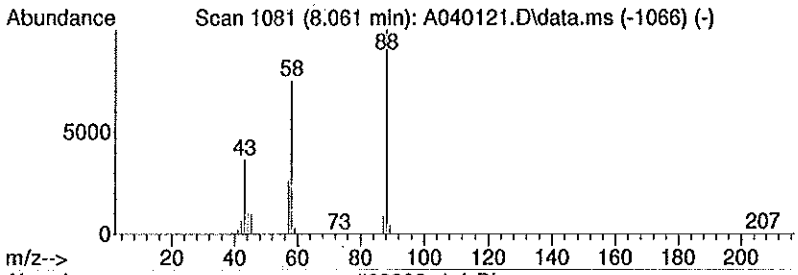
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

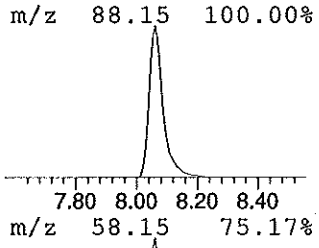
**********

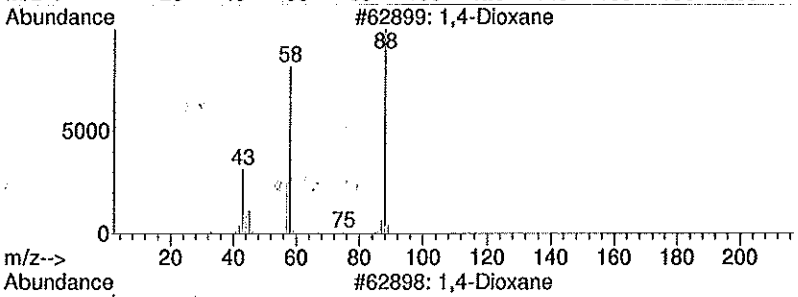
Peak Number 4 1,4-Dioxane Concentration Rank 1

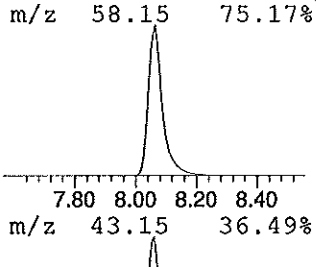
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.061 | 12.76 ug/L | 1213380 | fluorobenzene | 7.009 |

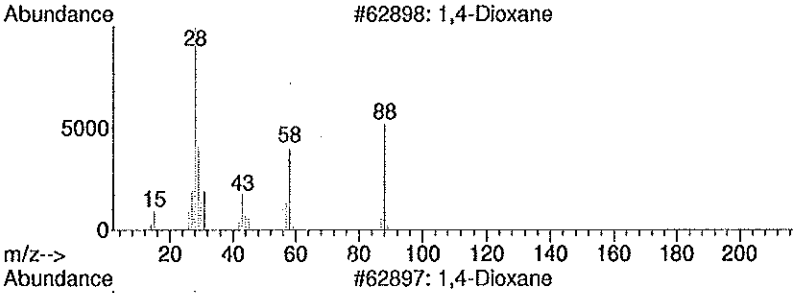
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 83 |
| 5 | 1-Propanamine, N-ethyl- | 87 | C5H13N | 020193-20-8 | 32 |

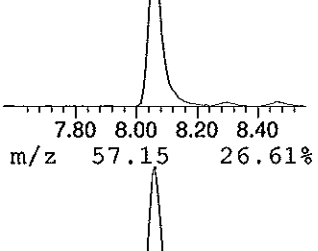


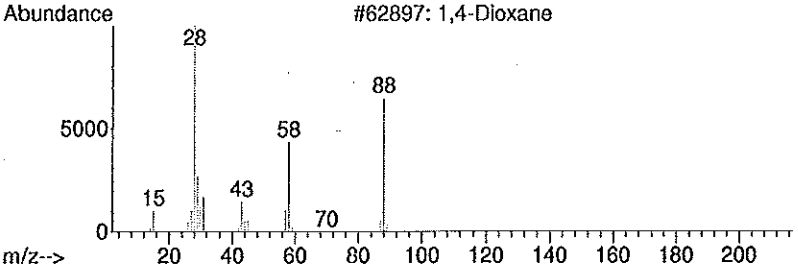



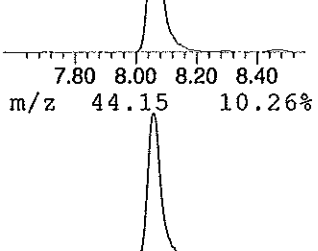



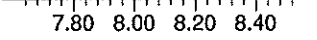



Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

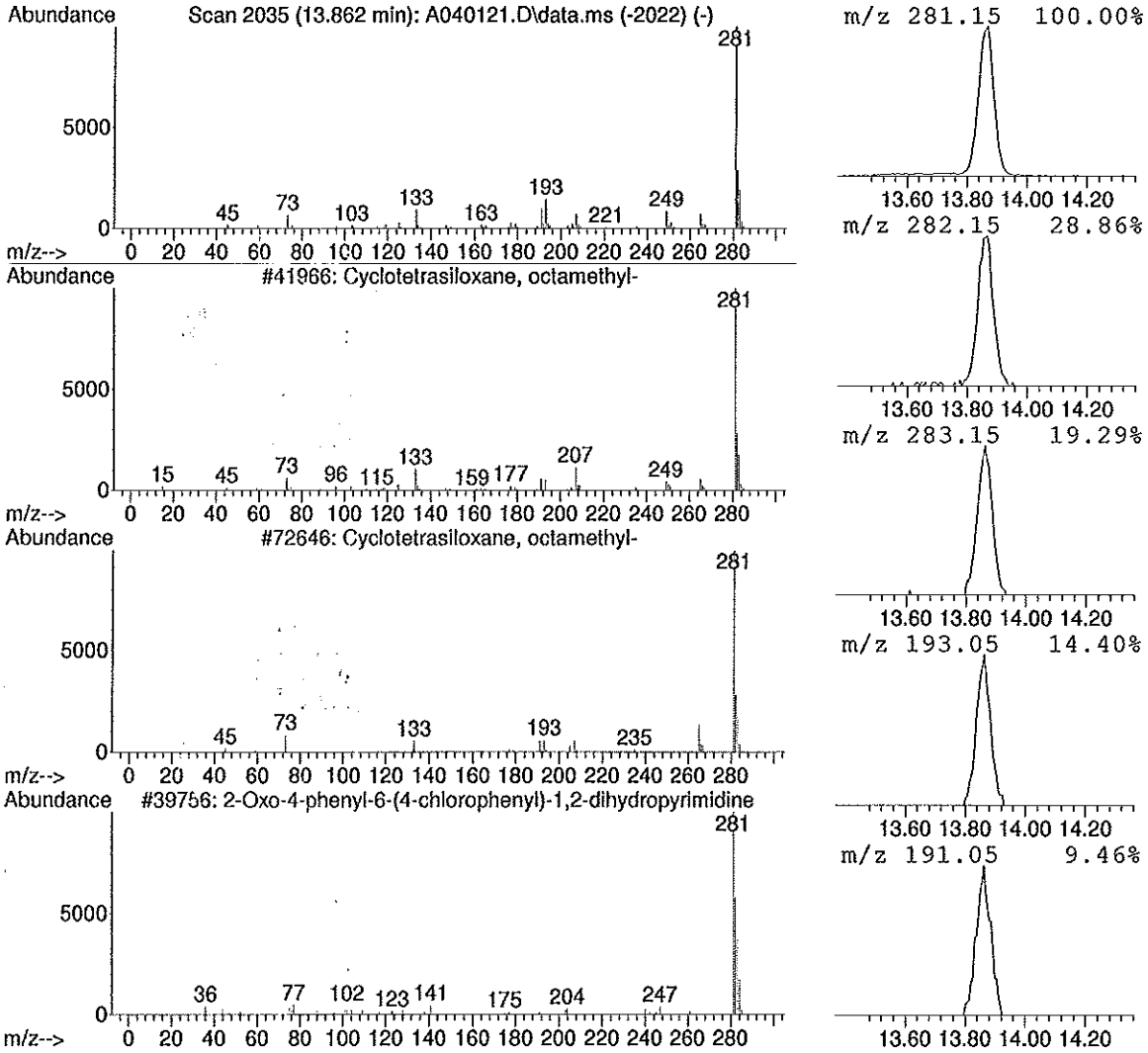
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 5 Cyclotetrasiloxane, octamet... Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.862 | 2.65 ug/L | 267941 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclotetrasiloxane, octamethyl- | 296 | C8H24O4Si4 | 000556-67-2 | 86 |
| 2 | Cyclotetrasiloxane, octamethyl- | 296 | C8H24O4Si4 | 000556-67-2 | 64 |
| 3 | 2-Oxo-4-phenyl-6-(4-chlorophenyl... | 282 | C16H11ClN2O | 000000-00-0 | 9 |
| 4 | Benzene, 1-phenyl-4-(2-cyano-2-p... | 281 | C21H15N | 027869-56-3 | 9 |
| 5 | 6,7-Benzo-phenothiazine-5,5-dioxide | 281 | C16H11NO2S | 000000-00-0 | 5 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

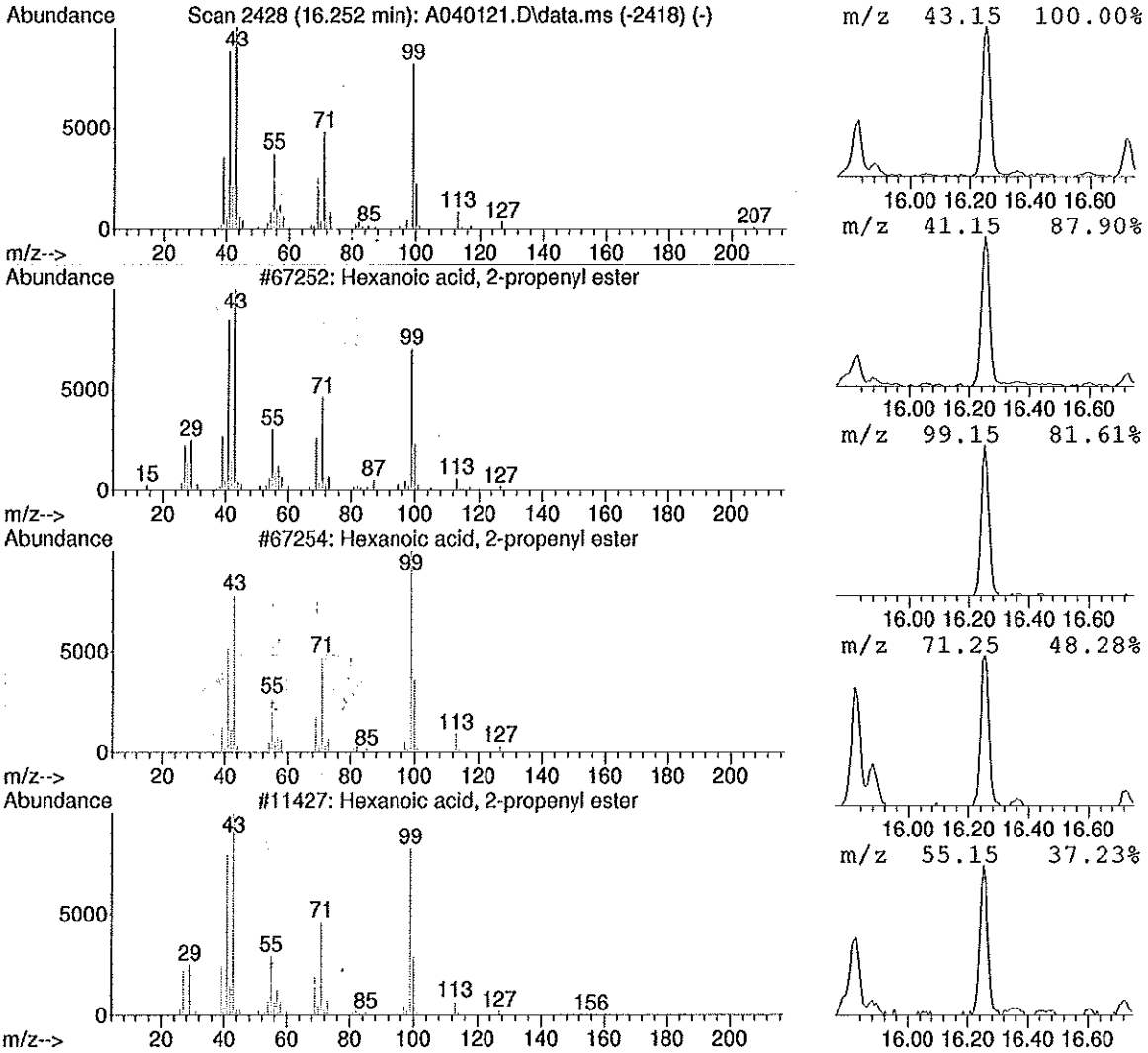
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 6 Hexanoic acid, 2-propenyl e... Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.252 | 2.05 ug/L | 206662 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 90 |
| 2 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 78 |
| 3 | Hexanoic acid, 2-propenyl ester | 156 | C9H16O2 | 000123-68-2 | 78 |
| 4 | Phenol-d6- | 100 | C6D6O | 013127-88-3 | 59 |
| 5 | Glycocyanidine | 99 | C3H5N3O | 000503-86-6 | 59 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040121.D
Acq On : 1 Apr 2008 8:27 pm
Operator : BR
Sample : ,SAMP,ME0803A55-04A,1,
Misc : 8260+_w25
ALS Vial : 21 Sample Multiplier: 1

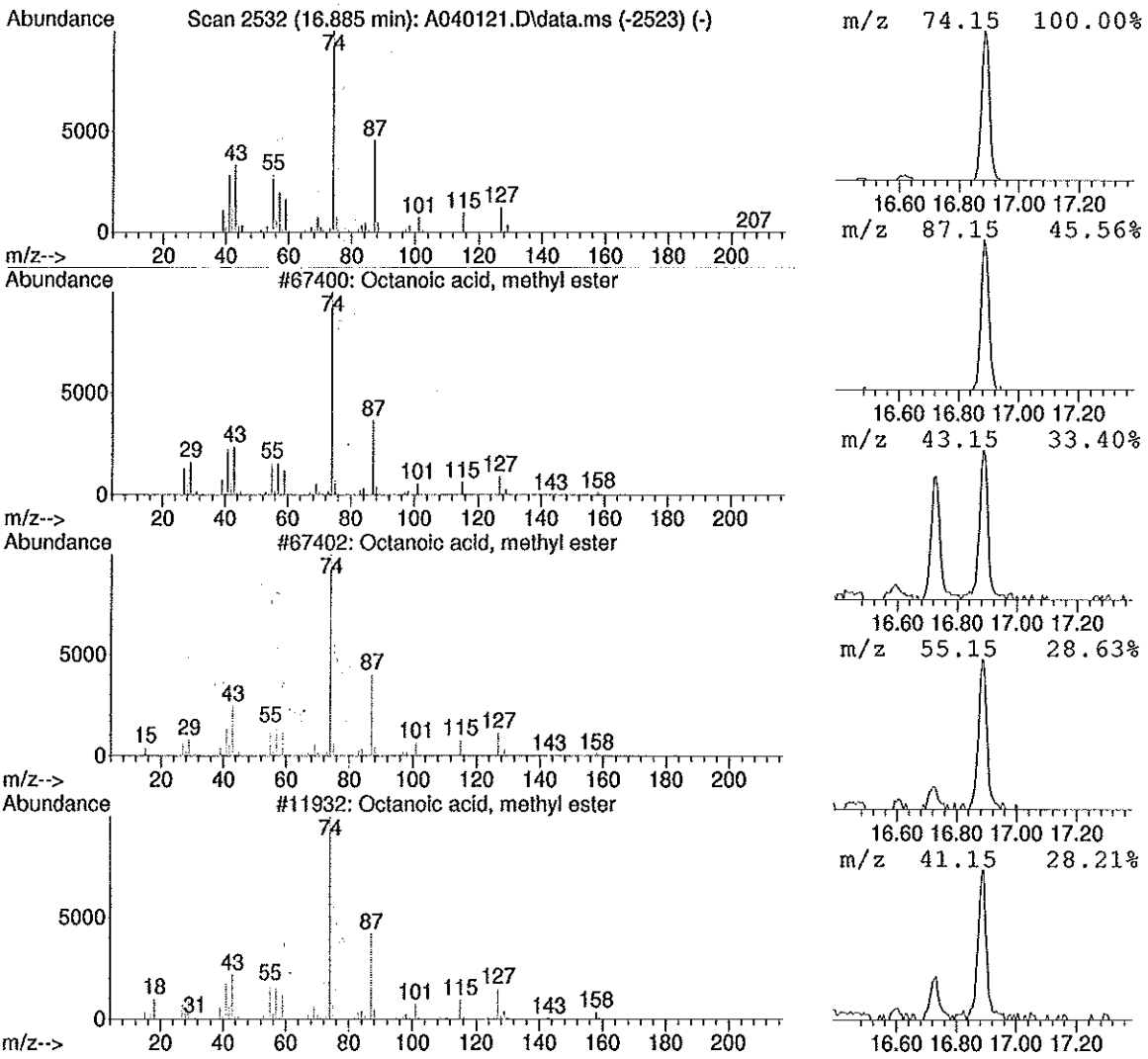
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 7 Octanoic acid, methyl ester Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.885 | 1.29 ug/L | 129910 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 90 |
| 2 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 90 |
| 3 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 90 |
| 4 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 83 |
| 5 | Octanoic acid, methyl ester | 158 | C9H18O2 | 000111-11-5 | 83 |



Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|
| enzene, 1,3-di... | 15.772 | 1.2 | ug/L | 128104 | 3 | 15.389 | 1062290 | 10.0 |
| enzene, 1-meth... | 16.277 | 1.2 | ug/L | 131480 | 3 | 15.389 | 1062290 | 10.0 |
| enzene, 1-meth... | 16.423 | 3.0 | ug/L | 323367 | 3 | 15.389 | 1062290 | 10.0 |
| enzene, 1,2,4,... | 16.946 | 2.4 | ug/L | 254157 | 3 | 15.389 | 1062290 | 10.0 |
| enzene, 1,2,4,... | 17.012 | 4.8 | ug/L | 506736 | 3 | 15.389 | 1062290 | 10.0 |
| ndan, 1-methyl- | 17.548 | 1.7 | ug/L | 183649 | 3 | 15.389 | 1062290 | 10.0 |

LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040122.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.169 | 760 | 770 | 783 | rBV | 139865 | 354404 | 31.23% | 4.439% |
| 2 | 6.601 | 828 | 841 | 857 | rBV | 98852 | 250500 | 22.07% | 3.137% |
| 3 | 7.015 | 894 | 909 | 924 | rBV | 369667 | 935112 | 82.40% | 11.712% |
| 4 | 8.079 | 1076 | 1084 | 1105 | rBV | 12142 | 40865 | 3.60% | 0.512% |
| 5 | 9.253 | 1266 | 1277 | 1289 | rBV | 441596 | 1134822 | 100.00% | 14.213% |
| 6 | 10.177 | 1419 | 1429 | 1437 | rVB4 | 24067 | 62006 | 5.46% | 0.777% |
| 7 | 11.527 | 1639 | 1651 | 1669 | rBV | 410739 | 1074813 | 94.71% | 13.462% |
| 8 | 13.522 | 1969 | 1979 | 1998 | rBV | 331791 | 819822 | 72.24% | 10.268% |
| 9 | 15.389 | 2273 | 2286 | 2298 | rVV | 491635 | 1062285 | 93.61% | 13.305% |
| 10 | 15.772 | 2340 | 2349 | 2362 | rBV | 56313 | 128104 | 11.29% | 1.604% |
| 11 | 15.887 | 2362 | 2368 | 2387 | rVB4 | 19380 | 52047 | 4.59% | 0.652% |
| 12 | 16.052 | 2387 | 2395 | 2403 | rBV2 | 20229 | 40234 | 3.55% | 0.504% |
| 13 | 16.277 | 2423 | 2432 | 2436 | rBV | 58644 | 131480 | 11.59% | 1.647% |
| 14 | 16.319 | 2436 | 2439 | 2448 | rVB | 58320 | 98287 | 8.66% | 1.231% |
| 15 | 16.423 | 2449 | 2456 | 2471 | rVB | 154769 | 323367 | 28.49% | 4.050% |
| 16 | 16.569 | 2471 | 2480 | 2483 | rBV2 | 24793 | 54731 | 4.82% | 0.685% |
| 17 | 16.946 | 2536 | 2542 | 2547 | rVV | 137926 | 254157 | 22.40% | 3.183% |
| 18 | 17.012 | 2547 | 2553 | 2563 | rVB | 270644 | 506736 | 44.65% | 6.347% |
| 19 | 17.110 | 2563 | 2569 | 2573 | rBV3 | 18284 | 38570 | 3.40% | 0.483% |
| 20 | 17.487 | 2624 | 2631 | 2635 | rBV3 | 19074 | 39438 | 3.48% | 0.494% |
| 21 | 17.548 | 2635 | 2641 | 2652 | rVV | 87238 | 183649 | 16.18% | 2.300% |
| 22 | 17.967 | 2704 | 2710 | 2711 | rBV3 | 37819 | 58952 | 5.19% | 0.738% |
| 23 | 17.992 | 2712 | 2714 | 2720 | rVB2 | 45004 | 63815 | 5.62% | 0.799% |
| 24 | 18.101 | 2726 | 2732 | 2738 | rVB4 | 31395 | 63230 | 5.57% | 0.792% |
| 25 | 18.630 | 2808 | 2819 | 2825 | rBV2 | 23049 | 37259 | 3.28% | 0.467% |
| 26 | 18.800 | 2838 | 2847 | 2858 | rBV | 18948 | 36154 | 3.19% | 0.453% |
| 27 | 18.928 | 2860 | 2868 | 2874 | rBV | 25100 | 38241 | 3.37% | 0.479% |
| 28 | 19.323 | 2929 | 2933 | 2940 | rBV5 | 16635 | 36896 | 3.25% | 0.462% |
| 29 | 20.637 | 3143 | 3149 | 3165 | rVB3 | 23411 | 64264 | 5.66% | 0.805% |

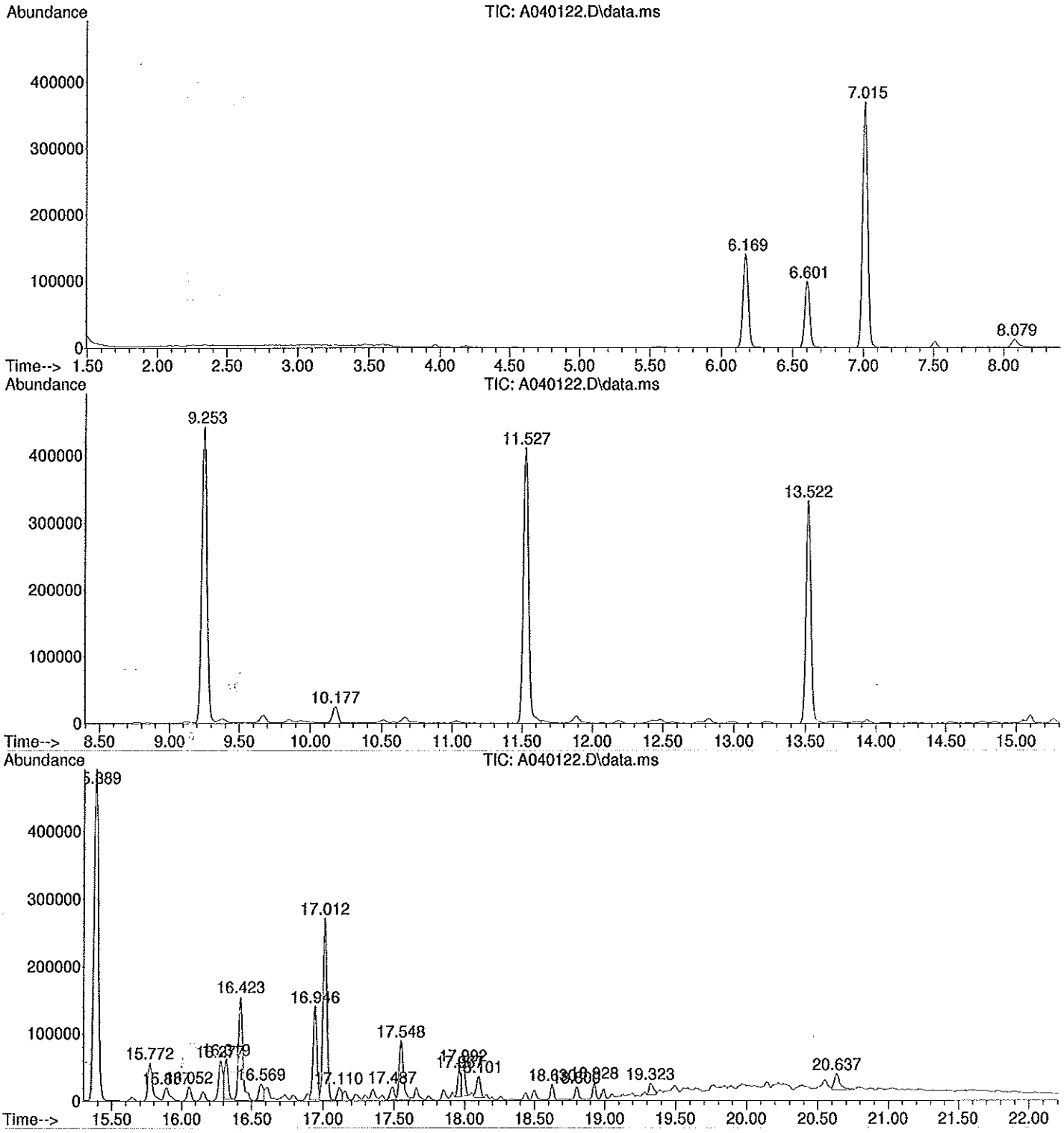
Sum of corrected areas: 7984240

LSC Report - Integrated Chromatogram

Data Path : D:\msdchem\1\data\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Data Path : D:\msdchem\1\data\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

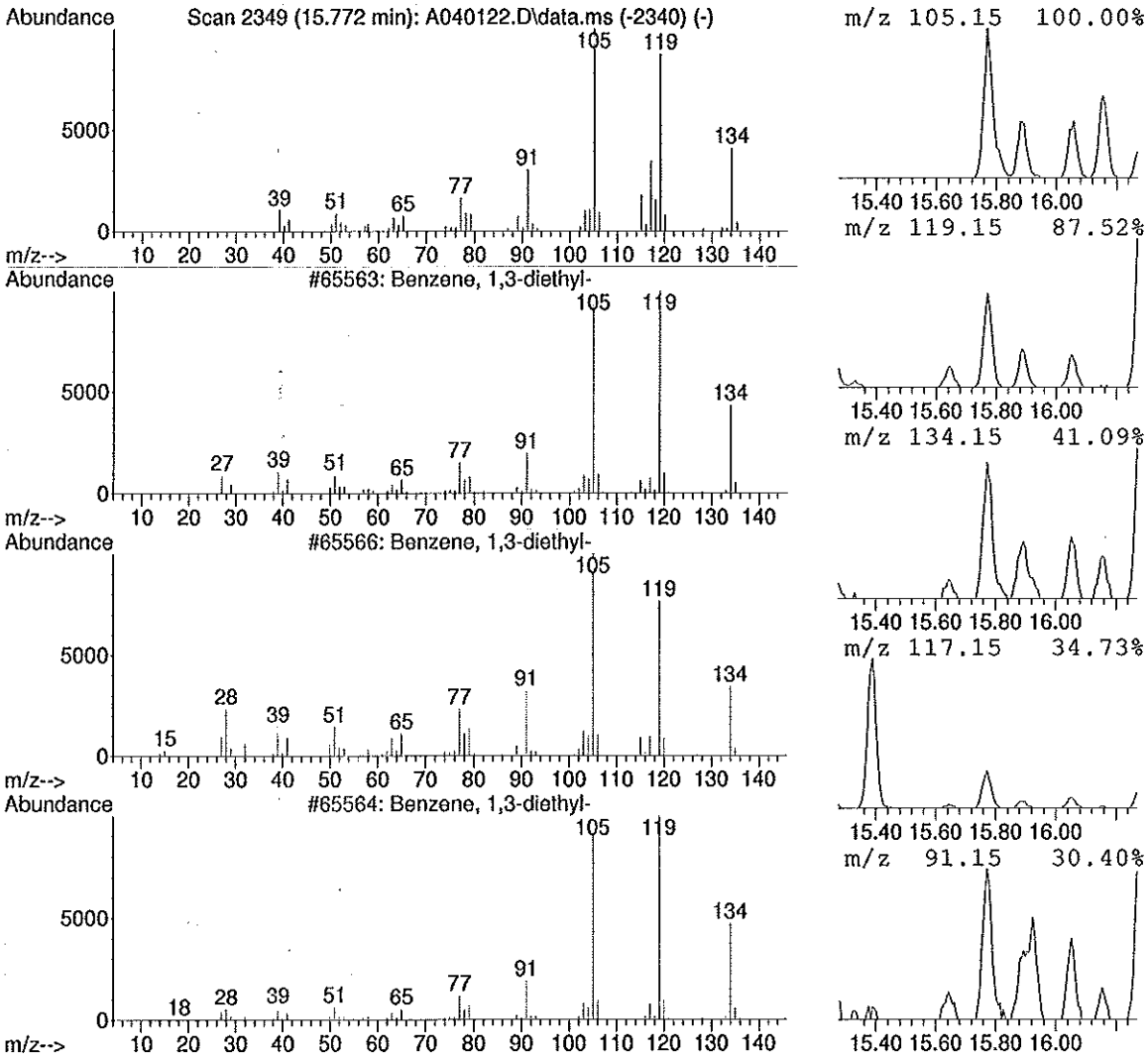
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 Benzene, 1,3-diethyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.772 | 1.21 ug/L | 128104 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 93 |
| 2 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 91 |
| 3 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 90 |
| 4 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 90 |
| 5 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 87 |



# Library Search Compound Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

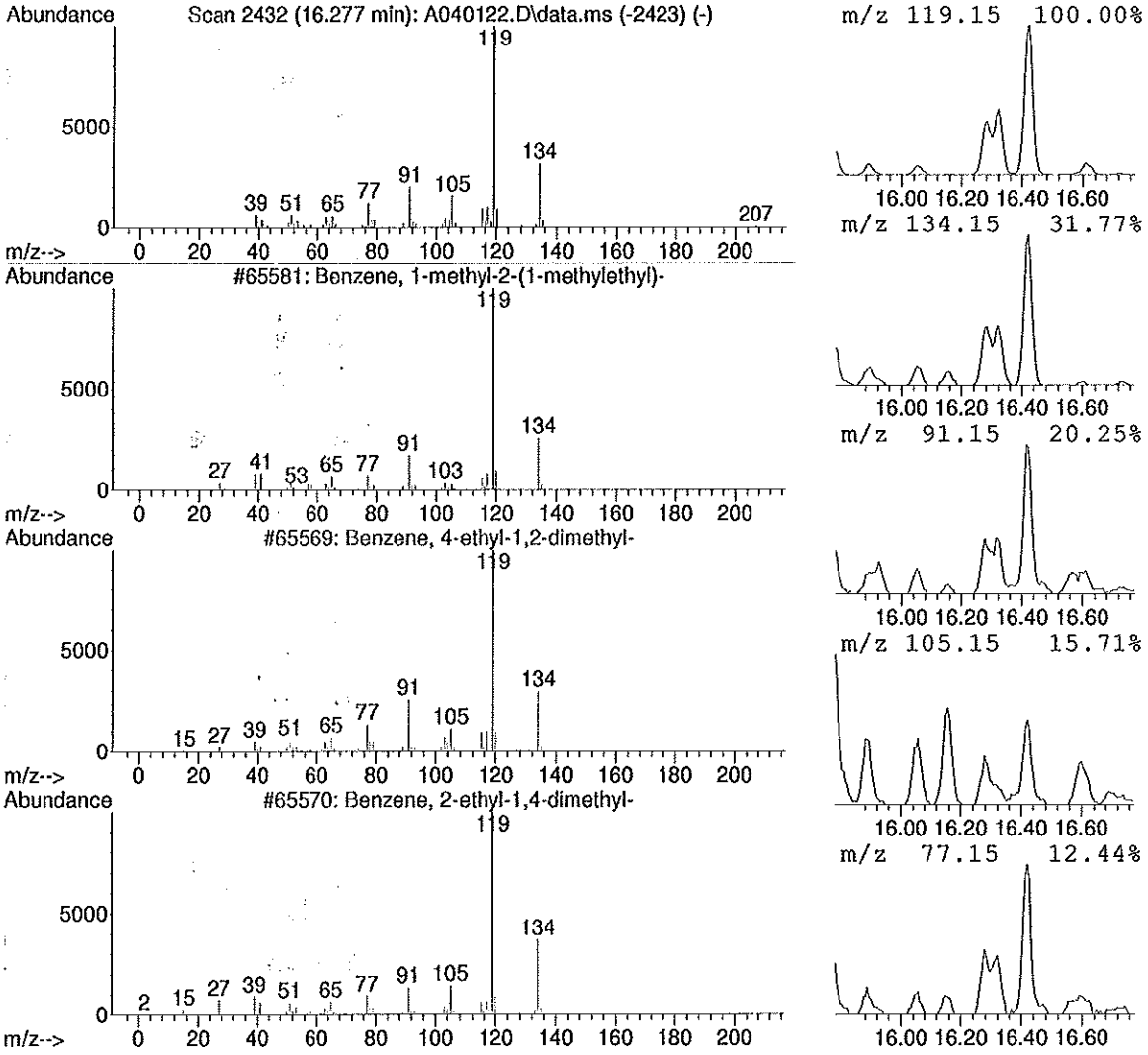
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 2 Benzene, 1-methyl-2-(1-meth... Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.277 | 1.24 ug/L | 131480 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 95 |
| 2 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 95 |
| 3 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 95 |
| 4 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 94 |
| 5 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 94 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

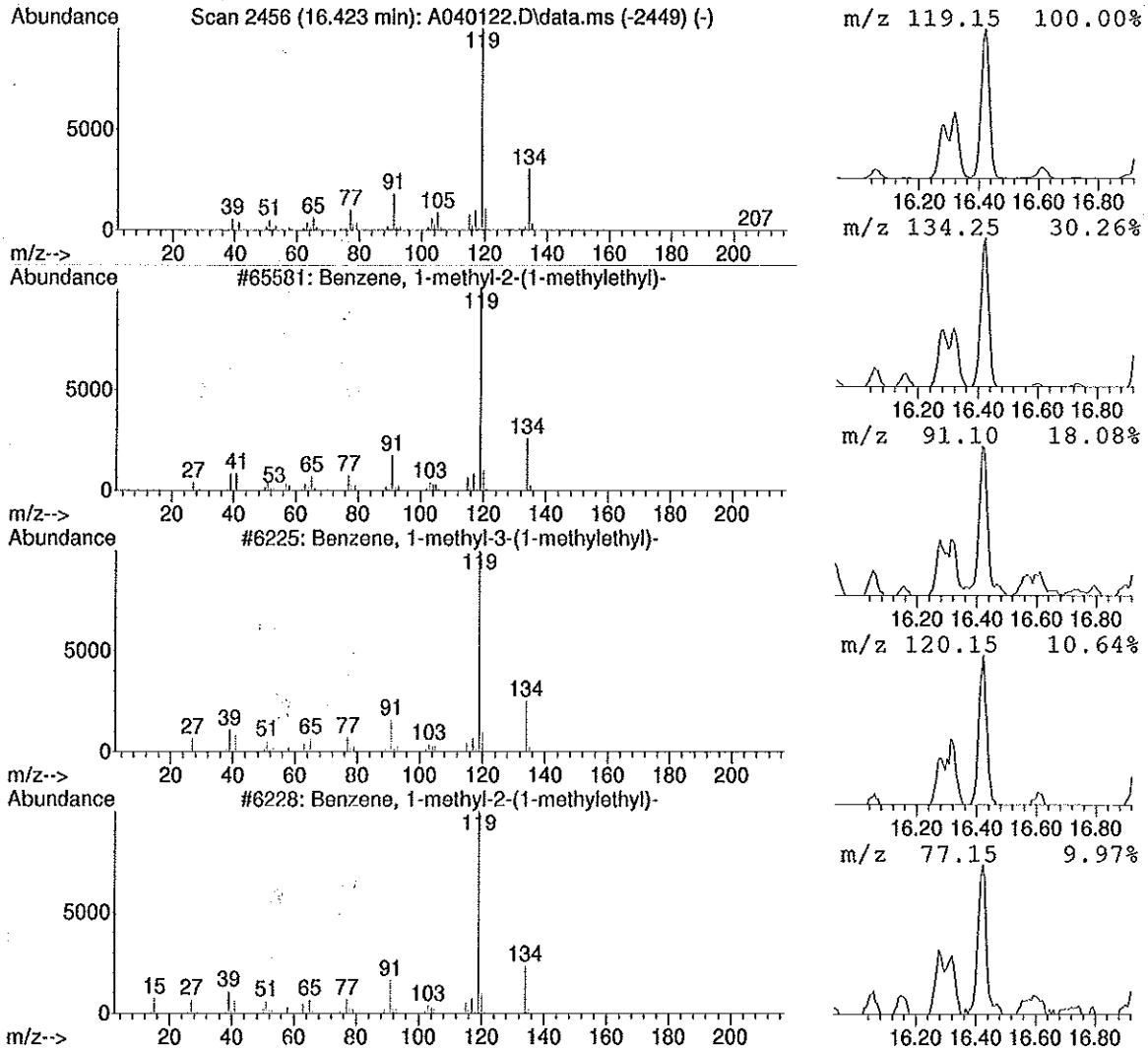
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 3 Benzene, 1-methyl-2-(1-meth... Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.423 | 3.04 ug/L | 323367 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 97 |
| 2 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 97 |
| 3 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 97 |
| 4 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 97 |
| 5 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 97 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

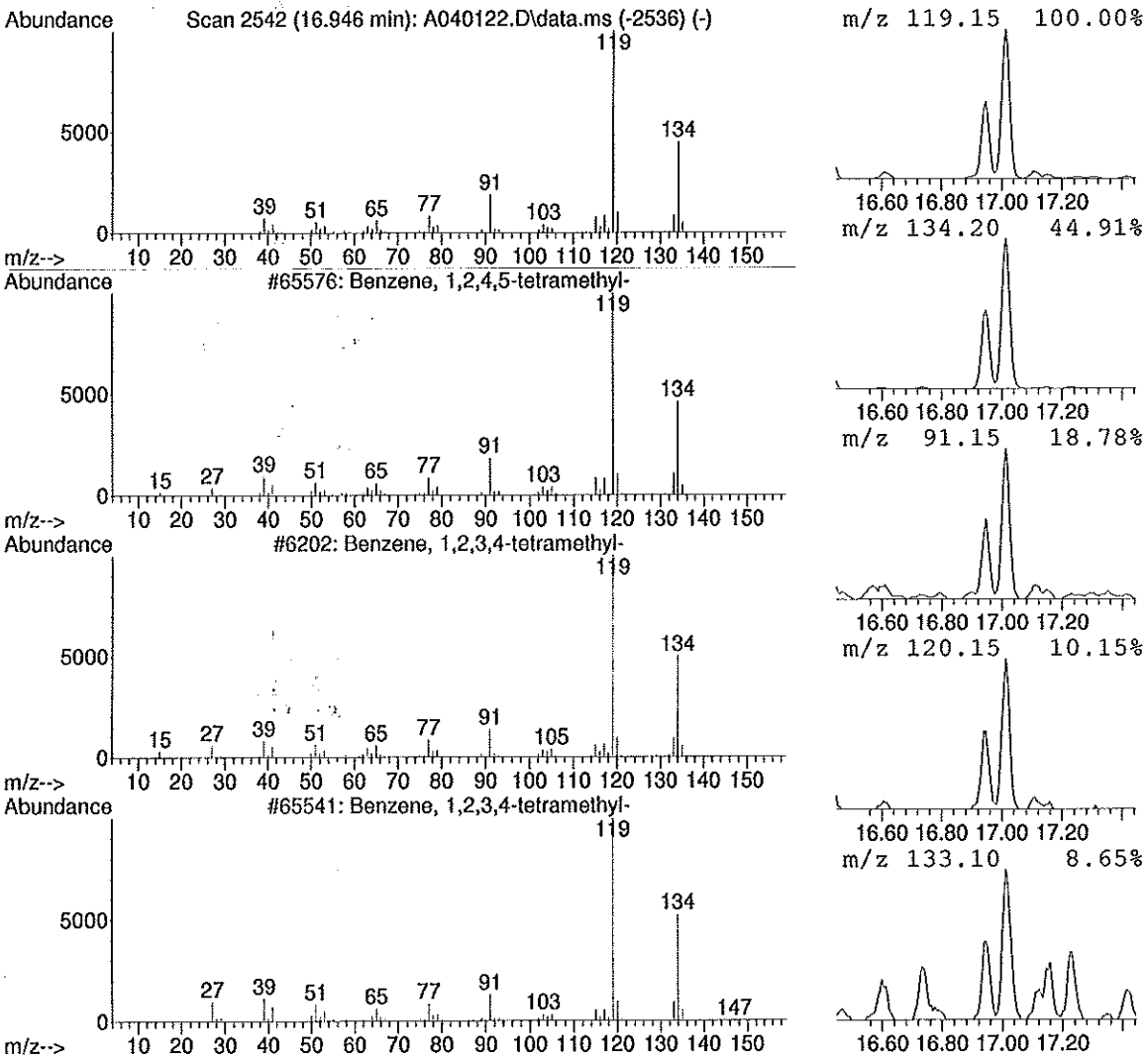
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 4 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.946 | 2.39 ug/L | 254157 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 95 |
| 2 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 94 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 94 |
| 4 | Benzene, 2-ethyl-1,3-dimethyl- | 134 | C10H14 | 002870-04-4 | 94 |
| 5 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 91 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

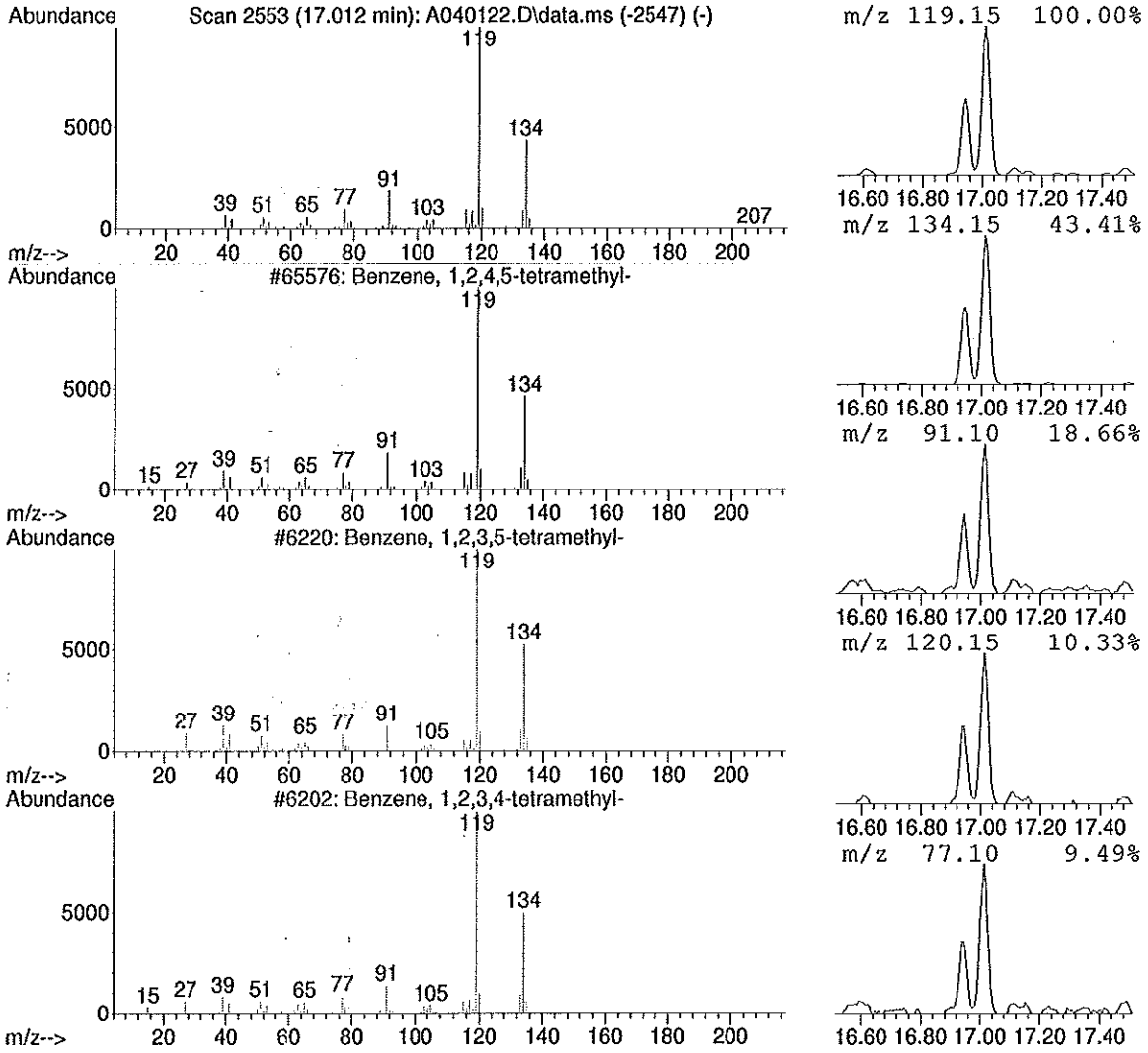
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 5 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.012 | 4.77 ug/L | 506736 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 97 |
| 2 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 96 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 4 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 94 |
| 5 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 94 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040122.D
Acq On : 1 Apr 2008 9:02 pm
Operator : BR
Sample : ,SAMP,ME0803A55-05A,1,
Misc : 8260+_w25
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

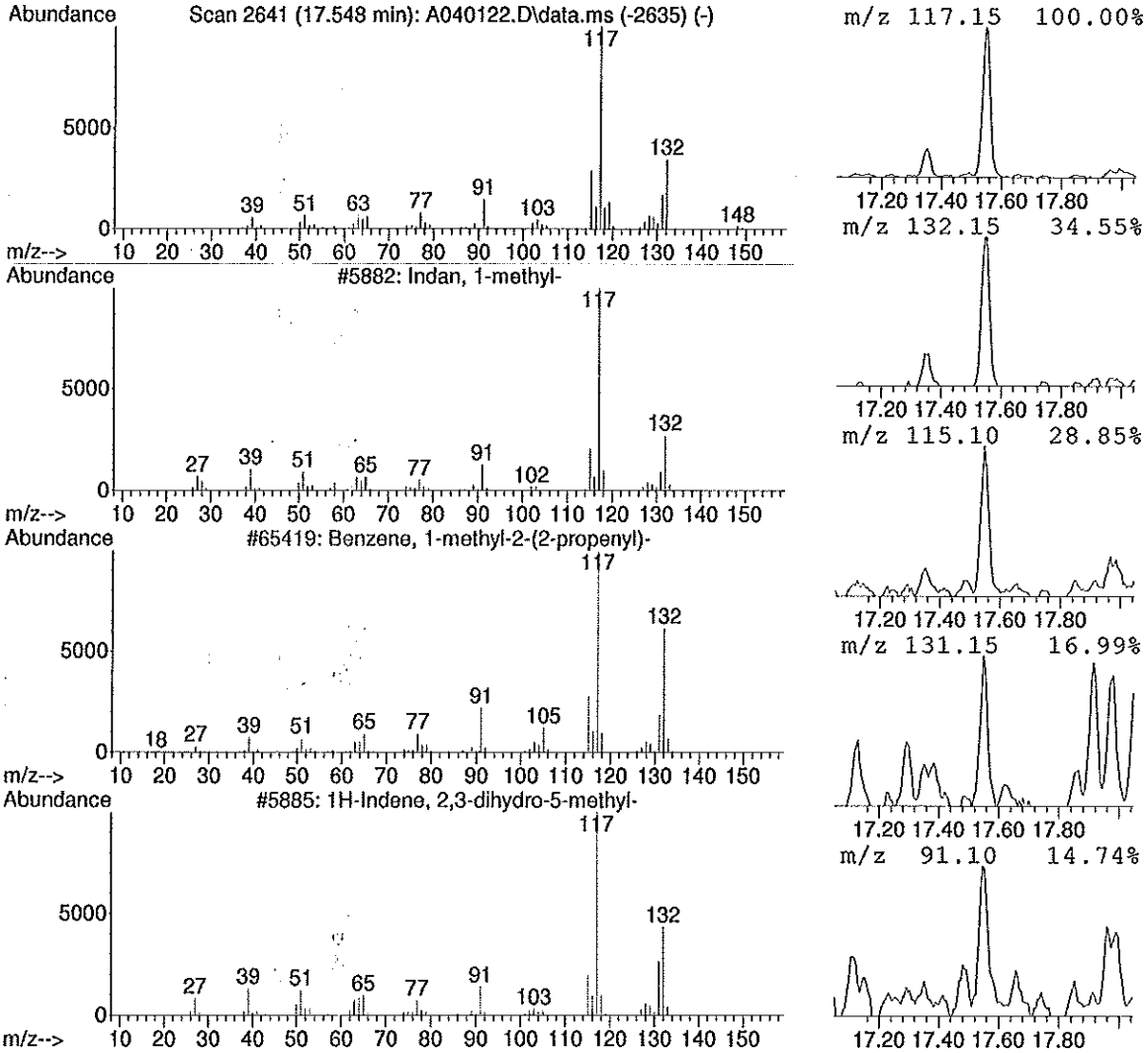
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 6 Indan, 1-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.548 | 1.73 ug/L | 183649 | 1,4-dichlorobenzene-d4 | 15.389 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 90 |
| 2 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 86 |
| 3 | 1H-Indene, 2,3-dihydro-5-methyl- | 132 | C10H12 | 000874-35-1 | 83 |
| 4 | 2,3-Dihydro-1-methylindene | 132 | C10H12 | 027133-93-3 | 81 |
| 5 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 78 |



Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\\
Data File : A040123.D
Acq On : 1 Apr 2008 9:40 pmm
Operator : BRR
Sample : ,SAMP,ME0803A55-06A,1,,
Misc : 8260+_w255
ALS Vial : 23 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********

LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040123.D
Acq On : 1 Apr 2008 9:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-06A,1,
Misc : 8260+_w25
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040123.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.173 | 759 | 770 | 792 | rBV | 138069 | 357165 | 30.93% | 6.326% |
| 2 | 6.605 | 831 | 841 | 857 | rVB | 99286 | 248974 | 21.56% | 4.410% |
| 3 | 7.012 | 895 | 908 | 922 | rBV | 377628 | 960512 | 83.18% | 17.013% |
| 4 | 9.250 | 1264 | 1276 | 1290 | rBV | 450319 | 1154715 | 100.00% | 20.453% |
| 5 | 11.530 | 1639 | 1651 | 1671 | rBV | 416784 | 1071967 | 92.83% | 18.987% |
| 6 | 13.525 | 1966 | 1979 | 1998 | rBV | 322171 | 803728 | 69.60% | 14.236% |
| 7 | 15.386 | 2271 | 2285 | 2305 | rBV | 507098 | 1048668 | 90.82% | 18.575% |

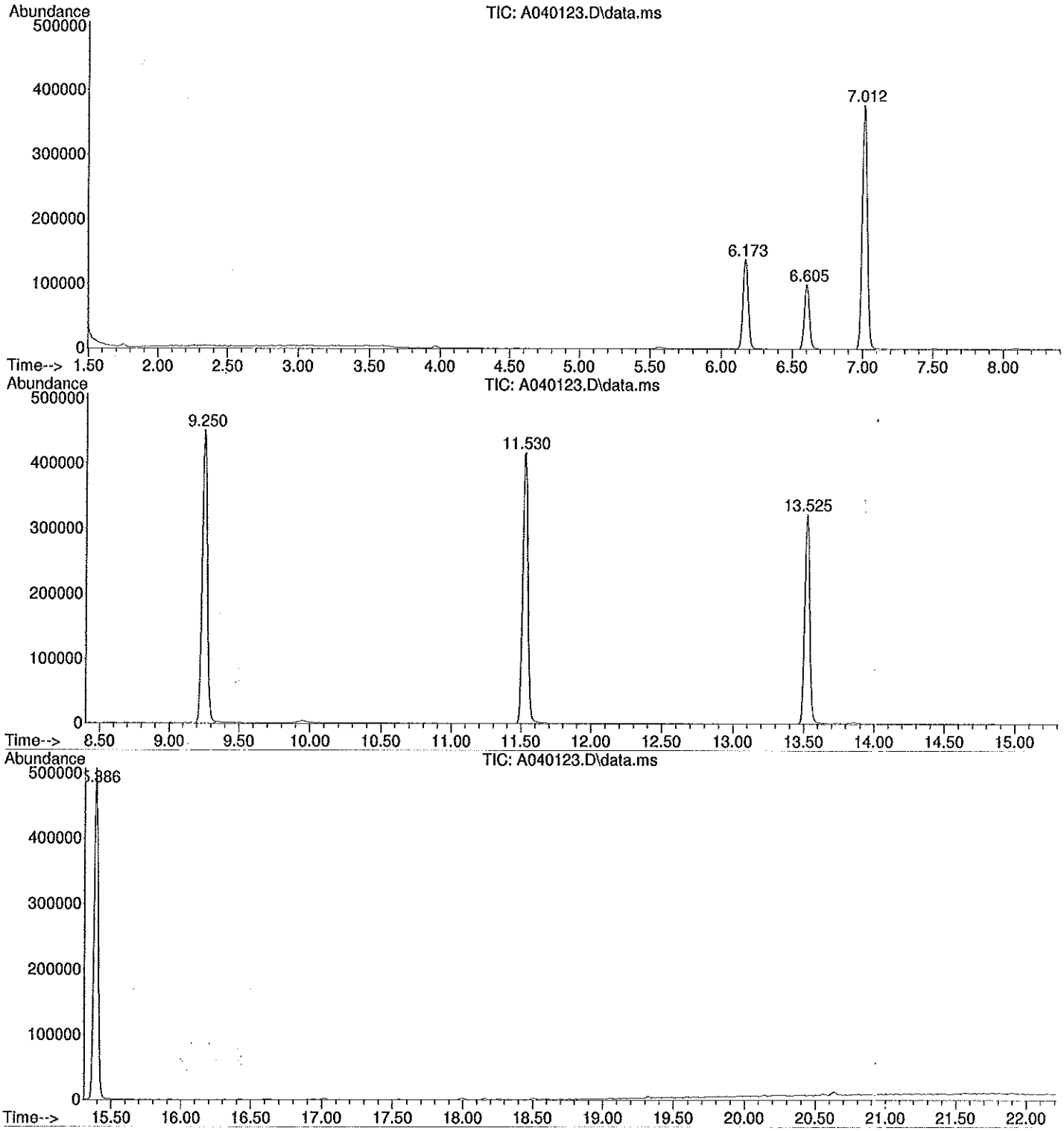
Sum of corrected areas: 5645729

LSC Report - Integrated Chromatogram

Data Path : D:\msdchem\1\data\A040108\
Data File : A040123.D
Acq On : 1 Apr 2008 9:40 pm
Operator : BR
Sample : ,SAMP,ME0803A55-06A,1,
Misc : 8260+_w25
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\\
Data File : A040124.D
Acq On : 1 Apr 2008 10:19 pmm
Operator : BRR
Sample : ,SAMP,ME0803A55-07A,1,,
Misc : 8260+_w255
ALS Vial : 24 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected

LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040124.D
Acq On : 1 Apr 2008 10:19 pm
Operator : BR
Sample : ,SAMP,ME0803A55-07A,1,
Misc : 8260+_w25
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040124.D\data.ms

| Peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.172 | 759 | 770 | 787 | rBV2 | 135041 | 348820 | 31.48% | 6.258% |
| 2 | 6.603 | 830 | 841 | 859 | rBV | 97999 | 246735 | 22.27% | 4.427% |
| 3 | 7.011 | 896 | 908 | 930 | rBV | 361702 | 921002 | 83.13% | 16.524% |
| 4 | 7.510 | 980 | 990 | 1002 | rBV3 | 18284 | 45039 | 4.06% | 0.808% |
| 5 | 9.249 | 1263 | 1276 | 1290 | rBV | 431338 | 1107972 | 100.00% | 19.878% |
| 6 | 11.529 | 1637 | 1651 | 1680 | rBV | 404719 | 1043182 | 94.15% | 18.716% |
| 7 | 13.524 | 1965 | 1979 | 1999 | rBV | 314374 | 783555 | 70.72% | 14.058% |
| 8 | 15.385 | 2276 | 2285 | 2302 | rBV | 485012 | 1027970 | 92.78% | 18.443% |
| 9 | 20.633 | 3143 | 3148 | 3165 | rVB3 | 16984 | 49562 | 4.47% | 0.889% |

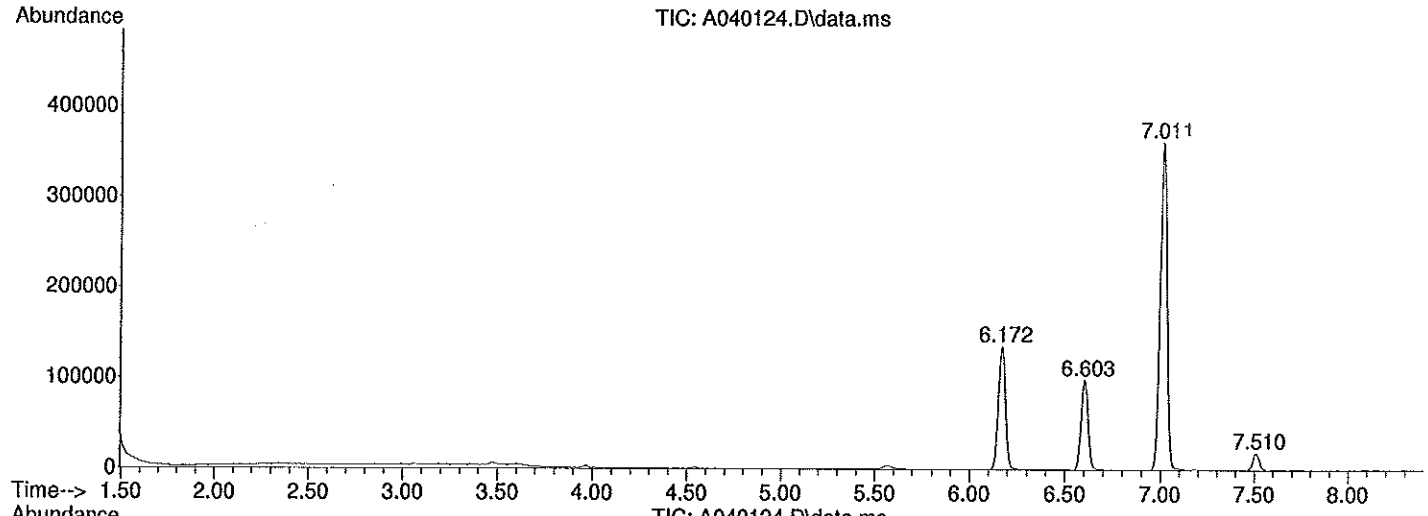
Sum of corrected areas: 5573837

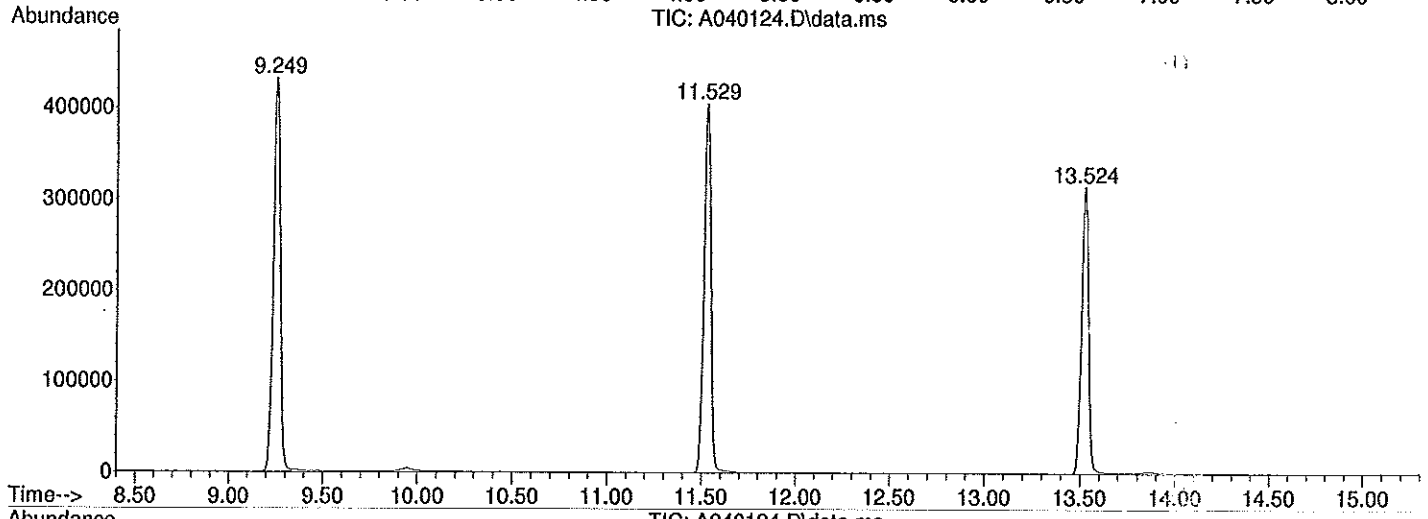
LSC Report - Integrated Chromatogram

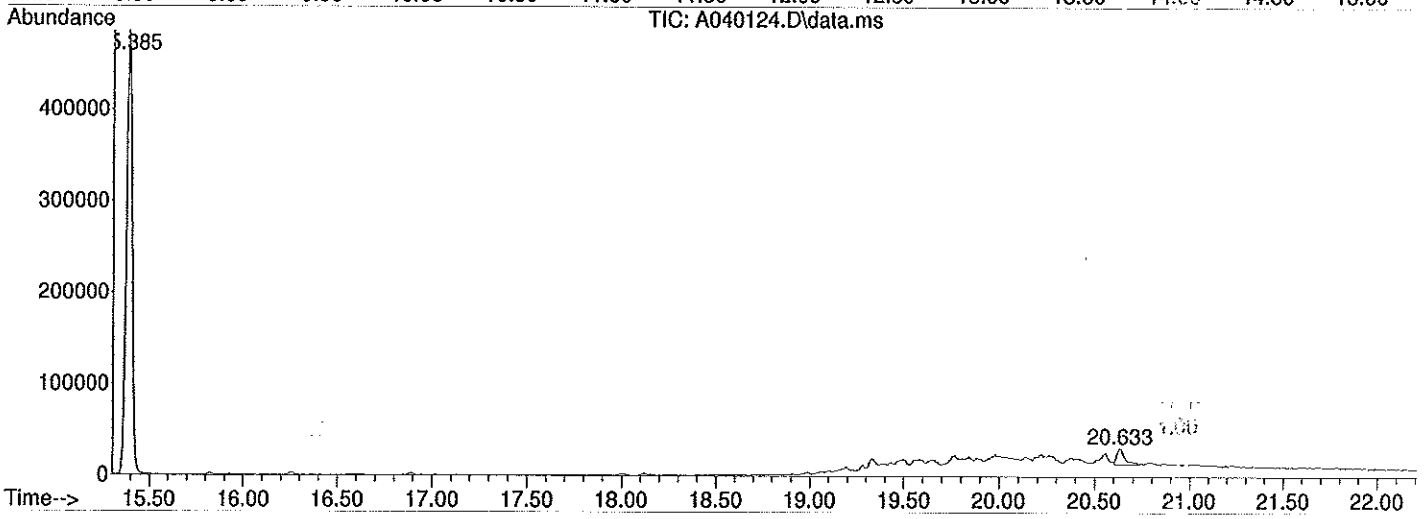
Data Path : D:\msdchem\1\data\A040108\
Data File : A040124.D
Acq On : 1 Apr 2008 10:19 pm
Operator : BR
Sample : ,SAMP,ME0803A55-07A,1,
Misc : 8260+_w25
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounts

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|
| uran, tetrahydro- | 5.909 | 3.1 | ug/L | 279930 | 1 | 7.016 | 912914 | 10.0 |
| ,4-Dioxane | 8.068 | 1.4 | ug/L | 125005 | 1 | 7.016 | 912914 | 10.0 |
| odecane, 2,7,1... | 20.632 | 1.6 | ug/L | 158479 | 3 | 15.390 | 1012680 | 10.0 |

LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040125.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.909 | 718 | 727 | 748 | rBV | 103935 | 279930 | 25.47% | 4.384% |
| 2 | 6.171 | 760 | 770 | 783 | rBV | 135355 | 349056 | 31.76% | 5.466% |
| 3 | 6.603 | 831 | 841 | 855 | rBV2 | 98367 | 253684 | 23.08% | 3.973% |
| 4 | 6.755 | 855 | 866 | 880 | rVB4 | 22567 | 71847 | 6.54% | 1.125% |
| 5 | 7.010 | 897 | 908 | 928 | rBV | 357194 | 912914 | 83.05% | 14.296% |
| 6 | 7.509 | 978 | 990 | 1000 | rBV3 | 31048 | 78746 | 7.16% | 1.233% |
| 7 | 8.068 | 1072 | 1082 | 1108 | rBV2 | 39168 | 125005 | 11.37% | 1.958% |
| 8 | 9.248 | 1264 | 1276 | 1290 | rBV | 430267 | 1099198 | 100.00% | 17.213% |
| 9 | 11.529 | 1639 | 1651 | 1664 | rBV | 398553 | 1010310 | 91.91% | 15.821% |
| 10 | 13.523 | 1960 | 1979 | 1999 | rBV | 310567 | 773298 | 70.35% | 12.109% |
| 11 | 15.390 | 2277 | 2286 | 2297 | rBV | 472947 | 1012679 | 92.13% | 15.858% |
| 12 | 19.100 | 2883 | 2896 | 2899 | rBV5 | 12727 | 42414 | 3.86% | 0.664% |
| 13 | 19.197 | 2905 | 2912 | 2916 | rVB | 18361 | 34544 | 3.14% | 0.541% |
| 14 | 19.331 | 2929 | 2934 | 2941 | rVV2 | 33611 | 82965 | 7.55% | 1.299% |
| 15 | 19.763 | 2999 | 3005 | 3015 | rBV3 | 28641 | 100872 | 9.18% | 1.580% |
| 16 | 20.632 | 3142 | 3148 | 3166 | rVB2 | 49550 | 158479 | 14.42% | 2.482% |

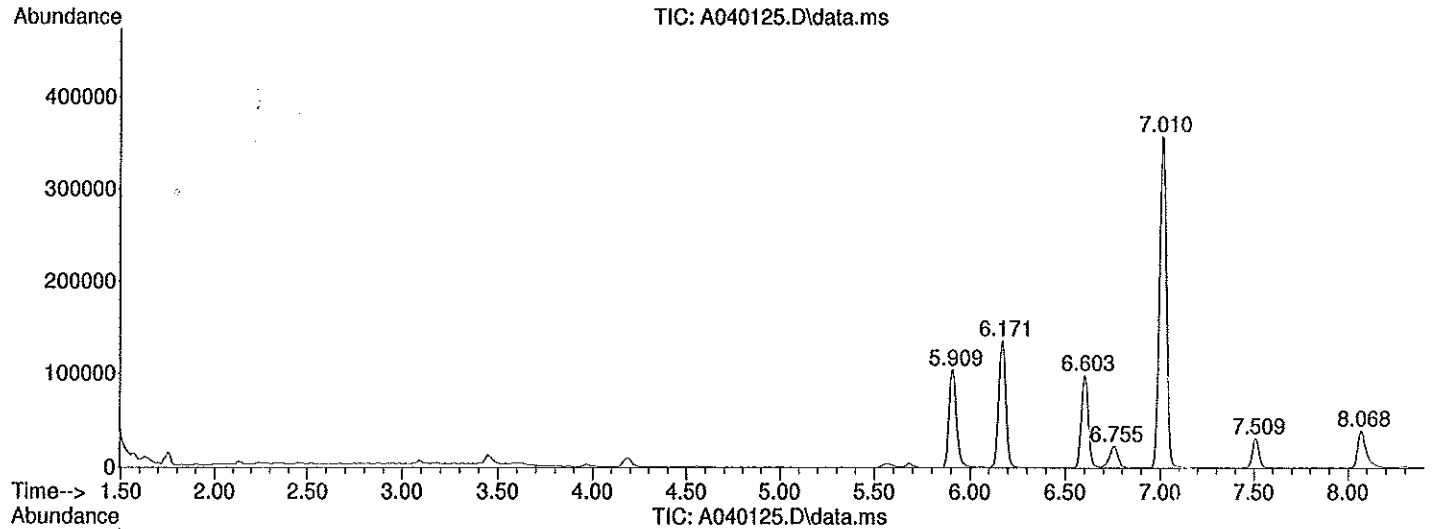
Sum of corrected areas: 6385941

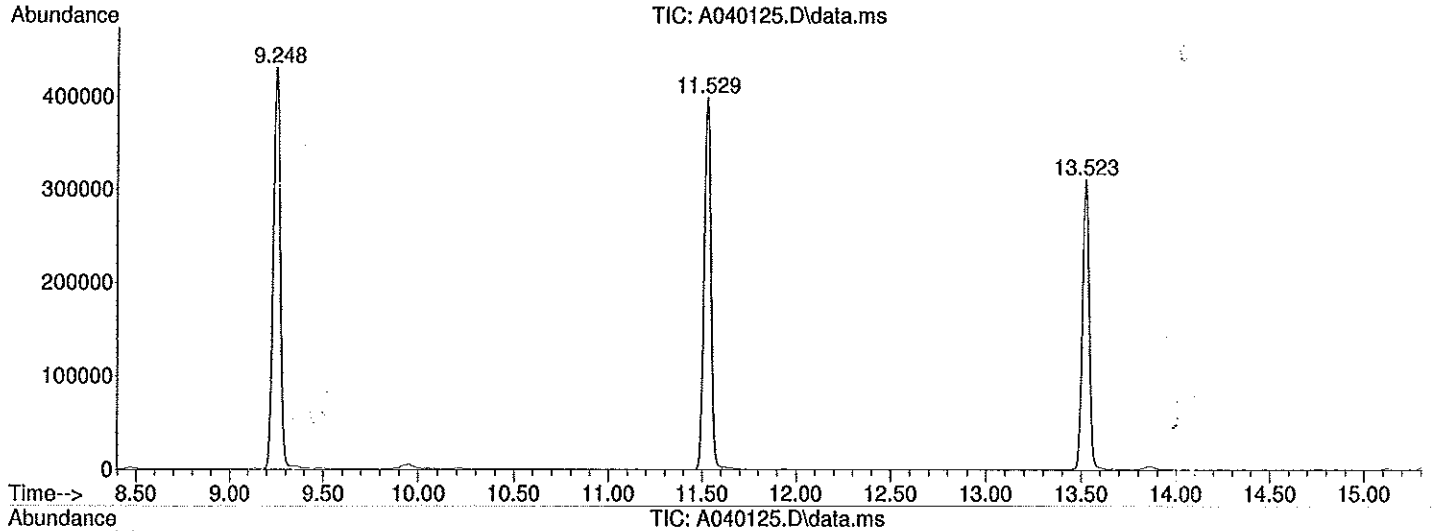
LSC Report - Integrated Chromatogram

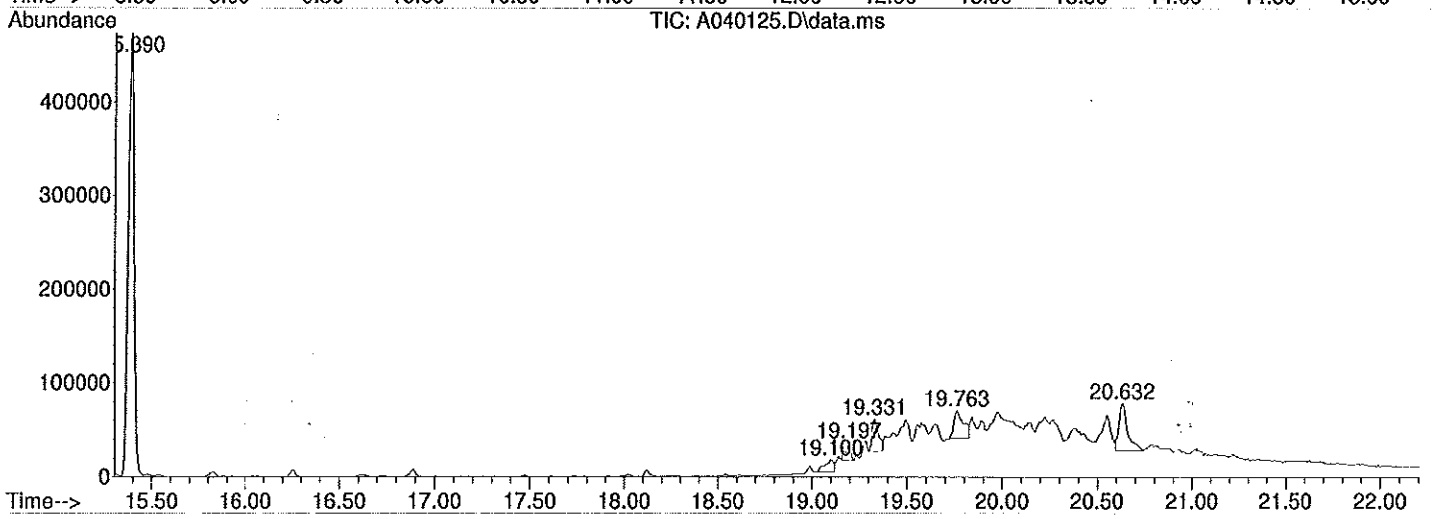
Data Path : D:\msdchem\1\data\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Data Path : D:\msdchem\1\data\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

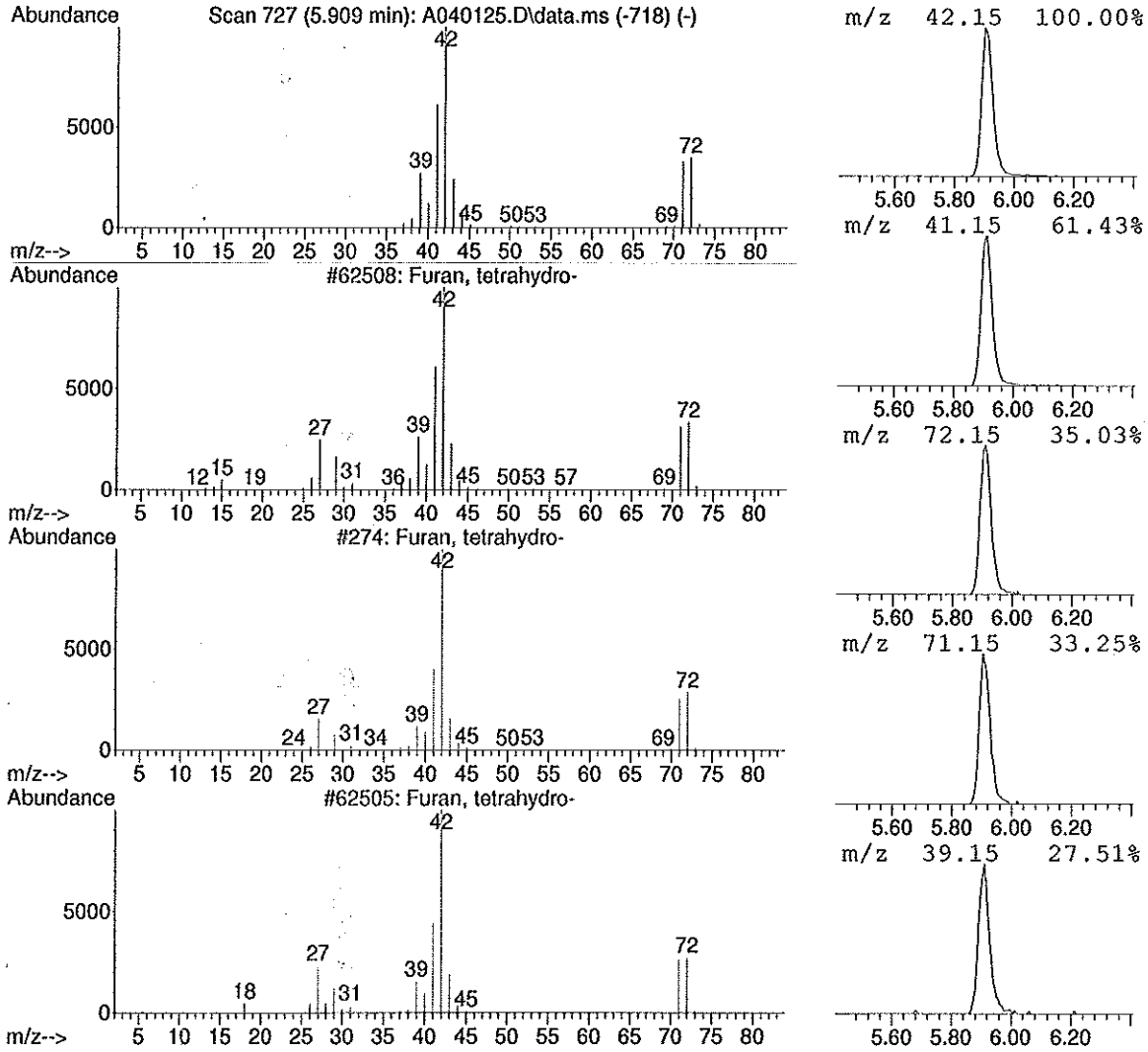
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********

Peak Number 1 Furan, tetrahydro- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.909 | 3.07 ug/L | 279930 | fluorobenzene | 7.016 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 91 |
| 2 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 3 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 4 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 5 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 83 |



Data Path : D:\msdchem\1\data\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

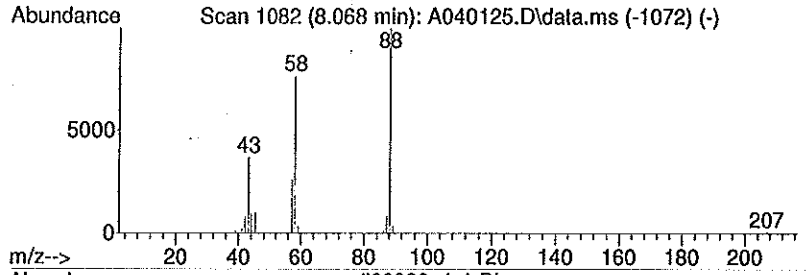
TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

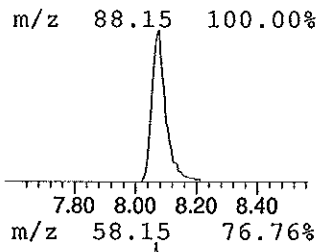
**********

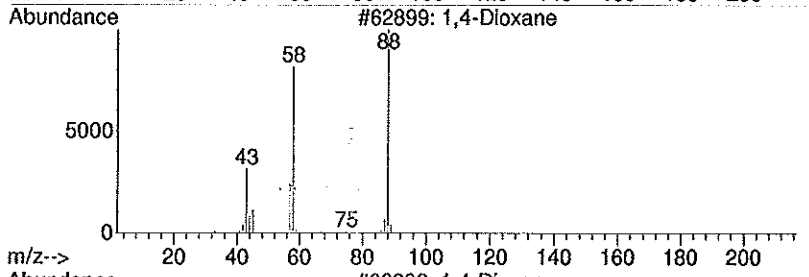
Peak Number 2 1,4-Dioxane Concentration Rank 3

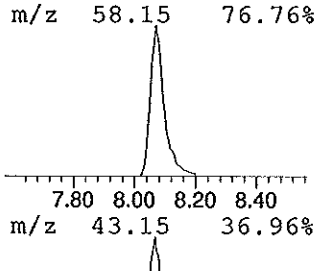
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.068 | 1.37 ug/L | 125005 | fluorobenzene | 7.016 |

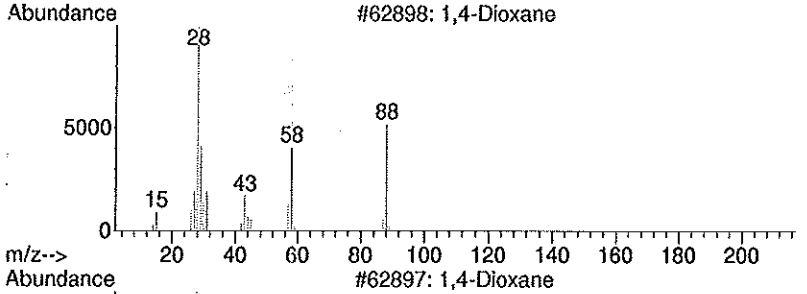
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 74 |
| 5 | 1-Propanamine, N-ethyl- | 87 | C5H13N | 020193-20-8 | 38 |

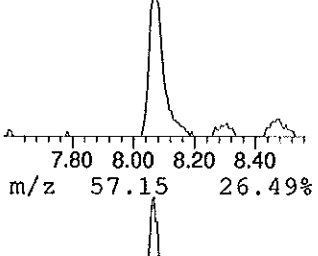


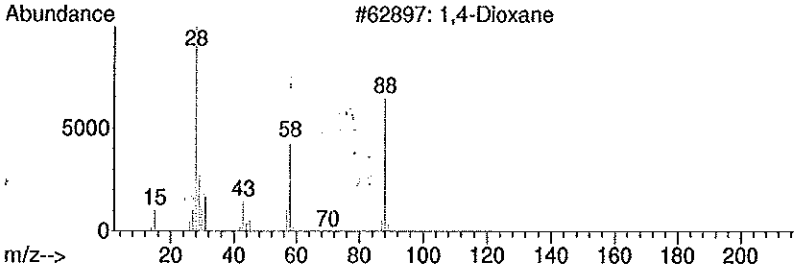



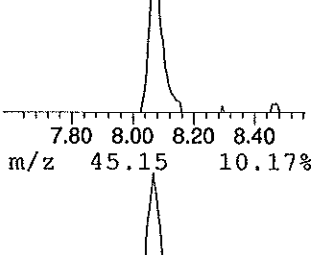



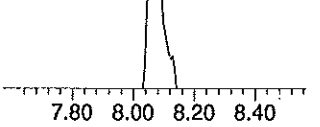



Data Path : D:\msdchem\1\data\A040108\
Data File : A040125.D
Acq On : 1 Apr 2008 10:56 pm
Operator : BR
Sample : ,SAMP,ME0803A55-08A,1,
Misc : 8260+_w25
ALS Vial : 25 Sample Multiplier: 1

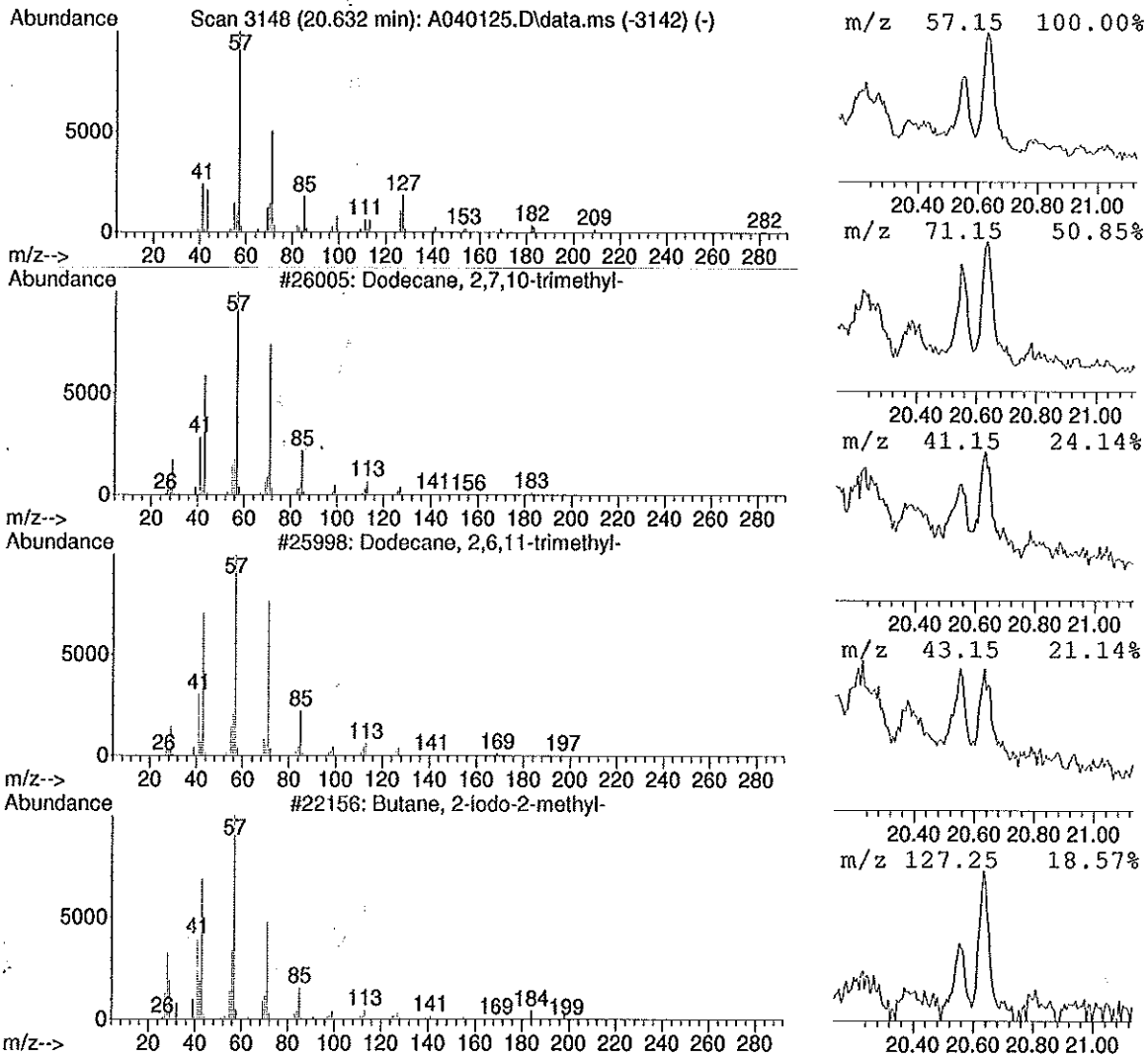
Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P

**********
Peak Number 3 Dodecane, 2,7,10-trimethyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.632 | 1.56 ug/L | 158479 | 1,4-dichlorobenzene-d4 | 15.390 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dodecane, 2,7,10-trimethyl- | 212 | C15H32 | 074645-98-0 | 78 |
| 2 | Dodecane, 2,6,11-trimethyl- | 212 | C15H32 | 031295-56-4 | 64 |
| 3 | Butane, 2-iodo-2-methyl- | 198 | C5H11I | 000594-38-7 | 59 |
| 4 | Decane, 5-ethyl-5-methyl- | 184 | C13H28 | 017312-74-2 | 59 |
| 5 | Heptadecane, 2,6,10,14-tetramethyl- | 296 | C21H44 | 018344-37-1 | 53 |



Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\\
Data File : A040126.D
Acq On : 1 Apr 2008 11:32 pmm
Operator : BRR
Sample : ,SAMP,ME0803A55-09A,1,,
Misc : 8260+_w255
ALS Vial : 26 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected

LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040126.D
Acq On : 1 Apr 2008 11:32 pm
Operator : BR
Sample : ,SAMP,ME0803A55-09A,1,
Misc : 8260+_w25
ALS Vial : 26 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040126.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.914 | 719 | 728 | 743 | rVB | 28095 | 73001 | 6.53% | 1.295% |
| 2 | 6.170 | 759 | 770 | 786 | rBV | 137750 | 356021 | 31.83% | 6.317% |
| 3 | 6.601 | 831 | 841 | 857 | rBV | 99193 | 249155 | 22.28% | 4.421% |
| 4 | 7.009 | 894 | 908 | 932 | rBV | 362186 | 930054 | 83.16% | 16.501% |
| 5 | 9.253 | 1266 | 1277 | 1300 | rBV | 432067 | 1118355 | 100.00% | 19.842% |
| 6 | 11.527 | 1637 | 1651 | 1681 | rBV | 411150 | 1048661 | 93.77% | 18.606% |
| 7 | 13.522 | 1969 | 1979 | 2008 | rBV | 309520 | 782157 | 69.94% | 13.877% |
| 8 | 15.389 | 2273 | 2286 | 2306 | rBV | 491419 | 1027193 | 91.85% | 18.225% |
| 9 | 20.631 | 3142 | 3148 | 3164 | rVB5 | 19291 | 51681 | 4.62% | 0.917% |

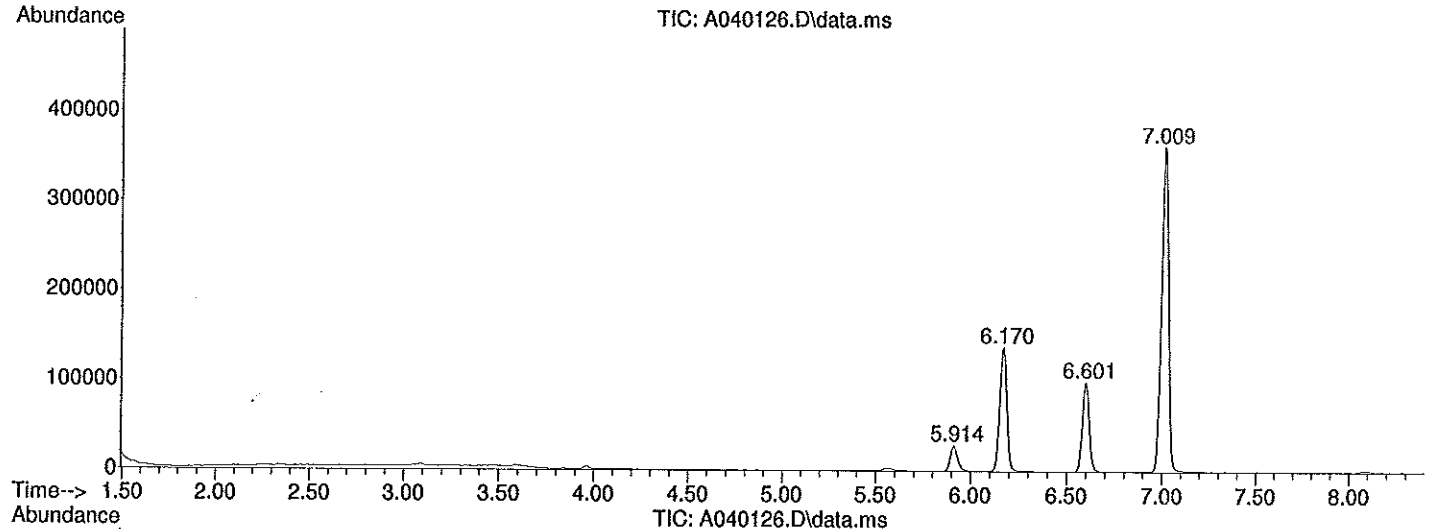
Sum of corrected areas: 5636278

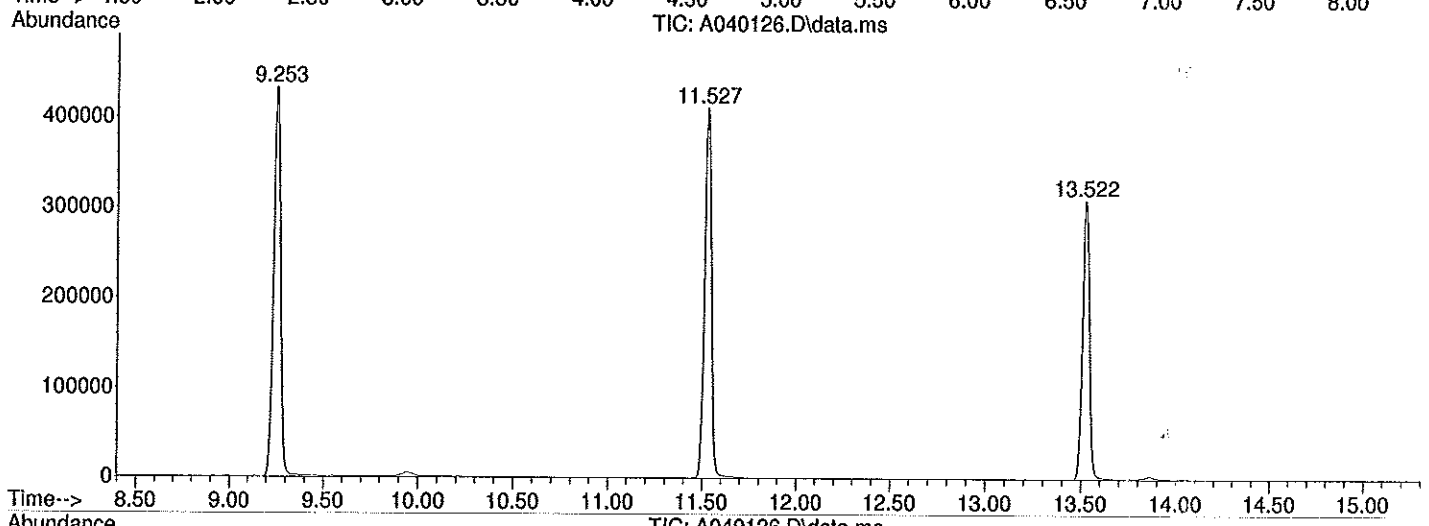
LSC Report - Integrated Chromatogram

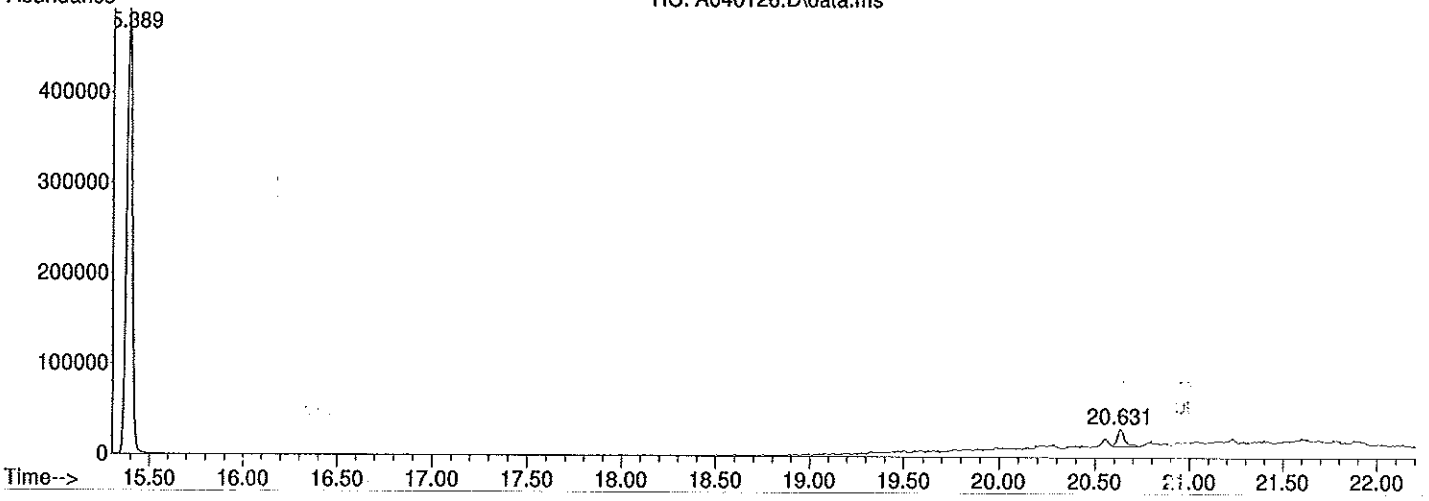
Data Path : D:\msdchem\1\data\A040108\
Data File : A040126.D
Acq On : 1 Apr 2008 11:32 pm
Operator : BR
Sample : ,SAMP,ME0803A55-09A,1,
Misc : 8260+_w25
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



Tentatively Identified Compound (LSC) summary

Data Path : D:\msdchem\1\data\A040108\\
Data File : A040127.D
Acq On : 2 Apr 2008 12:08 amm
Operator : BRR
Sample : ,SAMP,ME0803A55-10A,1,,
Misc : 8260+_w255
ALS Vial : 27 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\25ML0331.MM
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compountss

TIC Library : C:\DATABASE\nbs75k.LL
TIC Integration Parameters: RTEINT.PP

| TIC Top Hit name | RT | EstConc | Units | Response | Internal Standard # | Internal Standard RT | Internal Standard Resp | Internal Standard Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********

LSC Area Percent Report

Data Path : D:\msdchem\1\data\A040108\
Data File : A040127.D
Acq On : 2 Apr 2008 12:08 am
Operator : BR
Sample : ,SAMP,ME0803A55-10A,1,
Misc : 8260+_w25
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\25ML0331.M
Title : 25 mlW ICAL 03/31/08 - MISC Compounds

Signal : TIC: A040127.D\data.ms

| Peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.173 | 759 | 770 | 796 | rVB2 | 138563 | 350786 | 32.03% | 6.517% |
| 2 | 6.604 | 830 | 841 | 855 | rBV | 97605 | 240980 | 22.00% | 4.477% |
| 3 | 7.012 | 897 | 908 | 921 | rBV | 358132 | 911881 | 83.26% | 16.942% |
| 4 | 9.250 | 1264 | 1276 | 1290 | rBV | 428362 | 1095160 | 100.00% | 20.347% |
| 5 | 11.530 | 1639 | 1651 | 1680 | rVB | 398675 | 1024395 | 93.54% | 19.032% |
| 6 | 13.525 | 1965 | 1979 | 2002 | rBV | 307303 | 763296 | 69.70% | 14.181% |
| 7 | 15.386 | 2272 | 2285 | 2302 | rBV | 472586 | 995873 | 90.93% | 18.502% |

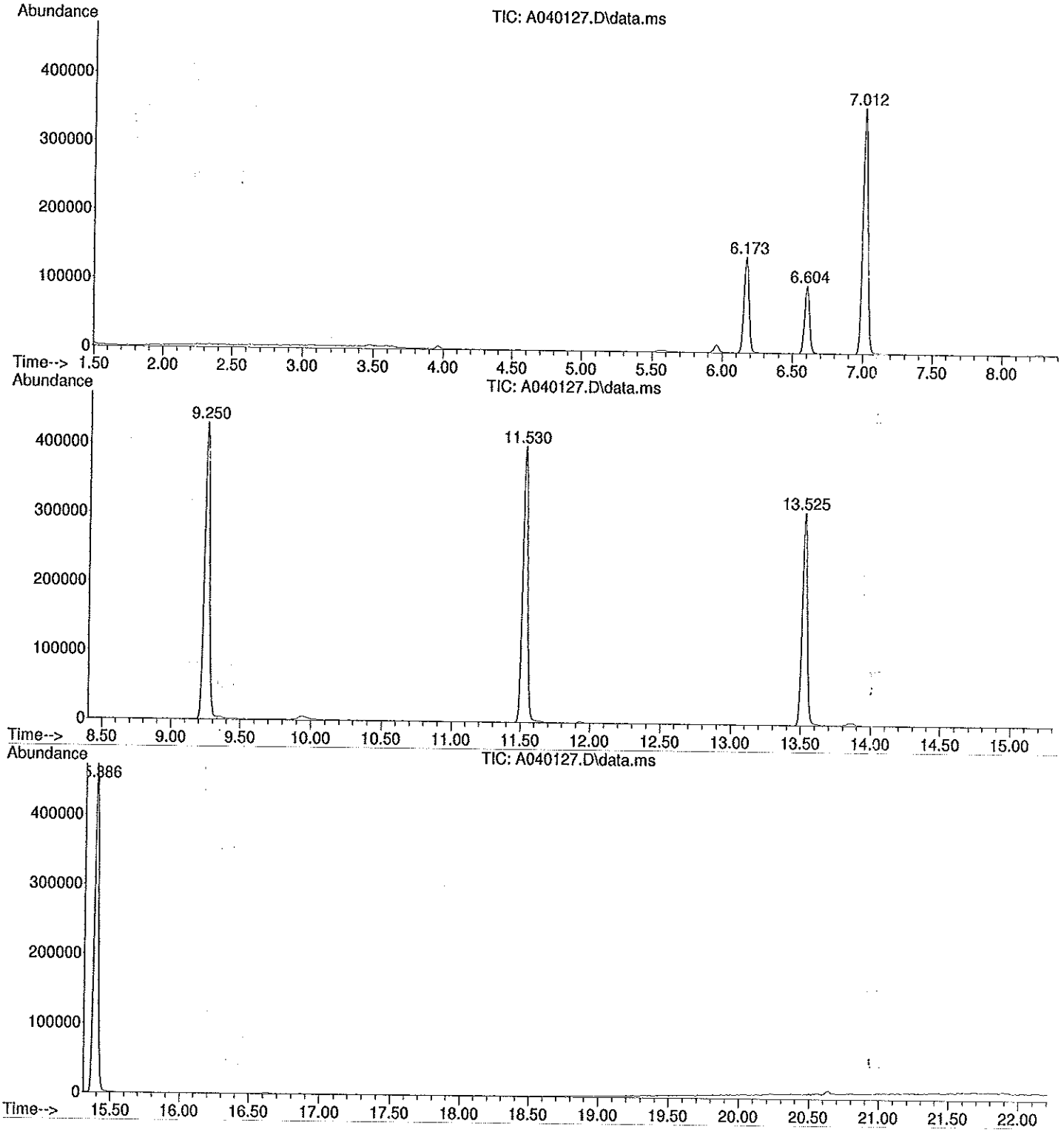
Sum of corrected areas: 5382371

LSC Report - Integrated Chromatogram

Data Path : D:\msdchem\1\data\A040108\
Data File : A040127.D
Acq On : 2 Apr 2008 12:08 am
Operator : BR
Sample : ,SAMP,ME0803A55-10A,1,
Misc : 8260+_w25
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\25ML0331.M
Quant Title : 25 mlW ICAL 03/31/08 - MISC Compounds

TIC Library : C:\DATABASE\nbs75k.L
TIC Integration Parameters: RTEINT.P



LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Project #18716
May 22, 2008

MWH Americas, Inc.
175 West Jackson Blvd, Suite 1900
Chicago, IL 60604-2814
ATTN: Mr. Justin Finger

SUBJECT: ACS GW Semi-Annual, Data Validation

Dear Mr. Finger,

**SUBJECT: Precision, Accuracy, Representativeness, Comparability, Completeness (PARCC) Summary Report for the ACS GW Semi-Annual Project**

Dear Mr Finger,

Enclosed is the Precision, Accuracy, Representativeness, Comparability, Completeness (PARCC) Summary Report for the ACS GW Semi-Annual Project.

We appreciate this opportunity to support MWH Americas, Ic. in the performance of this project. Please feel free to call me at (760) 634-0437 if you have any questions.

Sincerely,

ERauto

Erlinda T. Rauto
Operations Manager/Senior Chemist

# PRECISION, ACCURACY, REPRESENTATIVENESS, COMPARABILITY, COMPLETENESS SUMMARY REPORT

## American Chemical Service

**05/22/08**

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Glossary

| | |
|---|---|
| CRDL | Contract Required Detection Limit |
| CRQL | Contract Required Quantitation Limit |
| DQO | Data Quality Objectives |
| IDL | Instrument Detection Limit |
| LCS/LCSD | Laboratory Control Sample / Laboratory Control Sample Duplicate |
| mg/Kg | Milligrams per Kilogram |
| MS/MSD | Matrix Spike / Matrix Spike Duplicate |
| PARCC | Precision,Accuracy,Representativeness,Comparability, Completeness |
| PCBs | Polychlorinated Biphenyls |
| QAPP | Quality Assurance Project Plan |
| QA/QC | Quality Assurance / Quality Control |
| RPD | Relative Percent Difference |
| RRF | Relative Response Factor |
| RL | Reporting Limit |
| SDG | Sample Delivery Group |
| SVOC | Semivolatile Organic Compound |
| ug/Kg | Micrograms per Kilogram |
| ug/L | Micrograms per Liter |
| USEPA | United States Environmental Protection Agency |
| VOC | Volatile Organic Compound |
| %D | Percent Difference |
| %R | Percent Recovery |
| %RSD | Percent Relative Standard Deviation |

# PRECISION, ACCURACY, REPRESENTATIVENESS, COMPARABILITY, COMPLETENESS SUMMARY REPORT
## American Chemical Service

## 1.0 INTRODUCTION

Remedial design/ remedial action were conducted at the American Chemical Service, Inc. NPL Site in Griffith, Indiana. This part of the site investigation included the collection and analyses of 45 groundwater wells and quality control (QC) samples. The analyses were performed by the following methods:

Volatile Organics by EPA SW 846 Method 8260B
Bis(2-chloroethyl) ether by EPA SW 846 Method 8270C
Arsenic by EPA SW 846 Method 6010B

Analytical services were provided by Microbac who performed analyses on the groundwater well samples. The samples were grouped into sample delivery groups (SDGs) of up to 20 field samples received by the laboratory. The environmental samples are associated with QA/QC samples designed to document the data quality of the entire SDG or a sub-group of samples within an SDG. Table I in Appendix A is a cross-reference table listing each sample, analysis, SDG, collection date, laboratory sample number, and matrix. All shaded samples in Table I in Appendix A were reviewed under EPA Level 4 guidelines.

Approximately ten percent of the analytical data were validated according to EPA Level 4 data validation procedures and ninety percent of the analytical data were validated according to EPA Level 3 data validation procedures. The analytical data were evaluated for quality assurance and quality control (QA/QC) based on the following documents: *The Remedial Design/ Remedial Action PRP-Lead Project at the American Chemical Service, Inc. NPL Site, Griffith, Indiana Quality Assurance Project Plan,* November 2001, *Contract Laboratory Program National Functional Guidelines for Organic Data Review*, October 1999, *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004, and the *EPA SW 846 Third Edition, Test Methods for Evaluating Solid Waste.*

This report summarizes the QA/QC evaluation of the data according to precision, accuracy, representativeness, completeness, and comparability (PARCC) relative to the project data quality objectives (DQOs). This report provides a quantitative and qualitative assessment of the data and identifies potential sources of error, uncertainty, and bias that may affect the overall usability.

The PARCC summary report evaluates and summarizes the results of QA/QC data validation for the entire sampling program. Each analytical fraction has a separate section for each of the PARCC criteria. These sections interpret specific QC deviations and their effects on both individual data points and the analyses as a whole. Section 6 presents a summary of the PARCC criteria by comparing quantitative parameters with acceptability criteria defined in the project DQO's. Qualitative PARCC criteria are also summarized in this section.

### Precision and Accuracy of Environmental Data

Environmental data quality depends on sample collection procedures, analytical methods and instrumentation, documentation, and sample matrix properties. Both sampling procedures and laboratory analyses contain potential sources of uncertainty, error, and/or bias, which affect the overall quality of a measurement. Errors in sample data may result from incomplete equipment

decontamination, inappropriate sampling techniques, sample heterogeneity, improper filtering, and improper preservation. The accuracy of analytical results is dependent on selecting appropriate analytical methods, maintaining equipment properly, and complying with QC requirements. The sample matrix also is an important factor in the ability to obtain precise and accurate results within a given media.

Environmental and laboratory QA/QC samples assess the effects of sampling procedures and evaluate laboratory contamination, laboratory performance, and matrix effects. QA/QC samples include: trip blanks, field duplicates, method blanks, laboratory control samples (LCSs), surrogate spikes, matrix spike/matrix spike duplicates (MS/MSDs), and laboratory duplicates.

Before conducting the PARCC evaluation, the analytical data were validated according to the *Remedial Design/ Remedial Action PRP-Lead Project at the American Chemical Service, Inc. NPL Site, Griffith, Indiana Quality Assurance Project Plan,* November 2001, and the Functional Guidelines for Organic Data Review (USEPA 1999) and Inorganic Data Review (USEPA, 2004) and EPA SW 846 Third Edition, Test Methods for Evaluating Solid Waste. Samples not meeting the project procedures manual and the Functional Guideline acceptance criteria were qualified with a flag, an abbreviation indicating a deficiency with the data. The following are flags used in data validation.

J Estimated The associated numerical value is an estimated quantity. The analyte was detected but the reported value may not be accurate or precise. The "J" qualification indicates the data fell outside the QC limits, but the exceedance was not sufficient to cause rejection of the data.

R Rejected The data is unusable (the compound or analyte may or may not be present). Use of the "R" qualifier indicates a significant variance from functional guideline acceptance criteria. Either resampling or reanalysis is necessary to determine the presence or absence of the rejected analyte.

UB Analyte was not detected at or above the indicated concentration due to blank contamination. The "UB" flag is used to qualify any result detected in an environmental sample at a concentration less than 10 times the value of the concentration in any associated blank for common laboratory contaminants and less than 5 times the concentration in any associated blank for all other contaminants

B Analyte was positively detected in a sample and in an associated blank. The "B" flag is used to to qualify any result detected in an environmental sample at a concentration greater than 10 times the value of the concentration in any associated blank for common laboratory contaminants and greater than 5 times the concentration in any associated blank for all other contaminants

UJ Estimated/Nondetected Analyses were performed for the compound or analyte, but it was not detected and the sample quantitation or detection limit is an estimated quantity due to poor accuracy or precision. This qualification is also used to flag possible false negative results in the case where low bias in the analytical system is indicated by low calibration response, surrogate, internal standard, or other spike recovery.

Once the data are reviewed and qualified according to the *Remedial Design/ Remedial Action PRP-Lead Project at the American Chemical Service, Inc. NPL Site, Griffith, Indiana Quality Assurance Project Plan,* November 2001 and the functional guidelines, the data set is then evaluated using PARCC criteria. PARCC criteria provide an evaluation of overall data usability. The following is a discussion of PARCC criteria as related to the project DQOs.

**Precision** is a measure of the agreement or reproducibility of analytical results under a given set of conditions. It is a quantity that cannot be measured directly but is calculated from percent recovery data. Precision is expressed as the relative percent difference (RPD):

$$RPD = (D1-D2)/\{1/2(D1+D2)\} \times 100$$

Where D1 and D2 are the reported concentrations for sample and duplicate analyses. Precision is primarily assessed by calculating an RPD from the percent recoveries of the spiked compounds for each sample in the MS/MSD pair. In the absence of an MS/MSD pair, a laboratory duplicate or LCS/LCSD pair can be analyzed as an alternative means of assessing precision. In some cases, samples from multiple SDGs were within one QC batch and therefore are associated with the same laboratory QC samples. An additional measure of sampling precision was obtained by collecting and analyzing field duplicate samples, which were compared using the RPD result as the evaluation criteria.

MS and MSD samples are field samples spiked by the laboratory with target analytes prior to preparation and analysis. These samples measure the overall efficiency of the analytical method in recovering target analytes from an environmental matrix. A LCS is similar to an MS/MSD sample in that the LCS is spiked with the same target analytes prior to preparation and analysis. However, the LCS is prepared using a controlled interference-free matrix instead of a field sample aliquot. Laboratory reagent water is used to prepare aqueous LCS. Non-aqueous LCSs are prepared using solid media approved by the American Society for Testing and Materials (ASTM) for their homogeneity. The LCS measures laboratory efficiency in recovering target analytes from either a solid or aqueous matrix in the absence of matrix interferences.

For inorganics analysis, one primary sample is analyzed and accompanied by an unspiked laboratory duplicate. The data reviewer compares the reported results of the primary analysis and the laboratory duplicate, then calculates RPDs, which are used to assess laboratory precision.

Laboratory and field sampling precision are further evaluated by calculating RPDs for aqueous field sample duplicate pairs. The sampler collects two field samples at the same location and under identically controlled conditions. The laboratory then analyzes the samples under identical conditions.

An RPD outside the numerical QC limit in either MS/MSD samples or LCS/LCSD indicates imprecision. Imprecision is the variance in the consistency with which the laboratory arrives at a particular reported result. Thus, the actual analyte concentration may be higher or lower than the reported result.

Possible causes of poor precision include sample matrix interference, improper sample collection or handling, inconsistent sample preparation, and poor instrument stability. In some duplicate pairs, results maybe reported in either the primary or duplicate samples at levels below the reporting limit or non-detected. Since these values are considered to be estimates, RPD exceedances from these duplicate pairs do not suggest a significant impact on the data quality.

**Accuracy** is a measure of the agreement of an experimental determination and the true value of the parameter being measured. It is used to identify bias in a given measurement system. Recoveries outside acceptable QC limits may be caused by factors such as instrumentation, analyst error, or matrix interference. Accuracy is assessed through the analysis of MS, MSD, LCS, and samples containing surrogate spikes. In some cases, samples from multiple SDGs

were within one QC batch and therefore are associated with the same laboratory QC samples. Surrogate spikes are either isotopically labeled compounds or compounds that are not typically detected in the samples. Surrogate spikes are added to every blank, environmental sample, MS/MSD, and standard, for volatile organic (VOC), semivolatile (SVOC), chlorinated pesticides and polychlorinated biphenyl (PCBs) analyses. Accuracy of inorganic analyses is determined using the percent recoveries of MS and LCS analyses.

Percent recovery (%R) is calculated using the following equation:

$$\%R = (A-B)/C \times 100$$

where:
A = measured concentration in the spiked sample
B = measured concentration of the spike compound in the unspiked sample
C = concentration of the spike

The percent recovery of each analyte spiked in MS/MSD samples, LCS, and surrogate compounds added to environmental samples is evaluated with the acceptance criteria specified by the previously noted documents. Spike recoveries outside the acceptable QC accuracy limits provide an indication of bias, where the reported data may overestimate or underestimate the actual concentration of compounds detected or quantitation limits reported for environmental samples.

**Representativeness** is a qualitative parameter that expresses the degree to which the sample data are characteristic of a population. It is evaluated by reviewing the QC results of blank samples and holding times. Positive detects of compounds in the blank samples identify compounds that may have been introduced into the samples during sample collection, transport, preparation, or analysis. The QA/QC blanks collected and analyzed are method blanks, equipment rinsate blanks, and trip blanks.

A method blank is a laboratory grade water or solid matrix that contains the method reagents and has undergone the same preparation and analysis as the environmental samples. The method blank provides a measure of the combined contamination derived from the laboratory source water, glassware, instruments, reagents, and sample preparation steps. Method blanks are prepared for each sample of a similar matrix extracted by the same method at a similar concentration level.

Trip blanks are used to identify possible volatile organic contamination introduced into the sample during transport. A trip blank is a sample bottle filled in the laboratory with reagent-grade water and preserved to a pH less than 2 with hydrochloric acid. It is transported to the site, stored with the sample containers, and returned unopened to the laboratory for analysis. Additionally, for inorganic analyses, initial and continuing calibration blanks consist of acidified laboratory grade water, which are injected at the beginning and at a regular frequency during each 12 - hour sample analysis run. These blanks estimate residual contaminants from the previous sample or standards analysis and measure baseline shifts that commonly occur in emission and absorption spectroscopy.

Contaminants found in both the environmental sample and a blank sample are assumed to be laboratory artifacts if the concentration in the environmental sample is less than 10 times the blank value for common laboratory contaminants; methylene chloride, acetone, 2-butanone, and phthalate esters or 5 times the blank value for other laboratory contaminants.

Holding times are evaluated to assure that the sample integrity is intact for accurate sample preparation and analysis. Holding times will be specific for each method and matrix analyzed. Holding time exceedances can cause loss of sample constituents due to biodegradation, precipitation, volatization, and chemical degradation.

**Comparability** is a qualitative expression of the confidence with which one data set may be compared to another. It provides an assessment of the equivalence of the analytical results to data obtained from other analyses. It is important that data sets be comparable if they are used in conjunction with other data sets. The factors affecting comparability include the following: sample collection and handling techniques, matrix type, and analytical method. If these aspects of sampling and analysis are carried out according to standard analytical procedures, the data are considered comparable. Comparability is also dependent upon other PARCC criteria, because only when precision, accuracy, and representativeness are known can data sets be compared with confidence.

**Completeness** is defined as the percentage of acceptable sample results compared to the total number of sample results. Completeness is evaluated to determine if an acceptable amount of usable data were obtained so that a valid scientific site assessment can be completed. Completeness equals the total number of sample results for each fraction minus the total number of rejected sample results divided by the total number of sample results multiplied by 100. As specified in the project DQOs, the goal for completeness for target analytes in each analytical fraction is 95 percent.

Percent completeness is calculated using the following equation:

$$\%C = (T - R)/T \times 100$$

where:
%C = percent completeness
T = total number of sample results
R = total number of rejected sample results

Completeness is also determined by comparing the planned number of samples per method and matrix as specified in the FSP or QAPP, with the number determined above.

The following sections present a review of QC data for each analytical method.

## 2.0 VOLATILE ORGANIC COMPOUNDS

A total of forty five water samples were analyzed for volatile organic compounds (VOC) by EPA SW 846 Method 8260B. All 1710 volatile results were assessed to be valid since none of the 1710 total results were rejected based on QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

### 2.1 Precision and Accuracy

#### 2.1.1 Instrument Calibration

Initial and continuing calibration results provide a means of evaluating accuracy within a particular SDG. Relative response factor (RRF), percent relative standard deviation (%RSD), and percent difference (%D) are the three major parameters used to measure the effectiveness of instrument calibration. RRF is a measure of the relative spectral response of an analyte compared to its internal standard. %RSD is an expression of the linearity of instrument

response. %D is a comparison of a continuing calibration instrumental response with its initial response. %RSD and %D exceedances suggest routine instrumental anomalies, which typically impact all sample results for the affected compounds.

The percent differences for chloromethane, bromomethane, chloroethane, acetone, vinyl chloride, methylene chloride, carbon disulfide and 1,1 dichloroethene were above the criteria for acceptance of 25.0% in the continuing calibration. One hundred thirty four results were qualified detected estimated (J) and non-detected estimated (UJ). The details regarding the qualification of results are provided in the data validation reports.

The relative response factors for acetone, 2-butanone, 1,1,2,2-tetrachloroethane and bromomethane were above the criteria for acceptance of 0.05 in the initial calibration and/or the continuing calibration standards. One hundred forty five results were qualified detected estimated (J) and non-detected estimated (UJ). The details regarding the qualification of results are provided in the data validation reports.

### 2.1.2 Surrogates

No data were qualified based on the surrogate nonconformances. In cases where individual recoveries exceeded criteria, the QC exceedance was judged to have no impact on the data quality and no qualifications were made.

### 2.1.3 MS/MSD Samples

No data were qualified based on MS/MSD nonconformances. For those SDGs with MS/MSD results, the recoveries were evaluated against the acceptance criteria.

### 2.1.4 LCS Samples

No data were qualified based on LCS nonconformances. For those SDGs with LCS results, the recoveries were evaluated against the acceptance criteria.

### 2.1.5 Internal Standards

No data were qualified based on internal standard nonconformances. The recoveries and retention times were evaluated against the acceptance criteria.

### 2.1.6 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs for the compounds. The associated data validation narratives provided details regarding criteria exceeded. Sample data were not qualified on the basis of field duplicate precision.

### 2.1.7 Compound Quantitation and Target Identification

All compound quantitation and target identification was found to be acceptable.

## 2.2 Representativeness

### 2.2.1 Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All holding times were met.

### 2.2.2 Blanks

Method blanks and trip blanks were collected and analyzed to evaluate representativeness. The concentration for an individual target compounds in any of the three types of QA/QC blanks were used for data qualification.

If contaminants were detected in a blank, corrective actions were made for the chemical analytical data during data validation. The corrective action consisted of amending the laboratory reported results for organic compounds based on the following criteria. The validation qualifier codes used in the blank summary tables are described below.

> Results Below the RL If a sample result for the blank contaminant was less than the RL and less than 10 times the blank value for common contaminants or 5 times the blank value for other contaminants, the sample result was amended as a non-detected at the RL for the target compound and qualified with UB
>
> Results Above the RL If a sample result for the blank contaminant was greater than the sample RL and less than 10 times the blank value for common contaminants or 5 times the blank value for other contaminants, the sample result for the blank contaminant was amended as a non-detect at the concentration reported in the sample results and qualified with UB.
>
> If a sample result for the blank contaminant was greater than 10 times the blank value for common contaminants or 5 times the blank value for other contaminants, the result was not amended and qualified with B.

#### 2.2.2.1 Method Blanks

No QC issues were associated with the method blanks for this analysis.

#### 2.2.2.2 Trip Blanks

No QC issues were associated with the trip blanks for this analysis.

### 2.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the method detection limits attained were at or below the reporting limit. Target compounds detected below the reporting limits flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

### 2.4 Completeness

The completeness level attained for volatile organic field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

## 3.0 Bis (2-chloroethyl) ether

A total of five water samples were analyzed for bis (2-chloroethyl) ether by EPA SW 846 Method 8270C. All 5 bis (2-chloroethyl) ether results were assessed to be valid since none of the 5 total

results were rejected based on QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

## 3.1 Precision and Accuracy

### 3.1.1 Instrument Calibration

As previously discussed in Section 2.1.1, initial and continuing calibration results provide a means of evaluating accuracy.

The relative response factors met the acceptance criteria of 0.05 in the initial and continuing calibration standards.

The percent difference between the initial calibration mean relative response factors and the continuing calibration relative response factors met the acceptance criteria of 30 and 25 percent, respectively.

### 3.1.2 Surrogates

No data were qualified based on surrogate nonconformances. In cases where individual recoveries exceeded criteria, the QC exceedance was judged to have no impact on the data quality and no qualifications were made.

### 3.1.3 MS/MSD Samples

No data were qualified based on MS/MSD nonconformances. For those SDGs with MS/MSD results, the recoveries were evaluated against the acceptance criteria.

### 3.1.4 LCS Samples

No data were qualified based on LCS nonconformances. For those SDGs with LCS results, the recoveries were evaluated against the acceptance criteria.

### 3.1.5 Internal Standards

No data were qualified based on internal standard nonconformances. The recoveries and retention times were evaluated against the acceptance criteria.

### 3.1.6 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs for the compounds. The associated data validation narratives provided details regarding criteria exceeded. Sample data were not qualified on the basis of field duplicate precision.

### 3.1.8 Compound Quantitation and Target Identification

All compound quantitation and target compound identifications were found to be acceptable.

## 3.2 Representativeness

### 3.2.1 Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All holding times were met.

### 3.2.2 Blanks

As previously discussed in Section 2.2.2, method blanks, equipment rinsate blanks, and field blanks were analyzed to evaluate representativeness.

#### 3.2.2.1 Method Blanks

As a result of method blank contamination, thirteen analytes were qualified as non-detected estimated (UB). The details regarding the qualification of results are provided in the data validation reports.

#### 3.2.2.2 Equipment Rinsate and Field Blanks

No equipment rinsate and field blanks were associated with this group of samples for this analysis.

### 3.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the method detection limits attained were at or below the reporting limit. Target compounds detected below the reporting limits flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

### 3.4 Completeness

The completeness level attained for semivolatile organic field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

## 4.0 Arsenic

A total of five water samples were analyzed for arsenic by EPA SW 846 Method 6010B. All arsenic data were assessed to be valid since none of the 5 total results were rejected based on QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

### 4.1 Precision and Accuracy

#### 4.1.1 Instrument Calibration

Initial and continuing calibration verification results provide a means of evaluating accuracy within a particular SDG. Correlation coefficient (r) and percent recovery (%R) are the two major parameters used to measure the effectiveness of instrument calibration. The correlation coefficient indicates the linearity of the calibration curve. %R is used to verify the on going calibration acceptability of the analytical system. The most critical of the two calibration parameters, r, has the potential to affect data accuracy across an SDG when it is outside the acceptable QC limits. %R exceedances suggest more routine instrumental anomalies, which typically impact all sample results for the affected analytes.

The correlation coefficients in the initial calibrations and/or percent recoveries in the continuing calibration verifications were within the acceptance criteria of ≥ 0.995 and 90-110 percent, respectively.

### 4.1.2 MS Samples

No data were qualified based on MS/MSD nonconformances. For those SDGs with MS/MSD results, the recoveries were evaluated against the acceptance criteria.

### 4.1.3 Duplicate (DUP) Samples

No data were qualified based on duplicate nonconformances. For those SDGs with DUP results, the relative percent differences/differences were evaluated against the acceptance criteria. In cases where RPDs or differences exceeded criteria, the QC exceedance was judged to have no impact on the data quality and no qualifications were made.

### 4.1.4 LCS Samples

No data were qualified based on LCS nonconformances. For those SDGs with LCS results, the recoveries were evaluated against the acceptance criteria.

### 4.1.5 ICP Serial Dilution

No data were qualified based on ICP serial dilution nonconformances. For those SDGs with ICP results, the recoveries were evaluated against the acceptance criteria.

### 4.1.6 ICP Interference Check Sample

No data were qualified based on interference check sample nonconformances. All recoveries were evaluated against the acceptance criteria.

### 4.1.7 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs for the analytes. The associated data validation narratives provided details regarding criteria exceeded. Sample data were not qualified on the basis of field duplicate precision.

### 4.1.9 Sample Result Verification

All sample results were found to be acceptable.

## 4.2 Representativeness

### 4.2.1 Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All holding times were met.

### 4.2.2 Blanks

Method blanks and field blanks were collected and analyzed to evaluate representativeness. The concentration for an individual target compounds in any of the three types of QA/QC blanks were used for data qualification.

If contaminants were detected in a blank, corrective actions were made for the chemical analytical data during data validation. The corrective action consisted of amending the laboratory reported results for inorganic analytes based on the following criteria. The validation qualifier codes are described below.

> Results Above and Below the RL If a sample result for the blank contaminant was less than or greater than the RL and less than 5 times the blank value, the sample result was amended as a non-detected for the target compound and qualified with UB
>
> If a sample result for the blank contaminant was greater than 5 times the blank value, the result was not amended and qualified with B.

#### 4.2.2.1 Method Blanks

As a result of method blank contamination, one analyte was qualified as non-detected estimated (UB). The details regarding the qualification of results are provided in the data validation reports.

### 4.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the method detection limits attained were at or below the reporting limit. Target analytes detected below the reporting limits flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

### 4.4 Completeness

The completeness level attained for metal field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

## 5.0 VARIANCES IN ANALYTICAL PERFORMANCE

The laboratory used standard analytical methods for all of the analyses throughout the project. No systematic variances in analytical performance were noted according to the laboratory SOW.

## 6.0 SUMMARY OF PARCC CRITERIA

The validation reports present the PARCC results for all SDGs. Each PARCC criterion is discussed in detail in the following sections.

### 6.1 Precision and Accuracy

Precision and accuracy were evaluated usi`ng data quality indicators such as MS/MSD, LCS, and surrogates. The precision and accuracy of the data set were considered acceptable after integration of qualification of estimated results as specifically noted in the data validation reports.

## 6.2 Representativeness

All samples for each method and matrix were evaluated for holding time compliance. All samples were associated with a method blank in each individual SDG. The representativeness of the project data is considered acceptable after qualification for blank contamination.

## 6.3 Comparability

Sampling frequency requirements were met in obtaining duplicates and necessary field blanks. The laboratory used standard analytical methods for their analyses. The analytical results were reported in correct standard units. Holding times, sample preservation, and sample integrity were within QC criteria. The overall comparability is considered acceptable.

## 6.4 Completeness

Of the 1720 total analytes reported, none of the 1720 total results were rejected. The completeness for all SDGs is as follows:

| Parameter/Method | Total Analytes | No. of Rejects | %Completeness |
|---|---|---|---|
| Volatiles | 1710 | 0 | 100 |
| Bis (2-chloroethyl) ether | 5 | 0 | 100 |
| Arsenic | 5 | 0 | 100 |
| **Total** | **1720** | **0** | **100** |

The completeness percentage based on rejected data met the 95 percent DQO goal. A less quantifiable loss of data occurred in the application of blank qualifications.

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# LEVEL IV
# QA/QC DATA PACKAGE

| | |
|---|---|
| **CLIENT:** | MWH, Inc. |
| **PROJECT:** | GW - ACS / Griffith, IN |
| **LAB WORKORDER:** | ME0807691 |
| **DATE PACKAGE ISSUED:** | 8/6/2008 |

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX 219.769.1664

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**CLIENT:** **MWH, Inc.**

**PROJECT:** **GW - ACS / Griffith, IN**

**LAB WORKORDER:** **ME0807691**

**CHAIN-OF-CUSTODY:** **84999**


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# Case Narrative
# VOA Analysis

Client: MWH, Inc.

Project: GW - ACS / Griffith, IN

Laboratory #: ME0807691

Five groundwater samples were received on 7/16/2008 for analysis and reporting in accordance with our Level IV protocol. The samples were received in acceptable physical condition. The samples were analyzed for Volatile Organic Analytes using SW-846 Method 8260B.

The samples were collected on 7/16/2008. The samples were analyzed on 7/22/2008. All samples were analyzed within the prescribed maximum allowable holding time without exception.

The required instrument calibration was performed and the acceptance criteria met. The grand mean average was used to assess linearity.

Prior to analysis, the resultant mass spectra for BFB met all method criteria, and all samples were analyzed within 12-hour analytical sequences.

Prior to daily analysis, a CCV standard was analyzed and the acceptance criteria met for all CCCs and SPCCs.

The batch quality control tests were performed and the acceptance criteria met without exception.

Surrogate compounds are spiked into each sample to evaluate analysis efficiency. All environmental samples yielded acceptable surrogate recovery.

Internal standards are spiked into each CCV standard and environmental sample. All internal standard responses met the criteria established for the CCVs. The internal standard responses in the environmental samples were evaluated and deemed adequate.

Matrix evaluation was performed on the following client-submitted samples. The accuracy and precision criteria were met as noted.

| SAMPLE ID | QC TYPE | EVALUATION |
|---|---|---|
| ACS-GW-EB01-31 RE | MS/MSD | Accuracy and precision criteria met without exception. |

This Case Narrative was prepared by Amy L. Sheehy, QA Assistant.

July 25, 2008

Christopher Daly
MWH, Inc.
175 West Jackson Boulevard, Suite 1900
Chicago, IL 60604

Work Order No.: ME0807691

RE: GW - ACS / Griffith, IN

Dear Christopher Daly:

Microbac Laboratories, Inc. received 5 samples on 7/16/2008 1:50:00 PM for the analyses presented in the following report.

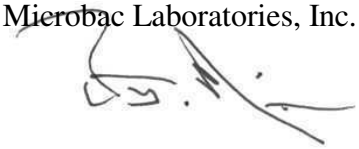
The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,
Microbac Laboratories, Inc.



Ronald J. Misiunas
Client Services Manager

Enclosures

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# WORK ORDER SAMPLE SUMMARY

**Date:** *Friday, July 25, 2008*

**CLIENT:** MWH, Inc.
**Project:** GW - ACS / Griffith, IN
**Lab Order:** ME0807691

| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---|---|---|---|---|
| ME0807691-01A | ACS-GW-TB01-31 RE | | 7/16/2008 7:30:00 AM | 7/16/2008 |
| ME0807691-02A | ACS-GW-EB01-31 RE | | 7/16/2008 8:05:00 AM | 7/16/2008 |
| ME0807691-03A | ACS-GW-DUP01-31 RE | | 7/16/2008 8:45:00 AM | 7/16/2008 |
| ME0807691-04A | ACS-GW-MW-59-31 RE | | 7/16/2008 10:30:00 AM | 7/16/2008 |
| ME0807691-05A | ACS-GW-MW-58-31 RE | | 7/16/2008 11:40:00 AM | 7/16/2008 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB01-31 RE | **Work Order / ID:** | ME0807691-01 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 07:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

**VOLATILE ORGANICS** Method: **SW8260B** Prep Date/Time: Analyst: **CLR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***12*** | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 12:11 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| Methylene chloride | A | ***8*** | 3.1 | 10 | J | µg/L | 1 | 07/22/08 12:11 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 07/22/08 12:11 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 07/22/08 12:11 |
| *Surr: 4-Bromofluorobenzene* | S | 102 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 12:11 |

# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB01-31 RE | **Work Order / ID:** | ME0807691-01 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 07:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 105 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 12:11 |
| *Surr: 1,2-Dichloroethane-d4* | S | 105 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 12:11 |
| *Surr: Toluene-d8* | S | 101 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 12:11 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB01-31 RE | **Work Order / ID:** | ME0807691-02 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 08:05 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

**VOLATILE ORGANICS** Method: **SW8260B** Prep Date/Time: Analyst: **CLR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***7.4*** | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 12:46 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| Methylene chloride | A | ***7.1*** | 3.1 | 10 | J | µg/L | 1 | 07/22/08 12:46 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 07/22/08 12:46 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 07/22/08 12:46 |
| *Surr: 4-Bromofluorobenzene* | S | 106 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 12:46 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB01-31 RE | **Work Order / ID:** | ME0807691-02 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 08:05 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 106 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 12:46 |
| *Surr: 1,2-Dichloroethane-d4* | S | 109 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 12:46 |
| *Surr: Toluene-d8* | S | 101 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 12:46 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP01-31 RE | **Work Order / ID:** | ME0807691-03 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 08:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

**VOLATILE ORGANICS** Method: **SW8260B** Prep Date/Time: Analyst: **CLR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***14*** | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 13:22 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 07/22/08 13:22 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 07/22/08 13:22 |
| *Surr: 4-Bromofluorobenzene* | S | 105 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 13:22 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP01-31 RE | **Work Order / ID:** | ME0807691-03 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 08:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 13:22 |
| *Surr: 1,2-Dichloroethane-d4* | S | 109 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 13:22 |
| *Surr: Toluene-d8* | S | 101 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 13:22 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW-59-31 RE | **Work Order / ID:** | ME0807691-04 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

**VOLATILE ORGANICS** Method: **SW8260B** Prep Date/Time: Analyst: **CLR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***14*** | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 13:58 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 07/22/08 13:58 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 07/22/08 13:58 |
| *Surr: 4-Bromofluorobenzene* | S | 105 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 13:58 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW-59-31 RE | **Work Order / ID:** | ME0807691-04 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 108 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 13:58 |
| *Surr: 1,2-Dichloroethane-d4* | S | 113 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 13:58 |
| *Surr: Toluene-d8* | S | 102 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 13:58 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW-58-31 RE | **Work Order / ID:** | ME0807691-05 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 11:40 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

**VOLATILE ORGANICS** Method: **SW8260B** Prep Date/Time: Analyst: **CLR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | ***18*** | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 14:34 |
| Benzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Bromodichloromethane | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Bromoform | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Bromomethane | A | ***ND*** | 1.8 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| 2-Butanone | A | ***ND*** | 3.6 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| Carbon Disulfide | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| Carbon tetrachloride | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Chlorobenzene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Chloroethane | A | ***ND*** | 2.3 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| Chloroform | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Chloromethane | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| Dibromochloromethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 1,1-Dichloroethane | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 1,2-Dichloroethane | A | ***ND*** | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 1,1-Dichloroethene | A | ***ND*** | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| cis-1,2-Dichloroethene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| trans-1,2-Dichloroethene | A | ***ND*** | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 1,2-Dichloropropane | A | ***ND*** | 1 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| cis-1,3-Dichloropropene | A | ***ND*** | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| trans-1,3-Dichloropropene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Ethylbenzene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 2-Hexanone | A | ***ND*** | 2.4 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| 4-Methyl-2-Pentanone | A | ***ND*** | 1.7 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| Methylene chloride | A | ***ND*** | 3.1 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| Styrene | A | ***ND*** | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 1,1,2,2-Tetrachloroethane | A | ***ND*** | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Tetrachloroethene | A | ***ND*** | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Toluene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 1,1,1-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 1,1,2-Trichloroethane | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Trichloroethene | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| Vinyl chloride | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| Total Xylenes | A | ***ND*** | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 1,2,4-Trichlorobenzene | A | ***ND*** | 2 | 5.0 | | µg/L | 1 | 07/22/08 14:34 |
| 1,2-Dichlorobenzene | A | ***ND*** | 1 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| 1,3-Dichlorobenzene | A | ***ND*** | 0.9 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| 1,4-Dichlorobenzene | A | ***ND*** | 0.7 | 10 | | µg/L | 1 | 07/22/08 14:34 |
| *Surr: 4-Bromofluorobenzene* | S | 104 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 14:34 |

# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW-58-31 RE | **Work Order / ID:** | ME0807691-05 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 11:40 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 106 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 14:34 |
| *Surr: 1,2-Dichloroethane-d4* | S | 111 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 14:34 |
| *Surr: Toluene-d8* | S | 101 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 14:34 |

**FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NA | = | Not Analyzed | N/A | = | Not Applicable | | | |
| mg/L | = | Milligrams per Liter (ppm) | ug/L | = | Micrograms per Liter (ppb) | cfu | = | Colony Forming Unit |
| mg/Kg | = | Milligrams per Kilogram (ppm) | ug/Kg | = | Micrograms per Kilogram (ppb) | ng/L | = | Nanograms per Liter (ppt) |

| | | |
|---|---|---|
| U | = | Undetected |
| J | = | Analyte concentration detected between RL and MDL (Metals / Organics) |
| B | = | Detected in the associated Method Blank at a concentration above the routine PQL/RL |
| b | = | Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL |
| D | = | Surrogate recoveries are not calculated due to sample dilution |
| ND | = | Not Detected at the Reporting Limit (or the Method Detection Limit, if listed) |
| E | = | Value above quantitation range |
| H | = | Analyte was prepared and/or analyzed outside of the analytical method holding time |
| I | = | Matrix Interference |
| R | = | RPD outside accepted recovery limits |
| S | = | Spike recovery outside recovery limits |
| Surr | = | Surrogate |

DF = Dilution Factor RL = Reporting Limit ST = Sample Type MDL = Method Detection Limit

**SAMPLE TYPES**

| | | |
|---|---|---|
| A | = | Analyte |
| I | = | Internal Standard |
| S | = | Surrogate |
| T | = | Tentatively Identified Compound (TIC, concentration estimated) |

**QC SAMPLE IDENTIFICATIONS**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MBLK | = | Method Blank | ICSA | = | Interference Check Standard "A" | OPR | = | Ongoing Precision and Recovery Standard |
| DUP | = | Method Duplicate | ICSAB | = | Interference Check Standard "AB" | | | |
| LCS | = | Laboratory Control Sample | LCSD | = | Laboratory Control Sample Duplicate | | | |
| MS | = | Matrix Spike | MSD | = | Matrix Spike Duplicate | | | |
| ICB | = | Initial Calibration Blank | CCB | = | Continuing Calibration Blank | | | |
| ICV | = | Initial Calibration Verification | CCV | = | Continuing Calibration Verification | | | |
| PDS | = | Post Digestion Spike | SD | = | Serial Dilution | | | |

**CERTIFICATIONS**

*Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.*

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

**MICROBAC LOCATIONS, SERVICE CENTERS (SC) AND SATELLITE OFFICES (Sat)**

**Baltimore Division** - Baltimore, MD
**Camp Hill Division** - Camp Hill, PA
**Camp Hill Division (SC)** - Pittston, PA
**Chicagoland Division** - Merrillville, IN
**Chicagoland Division (SC)** - Indianapolis, IN
**Corona Division** - Corona, CA
**Erie Division** - Erie, PA
**Fayetteville Division** - Fayetteville, NC
**Hauser Division** - Boulder, CO
**Kentucky Division** - Louisville, KY
**Kentucky Division (Sat)** - Evansville, IN
**Kentucky Division (Sat)** - Lexington, KY
**Kentucky Division (Sat)** - Paducah, KY
**Knoxville Division** - Maryville, TN
**Massachusetts Division** - Marlborough, MA
**Microbac Corporate Office** - Wexford, PA
**Microbac NY - Cortland Office** - Cortland, NY
**Microbac NY - Waverly Office** - Waverly, NY
**New Castle Division** - New Castle, PA
**Pittsburgh Division** - Warrendale, PA
**Richmond Division** - Richmond, VA
**South Carolina Division** - New Ellenton, SC
**South Jersey Division** - Turnersville, NJ
**Southern Headquarters** - Poquoson, VA
**Southern Testing Division** - Wilson, NC
**Southern Testing Division (Sat)** - Greensboro, NC
**Venice Division** - Venice, FL

# COOLER INSPECTION

**Date:** Friday, July 25, 2008

Client Name: ***MWH, Inc.***

Work Order Number ***ME0807691***

Checklist completed by KRS | 7/16/2008 4:43:22 PM

Date / Time Received: ***7/16/2008 1:50:00 PM***

Received by: KRS

Reviewed by RJM | 7/17/2008 6:24:06 PM

Carrier name: Client Delivered

| | | | |
|---|---|---|---|
| After-Hour Arrival? | Yes ☐ | No ☑ | |
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on shippping container/cooler? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☑ |
| Chain of custody present? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient client identification? | Yes ☑ | No ☐ | |
| Chain of custody included sufficient sample collector information? | Yes ☑ | No ☐ | |
| Chain of custody included a sample description? | Yes ☑ | No ☐ | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate matrix? | Yes ☑ | No ☐ | |
| Chain of custody included date of collection? | Yes ☑ | No ☐ | |
| Chain of custody included time of collection? | Yes ☑ | No ☐ | |
| Chain of custody identified the appropriate number of containers? | Yes ☑ | No ☐ | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | |
| Sample containers intact? | Yes ☑ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | |
| All samples received within holding time? | Yes ☑ | No ☐ | |
| If samples are preserved, are the preservatives identified? | Yes ☑ | No ☐ | |
| Samples properly preserved? | Yes ☑ | No ☐ | |

If No, adjusted by? _____ Date/Time _____

| | | | |
|---|---|---|---|
| Chain of custody included the requested analyses? | Yes ☑ | No ☐ | |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | |
| Samples received on ice? | Yes ☑ | No ☐ | |

| Container/Temp Blank temperatures | Cooler | Temp |
|---|---|---|
| | 1 | 4 ºC |

VOA vials for aqueous samples have zero headspace? No VOA vials submitted ☐ Yes ☑ No ☐

**ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.**

General Comments:

| Sample ID | Client Sample ID | Comments |
|---|---|---|
| ME0807691-01A | ACS-GW-TB01-31 RE | |
| ME0807691-02A | ACS-GW-EB01-31 RE | |
| ME0807691-03A | ACS-GW-DUP01-31 RE | |
| ME0807691-04A | ACS-GW-MW-59-31 RE | |
| ME0807691-05A | ACS-GW-MW-58-31 RE | |

ME0807691
GW - SemiAnnual / ACS
MONT. WATSON-IL-CHICAG 7/23/2008
Christopher Daly
RJM

# Microbac®

Samples Submitted to:

[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664

[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

## Chain of Custody Record

Number 84999

*Instructions on back*

| | | | |
|---|---|---|---|
| Client Name: MWH | Project: ACS GROUNDWATER | Turnaround Time | Report Type |
| Address: 175 W. JACKSON BLVD SUITE 1900 | Location: GRIFFITH, IN | [X] Routine (7 working days) | [ ] Results Only [ ] Level II |
| City, State, Zip: CHICAGO, IL 60604 | PO #: 4050577.0301.0601 | [ ] RUSH* (notify lab) | [ ] Level III [ ] Level III CLP-like |
| Contact: DAVID SOWERS / JUSTIN FINGER | Compliance Monitoring? [X] Yes(1) [ ] No | _____ (needed by) | [ ] Level IV [ ] Level IV CLP-like |
| Telephone #: (312) 831-3000 | (1)Agency/Program | | [ ] EDD |

Sampled by (PRINT): J. FINGER, T. CARROLL  Sampler Signature: [signature]  Sampler Phone #: (312) 831-3447

Send Report via: [X] Mail [ ] Telephone [ ] Fax (fax #) _____  [X] e-mail (address): JUSTIN.E.FINGER@MWHGLOBAL.COM

* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** **Preservative Types:** (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

| Client Sample ID | Matrix* | Grab | Composite | Filtered | Date Collected | Time Collected | No. of Containers | Requested Analyses → Preservative Types ** ↓ | VOCs, TICs | | | | | | | | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | 0807691 |
| ACS-GW-TB01-31RE | GW | X | | | 7/16/08 | 0730 | 1 | 3 | X | | | | | | | | 01A |
| ACS-GW-EB01-31RE | GW | X | | | 7/16/08 | 0805 | 3 | 3 | X | | | | | | | | 02 |
| ACS-GW-DUP01-31RE | GW | X | | | 7/16/08 | 0845 | 3 | 3 | X | | | | | | | | 03 |
| ACS-GW-MW59-31RE | GW | X | | | 7/16/08 | 1030 | 3 | 3 | X | | | | | | | | 04 |
| ACS-GW-MW58-31RE | GW | X | | | 7/16/08 | 1140 | 3 | 3 | X | | | | | | | | 05 |
| | | | | | | | | | | | | | | | | | |
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**Possible Hazard Identification** [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive  **Sample Disposition** [ ] Dispose as appropriate [ ] Return [ ] Archive

**Comments:** RUN ANALYSES ON RESIDENTIAL LEVEL FOR MONITORING WELLS - DO NOT RUN ON LOW LEVEL, LOW LEVEL IS FOR RESIDENTIAL WELLS ONLY, NO RESIDENTIAL SAMPLES COLLECTED WITH THIS EVENT

**Sample temperature upon receipt in degrees C =** 4°

| Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
|---|---|---|---|
| [signature] | 7/16/08 1200 | | |
| Relinquished By (signature) | Date/Time | Received By (signature) | Date/Time |
| | | | |
| Relinquished By (signature) | Date/Time | Received for Lab By (signature) | Date/Time |
| | | [signature] | 7/16/08 1350 |

rev. 11/04/04

Page 1 of 1

**CLIENT:** MWH, Inc.
**Work Order:** ME0807691
**Project:** GW - ACS / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R115393**

Sample ID: **MB 7/22** SampType: **MBLK** TestCode: **8260+_W** Units: **µg/L** Prep Date: Run ID: **VOA-4_080722A**
Client ID: **ZZZZZ** Batch ID: **R115393** TestNo: **SW8260B** Analysis Date: **7/22/2008 8:31:00 AM** SeqNo: **1843966**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | 5.93 | 50 | | | | | | | | | J |
| Benzene | ND | 5.0 | | | | | | | | | |
| Bromodichloromethane | ND | 5.0 | | | | | | | | | |
| Bromoform | ND | 5.0 | | | | | | | | | |
| Bromomethane | ND | 10 | | | | | | | | | |
| 2-Butanone | ND | 10 | | | | | | | | | |
| Carbon Disulfide | ND | 10 | | | | | | | | | |
| Carbon tetrachloride | ND | 5.0 | | | | | | | | | |
| Chlorobenzene | ND | 5.0 | | | | | | | | | |
| Chloroethane | ND | 10 | | | | | | | | | |
| Chloroform | ND | 5.0 | | | | | | | | | |
| Chloromethane | ND | 10 | | | | | | | | | |
| Dibromochloromethane | ND | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | ND | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | ND | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | ND | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | ND | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 5.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 5.0 | | | | | | | | | |
| Ethylbenzene | ND | 5.0 | | | | | | | | | |
| 2-Hexanone | ND | 10 | | | | | | | | | |
| 4-Methyl-2-Pentanone | ND | 10 | | | | | | | | | |
| Methylene chloride | ND | 10 | | | | | | | | | |
| Styrene | ND | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | | | | | | | | |
| Tetrachloroethene | ND | 5.0 | | | | | | | | | |
| Toluene | ND | 5.0 | | | | | | | | | |

**Qualifiers:**

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0807691
**Project:** GW - ACS / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R115393**

Sample ID: **MB 7/22** SampType: **MBLK** TestCode: **8260+_W** Units: **µg/L** Prep Date: Run ID: **VOA-4_080722A**
Client ID: **ZZZZZ** Batch ID: **R115393** TestNo: **SW8260B** Analysis Date: **7/22/2008 8:31:00 AM** SeqNo: **1843966**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 5.0 | | | | | | | | | |
| Trichloroethene | ND | 5.0 | | | | | | | | | |
| Vinyl chloride | ND | 10 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 10 | | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 10 | | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 10 | | | | | | | | | |
| Total Xylenes | ND | 5.0 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 52.54 | 0 | 50 | 0 | 105 | 76.9 | 116 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 53.23 | 0 | 50 | 0 | 106 | 78.4 | 125 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 53.33 | 0 | 50 | 0 | 107 | 74.2 | 136 | 0 | 0 | | |
| Surr: Toluene-d8 | 50.53 | 0 | 50 | 0 | 101 | 81.4 | 122 | 0 | 0 | | |

Sample ID: **LCS 20 PPB** SampType: **LCS** TestCode: **8260+_W** Units: **µg/L** Prep Date: Run ID: **VOA-4_080722A**
Client ID: **ZZZZZ** Batch ID: **R115393** TestNo: **SW8260B** Analysis Date: **7/22/2008 9:06:00 AM** SeqNo: **1843967**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 19.47 | 5.0 | 20 | 0 | 97.4 | 75.5 | 121 | 0 | 0 | | |
| Bromodichloromethane | 17.77 | 5.0 | 20 | 0 | 88.8 | 63.1 | 132 | 0 | 0 | | |
| Bromoform | 20.22 | 5.0 | 20 | 0 | 101 | 33.5 | 173 | 0 | 0 | | |
| Bromomethane | 10.87 | 10 | 20 | 0 | 54.4 | 10 | 226 | 0 | 0 | | |
| Carbon tetrachloride | 20.32 | 5.0 | 20 | 0 | 102 | 68.7 | 143 | 0 | 0 | | |
| Chlorobenzene | 18.87 | 5.0 | 20 | 0 | 94.4 | 67.9 | 138 | 0 | 0 | | |
| Chloroethane | 14.07 | 10 | 20 | 0 | 70.4 | 35.6 | 190 | 0 | 0 | | |
| Chloroform | 19.5 | 5.0 | 20 | 0 | 97.5 | 72.6 | 134 | 0 | 0 | | |
| Chloromethane | 12.99 | 10 | 20 | 0 | 65 | 34.7 | 130 | 0 | 0 | | |
| Dibromochloromethane | 18.42 | 5.0 | 20 | 0 | 92.1 | 61.4 | 141 | 0 | 0 | | |
| 1,1-Dichloroethane | 18.48 | 5.0 | 20 | 0 | 92.4 | 76.1 | 139 | 0 | 0 | | |
| 1,2-Dichloroethane | 19.51 | 5.0 | 20 | 0 | 97.6 | 63 | 145 | 0 | 0 | | |
| 1,1-Dichloroethene | 15.82 | 5.0 | 20 | 0 | 79.1 | 44 | 149 | 0 | 0 | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
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H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0807691
**Project:** GW - ACS / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R115393**

Sample ID: **LCS 20 PPB** SampType: **LCS** TestCode: **8260+_W** Units: **µg/L** Prep Date: Run ID: **VOA-4_080722A**
Client ID: **ZZZZZ** Batch ID: **R115393** TestNo: **SW8260B** Analysis Date: **7/22/2008 9:06:00 AM** SeqNo: **1843967**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 17.54 | 5.0 | 20 | 0 | 87.7 | 52.5 | 152 | 0 | 0 | | |
| 1,2-Dichloropropane | 18.01 | 5.0 | 20 | 0 | 90 | 75.3 | 124 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 16.07 | 5.0 | 20 | 0 | 80.4 | 48.4 | 152 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 15.01 | 5.0 | 20 | 0 | 75 | 39.9 | 176 | 0 | 0 | | |
| Ethylbenzene | 19.54 | 5.0 | 20 | 0 | 97.7 | 76.1 | 125 | 0 | 0 | | |
| Methylene chloride | 16.42 | 10 | 20 | 0 | 82.1 | 26.3 | 157 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 17.21 | 5.0 | 20 | 0 | 86 | 56.5 | 136 | 0 | 0 | | |
| Tetrachloroethene | 20.7 | 5.0 | 20 | 0 | 104 | 68.7 | 150 | 0 | 0 | | |
| Toluene | 17.95 | 5.0 | 20 | 0 | 89.8 | 63.9 | 131 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 19.5 | 5.0 | 20 | 0 | 97.5 | 70.1 | 136 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 18.17 | 5.0 | 20 | 0 | 90.8 | 66.6 | 137 | 0 | 0 | | |
| Trichloroethene | 18.72 | 5.0 | 20 | 0 | 93.6 | 45.2 | 154 | 0 | 0 | | |
| Vinyl chloride | 12.54 | 10 | 20 | 0 | 62.7 | 45 | 140 | 0 | 0 | | |
| 1,2-Dichlorobenzene | 18.84 | 10 | 20 | 0 | 94.2 | 79.6 | 121 | 0 | 0 | | |
| 1,3-Dichlorobenzene | 18.81 | 10 | 20 | 0 | 94.1 | 73.8 | 113 | 0 | 0 | | |
| 1,4-Dichlorobenzene | 18.59 | 10 | 20 | 0 | 93 | 78.9 | 119 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 51.99 | 0 | 50 | 0 | 104 | 76.9 | 116 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 53.78 | 0 | 50 | 0 | 108 | 78.4 | 125 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 55.51 | 0 | 50 | 0 | 111 | 74.2 | 136 | 0 | 0 | | |
| Surr: Toluene-d8 | 50.6 | 0 | 50 | 0 | 101 | 81.4 | 122 | 0 | 0 | | |

Sample ID: **ME0807691-02AMS** SampType: **MS** TestCode: **8260+_W** Units: **µg/L** Prep Date: Run ID: **VOA-4_080722A**
Client ID: **ACS-GW-EB01-31 R** Batch ID: **R115393** TestNo: **SW8260B** Analysis Date: **7/22/2008 3:51:00 PM** SeqNo: **1844789**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 17.06 | 5.0 | 20 | 0 | 85.3 | 60.6 | 130 | 0 | 0 | | |
| Bromodichloromethane | 17.12 | 5.0 | 20 | 0 | 85.6 | 65.8 | 126 | 0 | 0 | | |
| Bromoform | 18.29 | 5.0 | 20 | 0 | 91.4 | 40.5 | 146 | 0 | 0 | | |
| Bromomethane | 10.88 | 10 | 20 | 0 | 54.4 | 0 | 243 | 0 | 0 | | |
| Carbon tetrachloride | 19.64 | 5.0 | 20 | 0 | 98.2 | 47.2 | 149 | 0 | 0 | | |
| Chlorobenzene | 18.06 | 5.0 | 20 | 0 | 90.3 | 75.6 | 127 | 0 | 0 | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0807691
**Project:** GW - ACS / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R115393**

Sample ID: **ME0807691-02AMS** SampType: **MS** TestCode: **8260+_W** Units: **µg/L** Prep Date: Run ID: **VOA-4_080722A**
Client ID: **ACS-GW-EB01-31 R** Batch ID: **R115393** TestNo: **SW8260B** Analysis Date: **7/22/2008 3:51:00 PM** SeqNo: **1844789**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | 11.77 | 10 | 20 | 0 | 58.8 | 0 | 357 | 0 | 0 | | |
| Chloroform | 19.04 | 5.0 | 20 | 0 | 95.2 | 71.2 | 120 | 0 | 0 | | |
| Chloromethane | 12.28 | 10 | 20 | 0 | 61.4 | 10.8 | 155 | 0 | 0 | | |
| Dibromochloromethane | 18.1 | 5.0 | 20 | 0 | 90.5 | 60.1 | 136 | 0 | 0 | | |
| 1,1-Dichloroethane | 18.18 | 5.0 | 20 | 0 | 90.9 | 68 | 119 | 0 | 0 | | |
| 1,2-Dichloroethane | 19.36 | 5.0 | 20 | 0 | 96.8 | 67.7 | 133 | 0 | 0 | | |
| 1,1-Dichloroethene | 14.49 | 5.0 | 20 | 0 | 72.4 | 50.1 | 125 | 0 | 0 | | |
| trans-1,2-Dichloroethene | 16.36 | 5.0 | 20 | 0 | 81.8 | 56.9 | 132 | 0 | 0 | | |
| 1,2-Dichloropropane | 17.48 | 5.0 | 20 | 0 | 87.4 | 71.4 | 125 | 0 | 0 | | |
| cis-1,3-Dichloropropene | 14.86 | 5.0 | 20 | 0 | 74.3 | 66.9 | 134 | 0 | 0 | | |
| trans-1,3-Dichloropropene | 13.46 | 5.0 | 20 | 0 | 67.3 | 69.9 | 130 | 0 | 0 | | S |
| Ethylbenzene | 18.58 | 5.0 | 20 | 0 | 92.9 | 60.6 | 144 | 0 | 0 | | |
| Methylene chloride | 14.73 | 10 | 20 | 0 | 73.6 | 55.4 | 130 | 0 | 0 | | |
| 1,1,2,2-Tetrachloroethane | 15.88 | 5.0 | 20 | 0 | 79.4 | 46.8 | 168 | 0 | 0 | | |
| Tetrachloroethene | 19.08 | 5.0 | 20 | 0 | 95.4 | 60.1 | 144 | 0 | 0 | | |
| Toluene | 17 | 5.0 | 20 | 0 | 85 | 69.7 | 130 | 0 | 0 | | |
| 1,1,1-Trichloroethane | 18.88 | 5.0 | 20 | 0 | 94.4 | 63 | 136 | 0 | 0 | | |
| 1,1,2-Trichloroethane | 17.07 | 5.0 | 20 | 0 | 85.4 | 40.6 | 165 | 0 | 0 | | |
| Trichloroethene | 17.59 | 5.0 | 20 | 0 | 88 | 48.6 | 139 | 0 | 0 | | |
| Vinyl chloride | 11.61 | 10 | 20 | 0 | 58 | 33 | 151 | 0 | 0 | | |
| 1,2-Dichlorobenzene | 17.63 | 10 | 20 | 0 | 88.2 | 76.7 | 123 | 0 | 0 | | |
| 1,3-Dichlorobenzene | 17.85 | 10 | 20 | 0 | 89.2 | 69.3 | 116 | 0 | 0 | | |
| 1,4-Dichlorobenzene | 17.77 | 10 | 20 | 0 | 88.8 | 73.9 | 122 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 52.47 | 0 | 50 | 0 | 105 | 76.9 | 116 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 53.31 | 0 | 50 | 0 | 107 | 78.4 | 125 | 0 | 0 | | |
| Surr: 1,2-Dichloroethane-d4 | 53.4 | 0 | 50 | 0 | 107 | 74.2 | 136 | 0 | 0 | | |
| Surr: Toluene-d8 | 50.33 | 0 | 50 | 0 | 101 | 81.4 | 122 | 0 | 0 | | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
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B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0807691
**Project:** GW - ACS / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R115393**

Sample ID: **ME0807691-02AMS** SampType: **MSD** TestCode: **8260+_W** Units: **µg/L** Prep Date: Run ID: **VOA-4_080722A**
Client ID: **ACS-GW-EB01-31 R** Batch ID: **R115393** TestNo: **SW8260B** Analysis Date: **7/22/2008 4:27:00 PM** SeqNo: **1844790**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 17.35 | 5.0 | 20 | 0 | 86.8 | 60.6 | 130 | 17.06 | 1.69 | 23.7 | |
| Bromodichloromethane | 17.79 | 5.0 | 20 | 0 | 89 | 65.8 | 126 | 17.12 | 3.84 | 28.4 | |
| Bromoform | 19.29 | 5.0 | 20 | 0 | 96.5 | 40.5 | 146 | 18.29 | 5.32 | 28.8 | |
| Bromomethane | 11.57 | 10 | 20 | 0 | 57.8 | 0 | 243 | 10.88 | 6.15 | 52.8 | |
| Carbon tetrachloride | 19.35 | 5.0 | 20 | 0 | 96.8 | 47.2 | 149 | 19.64 | 1.49 | 31.1 | |
| Chlorobenzene | 18.11 | 5.0 | 20 | 0 | 90.6 | 75.6 | 127 | 18.06 | 0.276 | 23 | |
| Chloroethane | 12.04 | 10 | 20 | 0 | 60.2 | 0 | 357 | 11.77 | 2.27 | 29.3 | |
| Chloroform | 18.57 | 5.0 | 20 | 0 | 92.8 | 71.2 | 120 | 19.04 | 2.50 | 25 | |
| Chloromethane | 12.72 | 10 | 20 | 0 | 63.6 | 10.8 | 155 | 12.28 | 3.52 | 90.9 | |
| Dibromochloromethane | 17.97 | 5.0 | 20 | 0 | 89.8 | 60.1 | 136 | 18.1 | 0.721 | 27.1 | |
| 1,1-Dichloroethane | 17.97 | 5.0 | 20 | 0 | 89.8 | 68 | 119 | 18.18 | 1.16 | 14.2 | |
| 1,2-Dichloroethane | 18.73 | 5.0 | 20 | 0 | 93.6 | 67.7 | 133 | 19.36 | 3.31 | 23.3 | |
| 1,1-Dichloroethene | 15.12 | 5.0 | 20 | 0 | 75.6 | 50.1 | 125 | 14.49 | 4.26 | 31 | |
| trans-1,2-Dichloroethene | 16.7 | 5.0 | 20 | 0 | 83.5 | 56.9 | 132 | 16.36 | 2.06 | 66.1 | |
| 1,2-Dichloropropane | 17.02 | 5.0 | 20 | 0 | 85.1 | 71.4 | 125 | 17.48 | 2.67 | 26 | |
| cis-1,3-Dichloropropene | 15.57 | 5.0 | 20 | 0 | 77.8 | 66.9 | 134 | 14.86 | 4.67 | 28.7 | |
| trans-1,3-Dichloropropene | 14.45 | 5.0 | 20 | 0 | 72.3 | 69.9 | 130 | 13.46 | 7.09 | 27.9 | |
| Ethylbenzene | 18.66 | 5.0 | 20 | 0 | 93.3 | 60.6 | 144 | 18.58 | 0.430 | 25.2 | |
| Methylene chloride | 16.04 | 10 | 20 | 0 | 80.2 | 55.4 | 130 | 14.73 | 8.51 | 28.7 | |
| 1,1,2,2-Tetrachloroethane | 16.95 | 5.0 | 20 | 0 | 84.8 | 46.8 | 168 | 15.88 | 6.52 | 22.3 | |
| Tetrachloroethene | 20.06 | 5.0 | 20 | 0 | 100 | 60.1 | 144 | 19.08 | 5.01 | 29.7 | |
| Toluene | 17.08 | 5.0 | 20 | 0 | 85.4 | 69.7 | 130 | 17 | 0.469 | 25.4 | |
| 1,1,1-Trichloroethane | 18.86 | 5.0 | 20 | 0 | 94.3 | 63 | 136 | 18.88 | 0.106 | 29 | |
| 1,1,2-Trichloroethane | 17.91 | 5.0 | 20 | 0 | 89.6 | 40.6 | 165 | 17.07 | 4.80 | 25.9 | |
| Trichloroethene | 17.43 | 5.0 | 20 | 0 | 87.2 | 48.6 | 139 | 17.59 | 0.914 | 26.9 | |
| Vinyl chloride | 12.13 | 10 | 20 | 0 | 60.6 | 33 | 151 | 11.61 | 4.38 | 31.2 | |
| 1,2-Dichlorobenzene | 18.61 | 10 | 20 | 0 | 93 | 76.7 | 123 | 17.63 | 5.41 | 17.8 | |
| 1,3-Dichlorobenzene | 18.23 | 10 | 20 | 0 | 91.2 | 69.3 | 116 | 17.85 | 2.11 | 18.2 | |
| 1,4-Dichlorobenzene | 18.1 | 10 | 20 | 0 | 90.5 | 73.9 | 122 | 17.77 | 1.84 | 17.1 | |
| Surr: 4-Bromofluorobenzene | 53.1 | 0 | 50 | 0 | 106 | 76.9 | 116 | 0 | 0 | 0 | |
| Surr: Dibromofluoromethane | 52.99 | 0 | 50 | 0 | 106 | 78.4 | 125 | 0 | 0 | 0 | |

**Qualifiers:**
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J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

**CLIENT:** MWH, Inc.
**Work Order:** ME0807691
**Project:** GW - ACS / Griffith, IN

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R115393**

Sample ID: **ME0807691-02AMS** SampType: **MSD** TestCode: **8260+_W** Units: **µg/L** Prep Date: Run ID: **VOA-4_080722A**
Client ID: **ACS-GW-EB01-31 R** Batch ID: **R115393** TestNo: **SW8260B** Analysis Date: **7/22/2008 4:27:00 PM** SeqNo: **1844790**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: 1,2-Dichloroethane-d4 | 53.79 | 0 | 50 | 0 | 108 | 74.2 | 136 | 0 | 0 | 0 | |
| Surr: Toluene-d8 | 51.01 | 0 | 50 | 0 | 102 | 81.4 | 122 | 0 | 0 | 0 | |

**Qualifiers:**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
H - Analyte was prepared and/or analyzed outside of the analytical method holding time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected above reporting limit in the Method Blank
b - Analyte detected below reporting limit in the Method Blank

# VOA GC/MS
# RAW DATA

# METHOD BLANK
# RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072204.D Vial: 4
Acq On : 22 Jul 2008 8:31 am Operator: CR
Sample : ,MBLK,MB 7/22,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 10:02 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) fluorobenzene | 6.97 | 96 | 1036043 | 50.00 | ug/L | -0.03 |
| 41) chlorobenzene-d5 | 11.76 | 117 | 708905 | 50.00 | ug/L | -0.03 |
| 69) 1,4-dichlorobenzene-d4 | 15.85 | 152 | 342391 | 50.00 | ug/L | -0.03 |
| **System Monitoring Compounds** | | | | | | |
| 26) dibromofluoromethane | 6.10 | 113 | 292456 | 53.23 | ug/L | -0.03 |
| 30) 1,2-dichloroethane-d4 | 6.55 | 65 | 354154 | 53.33 | ug/L | -0.03 |
| 44) toluene-d8 | 9.33 | 98 | 909360 | 50.53 | ug/L | -0.03 |
| 63) 4-bromofluorobenzene | 13.90 | 95 | 399515 | 52.54 | ug/L | -0.03 |
| **Target Compounds** | | | | | | Qvalue |
| 11) acetone | 3.34 | 43 | 22424 | 5.93 | ug/L | 95 |

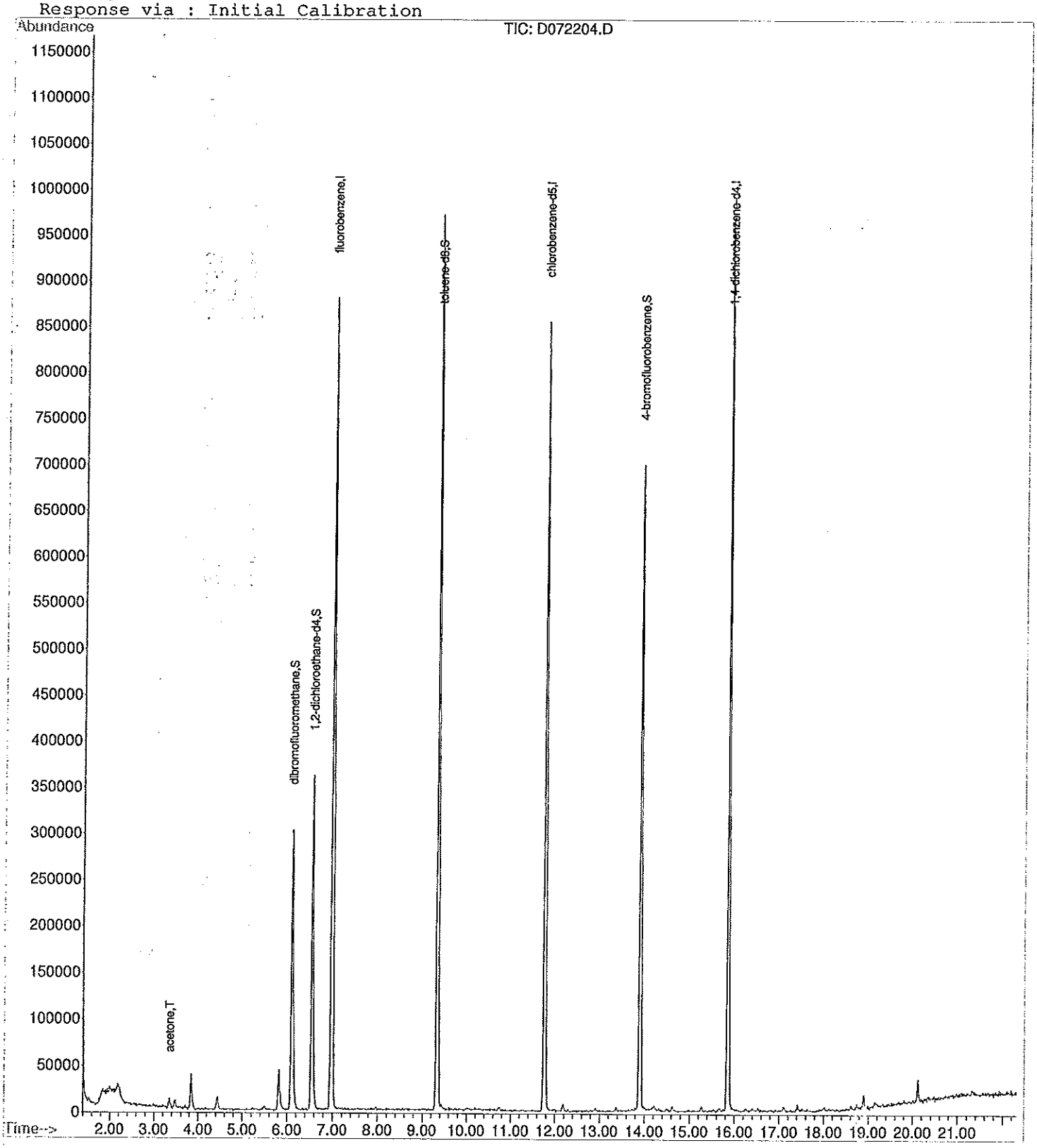
7/24/08

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072204.D Vial: 4
Acq On : 22 Jul 2008 8:31 am Operator: CR
Sample : ,MBLK,MB 7/22,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 10:02 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



# LABORATORY CONTROL SAMPLE RAW DATA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072205.D Vial: 5
Acq On : 22 Jul 2008 9:06 am Operator: CR
Sample : ,LCS,LCS 20 PPB,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 10:04 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) fluorobenzene | 6.97 | 96 | 990512 | 50.00 ug/L | -0.03 |
| 41) chlorobenzene-d5 | 11.76 | 117 | 691238 | 50.00 ug/L | -0.03 |
| 69) 1,4-dichlorobenzene-d4 | 15.85 | 152 | 338021 | 50.00 ug/L | -0.04 |
| **System Monitoring Compounds** | | | | | |
| 26) dibromofluoromethane | 6.10 | 113 | 282471 | 53.78 ug/L | -0.03 |
| 30) 1,2-dichloroethane-d4 | 6.54 | 65 | 352410 | 55.51 ug/L | -0.03 |
| 44) toluene-d8 | 9.34 | 98 | 888044 | 50.60 ug/L | -0.03 |
| 63) 4-bromofluorobenzene | 13.89 | 95 | 385492 | 51.99 ug/L | -0.04 |
| **Target Compounds** | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.57 | 85 | 70418 | 9.27 ug/L | 99 |
| 3) chloromethane | 1.84 | 50 | 113657m1 | 12.99 ug/L | |
| 4) vinyl chloride | 1.87 | 62 | 111839 | 12.54 ug/L | 96 |
| 6) bromomethane | 2.23 | 94 | 25791 | 10.87 ug/L | 99 |
| 7) chloroethane | 2.33 | 64 | 88398 | 14.07 ug/L | 91 |
| 8) trichlorofluoromethane | 2.62 | 101 | 166569 | 20.14 ug/L | 99 |
| 9) acrolein | 3.15 | 56 | 24468 | 53.30 ug/L | 97 |
| 10) 1,1-dichloroethene | 3.22 | 96 | 82967 | 15.82 ug/L | 90 |
| 11) acetone | 3.34 | 43 | 83598 | 23.13 ug/L | 98 |
| 12) carbon disulfide | 3.47 | 76 | 348334 | 22.73 ug/L | 99 |
| 13) methylene chloride | 3.83 | 84 | 136334 | 16.42 ug/L | 96 |
| 14) acrylonitrile | 4.18 | 53 | 57971 | 24.61 ug/L | 88 |
| 15) trans-1,2-dichloroethene | 4.14 | 96 | 102876 | 17.54 ug/L | 94 |
| 16) methyl-t-butyl ether | 4.13 | 73 | 364306 | 22.61 ug/L | 99 |
| 17) acetonitrile | 3.70 | 41 | 29782 | 26.62 ug/L # | 92 |
| 19) 1,1-dichloroethane | 4.68 | 63 | 209240 | 18.48 ug/L | 97 |
| 20) vinyl acetate | 4.75 | 43 | 182279 | 19.35 ug/L | 100 |
| 21) cis-1,2-dichloroethene | 5.44 | 96 | 113363 | 17.62 ug/L | 93 |
| 22) 2,2-dichloropropane | 5.40 | 77 | 136699 | 16.79 ug/L # | 78 |
| 23) 2-butanone | 5.47 | 72 | 16931 | 22.90 ug/L | 94 |
| 25) chloroform | 5.88 | 83 | 195427 | 19.50 ug/L | 99 |
| 27) 1,1,1-trichloroethane | 6.06 | 97 | 148813 | 19.50 ug/L | 95 |
| 29) carbon tetrachloride | 6.27 | 117 | 98049 | 20.32 ug/L | 96 |
| 31) benzene | 6.58 | 78 | 437112 | 19.47 ug/L | 98 |
| 32) 1,1-dichloropropene | 6.29 | 75 | 161414 | 19.01 ug/L | 100 |
| 33) 1,2-dichloroethane | 6.65 | 62 | 166291 | 19.51 ug/L | 98 |
| 34) trichloroethene | 7.50 | 95 | 107360 | 18.72 ug/L | 97 |
| 36) 1,2-dichloropropane | 7.85 | 63 | 116550 | 18.01 ug/L | 98 |
| 38) dibromomethane | 8.05 | 93 | 71533 | 19.74 ug/L | 93 |
| 39) bromodichloromethane | 8.30 | 83 | 138994 | 17.77 ug/L | 95 |
| 40) 2-chloroethyl vinyl ether | 8.75 | 63 | 74973 | 20.92 ug/L | 99 |
| 42) cis-1,3-dichloropropene | 8.97 | 75 | 165494 | 16.07 ug/L | 96 |
| 43) 4-methyl-2-pentanone | 9.20 | 43 | 178526 | 21.48 ug/L | 99 |
| 45) toluene | 9.44 | 92 | 262652 | 17.95 ug/L | 96 |
| 46) 1,1,2-trichloroethane | 10.20 | 83 | 80746 | 18.17 ug/L | 98 |
| 47) 1,3-dichloropropane | 10.45 | 76 | 176711 | 17.36 ug/L | 99 |
| 48) tetrachloroethene | 10.31 | 164 | 83705 | 20.70 ug/L | 95 |
| 49) trans-1,3-dichloropropene | 9.88 | 75 | 127572 | 15.01 ug/L | 99 |
| 50) 2-hexanone | 10.57 | 43 | 129406 | 21.55 ug/L | 91 |
| 51) dibromochloromethane | 10.84 | 129 | 95960 | 18.42 ug/L | 98 |
| 52) 1,2-dibromoethane | 11.00 | 107 | 101306 | 17.99 ug/L | 99 |
| 53) chlorobenzene | 11.81 | 112 | 270821 | 18.87 ug/L | 99 |
| 54) 1,1,1,2-tetrachloroethane | 11.98 | 131 | 91743 | 19.35 ug/L | 97 |
| 55) ethylbenzene | 11.98 | 91 | 512966 | 19.54 ug/L | 100 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072205.D Vial: 5
Acq On : 22 Jul 2008 9:06 am Operator: CR
Sample : ,LCS,LCS 20 PPB,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 10:04 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

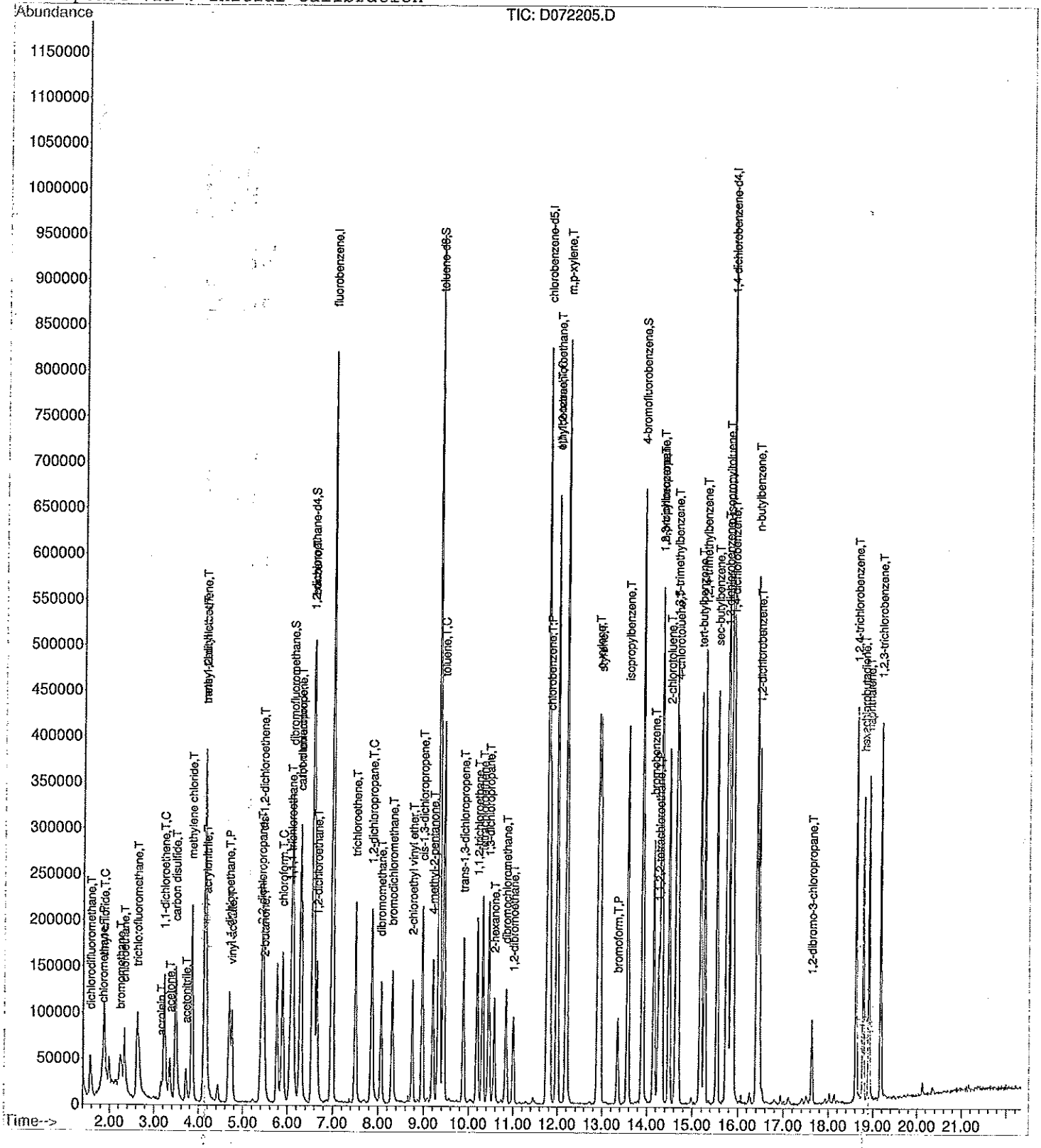
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 56) | m,p-xylene | 12.19 | 106 | 365090 | 37.17 | ug/L | | 92 |
| 58) | o-xylene | 12.90 | 106 | 175861 | 18.22 | ug/L | # | 88 |
| 59) | styrene | 12.95 | 104 | 305664 | 18.00 | ug/L | | 97 |
| 60) | isopropylbenzene | 13.57 | 105 | 462541 | 20.82 | ug/L | | 100 |
| 61) | bromobenzene | 14.15 | 156 | 108809 | 19.57 | ug/L | | 97 |
| 62) | bromoform | 13.35 | 173 | 67616 | 20.22 | ug/L | | 98 |
| 64) | 1,2,3-trichloropropane | 14.31 | 75 | 114356 | 19.28 | ug/L | | 100 |
| 65) | n-propylbenzene | 14.33 | 91 | 592203 | 18.83 | ug/L | | 100 |
| 66) | 2-chlorotoluene | 14.48 | 91 | 349065 | 18.89 | ug/L | | 99 |
| 67) | 4-chlorotoluene | 14.68 | 91 | 402985 | 19.42 | ug/L | | 100 |
| 68) | 1,3,5-trimethylbenzene | 14.64 | 105 | 384558 | 19.69 | ug/L | | 98 |
| 70) | 1,1,2,2-tetrachloroethane | 14.26 | 83 | 137736 | 17.21 | ug/L | | 98 |
| 71) | tert-butylbenzene | 15.18 | 119 | 317726 | 18.15 | ug/L | | 99 |
| 72) | sec-butylbenzene | 15.54 | 105 | 494199 | 16.69 | ug/L | | 99 |
| 73) | 1,2,4-trimethylbenzene | 15.26 | 105 | 394874 | 17.89 | ug/L | | 98 |
| 74) | 1,3-dichlorobenzene | 15.74 | 146 | 206958 | 18.81 | ug/L | | 97 |
| 75) | p-isopropyltoluene | 15.77 | 119 | 420694 | 19.26 | ug/L | | 99 |
| 77) | 1,4-dichlorobenzene | 15.89 | 146 | 207192 | 18.59 | ug/L | | 97 |
| 78) | 1,2-dichlorobenzene | 16.46 | 146 | 196396 | 18.84 | ug/L | | 98 |
| 79) | n-butylbenzene | 16.41 | 91 | 433038 | 17.77 | ug/L | | 99 |
| 80) | 1,2-dibromo-3-chloropropan | 17.62 | 75 | 29168 | 19.21 | ug/L | | 90 |
| 81) | 1,2,4-trichlorobenzene | 18.61 | 180 | 161711 | 19.17 | ug/L | | 92 |
| 82) | hexachlorobutadiene | 18.78 | 225 | 76813 | 19.16 | ug/L | | 95 |
| 83) | naphthalene | 18.90 | 128 | 325290 | 16.50 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.17 | 180 | 153103 | 19.53 | ug/L | | 96 |

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072205.D Vial: 5
Acq On : 22 Jul 2008 9:06 am Operator: CR
Sample : ,LCS,LCS 20 PPB,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 10:04 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



# MATRIX SPIKE/MATRIX SPIKE DUPLICATE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072209.D Vial: 9
Acq On : 22 Jul 2008 12:46 pm Operator: CR
Sample : ,SAMP,ME0807691-02A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 14:06 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 6.97 | 96 | 957162 | 50.00 | ug/L | | -0.03 |
| 41) chlorobenzene-d5 | 11.76 | 117 | 651163 | 50.00 | ug/L | | -0.03 |
| 69) 1,4-dichlorobenzene-d4 | 15.84 | 152 | 319320 | 50.00 | ug/L | | -0.04 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.10 | 113 | 268034 | 52.81 | ug/L | | -0.03 |
| 30) 1,2-dichloroethane-d4 | 6.54 | 65 | 335695 | 54.72 | ug/L | | -0.04 |
| 44) toluene-d8 | 9.33 | 98 | 831365 | 50.29 | ug/L | | -0.04 |
| 63) 4-bromofluorobenzene | 13.89 | 95 | 370219 | 53.01 | ug/L | | -0.04 |
| **Target Compounds** | | | | | | | Qvalue |
| 11) acetone | 3.34 | 43 | 25941 | 7.43 | ug/L | | 87 |
| 13) methylene chloride | 3.84 | 84 | 56682 | 7.06 | ug/L | | 97 |
| 18) hexane | 4.43 | 57 | 286998 | 21.06 | ug/L | # | 96 |

JN 7/22/08

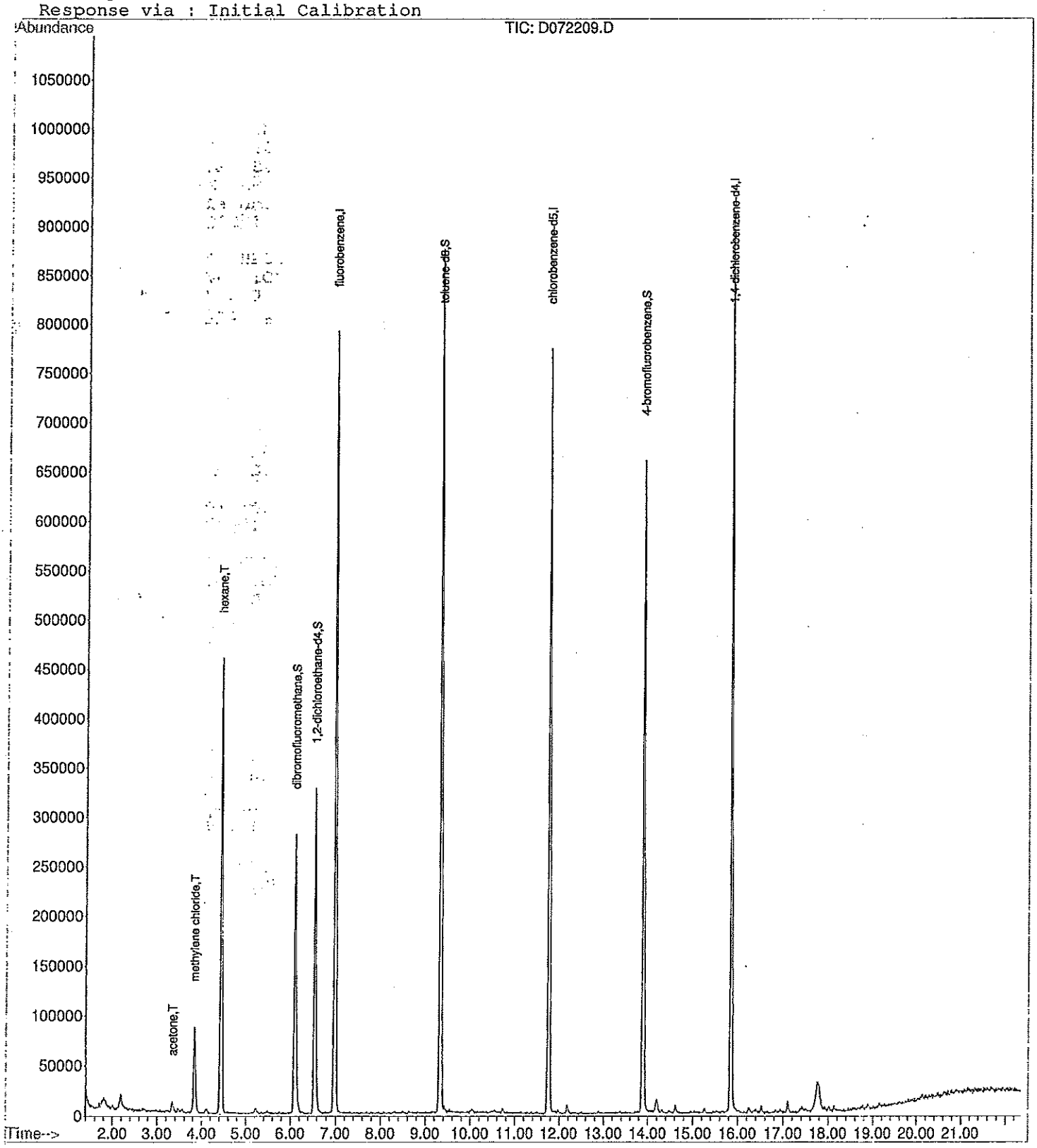
7/23/08

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072209.D Vial: 9
Acq On : 22 Jul 2008 12:46 pm Operator: CR
Sample : ,SAMP,ME0807691-02A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 14:06 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072214.D Vial: 14
Acq On : 22 Jul 2008 3:51 pm Operator: CR
Sample : ,MS,ME0807691-02AMS,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 20:52 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) fluorobenzene | 6.97 | 96 | 907812 | 50.00 ug/L | -0.03 |
| 41) chlorobenzene-d5 | 11.76 | 117 | 633589 | 50.00 ug/L | -0.04 |
| 69) 1,4-dichlorobenzene-d4 | 15.85 | 152 | 314777 | 50.00 ug/L | -0.04 |
| **System Monitoring Compounds** | | | | | |
| 26) dibromofluoromethane | 6.10 | 113 | 256642 | 53.31 ug/L | -0.03 |
| 30) 1,2-dichloroethane-d4 | 6.54 | 65 | 310750 | 53.40 ug/L | -0.04 |
| 44) toluene-d8 | 9.33 | 98 | 809633 | 50.33 ug/L | -0.04 |
| 63) 4-bromofluorobenzene | 13.89 | 95 | 356548 | 52.47 ug/L | -0.04 |
| **Target Compounds** | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.56 | 85 | 47394 | 6.80 ug/L | 91 |
| 3) chloromethane | 1.84 | 50 | 98507m1 | 12.28 ug/L | |
| 4) vinyl chloride | 1.87 | 62 | 94906 | 11.61 ug/L | 95 |
| 6) bromomethane | 2.24 | 94 | 23674 | 10.88 ug/L | 96 |
| 7) chloroethane | 2.33 | 64 | 67758 | 11.77 ug/L | 88 |
| 8) trichlorofluoromethane | 2.62 | 101 | 134650 | 17.76 ug/L | 97 |
| 9) acrolein | 3.15 | 56 | 19235 | 45.72 ug/L | 83 |
| 10) 1,1-dichloroethene | 3.22 | 96 | 69676 | 14.49 ug/L | 92 |
| 11) acetone | 3.33 | 43 | 97233 | 29.36 ug/L | 99 |
| 12) carbon disulfide | 3.46 | 76 | 283498 | 20.18 ug/L | 97 |
| 13) methylene chloride | 3.84 | 84 | 112058 | 14.73 ug/L | 98 |
| 14) acrylonitrile | 4.17 | 53 | 48467 | 22.45 ug/L | 90 |
| 15) trans-1,2-dichloroethene | 4.14 | 96 | 87913 | 16.36 ug/L | 98 |
| 16) methyl-t-butyl ether | 4.12 | 73 | 297873 | 20.17 ug/L | 96 |
| 19) 1,1-dichloroethane | 4.68 | 63 | 188624 | 18.18 ug/L | 97 |
| 20) vinyl acetate | 4.74 | 43 | 159963 | 18.53 ug/L | 100 |
| 21) cis-1,2-dichloroethene | 5.43 | 96 | 99814 | 16.93 ug/L # | 84 |
| 22) 2,2-dichloropropane | 5.40 | 77 | 123837 | 16.60 ug/L | 100 |
| 23) 2-butanone | 5.47 | 72 | 14575 | 21.51 ug/L # | 85 |
| 25) chloroform | 5.88 | 83 | 174880 | 19.04 ug/L | 99 |
| 27) 1,1,1-trichloroethane | 6.06 | 97 | 132049 | 18.88 ug/L | 95 |
| 29) carbon tetrachloride | 6.27 | 117 | 86859 | 19.64 ug/L | 87 |
| 31) benzene | 6.57 | 78 | 350998 | 17.06 ug/L | 95 |
| 32) 1,1-dichloropropene | 6.28 | 75 | 135650 | 17.44 ug/L | 98 |
| 33) 1,2-dichloroethane | 6.65 | 62 | 151190 | 19.36 ug/L | 96 |
| 34) trichloroethene | 7.49 | 95 | 92499 | 17.59 ug/L | 96 |
| 36) 1,2-dichloropropane | 7.84 | 63 | 103653 | 17.48 ug/L | 96 |
| 38) dibromomethane | 8.05 | 93 | 63694 | 19.18 ug/L | 96 |
| 39) bromodichloromethane | 8.31 | 83 | 122727 | 17.12 ug/L | 96 |
| 42) cis-1,3-dichloropropene | 8.96 | 75 | 140204 | 14.86 ug/L | 99 |
| 43) 4-methyl-2-pentanone | 9.19 | 43 | 149337 | 19.60 ug/L | 97 |
| 45) toluene | 9.44 | 92 | 227953 | 17.00 ug/L | 92 |
| 46) 1,1,2-trichloroethane | 10.19 | 83 | 69516 | 17.07 ug/L | 99 |
| 47) 1,3-dichloropropane | 10.45 | 76 | 156689 | 16.80 ug/L | 99 |
| 48) tetrachloroethene | 10.31 | 164 | 70698 | 19.08 ug/L | 97 |
| 49) trans-1,3-dichloropropene | 9.87 | 75 | 104887 | 13.46 ug/L | 99 |
| 50) 2-hexanone | 10.57 | 43 | 136831 | 24.86 ug/L | 89 |
| 51) dibromochloromethane | 10.84 | 129 | 86460 | 18.10 ug/L | 96 |
| 52) 1,2-dibromoethane | 11.00 | 107 | 87929 | 17.03 ug/L # | 99 |
| 53) chlorobenzene | 11.81 | 112 | 237582 | 18.06 ug/L | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.97 | 131 | 78030 | 17.96 ug/L | 98 |
| 55) ethylbenzene | 11.98 | 91 | 447098 | 18.58 ug/L | 96 |
| 56) m,p-xylene | 12.18 | 106 | 323337 | 35.92 ug/L | 98 |
| 58) o-xylene | 12.90 | 106 | 155913 | 17.63 ug/L # | 87 |

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



JN 7/22/08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072214.D Vial: 14
Acq On : 22 Jul 2008 3:51 pm Operator: CR
Sample : ,MS,ME0807691-02AMS,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 20:52 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

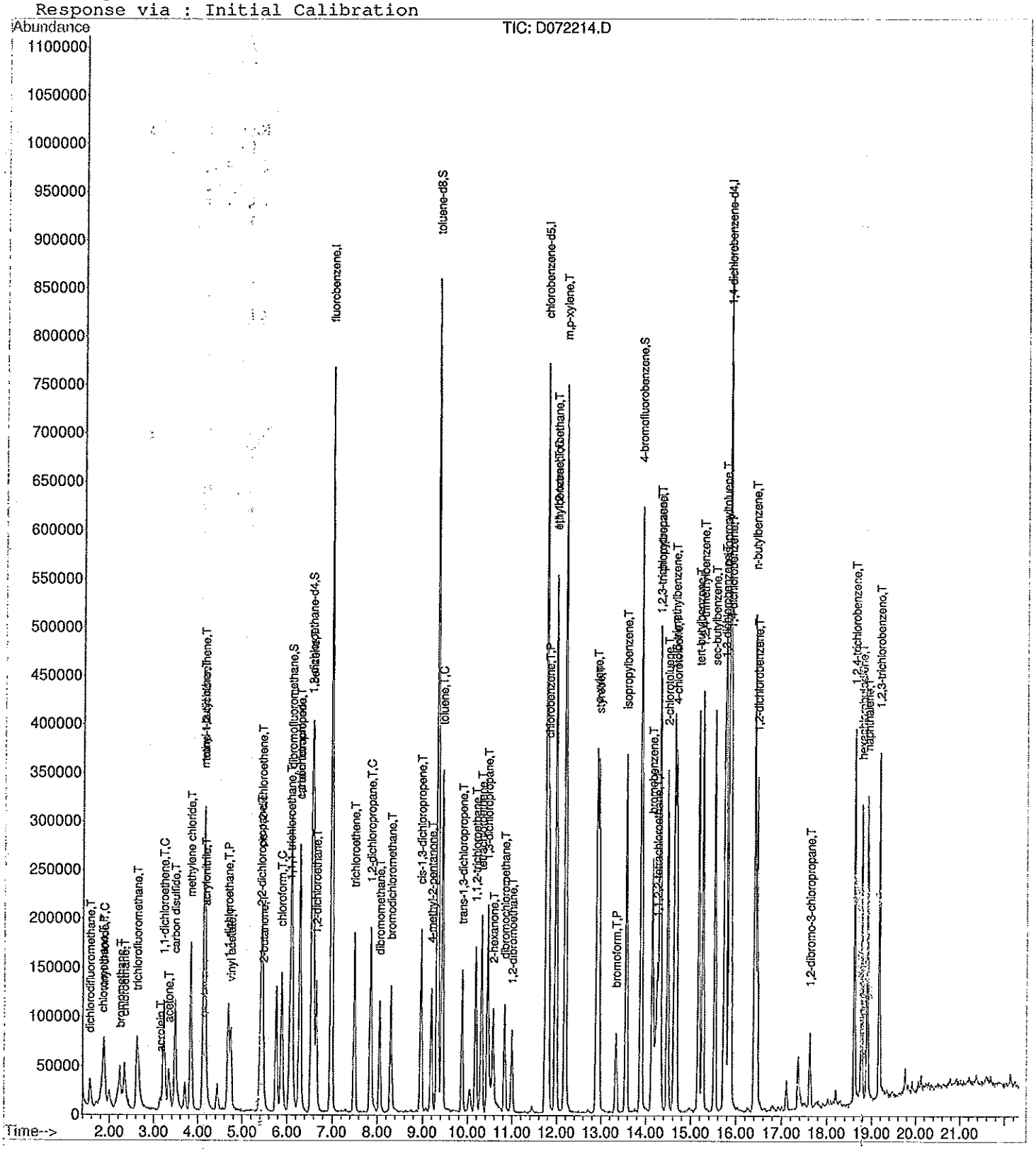
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 59) | styrene | 12.95 | 104 | 264225 | 16.98 | ug/L | 95 |
| 60) | isopropylbenzene | 13.56 | 105 | 409761 | 20.12 | ug/L | 99 |
| 61) | bromobenzene | 14.14 | 156 | 94489 | 18.54 | ug/L | 98 |
| 62) | bromoform | 13.34 | 173 | 56075 | 18.29 | ug/L | 92 |
| 64) | 1,2,3-trichloropropane | 14.30 | 75 | 96976 | 17.83 | ug/L | 98 |
| 65) | n-propylbenzene | 14.32 | 91 | 522396 | 18.12 | ug/L | 100 |
| 66) | 2-chlorotoluene | 14.48 | 91 | 310230 | 18.32 | ug/L | 100 |
| 67) | 4-chlorotoluene | 14.68 | 91 | 354523 | 18.64 | ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.64 | 105 | 334082 | 18.66 | ug/L | 98 |
| 70) | 1,1,2,2-tetrachloroethane | 14.25 | 83 | 118399 | 15.88 | ug/L | 99 |
| 71) | tert-butylbenzene | 15.17 | 119 | 285101 | 17.49 | ug/L | 97 |
| 72) | sec-butylbenzene | 15.53 | 105 | 440218 | 15.96 | ug/L | 99 |
| 73) | 1,2,4-trimethylbenzene | 15.26 | 105 | 342986 | 16.69 | ug/L | 98 |
| 74) | 1,3-dichlorobenzene | 15.74 | 146 | 182897 | 17.85 | ug/L | 96 |
| 75) | p-isopropyltoluene | 15.77 | 119 | 364296 | 17.91 | ug/L | 97 |
| 77) | 1,4-dichlorobenzene | 15.88 | 146 | 184454 | 17.77 | ug/L | 98 |
| 78) | 1,2-dichlorobenzene | 16.46 | 146 | 171172 | 17.63 | ug/L | 99 |
| 79) | n-butylbenzene | 16.41 | 91 | 384393 | 16.94 | ug/L | 99 |
| 80) | 1,2-dibromo-3-chloropropan | 17.63 | 75 | 24105 | 17.05 | ug/L | 90 |
| 81) | 1,2,4-trichlorobenzene | 18.61 | 180 | 143202 | 18.23 | ug/L | 95 |
| 82) | hexachlorobutadiene | 18.78 | 225 | 72700 | 19.47 | ug/L | 97 |
| 83) | naphthalene | 18.90 | 128 | 280554 | 15.28 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.17 | 180 | 135805 | 18.60 | ug/L | 93 |

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072214.D Vial: 14
Acq On : 22 Jul 2008 3:51 pm Operator: CR
Sample : ,MS,ME0807691-02AMS,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 20:52 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072215.D Vial: 15
Acq On : 22 Jul 2008 4:27 pm Operator: CR
Sample : ,MSD,ME0807691-02AMSD,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 20:46 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 6.98 | 96 | 898216 | 50.00 | ug/L | | -0.03 |
| 41) chlorobenzene-d5 | 11.77 | 117 | 618598 | 50.00 | ug/L | | -0.03 |
| 69) 1,4-dichlorobenzene-d4 | 15.86 | 152 | 303890 | 50.00 | ug/L | | -0.03 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.10 | 113 | 252389 | 52.99 | ug/L | | -0.03 |
| 30) 1,2-dichloroethane-d4 | 6.54 | 65 | 309691 | 53.79 | ug/L | | -0.03 |
| 44) toluene-d8 | 9.34 | 98 | 801030 | 51.01 | ug/L | | -0.03 |
| 63) 4-bromofluorobenzene | 13.90 | 95 | 352292 | 53.10 | ug/L | | -0.03 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.56 | 85 | 48410 | 7.02 | ug/L | | 91 |
| 3) chloromethane | 1.86 | 50 | 100960 | 12.72 | ug/L | | 94 |
| 4) vinyl chloride | 1.87 | 62 | 98134 | 12.13 | ug/L | | 91 |
| 6) bromomethane | 2.23 | 94 | 24896 | 11.57 | ug/L | | 85 |
| 7) chloroethane | 2.34 | 64 | 68601 | 12.04 | ug/L | | 98 |
| 8) trichlorofluoromethane | 2.63 | 101 | 127786 | 17.04 | ug/L | | 82 |
| 9) acrolein | 3.14 | 56 | 18843 | 45.26 | ug/L | | 90 |
| 10) 1,1-dichloroethene | 3.22 | 96 | 71921 | 15.12 | ug/L | | 97 |
| 11) acetone | 3.33 | 43 | 64235 | 19.60 | ug/L | | 100 |
| 12) carbon disulfide | 3.47 | 76 | 282854 | 20.35 | ug/L | | 97 |
| 13) methylene chloride | 3.84 | 84 | 120767 | 16.04 | ug/L | | 90 |
| 14) acrylonitrile | 4.17 | 53 | 48391 | 22.65 | ug/L | | 95 |
| 15) trans-1,2-dichloroethene | 4.14 | 96 | 88789 | 16.70 | ug/L | | 95 |
| 16) methyl-t-butyl ether | 4.12 | 73 | 297152 | 20.33 | ug/L | | 96 |
| 17) acetonitrile | 3.70 | 41 | 23649 | 23.31 | ug/L | # | 85 |
| 19) 1,1-dichloroethane | 4.68 | 63 | 184456 | 17.97 | ug/L | | 99 |
| 20) vinyl acetate | 4.75 | 43 | 152993 | 17.91 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.44 | 96 | 100136 | 17.16 | ug/L | | 88 |
| 22) 2,2-dichloropropane | 5.41 | 77 | 123013 | 16.66 | ug/L | | 99 |
| 23) 2-butanone | 5.48 | 72 | 12684 | 18.92 | ug/L | | 83 |
| 25) chloroform | 5.88 | 83 | 168804 | 18.57 | ug/L | | 98 |
| 27) 1,1,1-trichloroethane | 6.06 | 97 | 130538 | 18.86 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.27 | 117 | 84676 | 19.35 | ug/L | | 94 |
| 31) benzene | 6.58 | 78 | 353225 | 17.35 | ug/L | | 100 |
| 32) 1,1-dichloropropene | 6.29 | 75 | 133742 | 17.37 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.66 | 62 | 144763 | 18.73 | ug/L | | 98 |
| 34) trichloroethene | 7.50 | 95 | 90656 | 17.43 | ug/L | | 97 |
| 36) 1,2-dichloropropane | 7.86 | 63 | 99897 | 17.02 | ug/L | | 97 |
| 37) methyl methacrylate | 7.86 | 41 | 79852 | 12.23 | ug/L | # | 47 |
| 38) dibromomethane | 8.06 | 93 | 63821 | 19.42 | ug/L | | 96 |
| 39) bromodichloromethane | 8.30 | 83 | 126226 | 17.79 | ug/L | | 98 |
| 42) cis-1,3-dichloropropene | 8.97 | 75 | 143506 | 15.57 | ug/L | | 98 |
| 43) 4-methyl-2-pentanone | 9.21 | 43 | 151763 | 20.41 | ug/L | | 97 |
| 45) toluene | 9.44 | 92 | 223636 | 17.08 | ug/L | | 100 |
| 46) 1,1,2-trichloroethane | 10.19 | 83 | 71217 | 17.91 | ug/L | | 95 |
| 47) 1,3-dichloropropane | 10.45 | 76 | 160679 | 17.64 | ug/L | | 99 |
| 48) tetrachloroethene | 10.31 | 164 | 72597 | 20.06 | ug/L | | 98 |
| 49) trans-1,3-dichloropropene | 9.88 | 75 | 109914 | 14.45 | ug/L | | 96 |
| 50) 2-hexanone | 10.58 | 43 | 117855 | 21.94 | ug/L | | 98 |
| 51) dibromochloromethane | 10.84 | 129 | 83810 | 17.97 | ug/L | | 95 |
| 52) 1,2-dibromoethane | 11.00 | 107 | 88475 | 17.55 | ug/L | | 99 |
| 53) chlorobenzene | 11.82 | 112 | 232601 | 18.11 | ug/L | | 98 |
| 54) 1,1,1,2-tetrachloroethane | 11.98 | 131 | 82971 | 19.56 | ug/L | | 97 |
| 55) ethylbenzene | 11.98 | 91 | 438495 | 18.66 | ug/L | | 93 |

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



JN 7/22/08

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072215.D Vial: 15
Acq On : 22 Jul 2008 4:27 pm Operator: CR
Sample : ,MSD,ME0807691-02AMSD,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 20:46 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

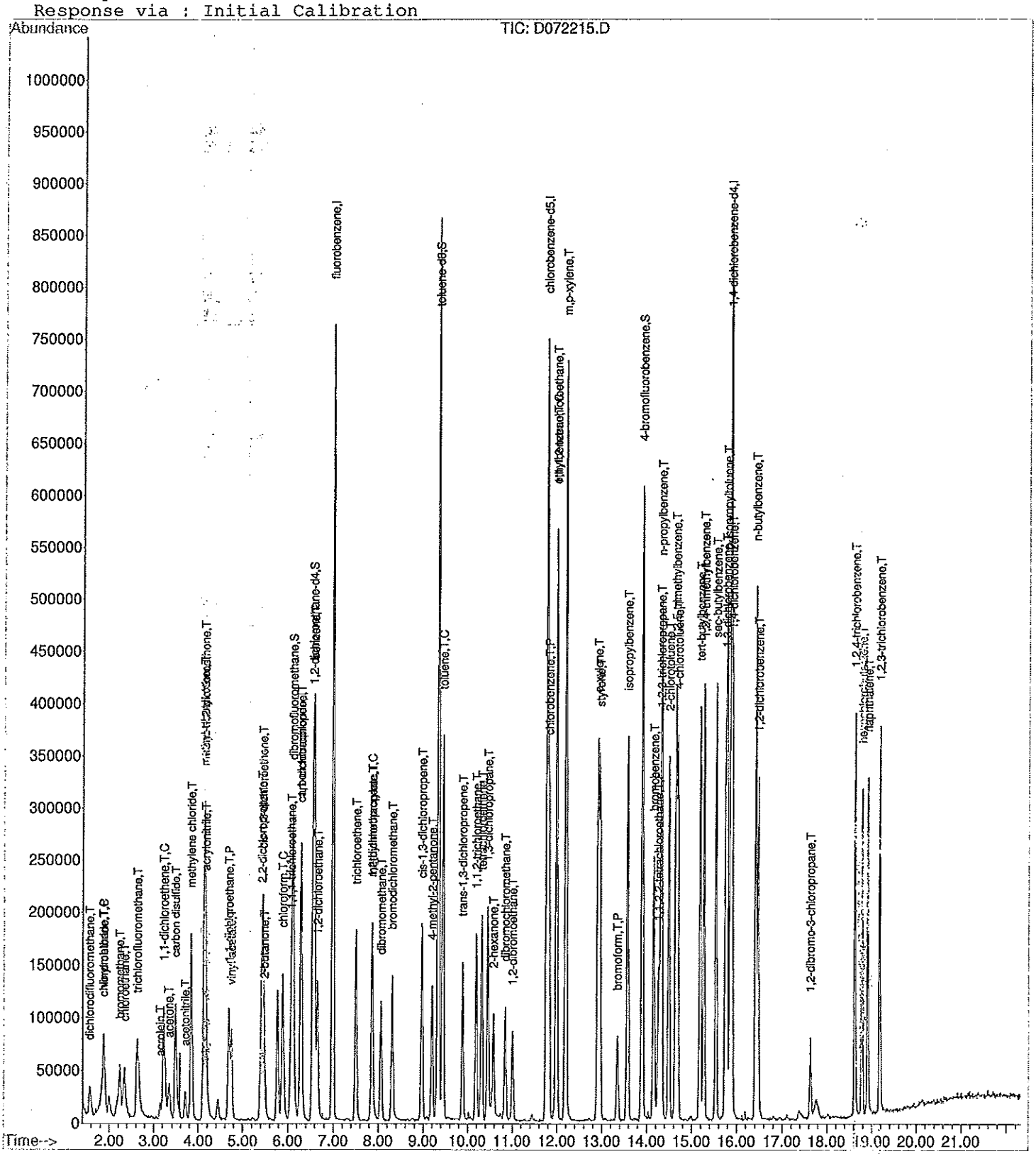
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 56) | m,p-xylene | 12.20 | 106 | 322634 | 36.71 | ug/L | | 95 |
| 58) | o-xylene | 12.91 | 106 | 153537 | 17.78 | ug/L | # | 84 |
| 59) | styrene | 12.96 | 104 | 263364 | 17.33 | ug/L | | 97 |
| 60) | isopropylbenzene | 13.57 | 105 | 399568 | 20.10 | ug/L | | 100 |
| 61) | bromobenzene | 14.16 | 156 | 95398 | 19.17 | ug/L | | 98 |
| 62) | bromoform | 13.35 | 173 | 57724 | 19.29 | ug/L | | 96 |
| 64) | 1,2,3-trichloropropane | 14.30 | 75 | 99900 | 18.82 | ug/L | | 99 |
| 65) | n-propylbenzene | 14.32 | 91 | 520996 | 18.51 | ug/L | | 100 |
| 66) | 2-chlorotoluene | 14.49 | 91 | 311738 | 18.85 | ug/L | | 99 |
| 67) | 4-chlorotoluene | 14.68 | 91 | 353408 | 19.03 | ug/L | | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.64 | 105 | 330865 | 18.93 | ug/L | | 97 |
| 70) | 1,1,2,2-tetrachloroethane | 14.26 | 83 | 122016 | 16.95 | ug/L | | 98 |
| 71) | tert-butylbenzene | 15.18 | 119 | 281159 | 17.86 | ug/L | | 97 |
| 72) | sec-butylbenzene | 15.54 | 105 | 437441 | 16.43 | ug/L | | 99 |
| 73) | 1,2,4-trimethylbenzene | 15.27 | 105 | 340670 | 17.17 | ug/L | | 97 |
| 74) | 1,3-dichlorobenzene | 15.74 | 146 | 180318 | 18.23 | ug/L | | 99 |
| 75) | p-isopropyltoluene | 15.78 | 119 | 366462 | 18.67 | ug/L | | 98 |
| 77) | 1,4-dichlorobenzene | 15.89 | 146 | 181356 | 18.10 | ug/L | | 97 |
| 78) | 1,2-dichlorobenzene | 16.47 | 146 | 174438 | 18.61 | ug/L | | 98 |
| 79) | n-butylbenzene | 16.41 | 91 | 388602 | 17.74 | ug/L | | 96 |
| 80) | 1,2-dibromo-3-chloropropan | 17.64 | 75 | 25100 | 18.39 | ug/L | | 92 |
| 81) | 1,2,4-trichlorobenzene | 18.62 | 180 | 145640 | 19.20 | ug/L | | 97 |
| 82) | hexachlorobutadiene | 18.78 | 225 | 73661 | 20.44 | ug/L | | 93 |
| 83) | naphthalene | 18.91 | 128 | 287689 | 16.23 | ug/L | | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.17 | 180 | 134671 | 19.11 | ug/L | | 98 |

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072215.D Vial: 15
Acq On : 22 Jul 2008 4:27 pm Operator: CR
Sample : ,MSD,ME0807691-02AMSD,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 20:46 2008 Quant Results File: VOA0603.RES

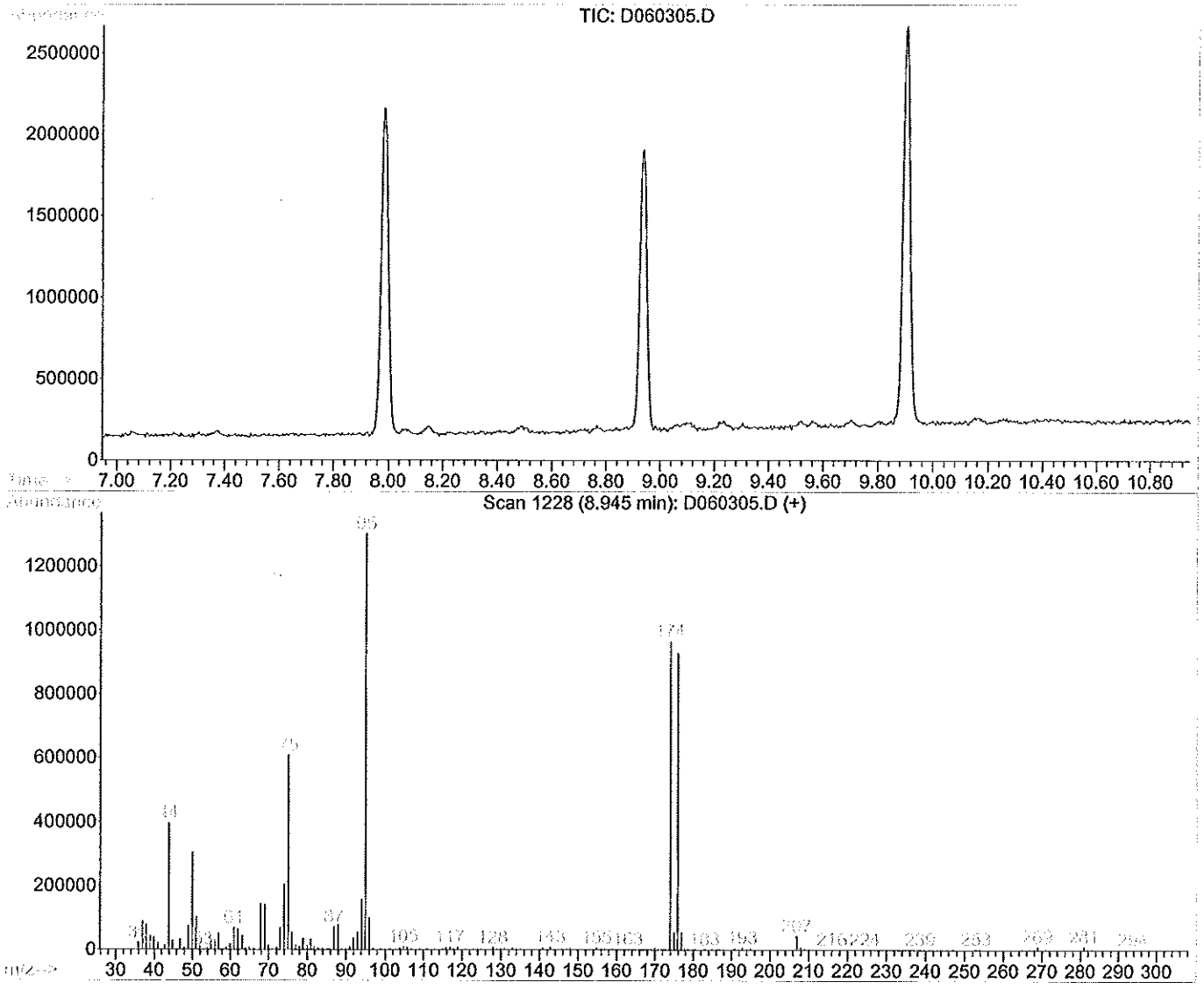
Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



# TUNING RAW DATA

BFB

Data File : C:\HPCHEM\1\DATA\D060308\D060305.D Vial: 5
Acq On : 3 Jun 2008 10:26 am Operator: BR
Sample : ,TUNE,BFB TUNE,1,bfb at Inst : VOA 4
Misc : BFB Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08




Spectrum Information: Scan 1228

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 23.4 | 305048 | PASS |
| 75 | 95 | 30 | 60 | 46.7 | 607672 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 1302528 | PASS |
| 96 | 95 | 5 | 9 | 7.6 | 99368 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 74.2 | 966144 | PASS |
| 175 | 174 | 5 | 9 | 5.8 | 56136 | PASS |
| 176 | 174 | 95 | 101 | 96.1 | 928576 | PASS |
| 177 | 176 | 5 | 9 | 5.9 | 55156 | PASS |

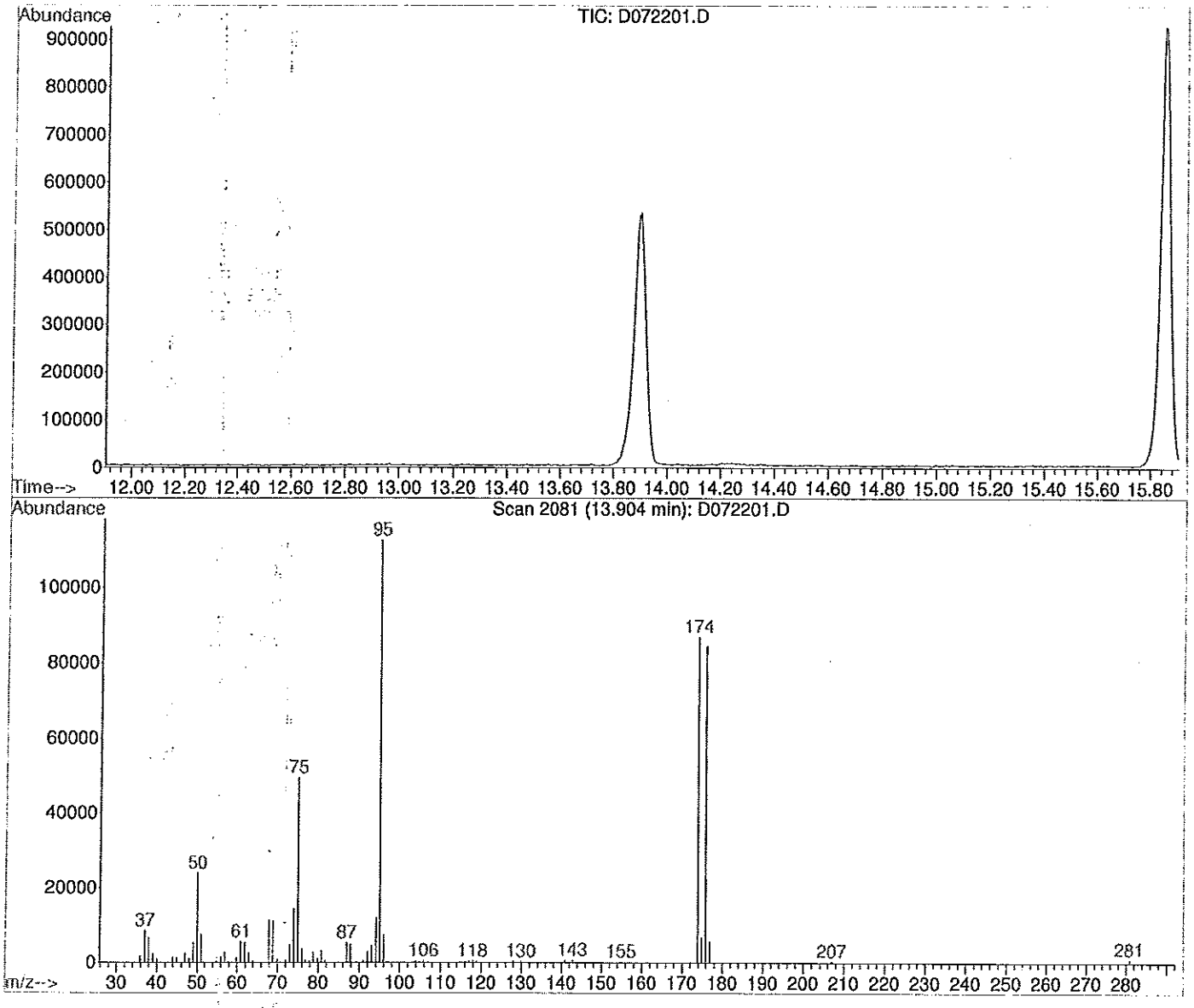
D060305.D VOA0603.M Tue Jun 03 10:40:30 2008 VOA4

6/4/08

6/4/08

BFB

Data File : C:\HPCHEM\1\DATA\D072208\D072201.D  Vial: 1
Acq On : 22 Jul 2008 6:38 am  Operator: CR
Sample : ,TUNE,BFB TUNE,1,  Inst : VOA 4
Misc : BFB  Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08




Spectrum Information: Scan 2081

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 21.3 | 24008 | PASS |
| 75 | 95 | 30 | 60 | 44.0 | 49608 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 112776 | PASS |
| 96 | 95 | 5 | 9 | 6.6 | 7474 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 250 | 77.1 | 86936 | PASS |
| 175 | 174 | 5 | 9 | 7.8 | 6753 | PASS |
| 176 | 174 | 95 | 101 | 97.3 | 84568 | PASS |
| 177 | 176 | 5 | 9 | 6.7 | 5637 | PASS |

7/22/08

D072201.D VOA0603.M Tue Jul 22 07:09:13 2008 VOA4

# INITIAL CALIBRATION RAW DATA

# Response Factor Report VOA 4

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 14:55:40 2008
Response via : Initial Calibration

avg %RSD = 11.2 %
all 624 targets <35%

Calibration Files
70 = D060310.D

| | | | | | |
|---|---|---|---|---|---|
| 5 | =D060306.D | 10 | =D060307.D | 20 | =D060308.D |
| 50 | =D060309.D | 100 | =D060311.D | 200 | =D060312.D |

| | | Compound | 5 | 10 | 20 | 50 | 100 | 200 | Avg | %RSD | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | fluorobenzene | ----------ISTD---------- | | | | | | | | |
| 2) | T | dichlorodifluoromet | 0.413 | 0.377 | 0.342 | 0.353 | 0.420 | 0.406 | 0.384 | 7.85 | |
| 3) | T,P | chloromethane | POL 10 | 0.505 | 0.482 | 0.465 | 0.387 | 0.451 | 0.442 | 12.78 | |
| 4) | T,C | vinyl chloride | 0.486 | 0.448 | 0.427 | 0.446 | 0.442 | 0.460 | 0.450 | 4.13 | |
| 5) | T | 1,3-butadiene | POL 10 | 0.376 | 0.367 | 0.318 | 0.344 | 0.326 | 0.339 | 8.16 | |
| 6) | T | bromomethane | ↓ | 0.126 | 0.128 | 0.113 | 0.111 | 0.131 | 0.120 | 7.97 | |
| 7) | T | chloroethane | 0.447 | 0.317 | 0.278 | 0.306 | UQL=70 | | 0.317 | 24.90 | |
| 8) | T | trichlorofluorometh | 0.393 | 0.389 | 0.375 | 0.411 | 0.457 | 0.470 | 0.417 | 8.59 | |
| 9) | T | acrolein | 0.024 | 0.028 | 0.025 | 0.024 | 0.019 | 0.022 | 0.023 | 12.55 | |
| 10) | M,C | 1,1-dichloroethene | 0.244 | 0.295 | 0.298 | 0.259 | 0.246 | 0.272 | 0.265 | 9.11 | |
| 11) | T | acetone | POL 50 | 0.299 | 0.225 | 0.171 | 0.118 | 0.132 | 0.182 | 37.57 | not 624 |
| 12) | T | carbon disulfide | 0.832 | 0.871 | 0.837 | 0.744 | 0.697 | 0.759 | 0.774 | 9.66 | |
| 13) | T | methylene chloride | POL 10 | 0.513 | 0.449 | 0.424 | 0.364 | 0.351 | 0.419 | 14.06 | |
| 14) | T | acrylonitrile | 0.134 | 0.141 | 0.126 | 0.120 | 0.094 | 0.107 | 0.119 | 13.80 | |
| 15) | T | trans-1,2-dichloroe | 0.340 | 0.312 | 0.317 | 0.293 | 0.263 | 0.288 | 0.296 | 9.87 | |
| 16) | T | methyl-t-butyl ethe | 0.848 | 0.889 | 0.872 | 0.833 | 0.679 | 0.814 | 0.813 | 8.94 | |
| 17) | T | acetonitrile | 0.065 | 0.067 | 0.060 | 0.057 | 0.043 | 0.051 | 0.056 | 15.11 | |
| 18) | T | hexane | POL = 20 | | 0.697 | 0.535 | 0.633 | 0.517 | 0.712 | 38.07 | not 624 |
| 19) | T,P | 1,1-dichloroethane | 0.617 | 0.607 | 0.623 | 0.568 | 0.498 | 0.575 | 0.571 | 8.78 | |
| 20) | T | vinyl acetate | POL 10 | 0.527 | 0.530 | 0.483 | 0.391 | 0.473 | 0.475 | 10.98 | |
| 21) | T | cis-1,2-dichloroeth | 0.361 | 0.349 | 0.361 | 0.319 | 0.275 | 0.319 | 0.325 | 10.50 | |
| 22) | T | 2,2-dichloropropane | 0.419 | 0.402 | 0.423 | 0.412 | 0.397 | 0.446 | 0.411 | 5.35 | |
| 23) | T | 2-butanone | 0.049 | 0.040 | 0.041 | 0.035 | 0.028 | 0.035 | 0.037 | 17.56 | |
| 24) | T | methyl acrylate | POL 10 | 0.372 | 0.348 | 0.324 | 0.263 | 0.305 | 0.319 | 11.96 | |
| 25) | T,C | chloroform | 0.562 | 0.537 | 0.544 | 0.499 | 0.441 | 0.504 | 0.506 | 8.98 | |
| 26) | S | dibromofluoromethan | 0.270 | 0.272 | 0.265 | 0.265 | 0.255 | 0.266 | 0.265 | 2.06 | |
| 27) | T | 1,1,1-trichloroetha | 0.399 | 0.395 | 0.389 | 0.387 | 0.367 | 0.406 | 0.385 | 4.68 | |
| 28) | T | cyclohexane | POL=10 | 0.659 | 0.599 | 0.549 | 0.587 | 0.549 | 0.578 | 8.47 | |
| 29) | T | carbon tetrachlorid | 0.222 | 0.235 | 0.254 | 0.248 | 0.240 | 0.274 | 0.244 | 7.05 | |
| 30) | S | 1,2-dichloroethane- | 0.320 | 0.331 | 0.335 | 0.323 | 0.302 | 0.316 | 0.320 | 3.37 | |
| 31) | M | benzene | 1.375 | 1.249 | 1.224 | 1.108 | 0.961 | 1.028 | 1.133 | 13.62 | |
| 32) | T | 1,1-dichloropropene | 0.453 | 0.448 | 0.458 | 0.424 | 0.400 | 0.424 | 0.429 | 6.05 | |
| 33) | T | 1,2-dichloroethane | 0.479 | 0.451 | 0.464 | 0.427 | 0.366 | 0.434 | 0.430 | 9.28 | |
| 34) | M | trichloroethene | 0.326 | 0.312 | 0.306 | 0.282 | 0.259 | 0.279 | 0.290 | 8.94 | |
| 35) | T | ethyl acrylate | POL 10 | 0.583 | 0.535 | 0.498 | 0.391 | 0.457 | 0.488 | 13.72 | |
| 36) | T,C | 1,2-dichloropropane | 0.364 | 0.349 | 0.360 | 0.328 | 0.282 | 0.313 | 0.327 | 10.07 | |
| 37) | T | methyl methacrylate | POL=10 | 0.427 | 0.406 | 0.368 | 0.299 | 0.340 | 0.364 | 12.98 | |
| 38) | T | dibromomethane | 0.206 | 0.195 | 0.209 | 0.185 | 0.150 | 0.168 | 0.183 | 12.05 | |
| 39) | T | bromodichloromethan | 0.456 | 0.406 | 0.420 | 0.397 | 0.342 | 0.391 | 0.395 | 9.87 | |
| 40) | T | 2-chloroethyl vinyl | POL=10 | 0.178 | 0.195 | 0.190 | 0.156 | 0.194 | 0.181 | 8.45 | |
| 41) | I | chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | |
| 42) | T | cis-1,3-dichloropro | 0.840 | 0.779 | 0.828 | 0.750 | 0.656 | 0.694 | 0.745 | 10.06 | |
| 43) | T | 4-methyl-2-pentanon | 0.779 | 0.623 | 0.673 | 0.588 | 0.463 | 0.530 | 0.601 | 17.15 | |
| 44) | S | toluene-d8 | 1.248 | 1.268 | 1.292 | 1.262 | 1.282 | 1.257 | 1.269 | 1.21 | |
| 45) | M,C | toluene | 1.267 | 1.106 | 1.139 | 1.086 | 0.907 | 0.955 | 1.058 | 12.15 | |
| 46) | T | 1,1,2-trichloroetha | 0.367 | 0.341 | 0.362 | 0.317 | 0.269 | 0.296 | 0.321 | 11.36 | |
| 47) | T | 1,3-dichloropropane | 0.848 | 0.783 | 0.827 | 0.723 | 0.622 | 0.683 | 0.736 | 11.57 | |
| 48) | T | tetrachloroethene | 0.304 | 0.303 | 0.318 | 0.288 | 0.279 | 0.286 | 0.292 | 5.74 | |
| 49) | T | trans-1,3-dichlorop | 0.670 | 0.632 | 0.683 | 0.612 | 0.542 | 0.604 | 0.615 | 8.52 | |
| 50) | T | 2-hexanone | 0.550 | 0.469 | 0.480 | 0.426 | 0.330 | 0.387 | 0.434 | 16.64 | |
| 51) | T | dibromochloromethan | 0.405 | 0.384 | 0.414 | 0.380 | 0.335 | 0.376 | 0.377 | 7.69 | |

6/4/08

6/6/08

(#) = Out of Range ### Number of calibration levels exceeded format ###

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 14:55:40 2008
Response via : Initial Calibration

Calibration Files
5 =D060306.D 10 =D060307.D 20 =D060308.D
50 =D060309.D 100 =D060311.D 200 =D060312.D

| | | Compound | 5 | 10 | 20 | 50 | 100 | 200 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 52) | T | 1,2-dibromoethane | 0.474 | 0.425 | 0.450 | 0.404 | 0.345 | 0.379 | 0.407 | 11.16 |
| 53) | M,P | chlorobenzene | 1.183 | 1.100 | 1.134 | 1.013 | 0.927 | 0.983 | 1.038 | 9.84 |
| 54) | T | 1,1,1,2-tetrachloro | 0.385 | 0.358 | 0.374 | 0.337 | 0.306 | 0.333 | 0.343 | 8.93 |
| 55) | T,C | ethylbenzene | 2.205 | 2.113 | 2.093 | 1.863 | 1.663 | 1.678 | 1.899 | 12.3* |
| 56) | T | m,p-xylene | 0.846 | 0.771 | 0.771 | 0.703 | 0.619 | 0.635 | 0.710 | 12.47 |
| 57) | T | butyl acrylate | PQL=10 | 1.338 | 1.300 | 1.142 | 0.946 | 1.001 | 1.128 | 14.31 |
| 58) | T | o-xylene | 0.825 | 0.744 | 0.775 | 0.693 | 0.604 | 0.633 | 0.698 | 12.40 |
| 59) | T | styrene | 1.413 | 1.308 | 1.364 | 1.204 | 1.075 | 1.140 | 1.228 | 10.97 |
| 60) | T | isopropylbenzene | 1.820 | 1.715 | 1.755 | 1.578 | 1.466 | 1.482 | 1.607 | 9.70 |
| 61) | T | bromobenzene | 0.458 | 0.429 | 0.436 | 0.395 | 0.351 | 0.388 | 0.402 | 10.04 |
| 62) | T,P | bromoform | 0.249 | 0.238 | 0.262 | 0.250 | 0.214 | 0.254 | 0.242 | 6.88 |
| 63) | S | 4-bromofluorobenzen | 0.535 | 0.543 | 0.533 | 0.538 | 0.534 | 0.538 | 0.536 | 0.68 |
| 64) | T | 1,2,3-trichloroprop | 0.573 | 0.455 | 0.477 | 0.410 | 0.334 | 0.371 | 0.429 | 18.66 |
| 65) | T | n-propylbenzene | 2.635 | 2.524 | 2.489 | 2.203 | 2.050 | 2.016 | 2.275 | 11.81 |
| 66) | T | 2-chlorotoluene | 1.540 | 1.424 | 1.456 | 1.312 | 1.199 | 1.246 | 1.336 | 10.41 |
| 67) | T | 4-chlorotoluene | 1.745 | 1.585 | 1.664 | 1.476 | 1.338 | 1.380 | 1.501 | 11.13 |
| 68) | T | 1,3,5-trimethylbenz | 1.628 | 1.511 | 1.542 | 1.395 | 1.279 | 1.291 | 1.413 | 10.56 |
| 69) | I | 1,4-dichlorobenzene-d | ISTD | | | | | | | |
| 70) | T,P | 1,1,2,2-tetrachloro | 1.465 | 1.205 | 1.343 | 1.152 | 0.941 | 1.096 | 1.184 | 14.72 |
| 71) | T | tert-butylbenzene | 2.813 | 2.721 | 2.839 | 2.500 | 2.386 | 2.545 | 2.590 | 7.90 |
| 72) | T | sec-butylbenzene | 4.800 | 4.683 | 4.808 | 4.246 | 4.063 | 4.111 | 4.381 | 8.45 |
| 73) | T | 1,2,4-trimethylbenz | 3.756 | 3.477 | 3.583 | 3.203 | 2.842 | 3.079 | 3.264 | 10.69 |
| 74) | T | 1,3-dichlorobenzene | 1.875 | 1.692 | 1.828 | 1.551 | 1.427 | 1.582 | 1.627 | 10.94 |
| 75) | T | p-isopropyltoluene | 3.553 | 3.412 | 3.521 | 3.151 | 2.975 | 3.083 | 3.230 | 8.12 |
| 76) | T | dicyclopentadiene | 5.730 | 5.807 | 5.716 | 4.908 | 4.588 | 4.416 | 5.108 | 12.12 |
| 77) | T | 1,4-dichlorobenzene | 1.966 | 1.738 | 1.834 | 1.568 | 1.406 | 1.582 | 1.648 | 12.50 |
| 78) | T | 1,2-dichlorobenzene | 1.778 | 1.609 | 1.713 | 1.484 | 1.337 | 1.511 | 1.542 | 10.84 |
| 79) | T | n-butylbenzene | 4.073 | 3.857 | 3.912 | 3.499 | 3.324 | 3.364 | 3.605 | 9.37 |
| 80) | T | 1,2-dibromo-3-chlor | 0.346 | 0.223 | 0.237 | 0.208 | 0.164 | 0.192 | 0.225 | 25.91 |
| 81) | T | 1,2,4-trichlorobenz | 1.476 | 1.284 | 1.342 | 1.204 | 1.101 | 1.236 | 1.248 | 10.85 |
| 82) | T | hexachlorobutadiene | PQL=10 | 0.614 | 0.610 | 0.586 | 0.590 | 0.643 | 0.593 | 7.34 |
| 83) | T | naphthalene | | 3.263 | 3.427 | 2.938 | 2.433 | 2.682 | 2.916 | 12.81 |
| 84) | T | 1,2,3-trichlorobenz | 1.405 | 1.232 | 1.253 | 1.100 | 0.994 | 1.130 | 1.160 | 12.68 |
| 85) | T | 2-methylnaphthalene | PQL=10 | 1.864 | 1.850 | 1.586 | 1.388 | 1.517 | 1.623 | 11.89 |

6/4/08

6/3/08

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060306.D Vial: 6
Acq On : 3 Jun 2008 10:43 am Operator: BR
Sample : ,ical,ical-VOA-5 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:25 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:24:44 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 7.00 | 96 | 1879956 | 50.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.80 | 117 | 1311180 | 50.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.88 | 152 | 617227 | 50.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.13 | 113 | 508528 | 49.47 | ug/L | | 0.00 |
| 30) 1,2-dichloroethane-d4 | 6.58 | 65 | 602095 | 53.86 | ug/L | | 0.00 |
| 44) toluene-d8 | 9.37 | 98 | 1636145 | 40.84 | ug/L | | 0.00 |
| 63) 4-bromofluorobenzene | 13.93 | 95 | 701170 | 58.92 | ug/L | | 0.00 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.58 | 85 | 77627 | 7.02 | ug/L | | 87 |
| 3) chloromethane | 1.89 | 50 | 108330m3 | 8.88 | ug/L | | |
| 4) vinyl chloride | 1.89 | 62 | 91398 | 6.62 | ug/L | | 99 |
| 5) 1,3-butadiene | 1.93 | 39 | 55648 | 5.25 | ug/L | | 89 |
| 6) bromomethane | 2.26 | 94 | 23547 | 11.44 | ug/L | | 97 |
| 7) chloroethane | 2.37 | 64 | 84031 | 10.46 | ug/L | | 93 |
| 8) trichlorofluoromethane | 2.66 | 101 | 73864 | 4.98 | ug/L | | 98 |
| 9) acrolein | 3.18 | 56 | 45941 | 33.57 | ug/L | | 90 |
| 10) 1,1-dichloroethene | 3.25 | 96 | 45904 | 4.58 | ug/L | | 90 |
| 11) acetone | 3.38 | 43 | 87249 | 13.86 | ug/L | | 96 |
| 12) carbon disulfide | 3.50 | 76 | 156446 | 5.35 | ug/L | | 99 |
| 13) methylene chloride | 3.87 | 84 | 145690 | 5.83 | ug/L | | 95 |
| 14) acrylonitrile | 4.20 | 53 | 251565 | 37.88 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.17 | 96 | 63854 | 5.61 | ug/L | | 92 |
| 16) methyl-t-butyl ether | 4.17 | 73 | 159504 | 5.45 | ug/L | | 99 |
| 17) acetonitrile | 3.73 | 41 | 122999 | 51.34 | ug/L | | 96 |
| 18) hexane | 4.46 | 57 | 228321 | 11.80 | ug/L | # | 98 |
| 19) 1,1-dichloroethane | 4.71 | 63 | 116016 | 6.04 | ug/L | | 95 |
| 20) vinyl acetate | 4.78 | 43 | 109600 | 7.26 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.47 | 96 | 67791 | 5.89 | ug/L | | 90 |
| 22) 2,2-dichloropropane | 5.44 | 77 | 78793 | 6.48 | ug/L | | 98 |
| 23) 2-butanone | 5.52 | 72 | 9147 | 7.08 | ug/L | # | 87 |
| 24) methyl acrylate | 5.62 | 55 | 71883 | 6.23 | ug/L | # | 100 |
| 25) chloroform | 5.92 | 83 | 105640 | 6.22 | ug/L | | 94 |
| 27) 1,1,1-trichloroethane | 6.10 | 97 | 75104 | 6.40 | ug/L | | 93 |
| 28) cyclohexane | 6.13 | 56 | 96612 | 5.18 | ug/L | | 89 |
| 29) carbon tetrachloride | 6.31 | 117 | 41750 | 4.76 | ug/L | # | 77 |
| 31) benzene | 6.61 | 78 | 258467 | 6.44 | ug/L | | 96 |
| 32) 1,1-dichloropropene | 6.32 | 75 | 85217 | 5.98 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.68 | 62 | 89957 | 7.04 | ug/L | | 92 |
| 34) trichloroethene | 7.53 | 95 | 61366 | 6.79 | ug/L | | 92 |
| 35) ethyl acrylate | 7.71 | 55 | 107701 | 6.88 | ug/L | | 95 |
| 36) 1,2-dichloropropane | 7.89 | 63 | 68516 | 6.93 | ug/L | | 95 |
| 37) methyl methacrylate | 8.05 | 41 | 79071 | 7.03 | ug/L | | 99 |
| 38) dibromomethane | 8.09 | 93 | 38809 | 6.44 | ug/L | | 97 |
| 39) bromodichloromethane | 8.33 | 83 | 85735 | 7.13 | ug/L | | 89 |
| 40) 2-chloroethyl vinyl ether | 8.78 | 63 | 30500 | 8.14 | ug/L | | 98 |
| 42) cis-1,3-dichloropropene | 9.00 | 75 | 110095 | 5.31 | ug/L | | 91 |
| 43) 4-methyl-2-pentanone | 9.24 | 43 | 102076 | 6.51 | ug/L | # | 90 |
| 45) toluene | 9.47 | 92 | 166152 | 5.53 | ug/L | | 95 |

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

CB 6/4/08



6/13/08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060306.D Vial: 6
Acq On : 3 Jun 2008 10:43 am Operator: BR
Sample : ,ical,ical-VOA-5 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:25 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:24:44 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| | Compound | R.T. | QIon | Response | Conc Unit | Qvalue |
|---|---|---|---|---|---|---|
| 46) | 1,1,2-trichloroethane | 10.22 | 83 | 48068 | 5.41 ug/L | 92 |
| 47) | 1,3-dichloropropane | 10.49 | 76 | 111141 | 5.78 ug/L | 98 |
| 48) | tetrachloroethene | 10.35 | 164 | 39894 | 5.47 ug/L | 94 |
| 49) | trans-1,3-dichloropropene | 9.92 | 75 | 87900 | 5.41 ug/L | 99 |
| 50) | 2-hexanone | 10.61 | 43 | 72122 | 6.87 ug/L | 94 |
| 51) | dibromochloromethane | 10.87 | 129 | 53135 | 5.48 ug/L | 91 |
| 52) | 1,2-dibromoethane | 11.04 | 107 | 62213 | 6.11 ug/L | 96 |
| 53) | chlorobenzene | 11.85 | 112 | 155107 | 6.21 ug/L | 99 |
| 54) | 1,1,1,2-tetrachloroethane | 12.02 | 131 | 50451 | 5.81 ug/L | 96 |
| 55) | ethylbenzene | 12.01 | 91 | 289104 | 6.25 ug/L | 97 |
| 56) | m,p-xylene | 12.22 | 106 | 221972 | 13.03 ug/L | 100 |
| 57) | butyl acrylate | 12.92 | 55 | 180327 | 6.39 ug/L | 100 |
| 58) | o-xylene | 12.93 | 106 | 108225 | 6.71 ug/L | 97 |
| 59) | styrene | 12.99 | 104 | 185293 | 6.66 ug/L | 95 |
| 60) | isopropylbenzene | 13.60 | 105 | 238687 | 6.94 ug/L | 99 |
| 61) | bromobenzene | 14.18 | 156 | 60001 | 7.08 ug/L | 98 |
| 62) | bromoform | 13.38 | 173 | 32681 | 5.91 ug/L | 94 |
| 64) | 1,2,3-trichloropropane | 14.34 | 75 | 75099 | 7.32 ug/L | 94 |
| 65) | n-propylbenzene | 14.36 | 91 | 345458 | 7.16 ug/L | 99 |
| 66) | 2-chlorotoluene | 14.52 | 91 | 201873 | 7.66 ug/L | 99 |
| 67) | 4-chlorotoluene | 14.71 | 91 | 228757 | 7.58 ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.67 | 105 | 213467 | 7.73 ug/L | 100 |
| 70) | 1,1,2,2-tetrachloroethane | 14.29 | 83 | 90414 | 5.55 ug/L | 94 |
| 71) | tert-butylbenzene | 15.21 | 119 | 173633 | 6.40 ug/L | 99 |
| 72) | sec-butylbenzene | 15.56 | 105 | 296254 | 6.48 ug/L | 100 |
| 73) | 1,2,4-trimethylbenzene | 15.30 | 105 | 231809 | 6.69 ug/L | 100 |
| 74) | 1,3-dichlorobenzene | 15.77 | 146 | 115714 | 7.00 ug/L | 99 |
| 75) | p-isopropyltoluene | 15.80 | 119 | 219322 | 6.68 ug/L | 99 |
| 76) | dicyclopentadiene | 15.89 | 66 | 353651 | 5.96 ug/L | 98 |
| 77) | 1,4-dichlorobenzene | 15.92 | 146 | 121366 | 6.59 ug/L | 98 |
| 78) | 1,2-dichlorobenzene | 16.50 | 146 | 109767 | 7.16 ug/L | 97 |
| 79) | n-butylbenzene | 16.43 | 91 | 251418 | 7.01 ug/L | 97 |
| 80) | 1,2-dibromo-3-chloropropan | 17.65 | 75 | 21350 | 9.82 ug/L | 97 |
| 81) | 1,2,4-trichlorobenzene | 18.64 | 180 | 91085 | 10.82 ug/L | 97 |
| 82) | hexachlorobutadiene | 18.80 | 225 | 41630 | 10.46 ug/L | 90 |
| 83) | naphthalene | 18.92 | 128 | 307769 | 14.17 ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.19 | 180 | 86713 | 11.52 ug/L | 97 |
| 85) | 2-methylnaphthalene | 20.15 | 142 | 167164 | 15.06 ug/L | 99 |

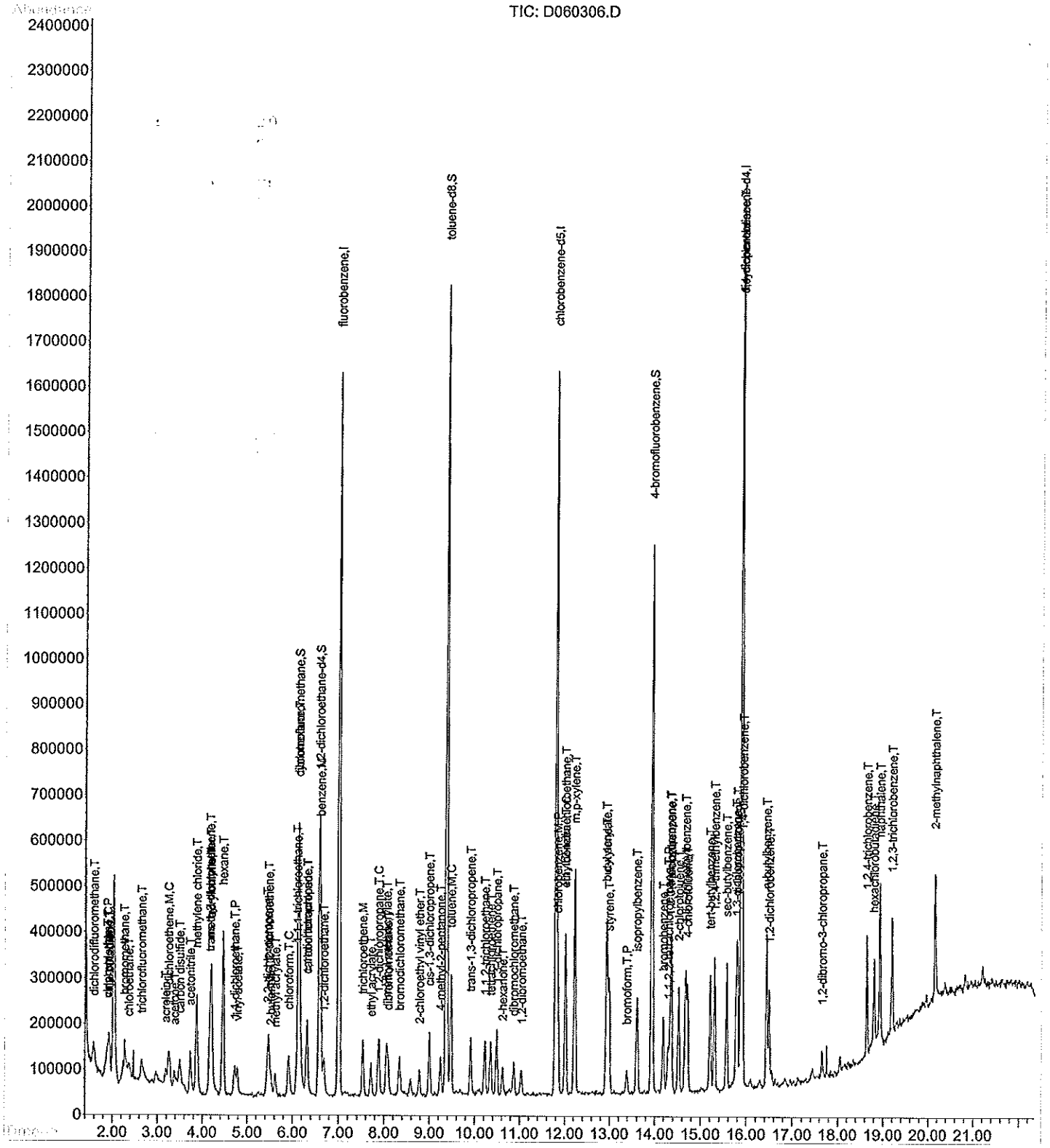
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D060308\D060306.D Vial: 6
Acq On : 3 Jun 2008 10:43 am Operator: BR
Sample : ,ical,ical-VOA-5 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:25 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:32:30 2008
Response via : Initial Calibration

TIC: D060306.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060307.D Vial: 7
Acq On : 3 Jun 2008 11:19 am Operator: BR
Sample : ,ical,ical-VOA-10 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:26 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:24:44 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 7.00 | 96 | 1956929 | 50.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.80 | 117 | 1350398 | 50.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.89 | 152 | 633729 | 50.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.13 | 113 | 531863 | 49.70 | ug/L | | 0.00 |
| 30) 1,2-dichloroethane-d4 | 6.58 | 65 | 647017 | 55.61 | ug/L | | 0.00 |
| 44) toluene-d8 | 9.37 | 98 | 1712050 | 41.49 | ug/L | | 0.00 |
| 63) 4-bromofluorobenzene | 13.93 | 95 | 733568 | 59.85 | ug/L | | 0.00 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.58 | 85 | 147376 | 12.81 | ug/L | | 98 |
| 3) chloromethane | 1.91 | 50 | 197778m | 15.57 | ug/L | | |
| 4) vinyl chloride | 1.89 | 62 | 175460 | 12.20 | ug/L | | 93 |
| 5) 1,3-butadiene | 1.92 | 39 | 147036 | 13.33 | ug/L | | 99 |
| 6) bromomethane | 2.26 | 94 | 49257 | 22.99 | ug/L | | 93 |
| 7) chloroethane | 2.35 | 64 | 124125 | 14.84 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.65 | 101 | 152106 | 9.84 | ug/L | | 96 |
| 9) acrolein | 3.17 | 56 | 108089 | 75.88 | ug/L | | 94 |
| 10) 1,1-dichloroethene | 3.24 | 96 | 115487 | 11.08 | ug/L | | 99 |
| 11) acetone | 3.37 | 43 | 117214 | 17.89 | ug/L | | 94 |
| 12) carbon disulfide | 3.49 | 76 | 340772 | 11.20 | ug/L | | 99 |
| 13) methylene chloride | 3.86 | 84 | 200736 | 7.72 | ug/L | | 98 |
| 14) acrylonitrile | 4.19 | 53 | 552293 | 79.88 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.16 | 96 | 122052 | 10.31 | ug/L | | 90 |
| 16) methyl-t-butyl ether | 4.16 | 73 | 347911 | 11.42 | ug/L | | 98 |
| 17) acetonitrile | 3.72 | 41 | 261821 | 104.99 | ug/L | | 99 |
| 18) hexane | 4.46 | 57 | 352778 | 17.52 | ug/L | # | 100 |
| 19) 1,1-dichloroethane | 4.71 | 63 | 237478 | 11.88 | ug/L | | 98 |
| 20) vinyl acetate | 4.77 | 43 | 206381 | 13.14 | ug/L | | 100 |
| 21) cis-1,2-dichloroethene | 5.47 | 96 | 136545 | 11.40 | ug/L | | 89 |
| 22) 2,2-dichloropropane | 5.44 | 77 | 157295 | 12.43 | ug/L | | 97 |
| 23) 2-butanone | 5.51 | 72 | 15744 | 11.70 | ug/L | | 79 |
| 24) methyl acrylate | 5.61 | 55 | 145574 | 12.12 | ug/L | # | 99 |
| 25) chloroform | 5.91 | 83 | 210072 | 11.88 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.10 | 97 | 154442 | 12.64 | ug/L | | 96 |
| 28) cyclohexane | 6.13 | 56 | 258106 | 13.28 | ug/L | | 97 |
| 29) carbon tetrachloride | 6.31 | 117 | 92086 | 10.09 | ug/L | | 99 |
| 31) benzene | 6.61 | 78 | 488937 | 11.71 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.32 | 75 | 175294 | 11.82 | ug/L | | 100 |
| 33) 1,2-dichloroethane | 6.68 | 62 | 176637 | 13.28 | ug/L | | 96 |
| 34) trichloroethene | 7.53 | 95 | 122265 | 13.00 | ug/L | | 94 |
| 35) ethyl acrylate | 7.71 | 55 | 228355 | 14.01 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.88 | 63 | 136622 | 13.28 | ug/L | | 96 |
| 37) methyl methacrylate | 8.05 | 41 | 167073 | 14.27 | ug/L | | 94 |
| 38) dibromomethane | 8.08 | 93 | 76243 | 12.15 | ug/L | | 98 |
| 39) bromodichloromethane | 8.34 | 83 | 158973 | 12.71 | ug/L | | 98 |
| 40) 2-chloroethyl vinyl ether | 8.78 | 63 | 69522 | 17.82 | ug/L | | 99 |
| 42) cis-1,3-dichloropropene | 9.00 | 75 | 210295 | 9.86 | ug/L | | 98 |
| 43) 4-methyl-2-pentanone | 9.24 | 43 | 168164 | 10.42 | ug/L | # | 90 |
| 45) toluene | 9.47 | 92 | 298620 | 9.64 | ug/L | | 92 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060307.D Vial: 7
Acq On : 3 Jun 2008 11:19 am Operator: BR
Sample : ,ical,ical-VOA-10 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:26 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:24:44 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

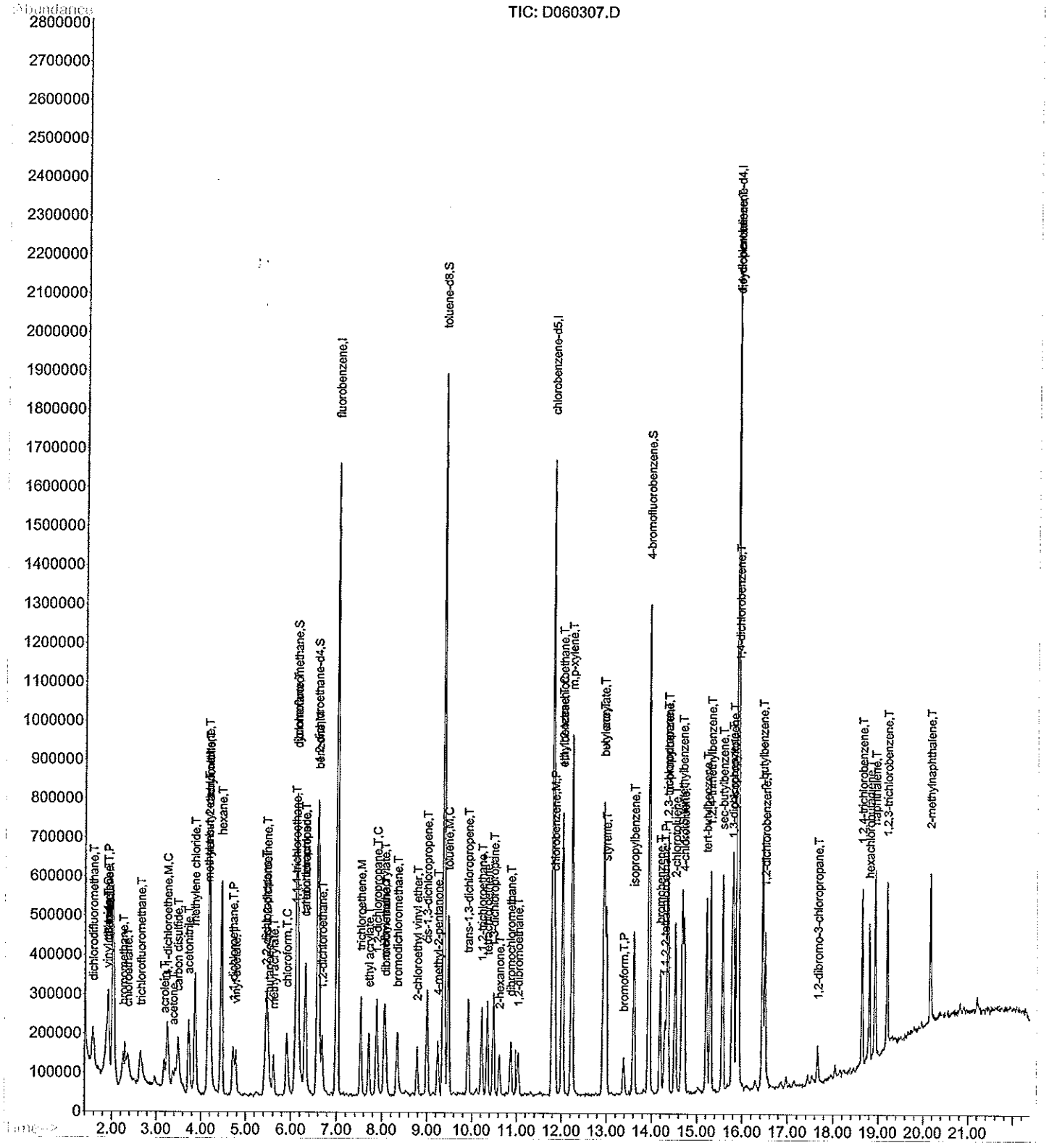
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 46) | 1,1,2-trichloroethane | 10.22 | 83 | 92207 | 10.07 | ug/L | 95 |
| 47) | 1,3-dichloropropane | 10.49 | 76 | 211343 | 10.68 | ug/L | 100 |
| 48) | tetrachloroethene | 10.35 | 164 | 81727 | 10.87 | ug/L | 97 |
| 49) | trans-1,3-dichloropropene | 9.91 | 75 | 170612 | 10.20 | ug/L | 99 |
| 50) | 2-hexanone | 10.62 | 43 | 126750 | 11.73 | ug/L | 96 |
| 51) | dibromochloromethane | 10.87 | 129 | 103659 | 10.38 | ug/L | 96 |
| 52) | 1,2-dibromoethane | 11.03 | 107 | 114677 | 10.93 | ug/L | 100 |
| 53) | chlorobenzene | 11.85 | 112 | 297127 | 11.55 | ug/L | 99 |
| 54) | 1,1,1,2-tetrachloroethane | 12.02 | 131 | 96608 | 10.80 | ug/L | 97 |
| 55) | ethylbenzene | 12.02 | 91 | 570784 | 11.98 | ug/L | 98 |
| 56) | m,p-xylene | 12.23 | 106 | 416528 | 23.74 | ug/L | 96 |
| 57) | butyl acrylate | 12.93 | 55 | 361330 | 12.43 | ug/L | 99 |
| 58) | o-xylene | 12.94 | 106 | 200932 | 12.10 | ug/L | 96 |
| 59) | styrene | 12.99 | 104 | 353188 | 12.33 | ug/L | 96 |
| 60) | isopropylbenzene | 13.61 | 105 | 463202 | 13.07 | ug/L | 100 |
| 61) | bromobenzene | 14.19 | 156 | 115738 | 13.26 | ug/L | 99 |
| 62) | bromoform | 13.38 | 173 | 64413 | 11.31 | ug/L | 97 |
| 64) | 1,2,3-trichloropropane | 14.34 | 75 | 122974 | 11.64 | ug/L | 97 |
| 65) | n-propylbenzene | 14.36 | 91 | 681695 | 13.71 | ug/L | 100 |
| 66) | 2-chlorotoluene | 14.53 | 91 | 384682 | 14.17 | ug/L | 98 |
| 67) | 4-chlorotoluene | 14.72 | 91 | 427969 | 13.78 | ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.68 | 105 | 407968 | 14.35 | ug/L | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 14.29 | 83 | 152777 | 9.14 | ug/L | 94 |
| 71) | tert-butylbenzene | 15.21 | 119 | 344882 | 12.37 | ug/L | 99 |
| 72) | sec-butylbenzene | 15.57 | 105 | 593594 | 12.64 | ug/L | 99 |
| 73) | 1,2,4-trimethylbenzene | 15.30 | 105 | 440677 | 12.38 | ug/L | 99 |
| 74) | 1,3-dichlorobenzene | 15.78 | 146 | 214509 | 12.64 | ug/L | 99 |
| 75) | p-isopropyltoluene | 15.81 | 119 | 432482 | 12.83 | ug/L | 97 |
| 76) | dicyclopentadiene | 15.90 | 66 | 736014 | 12.09 | ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.92 | 146 | 220254 | 11.66 | ug/L | 99 |
| 78) | 1,2-dichlorobenzene | 16.50 | 146 | 203965 | 12.96 | ug/L | 99 |
| 79) | n-butylbenzene | 16.44 | 91 | 488921 | 13.29 | ug/L | 99 |
| 80) | 1,2-dibromo-3-chloropropan | 17.67 | 75 | 28247 | 12.66 | ug/L | 93 |
| 81) | 1,2,4-trichlorobenzene | 18.65 | 180 | 162766 | 18.83 | ug/L | 96 |
| 82) | hexachlorobutadiene | 18.80 | 225 | 77879 | 19.06 | ug/L | 97 |
| 83) | naphthalene | 18.93 | 128 | 413512 | 18.55 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.20 | 180 | 156089 | 20.19 | ug/L | 91 |
| 85) | 2-methylnaphthalene | 20.16 | 142 | 236238 | 20.73 | ug/L | 97 |

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D060308\D060307.D Vial: 7
Acq On : 3 Jun 2008 11:19 am Operator: BR
Sample : ,ical,ical-VOA-10 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:26 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:32:30 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060308.D Vial: 8
Acq On : 3 Jun 2008 11:54 am Operator: BR
Sample : ,ical,ical-VOA-20 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:27 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:24:44 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 7.00 | 96 | 1662445 | 50.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.79 | 117 | 1107512 | 50.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.88 | 152 | 503631 | 50.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.12 | 113 | 440900 | 48.50 | ug/L | | 0.00 |
| 30) 1,2-dichloroethane-d4 | 6.57 | 65 | 556508 | 56.30 | ug/L | | 0.00 |
| 44) toluene-d8 | 9.36 | 98 | 1430483 | 42.27 | ug/L | | 0.00 |
| 63) 4-bromofluorobenzene | 13.92 | 95 | 590248 | 58.72 | ug/L | | 0.00 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.58 | 85 | 227546 | 23.28 | ug/L | | 97 |
| 3) chloromethane | 1.86 | 50 | 320215m | 29.67 | ug/L | | |
| 4) vinyl chloride | 1.90 | 62 | 284110 | 23.26 | ug/L | | 98 |
| 5) 1,3-butadiene | 1.92 | 39 | 244144 | 26.05 | ug/L | | 98 |
| 6) bromomethane | 2.26 | 94 | 85397 | 46.92 | ug/L | | 97 |
| 7) chloroethane | 2.35 | 64 | 185041 | 26.04 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.65 | 101 | 249491 | 19.00 | ug/L | | 98 |
| 9) acrolein | 3.17 | 56 | 165241 | 136.55 | ug/L | | 99 |
| 10) 1,1-dichloroethene | 3.24 | 96 | 197857 | 22.34 | ug/L | | 90 |
| 11) acetone | 3.36 | 43 | 149940 | 26.94 | ug/L | | 98 |
| 12) carbon disulfide | 3.48 | 76 | 556787 | 21.54 | ug/L | | 97 |
| 13) methylene chloride | 3.86 | 84 | 298402 | 13.51 | ug/L | | 98 |
| 14) acrylonitrile | 4.19 | 53 | 840983 | 143.19 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.16 | 96 | 211101 | 20.99 | ug/L | | 96 |
| 16) methyl-t-butyl ether | 4.15 | 73 | 579620 | 22.39 | ug/L | | 98 |
| 17) acetonitrile | 3.71 | 41 | 401164 | 189.37 | ug/L | | 99 |
| 18) hexane | 4.45 | 57 | 463289 | 27.08 | ug/L | # | 99 |
| 19) 1,1-dichloroethane | 4.70 | 63 | 414548 | 24.41 | ug/L | | 97 |
| 20) vinyl acetate | 4.77 | 43 | 352302 | 26.41 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.46 | 96 | 240136 | 23.59 | ug/L | # | 85 |
| 22) 2,2-dichloropropane | 5.43 | 77 | 281542 | 26.18 | ug/L | | 98 |
| 23) 2-butanone | 5.50 | 72 | 27210 | 23.81 | ug/L | | 95 |
| 24) methyl acrylate | 5.61 | 55 | 231353 | 22.67 | ug/L | # | 100 |
| 25) chloroform | 5.91 | 83 | 361638 | 24.07 | ug/L | | 96 |
| 27) 1,1,1-trichloroethane | 6.09 | 97 | 258354 | 24.90 | ug/L | | 96 |
| 28) cyclohexane | 6.12 | 56 | 398322 | 24.13 | ug/L | | 99 |
| 29) carbon tetrachloride | 6.29 | 117 | 168921 | 21.79 | ug/L | | 98 |
| 31) benzene | 6.60 | 78 | 814247 | 22.95 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.31 | 75 | 304630 | 24.17 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.68 | 62 | 308273 | 27.27 | ug/L | | 99 |
| 34) trichloroethene | 7.53 | 95 | 203359 | 25.45 | ug/L | | 96 |
| 35) ethyl acrylate | 7.71 | 55 | 355788 | 25.70 | ug/L | | 100 |
| 36) 1,2-dichloropropane | 7.87 | 63 | 239127 | 27.37 | ug/L | | 99 |
| 37) methyl methacrylate | 8.04 | 41 | 270122 | 27.15 | ug/L | | 96 |
| 38) dibromomethane | 8.08 | 93 | 139037 | 26.09 | ug/L | | 97 |
| 39) bromodichloromethane | 8.33 | 83 | 279278 | 26.28 | ug/L | | 100 |
| 40) 2-chloroethyl vinyl ether | 8.77 | 63 | 129802 | 39.17 | ug/L | | 99 |
| 42) cis-1,3-dichloropropene | 8.99 | 75 | 366952 | 20.97 | ug/L | | 99 |
| 43) 4-methyl-2-pentanone | 9.23 | 43 | 298233 | 22.52 | ug/L | | 96 |
| 45) toluene | 9.47 | 92 | 504784 | 19.87 | ug/L | | 98 |

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

CR 6/4/08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060308.D Vial: 8
Acq On : 3 Jun 2008 11:54 am Operator: BR
Sample : ,ical,ical-VOA-20 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:27 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:24:44 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 46) | 1,1,2-trichloroethane | 10.21 | 83 | 160218 | 21.33 | ug/L | 98 |
| 47) | 1,3-dichloropropane | 10.48 | 76 | 366437 | 22.57 | ug/L | 99 |
| 48) | tetrachloroethene | 10.35 | 164 | 141010 | 22.87 | ug/L | 99 |
| 49) | trans-1,3-dichloropropene | 9.91 | 75 | 302699 | 22.07 | ug/L | 99 |
| 50) | 2-hexanone | 10.61 | 43 | 212720 | 23.99 | ug/L | 96 |
| 51) | dibromochloromethane | 10.87 | 129 | 183242 | 22.37 | ug/L | 98 |
| 52) | 1,2-dibromoethane | 11.03 | 107 | 199324 | 23.16 | ug/L | 99 |
| 53) | chlorobenzene | 11.84 | 112 | 502280 | 23.81 | ug/L | 99 |
| 54) | 1,1,1,2-tetrachloroethane | 12.01 | 131 | 165642 | 22.57 | ug/L | 96 |
| 55) | ethylbenzene | 12.01 | 91 | 927314 | 23.74 | ug/L | 99 |
| 56) | m,p-xylene | 12.22 | 106 | 683510 | 47.50 | ug/L | 98 |
| 57) | butyl acrylate | 12.92 | 55 | 575954 | 24.16 | ug/L | 97 |
| 58) | o-xylene | 12.94 | 106 | 343411 | 25.21 | ug/L | 98 |
| 59) | styrene | 12.98 | 104 | 604321 | 25.71 | ug/L | 99 |
| 60) | isopropylbenzene | 13.60 | 105 | 777373 | 26.75 | ug/L | 100 |
| 61) | bromobenzene | 14.18 | 156 | 193344 | 27.02 | ug/L | 96 |
| 62) | bromoform | 13.38 | 173 | 115863 | 24.80 | ug/L | 92 |
| 64) | 1,2,3-trichloropropane | 14.33 | 75 | 211169 | 24.37 | ug/L | 100 |
| 65) | n-propylbenzene | 14.35 | 91 | 1102852 | 27.04 | ug/L | 99 |
| 66) | 2-chlorotoluene | 14.52 | 91 | 645036 | 28.98 | ug/L | 99 |
| 67) | 4-chlorotoluene | 14.71 | 91 | 737243 | 28.94 | ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.67 | 105 | 683117 | 29.30 | ug/L | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 14.28 | 83 | 270626 | 20.37 | ug/L | 95 |
| 71) | tert-butylbenzene | 15.20 | 119 | 571846 | 25.81 | ug/L | 99 |
| 72) | sec-butylbenzene | 15.56 | 105 | 968675 | 25.95 | ug/L | 99 |
| 73) | 1,2,4-trimethylbenzene | 15.29 | 105 | 721885 | 25.52 | ug/L | 100 |
| 74) | 1,3-dichlorobenzene | 15.77 | 146 | 368262 | 27.30 | ug/L | 99 |
| 75) | p-isopropyltoluene | 15.80 | 119 | 709222 | 26.47 | ug/L | 100 |
| 76) | dicyclopentadiene | 15.89 | 66 | 1151565 | 23.80 | ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.91 | 146 | 369506 | 24.60 | ug/L | 98 |
| 78) | 1,2-dichlorobenzene | 16.49 | 146 | 345032 | 27.58 | ug/L | 97 |
| 79) | n-butylbenzene | 16.43 | 91 | 788129 | 26.95 | ug/L | 98 |
| 80) | 1,2-dibromo-3-chloropropan | 17.65 | 75 | 47692 | 26.89 | ug/L | 96 |
| 81) | 1,2,4-trichlorobenzene | 18.64 | 180 | 270354 | 39.36 | ug/L | 96 |
| 82) | hexachlorobutadiene | 18.79 | 225 | 122948 | 37.86 | ug/L | 96 |
| 83) | naphthalene | 18.92 | 128 | 690444 | 38.97 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.19 | 180 | 252344 | 41.07 | ug/L | 97 |
| 85) | 2-methylnaphthalene | 20.15 | 142 | 372675 | 41.15 | ug/L | 100 |

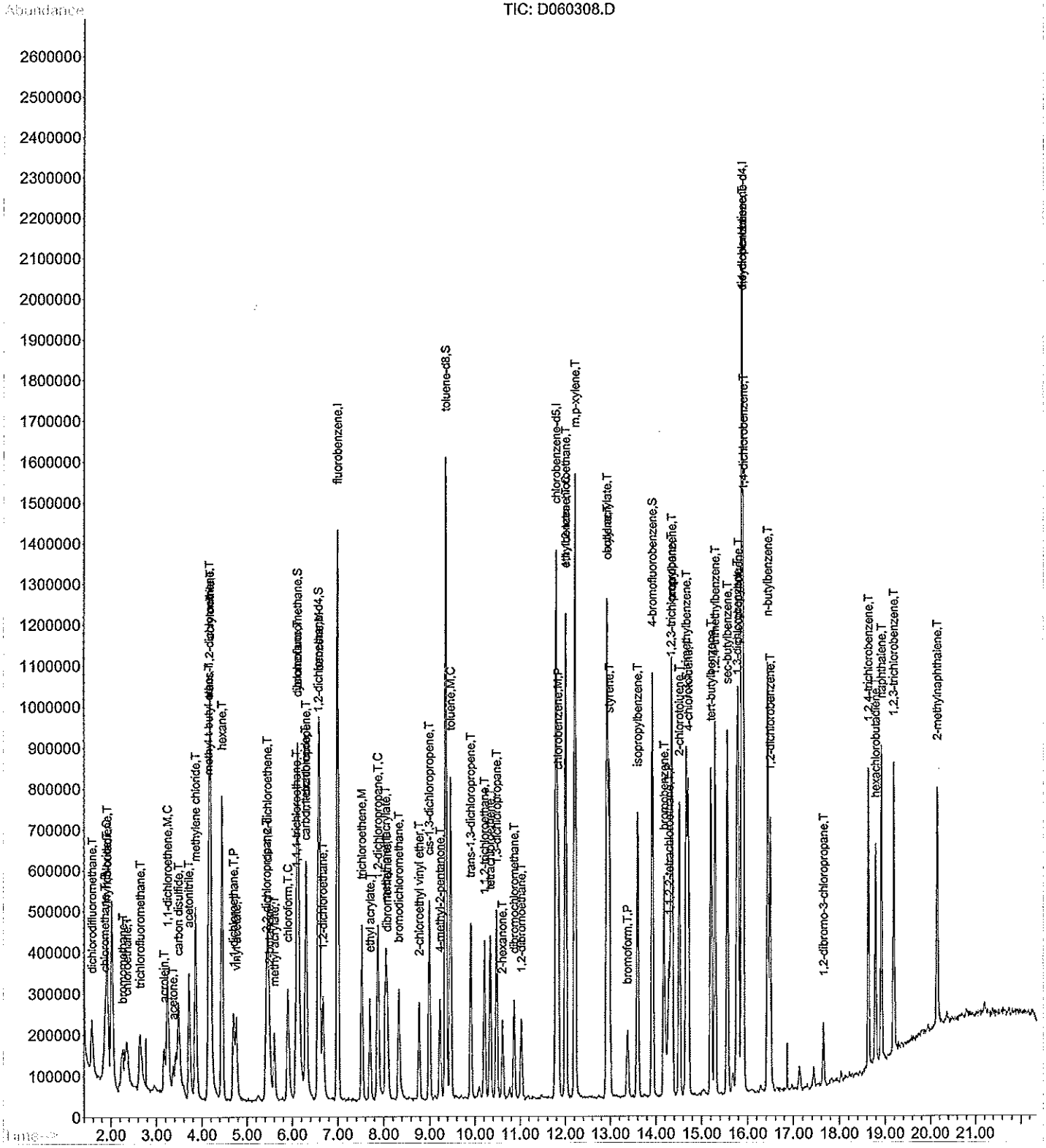
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D060308\D060308.D Vial: 8
Acq On : 3 Jun 2008 11:54 am Operator: BR
Sample : ,ical,ical-VOA-20 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:27 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:32:30 2008
Response via : Initial Calibration

TIC: D060308.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060309.D Vial: 9
Acq On : 3 Jun 2008 12:30 pm Operator: BR
Sample : ,ical,ical-VOA-50 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:24 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:22:41 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 7.00 | 96 | 1803098 | 50.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.79 | 117 | 1244733 | 50.00 | ug/L | | 0.00 |
| 69) 1,4-dichlorobenzene-d4 | 15.88 | 152 | 576461 | 50.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.13 | 113 | 477822 | 48.46 | ug/L | | 0.00 |
| 30) 1,2-dichloroethane-d4 | 6.57 | 65 | 581993 | 54.29 | ug/L | | 0.00 |
| 44) toluene-d8 | 9.37 | 98 | 1570637 | 41.30 | ug/L | | 0.00 |
| 63) 4-bromofluorobenzene | 13.93 | 95 | 669648 | 59.27 | ug/L | | 0.00 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.57 | 85 | 637265 | 60.10 | ug/L | | 100 |
| 3) chloromethane | 1.91 | 50 | 839292m | 71.74 | ug/L | | |
| 4) vinyl chloride | 1.89 | 62 | 804804 | 60.74 | ug/L | | 100 |
| 5) 1,3-butadiene | 1.91 | 39 | 573590 | 56.42 | ug/L | | 100 |
| 6) bromomethane | 2.25 | 94 | 204456 | 103.57 | ug/L | | 100 |
| 7) chloroethane | 2.34 | 64 | 552090 | 71.64 | ug/L | | 100 |
| 8) trichlorofluoromethane | 2.63 | 101 | 740971 | 52.04 | ug/L | | 100 |
| 9) acrolein | 3.17 | 56 | 425075 | 323.87 | ug/L | | 100 |
| 10) 1,1-dichloroethene | 3.24 | 96 | 466828 | 48.59 | ug/L | | 100 |
| 11) acetone | 3.36 | 43 | 308317 | 51.07 | ug/L | | 100 |
| 12) carbon disulfide | 3.48 | 76 | 1342242 | 47.88 | ug/L | | 100 |
| 13) methylene chloride | 3.85 | 84 | 765100 | 31.93 | ug/L | | 100 |
| 14) acrylonitrile | 4.19 | 53 | 2162988 | 339.55 | ug/L | | 100 |
| 15) trans-1,2-dichloroethene | 4.16 | 96 | 528682 | 48.46 | ug/L | | 100 |
| 16) methyl-t-butyl ether | 4.15 | 73 | 1502402 | 53.52 | ug/L | | 100 |
| 17) acetonitrile | 3.71 | 41 | 1028945 | 447.83 | ug/L | | 100 |
| 18) hexane | 4.45 | 57 | 963867 | 51.95 | ug/L | # | 100 |
| 19) 1,1-dichloroethane | 4.71 | 63 | 1025010 | 55.64 | ug/L | | 100 |
| 20) vinyl acetate | 4.77 | 43 | 870832 | 60.18 | ug/L | | 100 |
| 21) cis-1,2-dichloroethene | 5.46 | 96 | 575655 | 52.14 | ug/L | | 100 |
| 22) 2,2-dichloropropane | 5.43 | 77 | 742765 | 63.68 | ug/L | | 100 |
| 23) 2-butanone | 5.51 | 72 | 62768 | 50.63 | ug/L | | 100 |
| 24) methyl acrylate | 5.61 | 55 | 583445 | 52.71 | ug/L | # | 100 |
| 25) chloroform | 5.91 | 83 | 900529 | 55.27 | ug/L | | 100 |
| 27) 1,1,1-trichloroethane | 6.09 | 97 | 697118 | 61.95 | ug/L | | 100 |
| 28) cyclohexane | 6.12 | 56 | 990617 | 55.33 | ug/L | | 100 |
| 29) carbon tetrachloride | 6.30 | 117 | 446841 | 53.16 | ug/L | | 100 |
| 31) benzene | 6.60 | 78 | 1997835 | 51.91 | ug/L | | 100 |
| 32) 1,1-dichloropropene | 6.31 | 75 | 764545 | 55.94 | ug/L | | 100 |
| 33) 1,2-dichloroethane | 6.68 | 62 | 770123 | 62.82 | ug/L | | 100 |
| 34) trichloroethene | 7.53 | 95 | 509240 | 58.77 | ug/L | | 100 |
| 35) ethyl acrylate | 7.71 | 55 | 898677 | 59.85 | ug/L | | 100 |
| 36) 1,2-dichloropropane | 7.88 | 63 | 590616 | 62.32 | ug/L | | 100 |
| 37) methyl methacrylate | 8.04 | 41 | 664359 | 61.58 | ug/L | | 100 |
| 38) dibromomethane | 8.08 | 93 | 333491 | 57.70 | ug/L | | 100 |
| 39) bromodichloromethane | 8.33 | 83 | 715097 | 62.03 | ug/L | | 100 |
| 40) 2-chloroethyl vinyl ether | 8.78 | 63 | 341879 | 95.12 | ug/L | | 100 |
| 42) cis-1,3-dichloropropene | 8.99 | 75 | 933539 | 47.47 | ug/L | | 100 |
| 43) 4-methyl-2-pentanone | 9.24 | 43 | 732525 | 49.22 | ug/L | | 100 |
| 45) toluene | 9.47 | 92 | 1351712 | 47.35 | ug/L | | 100 |

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

Data File : C:\HPCHEM\1\DATA\D060308\D060309.D Vial: 9
Acq On : 3 Jun 2008 12:30 pm Operator: BR
Sample : ,ical,ical-VOA-50 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:24 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:22:41 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 46) | 1,1,2-trichloroethane | 10.22 | 83 | 395025 | 46.80 | ug/L | 100 |
| 47) | 1,3-dichloropropane | 10.48 | 76 | 899897 | 49.32 | ug/L | 100 |
| 48) | tetrachloroethene | 10.35 | 164 | 357865 | 51.65 | ug/L | 100 |
| 49) | trans-1,3-dichloropropene | 9.91 | 75 | 762022 | 49.45 | ug/L | 100 |
| 50) | 2-hexanone | 10.61 | 43 | 530712 | 53.26 | ug/L | 100 |
| 51) | dibromochloromethane | 10.87 | 129 | 473385 | 51.42 | ug/L | 100 |
| 52) | 1,2-dibromoethane | 11.04 | 107 | 503408 | 52.05 | ug/L | 100 |
| 53) | chlorobenzene | 11.85 | 112 | 1261230 | 53.20 | ug/L | 100 |
| 54) | 1,1,1,2-tetrachloroethane | 12.01 | 131 | 419033 | 50.80 | ug/L | 100 |
| 55) | ethylbenzene | 12.02 | 91 | 2318572 | 52.81 | ug/L | 100 |
| 56) | m,p-xylene | 12.23 | 106 | 1751281 | 108.30 | ug/L | 100 |
| 57) | butyl acrylate | 12.92 | 55 | 1421024 | 53.05 | ug/L | 100 |
| 58) | o-xylene | 12.94 | 106 | 863134 | 56.39 | ug/L | 100 |
| 59) | styrene | 12.99 | 104 | 1498891 | 56.75 | ug/L | 100 |
| 60) | isopropylbenzene | 13.60 | 105 | 1964355 | 60.15 | ug/L | 100 |
| 61) | bromobenzene | 14.19 | 156 | 492121 | 61.18 | ug/L | 100 |
| 62) | bromoform | 13.38 | 173 | 310879 | 59.20 | ug/L | 100 |
| 64) | 1,2,3-trichloropropane | 14.34 | 75 | 510686 | 52.43 | ug/L | 100 |
| 65) | n-propylbenzene | 14.36 | 91 | 2741938 | 59.82 | ug/L | 100 |
| 66) | 2-chlorotoluene | 14.52 | 91 | 1633712 | 65.31 | ug/L | 100 |
| 67) | 4-chlorotoluene | 14.72 | 91 | 1836637 | 64.14 | ug/L | 100 |
| 68) | 1,3,5-trimethylbenzene | 14.67 | 105 | 1735958 | 66.24 | ug/L | 100 |
| 70) | 1,1,2,2-tetrachloroethane | 14.29 | 83 | 664176 | 43.68 | ug/L | 100 |
| 71) | tert-butylbenzene | 15.21 | 119 | 1441124 | 56.83 | ug/L | 100 |
| 72) | sec-butylbenzene | 15.57 | 105 | 2447646 | 57.28 | ug/L | 100 |
| 73) | 1,2,4-trimethylbenzene | 15.30 | 105 | 1846157 | 57.03 | ug/L | 100 |
| 74) | 1,3-dichlorobenzene | 15.77 | 146 | 893924 | 57.89 | ug/L | 100 |
| 75) | p-isopropyltoluene | 15.80 | 119 | 1816147 | 59.21 | ug/L | 100 |
| 76) | dicyclopentadiene | 15.90 | 66 | 2829028 | 51.09 | ug/L | 100 |
| 77) | 1,4-dichlorobenzene | 15.92 | 146 | 903860 | 52.58 | ug/L | 100 |
| 78) | 1,2-dichlorobenzene | 16.50 | 146 | 855259 | 59.72 | ug/L | 100 |
| 79) | n-butylbenzene | 16.44 | 91 | 2017115 | 60.26 | ug/L | 100 |
| 80) | 1,2-dibromo-3-chloropropan | 17.65 | 75 | 119620 | 58.92 | ug/L | 100 |
| 81) | 1,2,4-trichlorobenzene | 18.64 | 180 | 694335 | 88.32 | ug/L | 100 |
| 82) | hexachlorobutadiene | 18.80 | 225 | 337890 | 90.89 | ug/L | 100 |
| 83) | naphthalene | 18.93 | 128 | 1693861 | 83.53 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.19 | 180 | 633851 | 90.13 | ug/L | 100 |
| 85) | 2-methylnaphthalene | 20.15 | 142 | 914106 | 88.18 | ug/L | 100 |

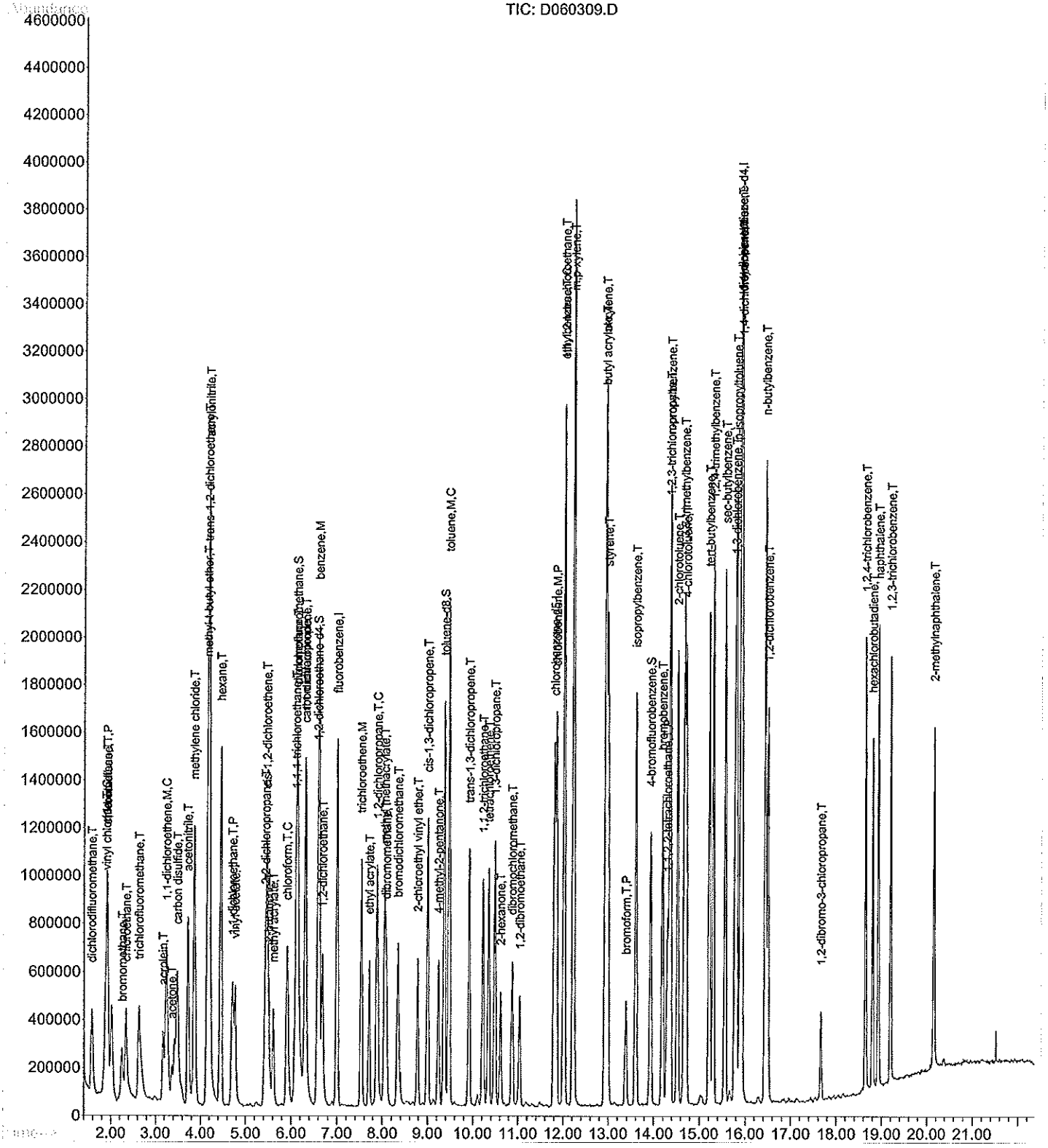
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D060308\D060309.D Vial: 9
Acq On : 3 Jun 2008 12:30 pm Operator: BR
Sample : ,ical,ical-VOA-50 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:24 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:22:41 2008
Response via : Initial Calibration

TIC: D060309.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060310.D Vial: 10
Acq On : 3 Jun 2008 1:06 pm Operator: BR
Sample : ,ical,ical-VOA-70 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:30 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:27:40 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 7.01 | 96 | 1952140 | 50.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.81 | 117 | 1332510 | 50.00 | ug/L | | 0.01 |
| 69) 1,4-dichlorobenzene-d4 | 15.89 | 152 | 600617 | 50.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.14 | 113 | 511506 | 47.25 | ug/L | | 0.00 |
| 30) 1,2-dichloroethane-d4 | 6.58 | 65 | 619348 | 50.89 | ug/L | | 0.00 |
| 44) toluene-d8 | 9.37 | 98 | 1703356 | 47.96 | ug/L | | 0.00 |
| 63) 4-bromofluorobenzene | 13.94 | 95 | 711216 | 54.24 | ug/L | | 0.01 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.57 | 85 | 1023089 | 76.21 | ug/L | | 94 |
| 3) chloromethane | 1.90 | 50 | 983797 | 62.61 | ug/L | | 98 |
| 4) vinyl chloride | 1.89 | 62 | 1207243 | 69.89 | ug/L | | 96 |
| 5) 1,3-butadiene | 1.92 | 39 | 837308 | 64.62 | ug/L | | 99 |
| 6) bromomethane | 2.25 | 94 | 298370 | 88.83 | ug/L | | 99 |
| 7) chloroethane | 2.34 | 64 | 647348 | 56.02 | ug/L | | 95 |
| 8) trichlorofluoromethane | 2.63 | 101 | 1167634 | 72.85 | ug/L | | 98 |
| 9) acrolein | 3.17 | 56 | 587924 | 453.89 | ug/L | | 97 |
| 10) 1,1-dichloroethene | 3.24 | 96 | 653647 | 58.76 | ug/L | | 93 |
| 11) acetone | 3.37 | 43 | 403848 | 53.62 | ug/L | | 99 |
| 12) carbon disulfide | 3.48 | 76 | 1846409 | 56.93 | ug/L | | 99 |
| 13) methylene chloride | 3.86 | 84 | 1130323 | 62.19 | ug/L | | 98 |
| 14) acrylonitrile | 4.19 | 53 | 3003431 | 476.25 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.17 | 96 | 708304 | 55.68 | ug/L | | 95 |
| 16) methyl-t-butyl ether | 4.15 | 73 | 2073603 | 61.93 | ug/L | | 100 |
| 17) acetonitrile | 3.72 | 41 | 1411739 | 554.16 | ug/L | | 98 |
| 18) hexane | 4.46 | 57 | 3220524 | 147.40 | ug/L | # | 98 |
| 19) 1,1-dichloroethane | 4.71 | 63 | 1397545 | 61.73 | ug/L | | 99 |
| 20) vinyl acetate | 4.78 | 43 | 1225457 | 66.22 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.47 | 96 | 791030 | 59.56 | ug/L | | 97 |
| 22) 2,2-dichloropropane | 5.44 | 77 | 1029942 | 68.07 | ug/L | | 98 |
| 23) 2-butanone | 5.51 | 72 | 92364 | 57.99 | ug/L | | 96 |
| 24) methyl acrylate | 5.61 | 55 | 828420 | 62.49 | ug/L | # | 99 |
| 25) chloroform | 5.91 | 83 | 1243293 | 62.08 | ug/L | | 98 |
| 27) 1,1,1-trichloroethane | 6.10 | 97 | 971190 | 68.10 | ug/L | | 99 |
| 28) cyclohexane | 6.14 | 56 | 1426019 | 65.64 | ug/L | | 98 |
| 29) carbon tetrachloride | 6.31 | 117 | 632864 | 66.34 | ug/L | | 99 |
| 31) benzene | 6.61 | 78 | 2699276 | 59.01 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.32 | 75 | 1072502 | 64.41 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.69 | 62 | 1069369 | 66.58 | ug/L | | 100 |
| 34) trichloroethene | 7.54 | 95 | 714095 | 64.15 | ug/L | | 99 |
| 35) ethyl acrylate | 7.71 | 55 | 1265443 | 66.09 | ug/L | | 98 |
| 36) 1,2-dichloropropane | 7.89 | 63 | 795929 | 64.12 | ug/L | | 99 |
| 37) methyl methacrylate | 8.05 | 41 | 933587 | 68.04 | ug/L | | 96 |
| 38) dibromomethane | 8.10 | 93 | 456859 | 62.85 | ug/L | | 98 |
| 39) bromodichloromethane | 8.34 | 83 | 963093 | 64.56 | ug/L | | 99 |
| 40) 2-chloroethyl vinyl ether | 8.79 | 63 | 472095 | 81.87 | ug/L | | 99 |
| 42) cis-1,3-dichloropropene | 9.00 | 75 | 1243883 | 58.41 | ug/L | | 99 |
| 43) 4-methyl-2-pentanone | 9.24 | 43 | 1029661 | 60.20 | ug/L | | 95 |
| 45) toluene | 9.48 | 92 | 1768209 | 58.75 | ug/L | | 98 |

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

CL 6/6/08



6/6/08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060310.D Vial: 10
Acq On : 3 Jun 2008 1:06 pm Operator: BR
Sample : ,ical,ical-VOA-70 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:30 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:27:40 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| | Compound | R.T. | QIon | Response | Conc Unit | Qvalue |
|---|---|---|---|---|---|---|
| 46) | 1,1,2-trichloroethane | 10.23 | 83 | 556534 | 59.30 ug/L | 96 |
| 47) | 1,3-dichloropropane | 10.50 | 76 | 1246344 | 59.67 ug/L | 100 |
| 48) | tetrachloroethene | 10.35 | 164 | 502155 | 61.97 ug/L | 95 |
| 49) | trans-1,3-dichloropropene | 9.92 | 75 | 1044756 | 59.99 ug/L | 99 |
| 50) | 2-hexanone | 10.62 | 43 | 741793 | 61.60 ug/L | 98 |
| 51) | dibromochloromethane | 10.88 | 129 | 641078 | 61.23 ug/L | 98 |
| 52) | 1,2-dibromoethane | 11.04 | 107 | 697526 | 61.60 ug/L | 100 |
| 53) | chlorobenzene | 11.85 | 112 | 1727301 | 60.86 ug/L | 99 |
| 54) | 1,1,1,2-tetrachloroethane | 12.02 | 131 | 574606 | 58.58 ug/L | 99 |
| 55) | ethylbenzene | 12.02 | 91 | 3133217 | 58.24 ug/L | 98 |
| 56) | m,p-xylene | 12.23 | 106 | 2338680 | 116.88 ug/L | 100 |
| 57) | butyl acrylate | 12.93 | 55 | 1944229 | 59.43 ug/L | 99 |
| 58) | o-xylene | 12.95 | 106 | 1140465 | 59.15 ug/L | 97 |
| 59) | styrene | 13.00 | 104 | 2040100 | 60.49 ug/L | 99 |
| 60) | isopropylbenzene | 13.61 | 105 | 2671944 | 63.71 ug/L | 100 |
| 61) | bromobenzene | 14.19 | 156 | 667609 | 63.89 ug/L | 99 |
| 62) | bromoform | 13.39 | 173 | 422623 | 64.99 ug/L | 98 |
| 64) | 1,2,3-trichloropropane | 14.35 | 75 | 717860 | 60.33 ug/L | 99 |
| 65) | n-propylbenzene | 14.37 | 91 | 3742286 | 62.33 ug/L | 100 |
| 66) | 2-chlorotoluene | 14.53 | 91 | 2197160 | 64.19 ug/L | 99 |
| 67) | 4-chlorotoluene | 14.72 | 91 | 2463025 | 62.78 ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.68 | 105 | 2323786 | 64.11 ug/L | 100 |
| 70) | 1,1,2,2-tetrachloroethane | 14.30 | 83 | 913237 | 59.93 ug/L | 97 |
| 71) | tert-butylbenzene | 15.22 | 119 | 1954485 | 65.12 ug/L | 100 |
| 72) | sec-butylbenzene | 15.57 | 105 | 3326936 | 64.26 ug/L | 99 |
| 73) | 1,2,4-trimethylbenzene | 15.31 | 105 | 2446588 | 62.99 ug/L | 100 |
| 74) | 1,3-dichlorobenzene | 15.78 | 146 | 1207888 | 63.31 ug/L | 99 |
| 75) | p-isopropyltoluene | 15.81 | 119 | 2452243 | 64.60 ug/L | 99 |
| 76) | dicyclopentadiene | 15.91 | 66 | 3863077 | 61.79 ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.93 | 146 | 1214646 | 60.59 ug/L | 99 |
| 78) | 1,2-dichlorobenzene | 16.50 | 146 | 1146332 | 64.41 ug/L | 98 |
| 79) | n-butylbenzene | 16.44 | 91 | 2695668 | 64.08 ug/L | 99 |
| 80) | 1,2-dibromo-3-chloropropan | 17.66 | 75 | 170904 | 68.46 ug/L | 90 |
| 81) | 1,2,4-trichlorobenzene | 18.65 | 180 | 918408 | 75.63 ug/L | 99 |
| 82) | hexachlorobutadiene | 18.81 | 225 | 432452 | 81.62 ug/L | 98 |
| 83) | naphthalene | 18.93 | 128 | 2313354 | 81.36 ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.20 | 180 | 845237 | 75.11 ug/L | 96 |
| 85) | 2-methylnaphthalene | 20.16 | 142 | 1286993 | 82.94 ug/L | 99 |

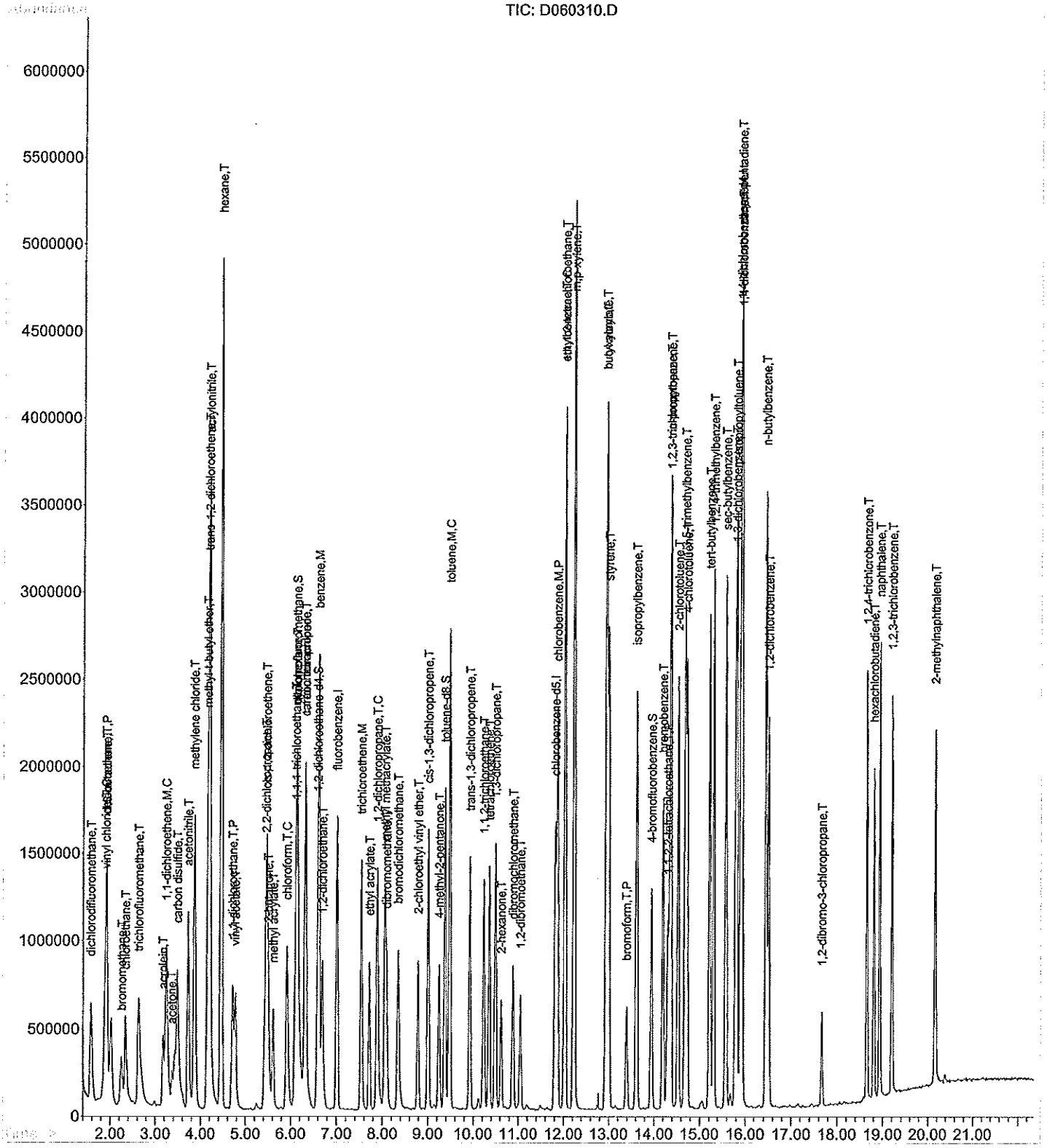
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D060308\D060310.D Vial: 10
Acq On : 3 Jun 2008 1:06 pm Operator: BR
Sample : ,ical,ical-VOA-70 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 13:30 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:32:30 2008
Response via : Initial Calibration

TIC: D060310.D



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060311.D Vial: 11
Acq On : 3 Jun 2008 1:41 pm Operator: BR
Sample : ,ical,ical-VOA-100 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 14:14 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:32:30 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 7.01 | 96 | 1950549 | 50.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.80 | 117 | 1297866 | 50.00 | ug/L | | 0.01 |
| 69) 1,4-dichlorobenzene-d4 | 15.89 | 152 | 595408 | 50.00 | ug/L | | 0.01 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.13 | 113 | 498164 | 46.57 | ug/L | | 0.00 |
| 30) 1,2-dichloroethane-d4 | 6.59 | 65 | 588250 | 47.88 | ug/L | | 0.01 |
| 44) toluene-d8 | 9.37 | 98 | 1663249 | 48.58 | ug/L | | 0.00 |
| 63) 4-bromofluorobenzene | 13.94 | 95 | 692482 | 53.02 | ug/L | | 0.01 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.57 | 85 | 1638550 | 118.33 | ug/L | | 99 |
| 3) chloromethane | 1.91 | 50 | 1510358 | 94.39 | ug/L | | 98 |
| 4) vinyl chloride | 1.89 | 62 | 1723519 | 98.12 | ug/L | | 97 |
| 5) 1,3-butadiene | 1.92 | 39 | 1340290 | 101.82 | ug/L | | 98 |
| 6) bromomethane | 2.24 | 94 | 434161 | 114.46 | ug/L | | 99 |
| 7) chloroethane | 2.35 | 64 | 339938 | 27.48 | ug/L | | 97 |
| 8) trichlorofluoromethane | 2.62 | 101 | 1784031 | 111.31 | ug/L | | 98 |
| 9) acrolein | 3.17 | 56 | 723369 | 613.33 | ug/L | | 97 |
| 10) 1,1-dichloroethene | 3.24 | 96 | 961558 | 87.96 | ug/L | | 98 |
| 11) acetone | 3.37 | 43 | 462210 | 61.94 | ug/L | | 95 |
| 12) carbon disulfide | 3.48 | 76 | 2718070 | 85.24 | ug/L | | 99 |
| 13) methylene chloride | 3.86 | 84 | 1420748 | 80.19 | ug/L | | 99 |
| 14) acrylonitrile | 4.20 | 53 | 3668209 | 640.83 | ug/L | | 100 |
| 15) trans-1,2-dichloroethene | 4.17 | 96 | 1026813 | 83.50 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.16 | 73 | 2649272 | 80.82 | ug/L | | 98 |
| 17) acetonitrile | 3.72 | 41 | 1681851 | 685.66 | ug/L | | 100 |
| 18) hexane | 4.46 | 57 | 2467922 | 91.56 | ug/L | # | 99 |
| 19) 1,1-dichloroethane | 4.71 | 63 | 1941768 | 85.88 | ug/L | | 98 |
| 20) vinyl acetate | 4.77 | 43 | 1523813 | 81.11 | ug/L | | 99 |
| 21) cis-1,2-dichloroethene | 5.47 | 96 | 1072548 | 81.75 | ug/L | | 95 |
| 22) 2,2-dichloropropane | 5.44 | 77 | 1548541 | 100.45 | ug/L | | 99 |
| 23) 2-butanone | 5.51 | 72 | 110386 | 70.62 | ug/L | | 84 |
| 24) methyl acrylate | 5.61 | 55 | 1024779 | 78.06 | ug/L | # | 99 |
| 25) chloroform | 5.91 | 83 | 1720119 | 85.67 | ug/L | | 99 |
| 27) 1,1,1-trichloroethane | 6.10 | 97 | 1431304 | 98.79 | ug/L | | 99 |
| 28) cyclohexane | 6.13 | 56 | 2288999 | 104.34 | ug/L | | 96 |
| 29) carbon tetrachloride | 6.31 | 117 | 936690 | 98.14 | ug/L | | 95 |
| 31) benzene | 6.61 | 78 | 3747698 | 82.89 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.31 | 75 | 1559252 | 93.06 | ug/L | | 100 |
| 33) 1,2-dichloroethane | 6.69 | 62 | 1427209 | 87.73 | ug/L | | 99 |
| 34) trichloroethene | 7.54 | 95 | 1011204 | 90.12 | ug/L | | 100 |
| 35) ethyl acrylate | 7.72 | 55 | 1525978 | 78.72 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.89 | 63 | 1098692 | 87.51 | ug/L | | 98 |
| 37) methyl methacrylate | 8.05 | 41 | 1164788 | 83.22 | ug/L | | 99 |
| 38) dibromomethane | 8.09 | 93 | 586872 | 80.31 | ug/L | | 99 |
| 39) bromodichloromethane | 8.34 | 83 | 1334231 | 88.29 | ug/L | | 99 |
| 40) 2-chloroethyl vinyl ether | 8.79 | 63 | 607988 | 96.67 | ug/L | | 99 |
| 42) cis-1,3-dichloropropene | 9.00 | 75 | 1702735 | 82.95 | ug/L | | 98 |
| 43) 4-methyl-2-pentanone | 9.24 | 43 | 1201856 | 73.05 | ug/L | | 96 |
| 45) toluene | 9.48 | 92 | 2353513 | 81.15 | ug/L | | 98 |

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



6/4/08

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D060308\D060311.D Vial: 11
Acq On : 3 Jun 2008 1:41 pm Operator: BR
Sample : ,ical,ical-VOA-100 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 14:14 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:32:30 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| | Compound | R.T. | QIon | Response | Conc Unit | Qvalue |
|---|---|---|---|---|---|---|
| 46) | 1,1,2-trichloroethane | 10.23 | 83 | 698406 | 77.61 ug/L | 97 |
| 47) | 1,3-dichloropropane | 10.49 | 76 | 1614919 | 80.25 ug/L | 100 |
| 48) | tetrachloroethene | 10.35 | 164 | 725457 | 91.96 ug/L | 96 |
| 49) | trans-1,3-dichloropropene | 9.92 | 75 | 1407113 | 83.65 ug/L | 99 |
| 50) | 2-hexanone | 10.61 | 43 | 856141 | 72.32 ug/L | 98 |
| 51) | dibromochloromethane | 10.88 | 129 | 870782 | 85.16 ug/L | 97 |
| 52) | 1,2-dibromoethane | 11.04 | 107 | 895732 | 81.81 ug/L | 100 |
| 53) | chlorobenzene | 11.85 | 112 | 2405893 | 87.79 ug/L | 100 |
| 54) | 1,1,1,2-tetrachloroethane | 12.02 | 131 | 795274 | 84.84 ug/L | 99 |
| 55) | ethylbenzene | 12.03 | 91 | 4317854 | 83.67 ug/L | 99 |
| 56) | m,p-xylene | 12.24 | 106 | 3211561 | 166.71 ug/L | 97 |
| 57) | butyl acrylate | 12.93 | 55 | 2456263 | 78.90 ug/L | 99 |
| 58) | o-xylene | 12.95 | 106 | 1566779 | 83.94 ug/L | 98 |
| 59) | styrene | 13.00 | 104 | 2790237 | 85.44 ug/L | 99 |
| 60) | isopropylbenzene | 13.62 | 105 | 3804753 | 92.53 ug/L | 100 |
| 61) | bromobenzene | 14.19 | 156 | 910787 | 87.60 ug/L | 99 |
| 62) | bromoform | 13.39 | 173 | 555611 | 87.91 ug/L | 98 |
| 64) | 1,2,3-trichloropropane | 14.35 | 75 | 865763 | 74.91 ug/L | 94 |
| 65) | n-propylbenzene | 14.37 | 91 | 5320455 | 90.32 ug/L | 100 |
| 66) | 2-chlorotoluene | 14.53 | 91 | 3112129 | 92.15 ug/L | 99 |
| 67) | 4-chlorotoluene | 14.72 | 91 | 3472602 | 90.50 ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.68 | 105 | 3320709 | 93.17 ug/L | 100 |
| 70) | 1,1,2,2-tetrachloroethane | 14.30 | 83 | 1120165 | 76.07 ug/L | 98 |
| 71) | tert-butylbenzene | 15.21 | 119 | 2841248 | 95.59 ug/L | 99 |
| 72) | sec-butylbenzene | 15.58 | 105 | 4838586 | 94.19 ug/L | 99 |
| 73) | 1,2,4-trimethylbenzene | 15.31 | 105 | 3384881 | 88.27 ug/L | 100 |
| 74) | 1,3-dichlorobenzene | 15.78 | 146 | 1699886 | 89.17 ug/L | 98 |
| 75) | p-isopropyltoluene | 15.81 | 119 | 3543238 | 93.78 ug/L | 99 |
| 76) | dicyclopentadiene | 15.91 | 66 | 5463608 | 89.03 ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.93 | 146 | 1674363 | 84.45 ug/L | 99 |
| 78) | 1,2-dichlorobenzene | 16.50 | 146 | 1592565 | 88.93 ug/L | 99 |
| 79) | n-butylbenzene | 16.45 | 91 | 3958523 | 94.42 ug/L | 98 |
| 80) | 1,2-dibromo-3-chloropropan | 17.66 | 75 | 195783 | 76.51 ug/L | 89 |
| 81) | 1,2,4-trichlorobenzene | 18.65 | 180 | 1310921 | 100.45 ug/L | 97 |
| 82) | hexachlorobutadiene | 18.81 | 225 | 702983 | 121.01 ug/L | 96 |
| 83) | naphthalene | 18.94 | 128 | 2897583 | 93.74 ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.20 | 180 | 1183816 | 97.42 ug/L | 98 |
| 85) | 2-methylnaphthalene | 20.16 | 142 | 1652570 | 98.23 ug/L | 98 |

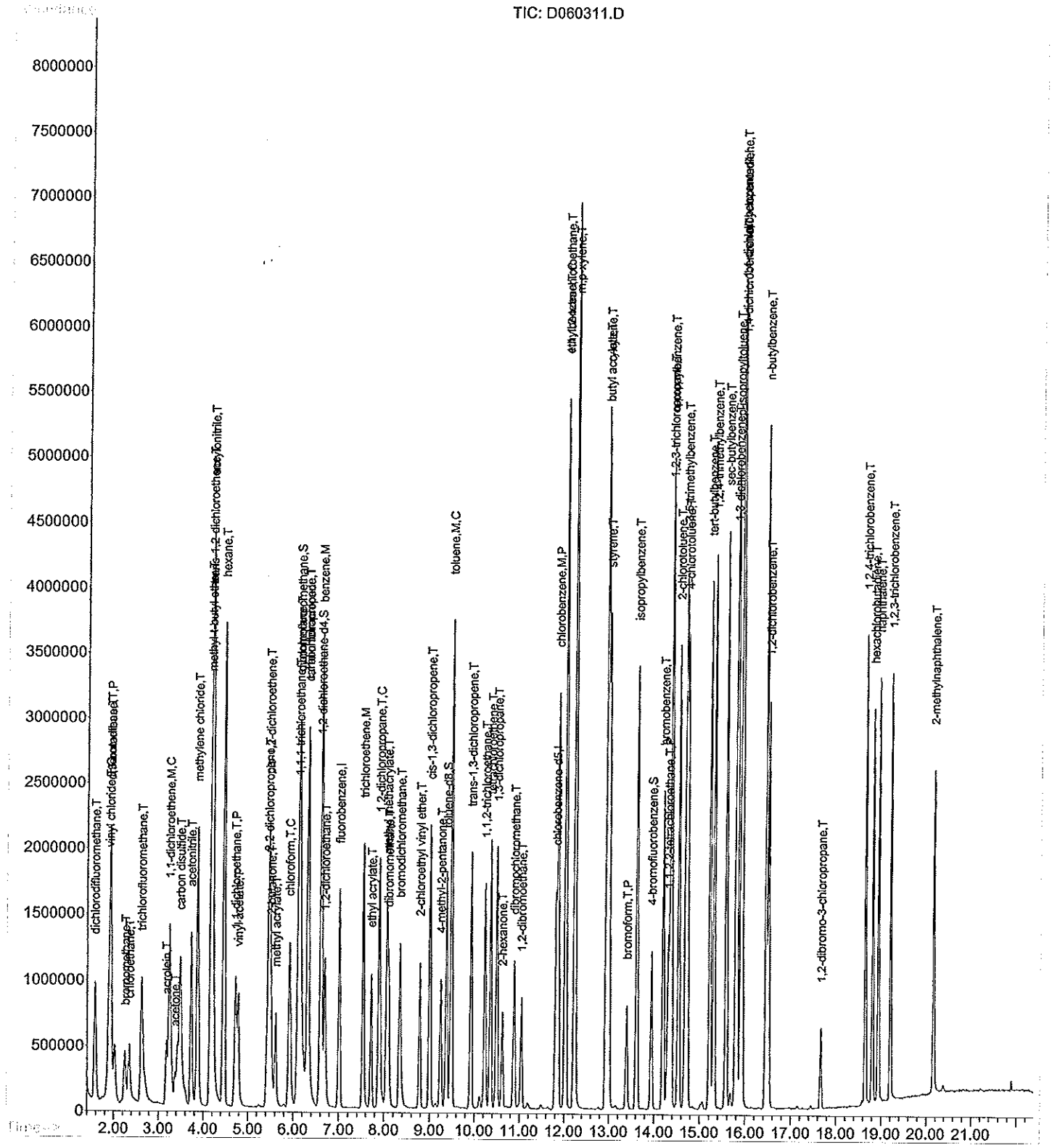
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D060308\D060311.D Vial: 11
Acq On : 3 Jun 2008 1:41 pm Operator: BR
Sample : ,ical,ical-VOA-100 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 14:14 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 13:32:30 2008
Response via : Initial Calibration

TIC: D060311.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\d060308\D060312.D Vial: 12
Acq On : 3 Jun 2008 2:28 pm Operator: BR
Sample : ,ical,ical-VOA-200 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 14:55 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 14:19:45 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 7.01 | 96 | 1692847 | 50.00 | ug/L | | 0.00 |
| 41) chlorobenzene-d5 | 11.81 | 117 | 1180863 | 50.00 | ug/L | | 0.01 |
| 69) 1,4-dichlorobenzene-d4 | 15.89 | 152 | 515034 | 50.00 | ug/L | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.14 | 113 | 450291 | 49.50 | ug/L | | 0.00 |
| 30) 1,2-dichloroethane-d4 | 6.58 | 65 | 535121 | 50.10 | ug/L | | 0.00 |
| 44) toluene-d8 | 9.37 | 98 | 1483913 | 48.49 | ug/L | | 0.00 |
| 63) 4-bromofluorobenzene | 13.94 | 95 | 635108 | 51.63 | ug/L | | 0.01 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.57 | 85 | 2747517 | 219.27 | ug/L | | 99 |
| 3) chloromethane | 1.91 | 50 | 3056880m | 214.30 | ug/L | | |
| 4) vinyl chloride | 1.88 | 62 | 3112944 | 203.99 | ug/L | | 94 |
| 5) 1,3-butadiene | 1.91 | 39 | 2205114 | 191.31 | ug/L | | 98 |
| 6) bromomethane | 2.25 | 94 | 885095 | 244.12 | ug/L | | 99 |
| 7) chloroethane | 2.33 | 64 | 567525 | 52.86 | ug/L | | 86 |
| 8) trichlorofluoromethane | 2.60 | 101 | 3183458 | 227.95 | ug/L | | 94 |
| 9) acrolein | 3.17 | 56 | 1467868 | 1617.51 | ug/L | | 98 |
| 10) 1,1-dichloroethene | 3.23 | 96 | 1841310 | 200.24 | ug/L | | 97 |
| 11) acetone | 3.38 | 43 | 895920 | 141.82 | ug/L | | 98 |
| 12) carbon disulfide | 3.47 | 76 | 5140781 | 191.90 | ug/L | | 100 |
| 13) methylene chloride | 3.86 | 84 | 2377419 | 161.64 | ug/L | | 99 |
| 14) acrylonitrile | 4.21 | 53 | 7248169 | 1615.70 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.16 | 96 | 1948695 | 188.37 | ug/L | | 99 |
| 16) methyl-t-butyl ether | 4.16 | 73 | 5514172 | 198.65 | ug/L | | 98 |
| 17) acetonitrile | 3.72 | 41 | 3446155 | 1708.16 | ug/L | | 99 |
| 18) hexane | 4.45 | 57 | 3498895 | 144.21 | ug/L | # | 98 |
| 19) 1,1-dichloroethane | 4.71 | 63 | 3893544 | 200.59 | ug/L | | 99 |
| 20) vinyl acetate | 4.78 | 43 | 3206089 | 199.72 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.47 | 96 | 2160299 | 194.25 | ug/L | | 98 |
| 22) 2,2-dichloropropane | 5.43 | 77 | 3021263 | 222.52 | ug/L | | 100 |
| 23) 2-butanone | 5.51 | 72 | 234019 | 179.06 | ug/L | | 94 |
| 24) methyl acrylate | 5.61 | 55 | 2064960 | 186.21 | ug/L | # | 99 |
| 25) chloroform | 5.91 | 83 | 3409954 | 199.28 | ug/L | | 98 |
| 27) 1,1,1-trichloroethane | 6.10 | 97 | 2747095 | 217.37 | ug/L | | 100 |
| 28) cyclohexane | 6.12 | 56 | 3717026 | 192.64 | ug/L | | 95 |
| 29) carbon tetrachloride | 6.30 | 117 | 1858433 | 227.58 | ug/L | | 98 |
| 31) benzene | 6.61 | 78 | 6958377 | 180.09 | ug/L | | 99 |
| 32) 1,1-dichloropropene | 6.32 | 75 | 2872076 | 199.00 | ug/L | | 99 |
| 33) 1,2-dichloroethane | 6.69 | 62 | 2936482 | 207.22 | ug/L | | 100 |
| 34) trichloroethene | 7.53 | 95 | 1891554 | 193.86 | ug/L | | 98 |
| 35) ethyl acrylate | 7.72 | 55 | 3091520 | 186.69 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.89 | 63 | 2118596 | 194.89 | ug/L | | 97 |
| 37) methyl methacrylate | 8.05 | 41 | 2299720 | 188.03 | ug/L | | 96 |
| 38) dibromomethane | 8.09 | 93 | 1135852 | 182.55 | ug/L | | 97 |
| 39) bromodichloromethane | 8.34 | 83 | 2649342 | 202.44 | ug/L | | 100 |
| 40) 2-chloroethyl vinyl ether | 8.79 | 63 | 1316623 | 228.91 | ug/L | | 100 |
| 42) cis-1,3-dichloropropene | 9.00 | 75 | 3278204 | 179.82 | ug/L | | 98 |
| 43) 4-methyl-2-pentanone | 9.25 | 43 | 2504689 | 172.10 | ug/L | | 95 |
| 45) toluene | 9.47 | 92 | 4509515 | 175.05 | ug/L | | 96 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\d060308\D060312.D Vial: 12
Acq On : 3 Jun 2008 2:28 pm Operator: BR
Sample : ,ical,ical-VOA-200 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 14:55 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 14:19:45 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Compound | R.T. | QIon | Response | Conc Unit | Qvalue |
|---|---|---|---|---|---|
| 46) 1,1,2-trichloroethane | 10.23 | 83 | 1397173 | 176.71 ug/L | 95 |
| 47) 1,3-dichloropropane | 10.49 | 76 | 3224559 | 182.11 ug/L | 100 |
| 48) tetrachloroethene | 10.35 | 164 | 1350251 | 189.97 ug/L | 96 |
| 49) trans-1,3-dichloropropene | 9.92 | 75 | 2853766 | 192.24 ug/L | 99 |
| 50) 2-hexanone | 10.62 | 43 | 1825729 | 173.57 ug/L | 99 |
| 51) dibromochloromethane | 10.88 | 129 | 1776231 | 194.93 ug/L | 97 |
| 52) 1,2-dibromoethane | 11.04 | 107 | 1792523 | 183.70 ug/L | 100 |
| 53) chlorobenzene | 11.86 | 112 | 4643200 | 186.44 ug/L | 97 |
| 54) 1,1,1,2-tetrachloroethane | 12.02 | 131 | 1571188 | 187.62 ug/L | 97 |
| 55) ethylbenzene | 12.02 | 91 | 7926302 | 171.09 ug/L | 99 |
| 56) m,p-xylene | 12.23 | 106 | 5998529 | 345.03 ug/L | 94 |
| 57) butyl acrylate | 12.93 | 55 | 4729358 | 170.71 ug/L | 98 |
| 58) o-xylene | 12.95 | 106 | 2990884 | 176.43 ug/L | 98 |
| 59) styrene | 12.99 | 104 | 5385886 | 182.20 ug/L | 98 |
| 60) isopropylbenzene | 13.61 | 105 | 7002326 | 185.30 ug/L | 98 |
| 61) bromobenzene | 14.19 | 156 | 1833924 | 192.97 ug/L | 98 |
| 62) bromoform | 13.39 | 173 | 1198113 | 210.23 ug/L | 98 |
| 64) 1,2,3-trichloropropane | 14.34 | 75 | 1750410 | 169.23 ug/L | 96 |
| 65) n-propylbenzene | 14.37 | 91 | 9521062 | 176.33 ug/L | 98 |
| 66) 2-chlorotoluene | 14.53 | 91 | 5883329 | 187.61 ug/L | 98 |
| 67) 4-chlorotoluene | 14.72 | 91 | 6518406 | 184.01 ug/L | 98 |
| 68) 1,3,5-trimethylbenzene | 14.68 | 105 | 6095999 | 184.38 ug/L | 98 |
| 70) 1,1,2,2-tetrachloroethane | 14.30 | 83 | 2258136 | 182.92 ug/L | 99 |
| 71) tert-butylbenzene | 15.22 | 119 | 5243963 | 200.79 ug/L | 99 |
| 72) sec-butylbenzene | 15.57 | 105 | 8468627 | 188.73 ug/L | 97 |
| 73) 1,2,4-trimethylbenzene | 15.31 | 105 | 6342726 | 189.44 ug/L | 99 |
| 74) 1,3-dichlorobenzene | 15.78 | 146 | 3259041 | 196.08 ug/L | 97 |
| 75) p-isopropyltoluene | 15.81 | 119 | 6351607 | 191.94 ug/L | 97 |
| 76) dicyclopentadiene | 15.90 | 66 | 9097424 | 170.47 ug/L | 97 |
| 77) 1,4-dichlorobenzene | 15.93 | 146 | 3258229 | 191.48 ug/L | 99 |
| 78) 1,2-dichlorobenzene | 16.50 | 146 | 3113006 | 198.58 ug/L | 97 |
| 79) n-butylbenzene | 16.44 | 91 | 6929327 | 188.49 ug/L | 95 |
| 80) 1,2-dibromo-3-chloropropan | 17.66 | 75 | 394803 | 176.62 ug/L | 84 |
| 81) 1,2,4-trichlorobenzene | 18.64 | 180 | 2546632 | 211.90 ug/L | 98 |
| 82) hexachlorobutadiene | 18.81 | 225 | 1323881 | 238.24 ug/L | 96 |
| 83) naphthalene | 18.93 | 128 | 5524592 | 195.31 ug/L | 100 |
| 84) 1,2,3-trichlorobenzene | 19.20 | 180 | 2327319 | 208.84 ug/L | 98 |
| 85) 2-methylnaphthalene | 20.16 | 142 | 3125918 | 199.99 ug/L | 97 |

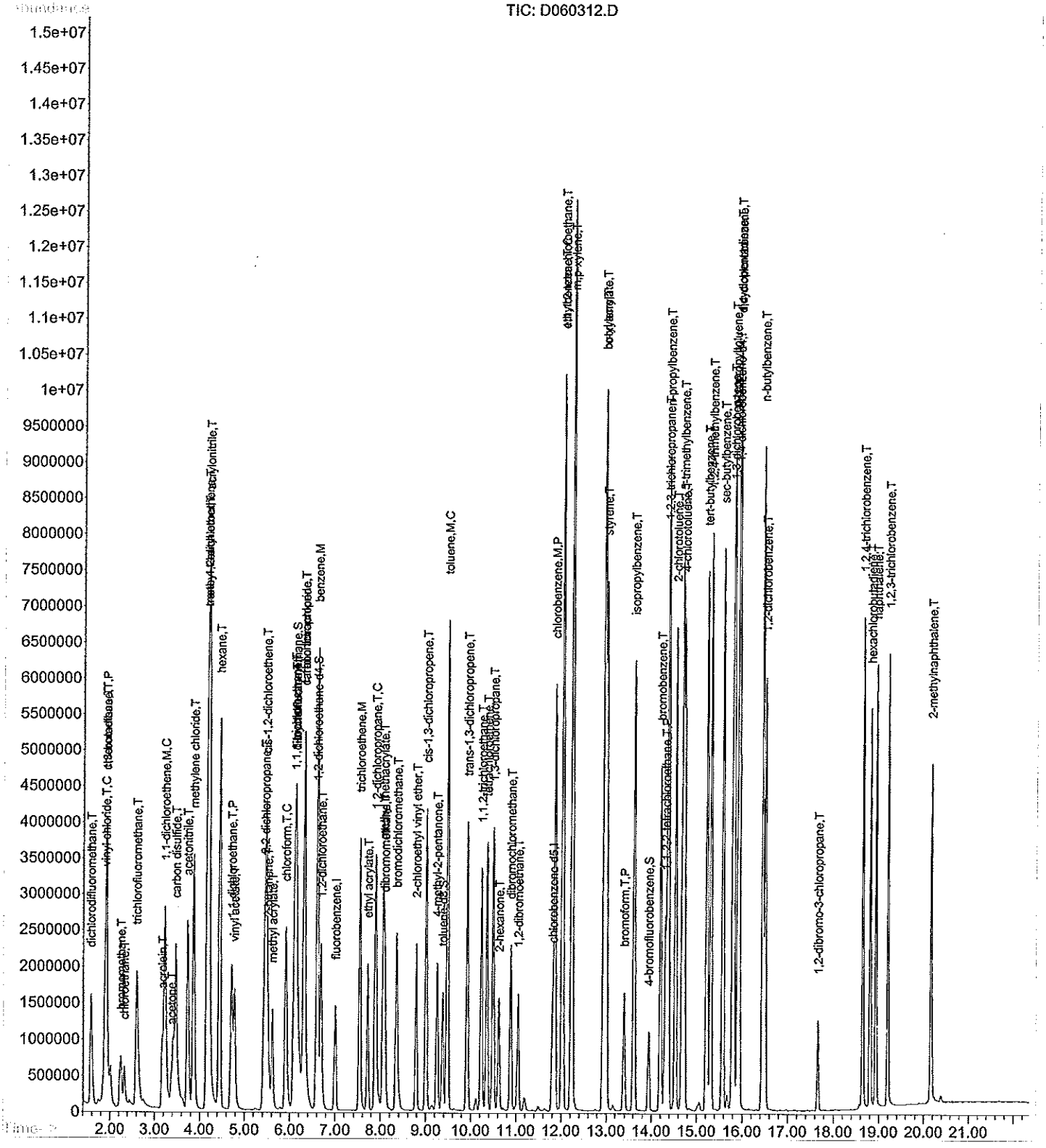
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\d060308\D060312.D Vial: 12
Acq On : 3 Jun 2008 2:28 pm Operator: BR
Sample : ,ical,ical-VOA-200 ppb,1, Inst : VOA 4
Misc : 8260+_w Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 3 14:55 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 05/21/08
Last Update : Tue Jun 03 14:19:45 2008
Response via : Initial Calibration

TIC: D060312.D



# CONTINUING CALIBRATION RAW DATA

# Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D072208\D072202.D  Vial: 2
Acq On : 22 Jul 2008 7:08 am  Operator: CR
Sample : ,CCV,CCV-50ppb,1,  Inst : VOA 4
Misc : 8260_W  Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | fluorobenzene | 1.000 | 1.000 | 0.0 | 61 | -0.02 |
| 2 | T | dichlorodifluoromethane | 0.384 | 0.482 | -25.5# | 83 | 0.00 |
| 3 | T,P | chloromethane | 0.442 | 0.475 | -7.5 | 62 | -0.06 |
| 4 | T,C | vinyl chloride | 0.450 | 0.438 | 2.7 | 60 | 0.00 |
| 5 | T | 1,3-butadiene | 0.339 | 0.237 | 30.1# | 45# | 0.00 |
| 6 | T | bromomethane | 0.120 | 0.130 | -8.3 | 70 | 0.00 |
| 7 | T | chloroethane | 0.317 | 0.263 | 17.0 | 52 | 0.01 |
| 8 | T | trichlorofluoromethane | 0.417 | 0.471 | -12.9 | 70 | 0.00 |
| 9 | T | acrolein | 0.023 | 0.026 | -13.0 | 68 | -0.01 |
| 10 | T,C | 1,1-dichloroethene | 0.265 | 0.273 | -3.0 | 64 | 0.00 |
| 11 | T | acetone | 0.182 | 0.136 | 25.3# | 48# | -0.02 |
| 12 | T | carbon disulfide | 0.774 | 1.028 | -32.8# | 84 | 0.00 |
| 13 | T | methylene chloride | 0.419 | 0.334 | 20.3# | 48# | 0.00 |
| 14 | T | acrylonitrile | 0.119 | 0.122 | -2.5 | 62 | -0.02 |
| 15 | T | trans-1,2-dichloroethene | 0.296 | 0.294 | 0.7 | 61 | -0.01 |
| 16 | T | methyl-t-butyl ether | 0.813 | 0.709 | 12.8 | 52 | -0.01 |
| 17 | T | acetonitrile | 0.056 | 0.038 | 32.1# | 40# | -0.01 |
| 18 | T | hexane | 0.712 | 0.412 | 42.1# | 47# | 0.00 |
| 19 | T,P | 1,1-dichloroethane | 0.571 | 0.563 | 1.4 | 60 | -0.01 |
| 20 | T | vinyl acetate | 0.475 | 0.306 | 35.6# | 39# | -0.01 |
| 21 | T | cis-1,2-dichloroethene | 0.325 | 0.326 | -0.3 | 62 | -0.02 |
| 22 | T | 2,2-dichloropropane | 0.411 | 0.406 | 1.2 | 60 | -0.01 |
| 23 | T | 2-butanone | 0.037 | 0.031 | 16.2 | 55 | -0.02 |
| 24 | T | methyl acrylate | 0.319 | 0.237 | 25.7# | 45# | -0.02 |
| 25 | T,C | chloroform | 0.506 | 0.504 | 0.4 | 61 | -0.02 |
| 26 | S | dibromofluoromethane | 0.265 | 0.277 | -4.5 | 64 | -0.02 |
| 27 | T | 1,1,1-trichloroethane | 0.385 | 0.406 | -5.5 | 64 | -0.02 |
| 28 | T | cyclohexane | 0.578 | 0.481 | 16.8 | 53 | -0.02 |
| 29 | T | carbon tetrachloride | 0.244 | 0.284 | -16.4 | 70 | -0.02 |
| 30 | S | 1,2-dichloroethane-d4 | 0.320 | 0.315 | 1.6 | 60 | -0.02 |
| 31 | T | benzene | 1.133 | 1.181 | -4.2 | 65 | -0.02 |
| 32 | T | 1,1-dichloropropene | 0.429 | 0.423 | 1.4 | 61 | -0.01 |
| 33 | T | 1,2-dichloroethane | 0.430 | 0.410 | 4.7 | 58 | -0.02 |
| 34 | T | trichloroethene | 0.290 | 0.296 | -2.1 | 64 | -0.02 |
| 35 | T | ethyl acrylate | 0.488 | 0.375 | 23.2# | 46# | -0.02 |
| 36 | T,C | 1,2-dichloropropane | 0.327 | 0.316 | 3.4 | 59 | -0.02 |
| 37 | T | methyl methacrylate | 0.364 | 0.274 | 24.7# | 45# | -0.02 |
| 38 | T | dibromomethane | 0.183 | 0.176 | 3.8 | 58 | -0.02 |
| 39 | T | bromodichloromethane | 0.395 | 0.385 | 2.5 | 59 | -0.02 |
| 40 | T | 2-chloroethyl vinyl ether | 0.181 | 0.175 | 3.3 | 56 | -0.02 |
| 41 | I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 62 | -0.02 |
| 42 | T | cis-1,3-dichloropropene | 0.745 | 0.658 | 11.7 | 55 | -0.02 |
| 43 | T | 4-methyl-2-pentanone | 0.601 | 0.437 | 27.3# | 46# | -0.04 |
| 44 | S | toluene-d8 | 1.269 | 1.282 | -1.0 | 63 | -0.02 |
| 45 | T,C | toluene | 1.058 | 0.991 | 6.3 | 57 | -0.02 |
| 46 | T | 1,1,2-trichloroethane | 0.321 | 0.284 | 11.5 | 56 | -0.03 |
| 47 | T | 1,3-dichloropropane | 0.736 | 0.638 | 13.3 | 55 | -0.02 |
| 48 | T | tetrachloroethene | 0.292 | 0.310 | -6.2 | 67 | -0.02 |
| 49 | T | trans-1,3-dichloropropene | 0.615 | 0.514 | 16.4 | 52 | -0.02 |
| 50 | T | 2-hexanone | 0.434 | 0.306 | 29.5# | 45# | -0.03 |
| 51 | T | dibromochloromethane | 0.377 | 0.363 | 3.7 | 59 | -0.02 |
| 52 | T | 1,2-dibromoethane | 0.407 | 0.362 | 11.1 | 56 | -0.03 |
| 53 | T,P | chlorobenzene | 1.038 | 1.041 | -0.3 | 64 | -0.03 |

(#) = Out of Range



7/24/09

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D072208\D072202.D  Vial: 2
Acq On : 22 Jul 2008 7:08 am  Operator: CR
Sample : ,CCV,CCV-50ppb,1,  Inst : VOA 4
Misc : 8260_W  Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| T | 1,1,1,2-tetrachloroethane | 0.343 | 0.344 | -0.3 | 64 | -0.02 |
| T,C | ethylbenzene | 1.899 | 1.860 | 2.1 | 62 | -0.03 |
| T | m,p-xylene | 0.710 | 0.699 | 1.5 | 62 | -0.03 |
| T | butyl acrylate | 1.128 | 0.886 | 21.5# | 48# | -0.02 |
| T | o-xylene | 0.698 | 0.675 | 3.3 | 61 | -0.02 |
| T | styrene | 1.228 | 1.188 | 3.3 | 61 | -0.02 |
| T | isopropylbenzene | 1.607 | 1.581 | 1.6 | 62 | -0.03 |
| T | bromobenzene | 0.402 | 0.407 | -1.2 | 64 | -0.03 |
| T,P | bromoform | 0.242 | 0.232 | 4.1 | 58 | -0.03 |
| S | 4-bromofluorobenzene | 0.536 | 0.544 | -1.5 | 63 | -0.03 |
| T | 1,2,3-trichloropropane | 0.429 | 0.339 | 21.0# | 51 | -0.03 |
| T | n-propylbenzene | 2.275 | 2.212 | 2.8 | 63 | -0.03 |
| T | 2-chlorotoluene | 1.336 | 1.301 | 2.6 | 62 | -0.02 |
| T | 4-chlorotoluene | 1.501 | 1.495 | 0.4 | 63 | -0.03 |
| T | 1,3,5-trimethylbenzene | 1.413 | 1.428 | -1.1 | 64 | -0.02 |
| I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 64 | -0.03 |
| T,P | 1,1,2,2-tetrachloroethane | 1.184 | 0.903 | 23.7# | 50 | -0.03 |
| T | tert-butylbenzene | 2.590 | 2.564 | 1.0 | 66 | -0.03 |
| T | sec-butylbenzene | 4.381 | 4.194 | 4.3 | 63 | -0.03 |
| T | 1,2,4-trimethylbenzene | 3.264 | 3.122 | 4.4 | 63 | -0.03 |
| T | 1,3-dichlorobenzene | 1.627 | 1.594 | 2.0 | 66 | -0.02 |
| T | p-isopropyltoluene | 3.230 | 3.265 | -1.1 | 67 | -0.02 |
| T | dicyclopentadiene | 5.108 | 4.180 | 18.2 | 55 | -0.03 |
| T | 1,4-dichlorobenzene | 1.648 | 1.631 | 1.0 | 67 | -0.02 |
| T | 1,2-dichlorobenzene | 1.542 | 1.490 | 3.4 | 65 | -0.03 |
| T | n-butylbenzene | 3.605 | 3.439 | 4.6 | 63 | -0.02 |
| T | 1,2-dibromo-3-chloropropane | 0.225 | 0.150 | 33.3# | 46# | -0.02 |
| T | 1,2,4-trichlorobenzene | 1.248 | 1.233 | 1.2 | 66 | -0.02 |
| T | hexachlorobutadiene | 0.593 | 0.673 | -13.5 | 74 | -0.02 |
| T | naphthalene | 2.916 | 2.209 | 24.2# | 48# | -0.02 |
| T | 1,2,3-trichlorobenzene | 1.160 | 1.100 | 5.2 | 64 | -0.02 |
| T | 2-methylnaphthalene | 1.623 | 0.969 | 40.3# | 39# | -0.02 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072202.D Vial: 2
Acq On : 22 Jul 2008 7:08 am Operator: CR
Sample : ,CCV,CCV-50ppb,1, Inst : VOA 4
Misc : 8260_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 7:41 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 6.98 | 96 | 1098585 | 50.00 | ug/L | | -0.02 |
| 41) chlorobenzene-d5 | 11.77 | 117 | 775723 | 50.00 | ug/L | | -0.02 |
| 69) 1,4-dichlorobenzene-d4 | 15.85 | 152 | 370193 | 50.00 | ug/L | | -0.03 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.11 | 113 | 304799 | 52.32 | ug/L | | -0.02 |
| 30) 1,2-dichloroethane-d4 | 6.55 | 65 | 346290 | 49.18 | ug/L | | -0.02 |
| 44) toluene-d8 | 9.34 | 98 | 994165 | 50.48 | ug/L | | -0.02 |
| 63) 4-bromofluorobenzene | 13.90 | 95 | 422148 | 50.74 | ug/L | | -0.03 |
| **Target Compounds** | | | | | | | Qvalue |
| 2) dichlorodifluoromethane | 1.57 | 85 | 529271 | 62.80 | ug/L | | 99 |
| 3) chloromethane | 1.85 | 50 | 521731m1 | 53.75 | ug/L | | |
| 4) vinyl chloride | 1.88 | 62 | 481478 | 48.68 | ug/L | | 95 |
| 5) 1,3-butadiene | 1.91 | 39 | 260235 | 34.89 | ug/L | | 99 |
| 6) bromomethane | 2.24 | 94 | 142346 | 54.08 | ug/L | | 99 |
| 7) chloroethane | 2.35 | 64 | 288411 | 41.40 | ug/L | | 90 |
| 8) trichlorofluoromethane | 2.63 | 101 | 517675 | 56.44 | ug/L | | 93 |
| 9) acrolein | 3.15 | 56 | 290865 | 571.28 | ug/L | | 96 |
| 10) 1,1-dichloroethene | 3.24 | 96 | 299709 | 51.52 | ug/L | | 95 |
| 11) acetone | 3.34 | 43 | 149049 | 37.19 | ug/L | | 96 |
| 12) carbon disulfide | 3.48 | 76 | 1129794 | 66.46 | ug/L | | 99 |
| 13) methylene chloride | 3.85 | 84 | 367091 | 39.86 | ug/L | | 95 |
| 14) acrylonitrile | 4.17 | 53 | 1340234 | 513.01 | ug/L | | 99 |
| 15) trans-1,2-dichloroethene | 4.15 | 96 | 323392 | 49.72 | ug/L | | 100 |
| 16) methyl t-butyl ether | 4.14 | 73 | 779156 | 43.59 | ug/L | | 96 |
| 17) acetonitrile | 3.70 | 41 | 412126 | 332.09 | ug/L | | 99 |
| 18) hexane | 4.45 | 57 | 452606 | 28.94 | ug/L | # | 99 |
| 19) 1,1-dichloroethane | 4.70 | 63 | 618603 | 49.27 | ug/L | | 99 |
| 20) vinyl acetate | 4.76 | 43 | 336339 | 32.20 | ug/L | | 98 |
| 21) cis-1,2-dichloroethene | 5.44 | 96 | 358002 | 50.17 | ug/L | | 93 |
| 22) 2,2-dichloropropane | 5.41 | 77 | 446007 | 49.40 | ug/L | | 98 |
| 23) 2-butanone | 5.49 | 72 | 34294 | 41.82 | ug/L | | 97 |
| 24) methyl acrylate | 5.59 | 55 | 260205 | 37.12 | ug/L | # | 99 |
| 25) chloroform | 5.89 | 83 | 553508 | 49.80 | ug/L | | 100 |
| 27) 1,1,1-trichloroethane | 6.07 | 97 | 445967 | 52.68 | ug/L | | 95 |
| 28) cyclohexane | 6.10 | 56 | 528385 | 41.64 | ug/L | | 95 |
| 29) carbon tetrachloride | 6.28 | 117 | 312484 | 58.38 | ug/L | | 99 |
| 31) benzene | 6.59 | 78 | 1297797 | 52.12 | ug/L | | 98 |
| 32) 1,1-dichloropropene | 6.30 | 75 | 464345 | 49.32 | ug/L | | 97 |
| 33) 1,2-dichloroethane | 6.66 | 62 | 450094 | 47.62 | ug/L | | 100 |
| 34) trichloroethene | 7.51 | 95 | 325139 | 51.11 | ug/L | | 96 |
| 35) ethyl acrylate | 7.68 | 55 | 412134 | 38.44 | ug/L | | 99 |
| 36) 1,2-dichloropropane | 7.86 | 63 | 346739 | 48.31 | ug/L | | 98 |
| 37) methyl methacrylate | 8.02 | 41 | 301307 | 37.72 | ug/L | | 99 |
| 38) dibromomethane | 8.06 | 93 | 192993 | 48.01 | ug/L | | 94 |
| 39) bromodichloromethane | 8.31 | 83 | 423035 | 48.75 | ug/L | | 99 |
| 40) 2-chloroethyl vinyl ether | 8.76 | 63 | 191913 | 48.28 | ug/L | | 99 |
| 42) cis-1,3-dichloropropene | 8.97 | 75 | 510178 | 44.15 | ug/L | | 98 |
| 43) 4-methyl-2-pentanone | 9.20 | 43 | 339167 | 36.37 | ug/L | | 93 |
| 45) toluene | 9.45 | 92 | 768363 | 46.80 | ug/L | | 98 |
| 46) 1,1,2-trichloroethane | 10.19 | 83 | 220330 | 44.18 | ug/L | | 95 |
| 47) 1,3-dichloropropane | 10.46 | 76 | 494945 | 43.34 | ug/L | | 100 |
| 48) tetrachloroethene | 10.32 | 164 | 240684 | 53.05 | ug/L | | 95 |
| 49) trans-1,3-dichloropropene | 9.89 | 75 | 398732 | 41.80 | ug/L | | 98 |

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072202.D Vial: 2
Acq On : 22 Jul 2008 7:08 am Operator: CR
Sample : ,CCV,CCV-50ppb,1, Inst : VOA 4
Misc : 8260_W Multiplr: 1.00
IS Integration Params: rteint.p
Quant Time: Jul 22 7:41 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

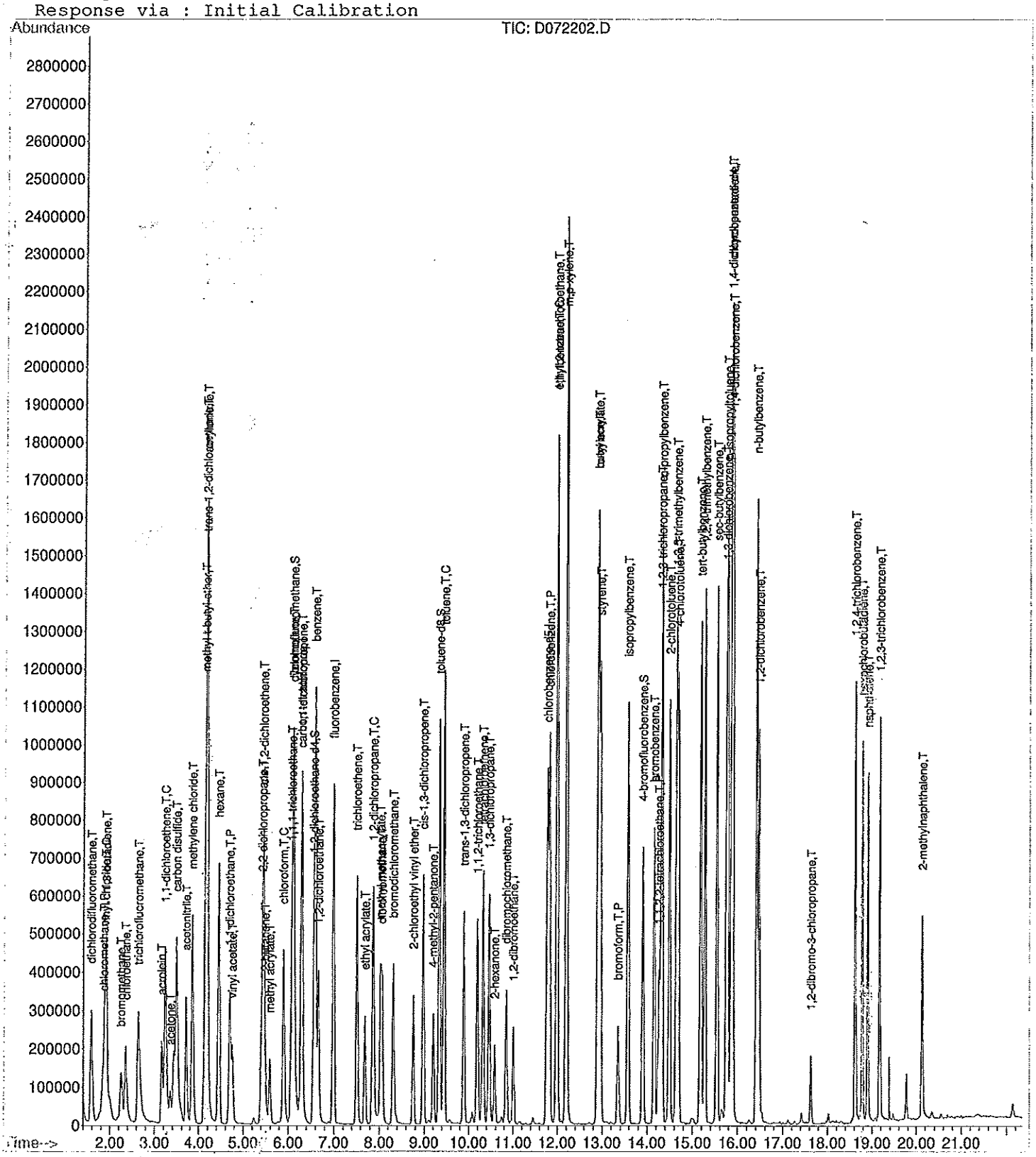
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 50) | 2-hexanone | 10.58 | 43 | 237541 | 35.26 | ug/L | 97 |
| 51) | dibromochloromethane | 10.84 | 129 | 281316 | 48.11 | ug/L | 98 |
| 52) | 1,2-dibromoethane | 11.01 | 107 | 280698 | 44.41 | ug/L | 99 |
| 53) | chlorobenzene | 11.82 | 112 | 807248 | 50.13 | ug/L | 97 |
| 54) | 1,1,1,2-tetrachloroethane | 11.99 | 131 | 266754 | 50.15 | ug/L | 98 |
| 55) | ethylbenzene | 11.99 | 91 | 1443186 | 48.98 | ug/L | 97 |
| 56) | m,p-xylene | 12.20 | 106 | 1083980 | 98.35 | ug/L | 99 |
| 57) | butyl acrylate | 12.89 | 55 | 687471 | 39.28 | ug/L | 98 |
| 58) | o-xylene | 12.91 | 106 | 523410 | 48.33 | ug/L | 96 |
| 59) | styrene | 12.96 | 104 | 921306 | 48.35 | ug/L | 99 |
| 60) | isopropylbenzene | 13.57 | 105 | 1226114 | 49.18 | ug/L | 98 |
| 61) | bromobenzene | 14.16 | 156 | 315996 | 50.65 | ug/L | 95 |
| 62) | bromoform | 13.35 | 173 | 179617 | 47.86 | ug/L | 98 |
| 64) | 1,2,3-trichloropropane | 14.31 | 75 | 262867 | 39.48 | ug/L | 92 |
| 65) | n-propylbenzene | 14.33 | 91 | 1716072 | 48.63 | ug/L | 99 |
| 66) | 2-chlorotoluene | 14.49 | 91 | 1009569 | 48.69 | ug/L | 98 |
| 67) | 4-chlorotoluene | 14.69 | 91 | 1159675 | 49.80 | ug/L | 99 |
| 68) | 1,3,5-trimethylbenzene | 14.64 | 105 | 1107374 | 50.52 | ug/L | 99 |
| 70) | 1,1,2,2-tetrachloroethane | 14.26 | 83 | 334209 | 38.12 | ug/L | 98 |
| 71) | tert-butylbenzene | 15.18 | 119 | 949131 | 49.50 | ug/L | 99 |
| 72) | sec-butylbenzene | 15.53 | 105 | 1552665 | 47.87 | ug/L | 98 |
| 73) | 1,2,4-trimethylbenzene | 15.27 | 105 | 1155599 | 47.82 | ug/L | 98 |
| 74) | 1,3-dichlorobenzene | 15.74 | 146 | 590266 | 48.99 | ug/L | 98 |
| 75) | p-isopropyltoluene | 15.77 | 119 | 1208690 | 50.54 | ug/L | 98 |
| 76) | dicyclopentadiene | 15.87 | 66 | 1547485 | 40.92 | ug/L | 99 |
| 77) | 1,4-dichlorobenzene | 15.90 | 146 | 603707 | 49.47 | ug/L | 97 |
| 78) | 1,2-dichlorobenzene | 16.47 | 146 | 551655 | 48.31 | ug/L | 99 |
| 79) | n-butylbenzene | 16.41 | 91 | 1273142 | 47.70 | ug/L | 98 |
| 80) | 1,2-dibromo-3-chloropropan | 17.63 | 75 | 55496 | 33.37 | ug/L | 85 |
| 81) | 1,2,4-trichlorobenzene | 18.62 | 180 | 456480 | 49.40 | ug/L | 97 |
| 82) | hexachlorobutadiene | 18.78 | 225 | 249312 | 56.78 | ug/L | 97 |
| 83) | naphthalene | 18.90 | 128 | 817672 | 37.88 | ug/L | 100 |
| 84) | 1,2,3-trichlorobenzene | 19.17 | 180 | 407155 | 47.42 | ug/L | 96 |
| 85) | 2-methylnaphthalene | 20.13 | 142 | 358755 | 29.86 | ug/L | 96 |

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072202.D Vial: 2
Acq On : 22 Jul 2008 7:08 am Operator: CR
Sample : ,CCV,CCV-50ppb,1, Inst : VOA 4
Misc : 8260_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 7:41 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



# SAMPLE RAW DATA

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072208.D Vial: 8
Acq On : 22 Jul 2008 12:11 pm Operator: CR
Sample : ,SAMP,ME0807691-01A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 14:06 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 6.98 | 96 | 994651 | 50.00 | ug/L | | -0.03 |
| 41) chlorobenzene-d5 | 11.76 | 117 | 682970 | 50.00 | ug/L | | -0.03 |
| 69) 1,4-dichlorobenzene-d4 | 15.85 | 152 | 329407 | 50.00 | ug/L | | -0.03 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.10 | 113 | 277725 | 52.66 | ug/L | | -0.03 |
| 30) 1,2-dichloroethane-d4 | 6.54 | 65 | 334930 | 52.53 | ug/L | | -0.04 |
| 44) toluene-d8 | 9.33 | 98 | 871781 | 50.28 | ug/L | | -0.03 |
| 63) 4-bromofluorobenzene | 13.89 | 95 | 374360 | 51.10 | ug/L | | -0.04 |
| **Target Compounds** | | | | | | | Qvalue |
| 11) acetone | 3.33 | 43 | 42323 | 11.66 | ug/L | | 86 |
| 13) methylene chloride | 3.84 | 84 | 66433 | 7.97 | ug/L | | 97 |
| 18) hexane | 4.44 | 57 | 302601 | 21.37 | ug/L | # | 99 |

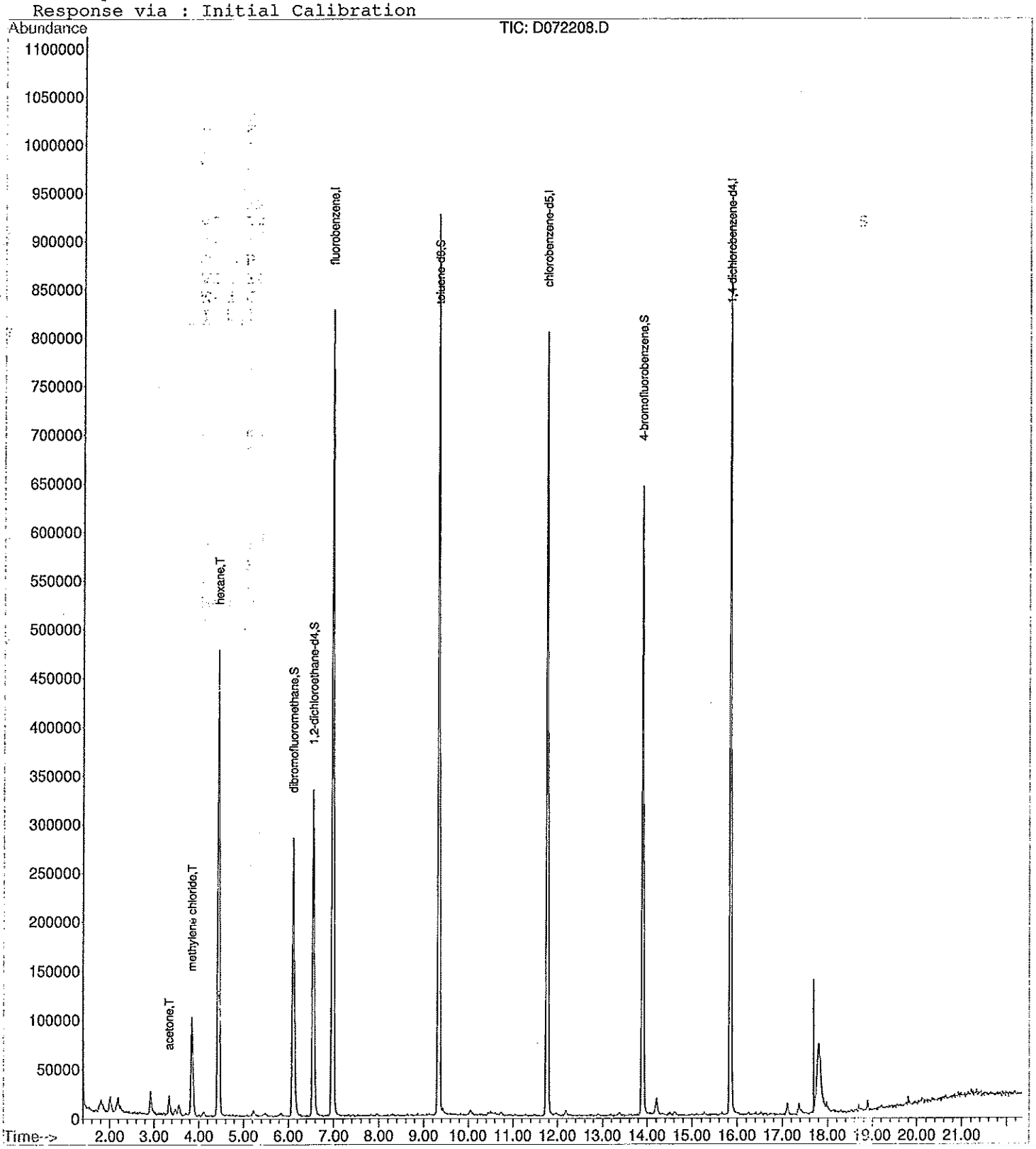
JN 7/22/08

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072208.D Vial: 8
Acq On : 22 Jul 2008 12:11 pm Operator: CR
Sample : ,SAMP,ME0807691-01A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 14:06 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\D072208\D072208.D  Vial: 8
Acq On : 22 Jul 2008 12:11 pm  Operator: CR
Sample : ,SAMP,ME0807691-01A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Smoothing : ON  Filtering: 5
Sampling : 1  Min Area: 3 % of largest Peak
Start Thrs: 0.2  Max Peaks: 100
Stop Thrs : 0  Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

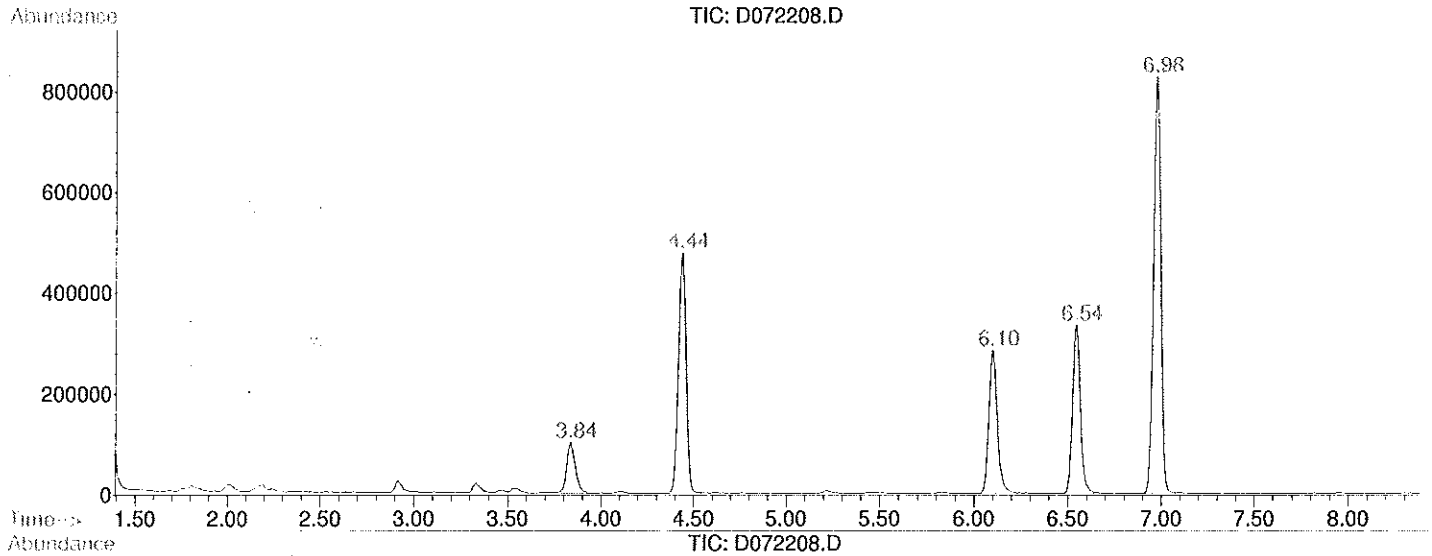
| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.837 | 395 | 407 | 424 | rVB | 100589 | 327490 | 13.01% | 2.207% |
| 2 | 4.439 | 490 | 507 | 524 | rBV2 | 476940 | 1368937 | 54.37% | 9.226% |
| 3 | 6.098 | 770 | 783 | 805 | rBV | 284013 | 909298 | 36.11% | 6.128% |
| 4 | 6.543 | 841 | 857 | 882 | rBV | 333644 | 975927 | 38.76% | 6.577% |
| 5 | 6.976 | 916 | 929 | 946 | rBV | 826374 | 2227376 | 88.47% | 15.012% |
| 6 | 9.334 | 1307 | 1321 | 1334 | rBV | 923939 | 2517798 | 100.00% | 16.969% |
| 7 | 11.763 | 1712 | 1725 | 1742 | rBV2 | 803221 | 2186033 | 86.82% | 14.733% |
| 8 | 13.892 | 2066 | 2079 | 2099 | rBV | 644390 | 1770692 | 70.33% | 11.934% |
| 9 | 15.847 | 2393 | 2404 | 2419 | rBV | 918937 | 2145771 | 85.22% | 14.462% |
| 10 | 17.807 | 2715 | 2730 | 2754 | rVB2 | 66626 | 408190 | 16.21% | 2.751% |

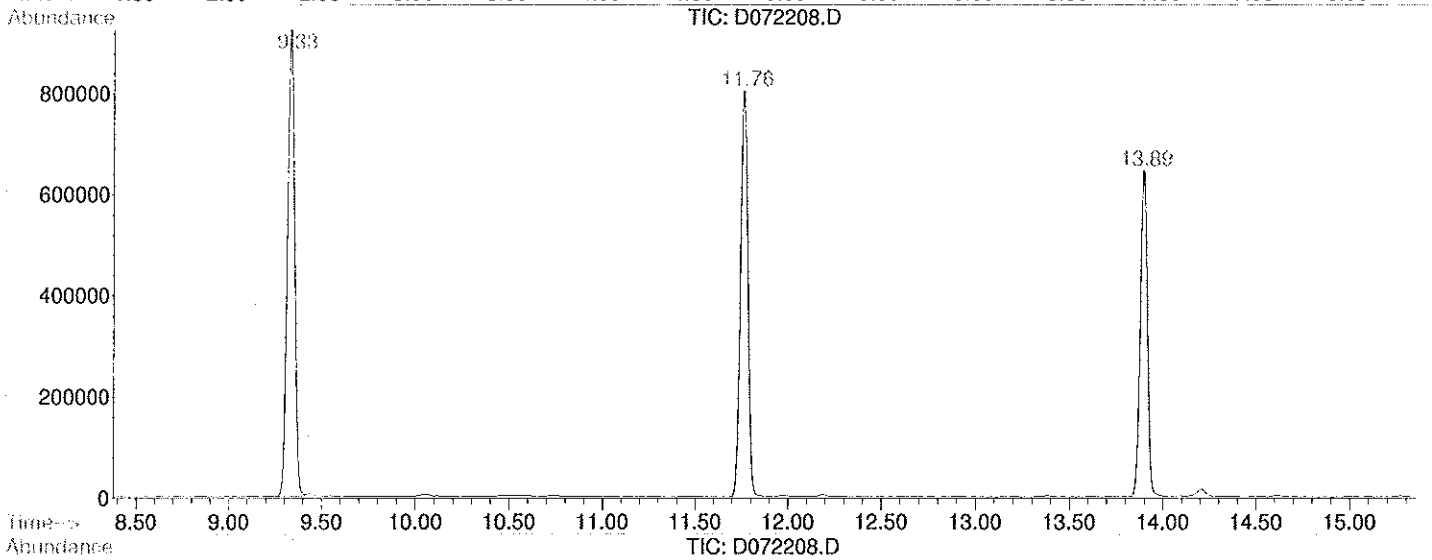
Sum of corrected areas: 14837512

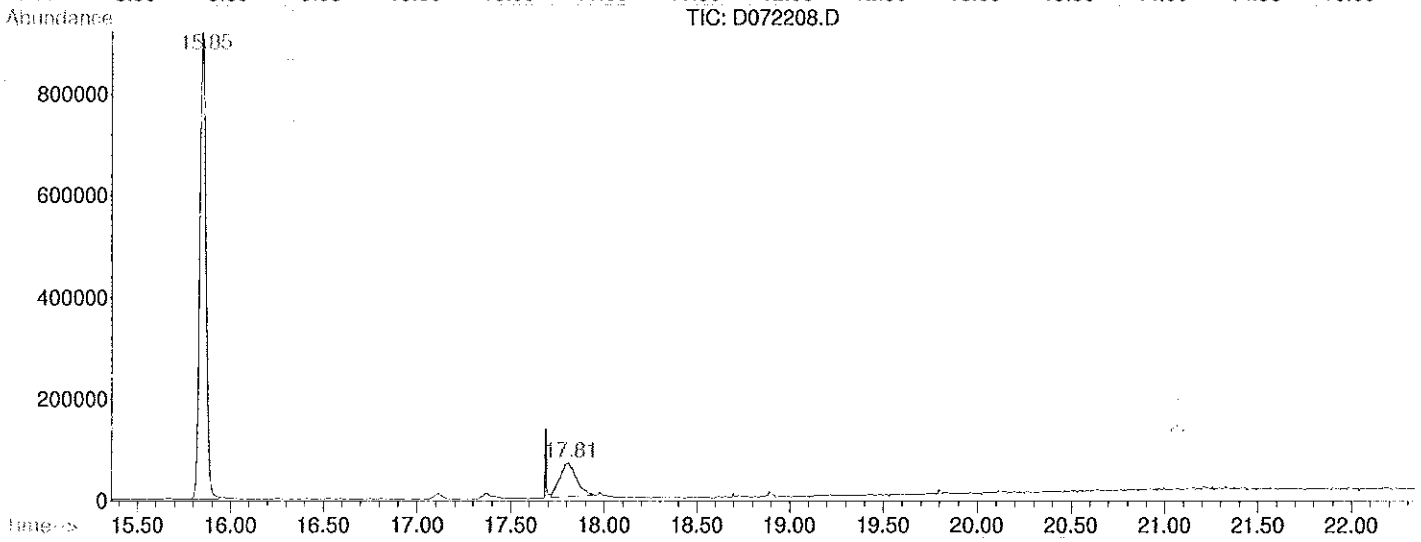
D072208.D VOA0603.M Fri Aug 01 14:24:58 2008 VOA4

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\D072208\D072208.D
Operator : CR
Acquired : 22 Jul 2008 12:11 pm using AcqMethod VOA-AQ
Instrument : VOA 4
Sample Name: ,SAMP,ME0807691-01A,1,
Misc Info : 8260+_W
Vial Number: 8
Quant File :VOA0603.RES (RTE Integrator)



# Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\D072208\D072208.D  Vial: 8
Acq On : 22 Jul 2008 12:11 pm  Operator: CR
Sample : ,SAMP,ME0807691-01A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

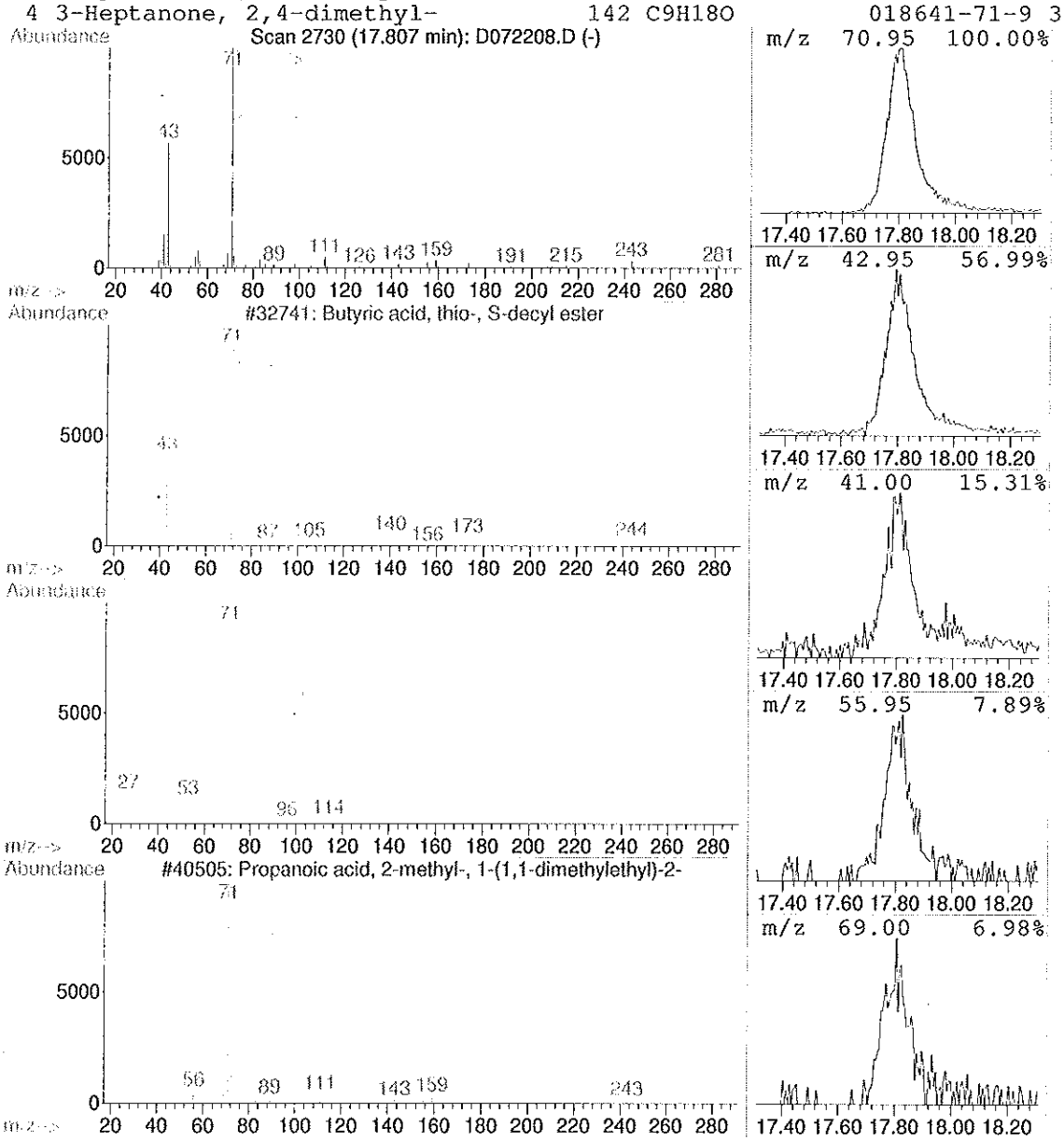
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 1 Butyric acid, thio-, S-decyl e Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.81 | 9.51 ug/L | 408190 | 1,4-dichlorobenzene-d4 | 15.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butyric acid, thio-, S-decyl ester | 244 | C14H28OS | 002432-55-5 | 59 |
| 2 | trans-2-Methyl-4-hexen-3-ol | 114 | C7H14O | 096346-76-8 | 45 |
| 3 | Propanoic acid, 2-methyl-, 1-(1,1-d | 286 | C16H30O4 | 074381-40-1 | 43 |
| 4 | 3-Heptanone, 2,4-dimethyl- | 142 | C9H18O | 018641-71-9 | 38 |



Tentatively Identified Compound (LSC) summary

Operator ID: CR  Date Acquired: 22 Jul 2008  12:11 pm
Data File: C:\HPCHEM\1\DATA\D072208\D072208.D
Name: ,SAMP,ME0807691-01A,1,
Misc: 8260+_W
Method: C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title: VOA ICAL 06/03/08
Library Searched: C:\DATABASE\nbs75k.L

| TIC Top Hit name | RT | EstConc | Units | Area | IntStd | ISRT | ISArea | ISConc |
|---|---|---|---|---|---|---|---|---|
| Butyric acid, thio-, | 17.81 | 9.5 | ug/L | 408190 | ISTD03 | 15.85 | 2145770 | 50.0 |

D072208.D  VOA0603.M  Fri Aug 01 14:25:03 2008  VOA4

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072209.D Vial: 9
Acq On : 22 Jul 2008 12:46 pm Operator: CR
Sample : ,SAMP,ME0807691-02A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 14:06 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) fluorobenzene | 6.97 | 96 | 957162 | 50.00 ug/L | -0.03 |
| 41) chlorobenzene-d5 | 11.76 | 117 | 651163 | 50.00 ug/L | -0.03 |
| 69) 1,4-dichlorobenzene-d4 | 15.84 | 152 | 319320 | 50.00 ug/L | -0.04 |
| **System Monitoring Compounds** | | | | | |
| 26) dibromofluoromethane | 6.10 | 113 | 268034 | 52.81 ug/L | -0.03 |
| 30) 1,2-dichloroethane-d4 | 6.54 | 65 | 335695 | 54.72 ug/L | -0.04 |
| 44) toluene-d8 | 9.33 | 98 | 831365 | 50.29 ug/L | -0.04 |
| 63) 4-bromofluorobenzene | 13.89 | 95 | 370219 | 53.01 ug/L | -0.04 |
| **Target Compounds** | | | | | Qvalue |
| 11) acetone | 3.34 | 43 | 25941 | 7.43 ug/L | 87 |
| 13) methylene chloride | 3.84 | 84 | 56682 | 7.06 ug/L | 97 |
| 18) hexane | 4.43 | 57 | 286998 | 21.06 ug/L # | 96 |

JN 7/22/08

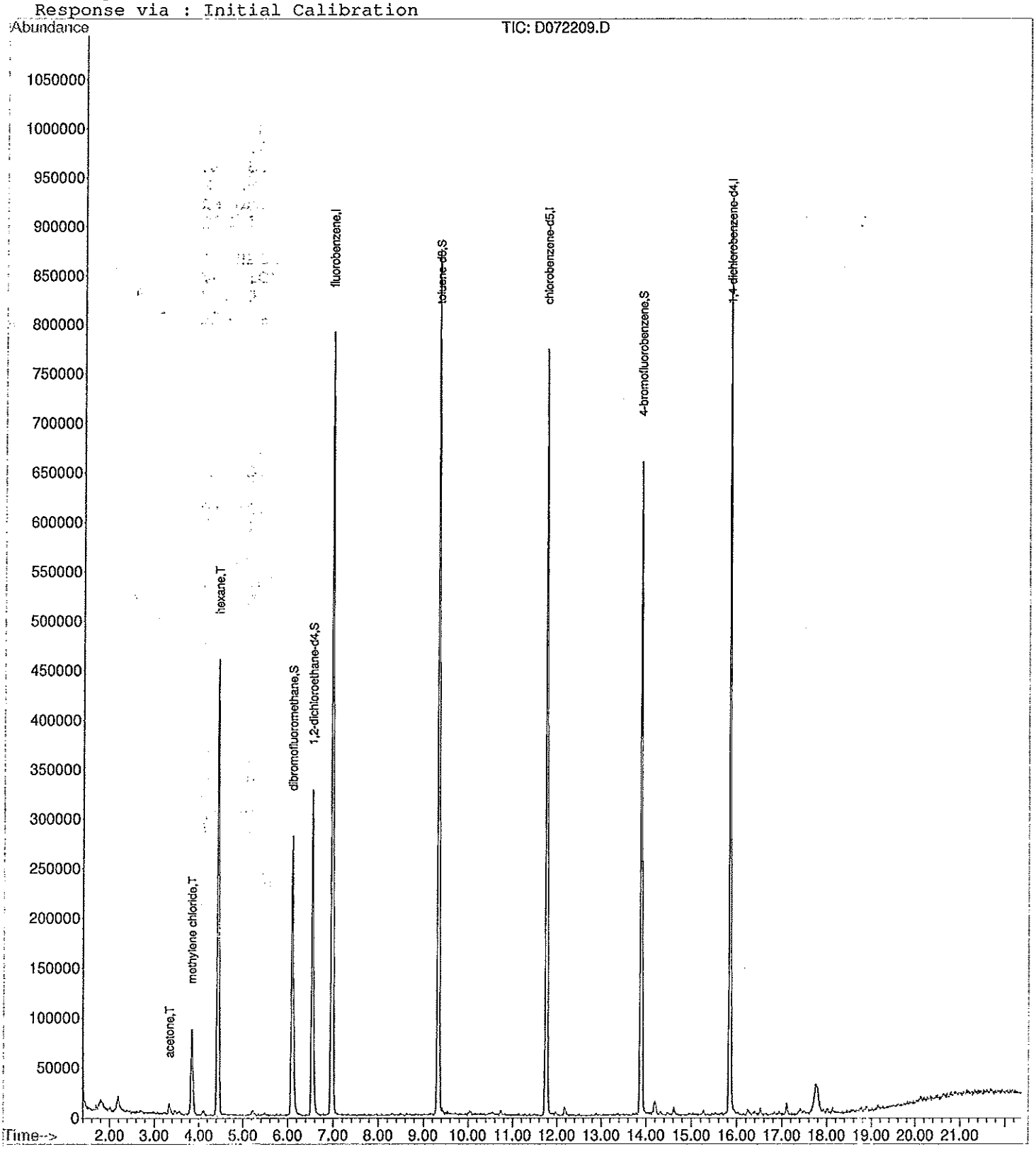
7/23/08

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072209.D Vial: 9
Acq On : 22 Jul 2008 12:46 pm Operator: CR
Sample : ,SAMP,ME0807691-02A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 14:06 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\D072208\D072209.D  Vial: 9
Acq On : 22 Jul 2008 12:46 pm  Operator: CR
Sample : ,SAMP,ME0807691-02A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Smoothing : ON  Filtering: 5
Sampling : 1  Min Area: 3 % of largest Peak
Start Thrs: 0.2  Max Peaks: 100
Stop Thrs : 0  Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

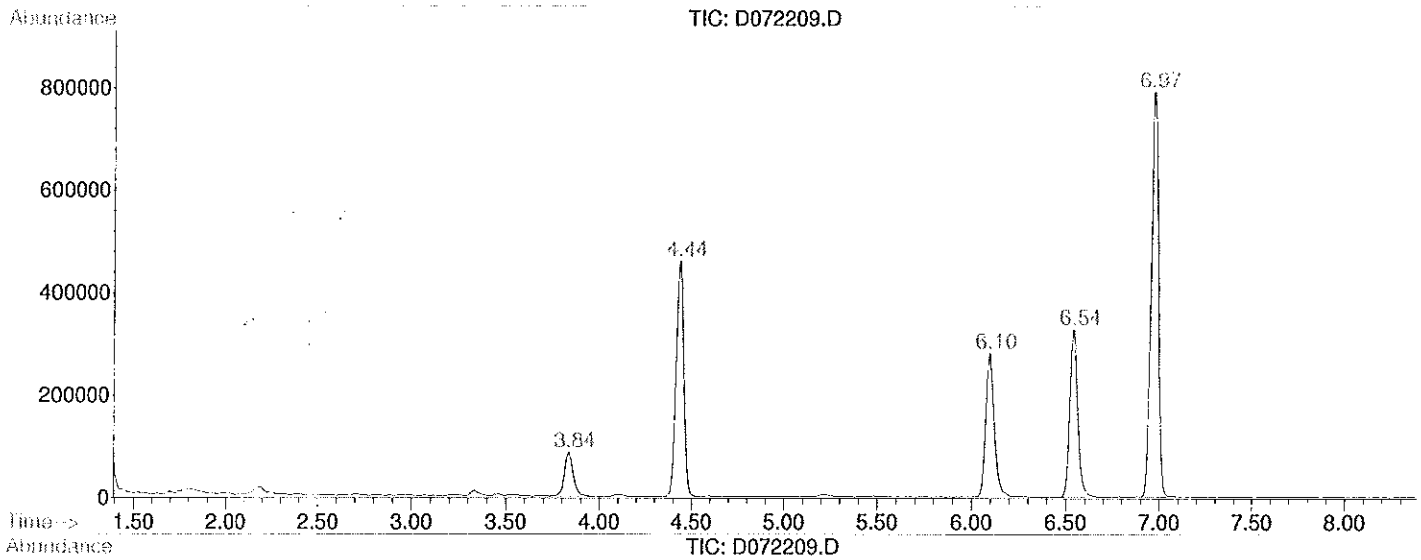
| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.835 | 390 | 407 | 430 | rBV | 85666 | 281481 | 11.65% | 1.986% |
| 2 | 4.436 | 488 | 507 | 522 | rBV2 | 459378 | 1330942 | 55.11% | 9.390% |
| 3 | 6.096 | 771 | 783 | 802 | rBV2 | 279589 | 868277 | 35.95% | 6.126% |
| 4 | 6.541 | 844 | 857 | 882 | rBV2 | 327116 | 965648 | 39.98% | 6.813% |
| 5 | 6.968 | 917 | 928 | 950 | rVB | 789626 | 2157697 | 89.34% | 15.222% |
| 6 | 9.332 | 1307 | 1321 | 1333 | rBV | 873196 | 2415255 | 100.00% | 17.040% |
| 7 | 11.755 | 1712 | 1724 | 1742 | rBV | 772626 | 2101580 | 87.01% | 14.827% |
| 8 | 13.890 | 2066 | 2079 | 2093 | rBV | 658512 | 1728103 | 71.55% | 12.192% |
| 9 | 15.844 | 2394 | 2404 | 2433 | rVB | 908109 | 2111465 | 87.42% | 14.896% |
| 10 | 17.769 | 2698 | 2724 | 2743 | rBV3 | 30238 | 213985 | 8.86% | 1.510% |

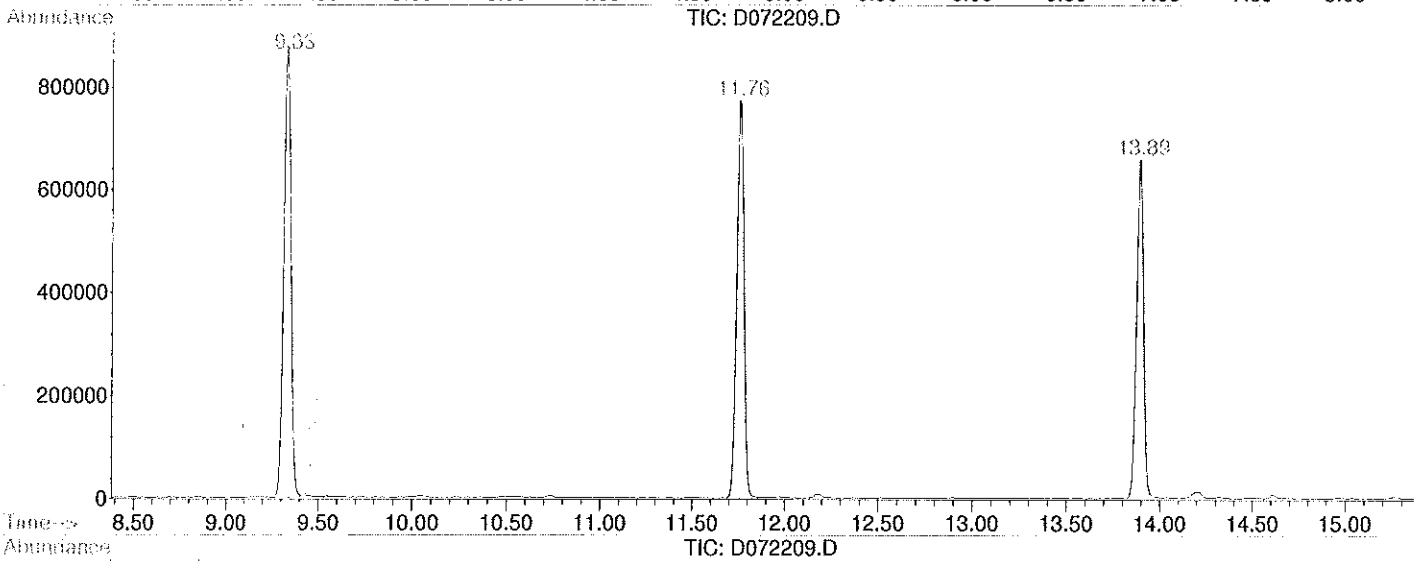
Sum of corrected areas: 14174433

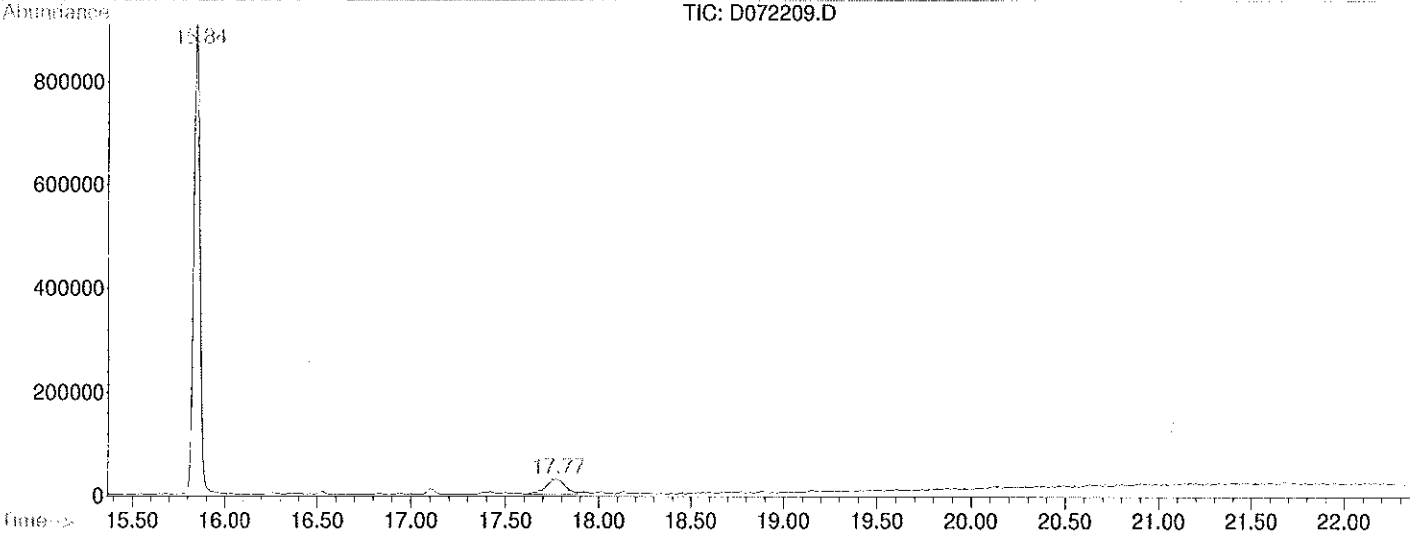
D072209.D VOA0603.M Fri Aug 01 14:25:06 2008 VOA4

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\D072208\D072209.D
Operator : CR
Acquired : 22 Jul 2008 12:46 pm using AcqMethod VOA-AQ
Instrument : VOA 4
Sample Name: ,SAMP,ME0807691-02A,1,
Misc Info : 8260+_W
Vial Number: 9
Quant File :VOA0603.RES (RTE Integrator)




D072209.D VOA0603.M Fri Aug 01 14:25:08 2008 VOA4

# Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\D072208\D072209.D  Vial: 9
Acq On : 22 Jul 2008 12:46 pm  Operator: CR
Sample : ,SAMP,ME0807691-02A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

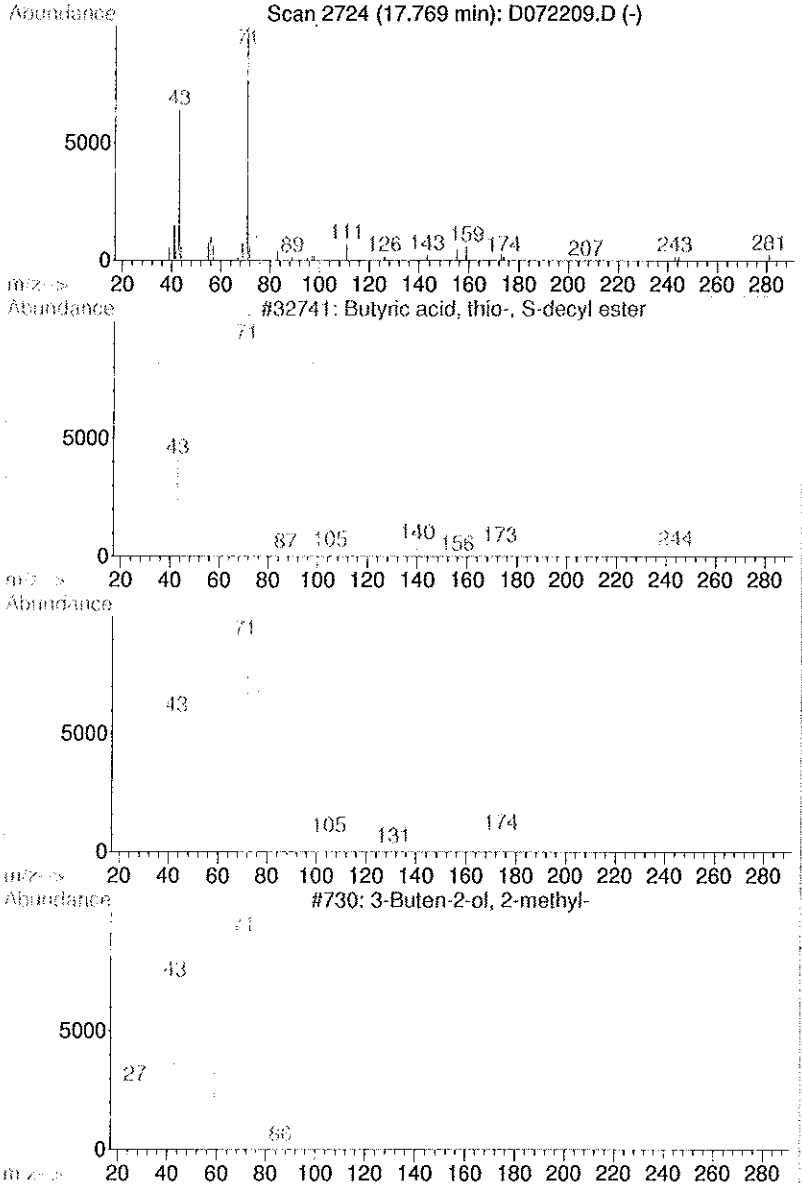
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

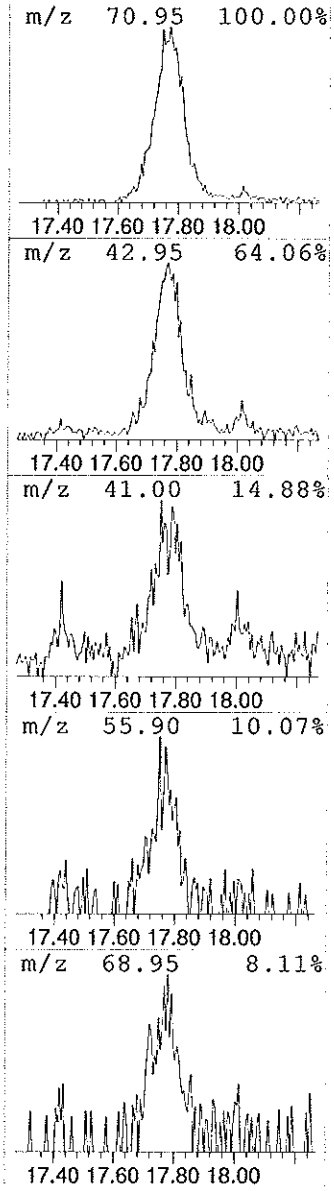
**********

Peak Number 1 Butyric acid, thio-, S-decyl e Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.77 | 5.07 ug/L | 213985 | 1,4-dichlorobenzene-d4 | 15.84 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butyric acid, thio-, S-decyl ester | 244 | C14H28OS | 002432-55-5 | 53 |
| 2 | Butyric acid, thio-, S-pentyl ester | 174 | C9H18OS | 002432-53-3 | 42 |
| 3 | 3-Buten-2-ol, 2-methyl- | 86 | C5H10O | 000115-18-4 | 42 |
| 4 | 4,5-Octanedione | 142 | C8H14O2 | 005455-24-3 | 42 |



Tentatively Identified Compound (LSC) summary

Operator ID: CR  Date Acquired: 22 Jul 2008  12:46 pm
Data File: C:\HPCHEM\1\DATA\D072208\D072209.D
Name: ,SAMP,ME0807691-02A,1,
Misc: 8260+_W
Method: C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title: VOA ICAL 06/03/08
Library Searched: C:\DATABASE\nbs75k.L

| TIC Top Hit name | RT | EstConc | Units | Area | IntStd | ISRT | ISArea | ISConc |
|---|---|---|---|---|---|---|---|---|
| Butyric acid, thio-, | 17.77 | 5.1 | ug/L | 213985 | ISTD03 | 15.84 | 2111470 | 50.0 |

D072209.D  VOA0603.M  Fri Aug 01 14:25:11 2008  VOA4

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072210.D Vial: 10
Acq On : 22 Jul 2008 1:22 pm Operator: CR
Sample : ,SAMP,ME0807691-03A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 14:06 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) fluorobenzene | 6.97 | 96 | 939487 | 50.00 | ug/L | | -0.03 |
| 41) chlorobenzene-d5 | 11.76 | 117 | 643649 | 50.00 | ug/L | | -0.04 |
| 69) 1,4-dichlorobenzene-d4 | 15.84 | 152 | 317662 | 50.00 | ug/L | | -0.04 |
| **System Monitoring Compounds** | | | | | | | |
| 26) dibromofluoromethane | 6.09 | 113 | 267304 | 53.66 | ug/L | | -0.04 |
| 30) 1,2-dichloroethane-d4 | 6.54 | 65 | 327795 | 54.43 | ug/L | | -0.03 |
| 44) toluene-d8 | 9.33 | 98 | 826684 | 50.59 | ug/L | | -0.04 |
| 63) 4-bromofluorobenzene | 13.88 | 95 | 362179 | 52.46 | ug/L | | -0.05 |
| **Target Compounds** | | | | | | | Qvalue |
| 11) acetone | 3.32 | 43 | 46267 | 13.50 | ug/L | | 83 |
| 18) hexane | 4.43 | 57 | 28326 | 2.12 | ug/L | # | 96 |

JN 7/22/08

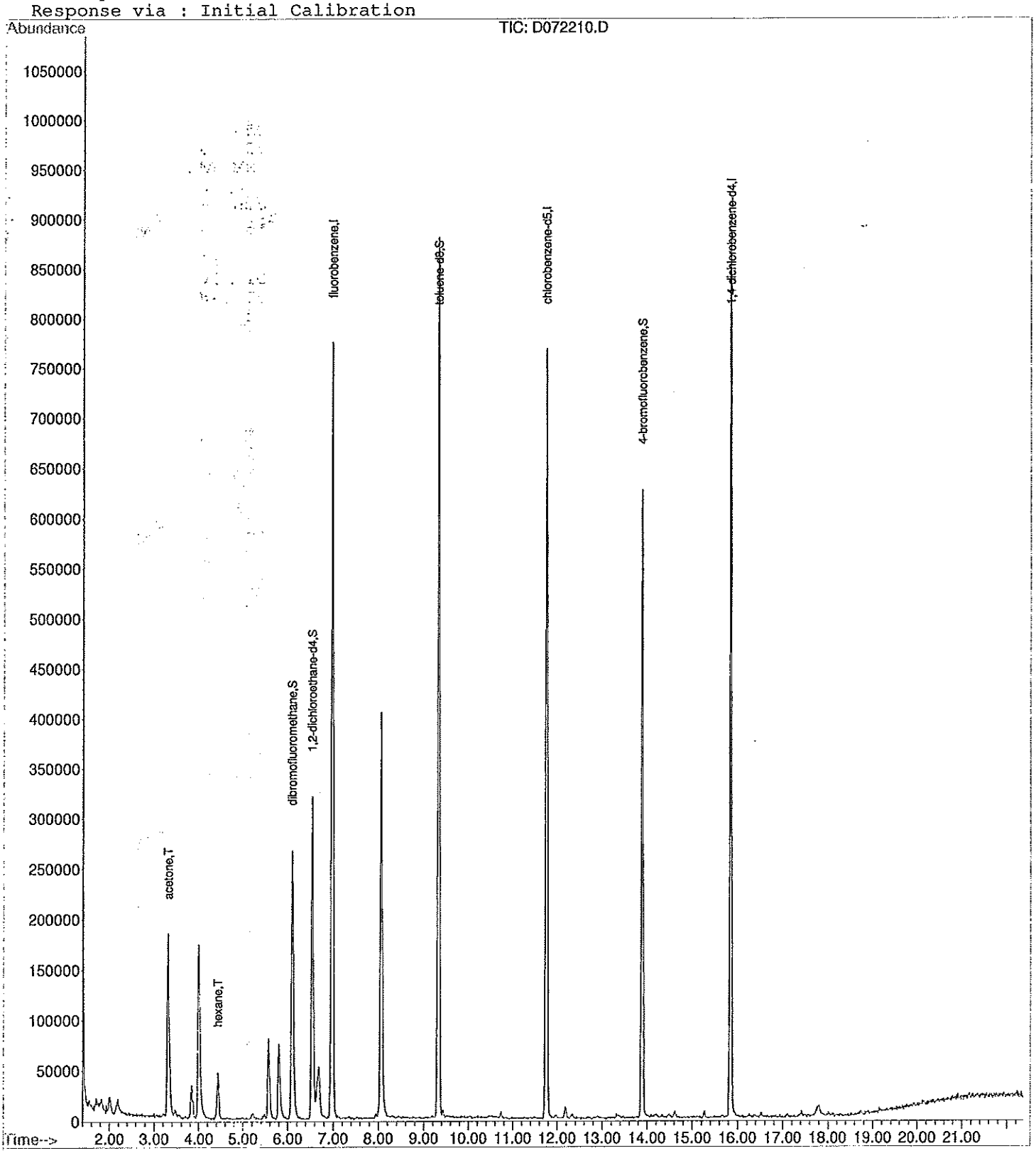
MC 7/24

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072210.D Vial: 10
Acq On : 22 Jul 2008 1:22 pm Operator: CR
Sample : ,SAMP,ME0807691-03A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 14:06 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\D072208\D072210.D  Vial: 10
Acq On : 22 Jul 2008 1:22 pm  Operator: CR
Sample : ,SAMP,ME0807691-03A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Smoothing : ON  Filtering: 5
Sampling : 1  Min Area: 3 % of largest Peak
Start Thrs: 0.2  Max Peaks: 100
Stop Thrs : 0  Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

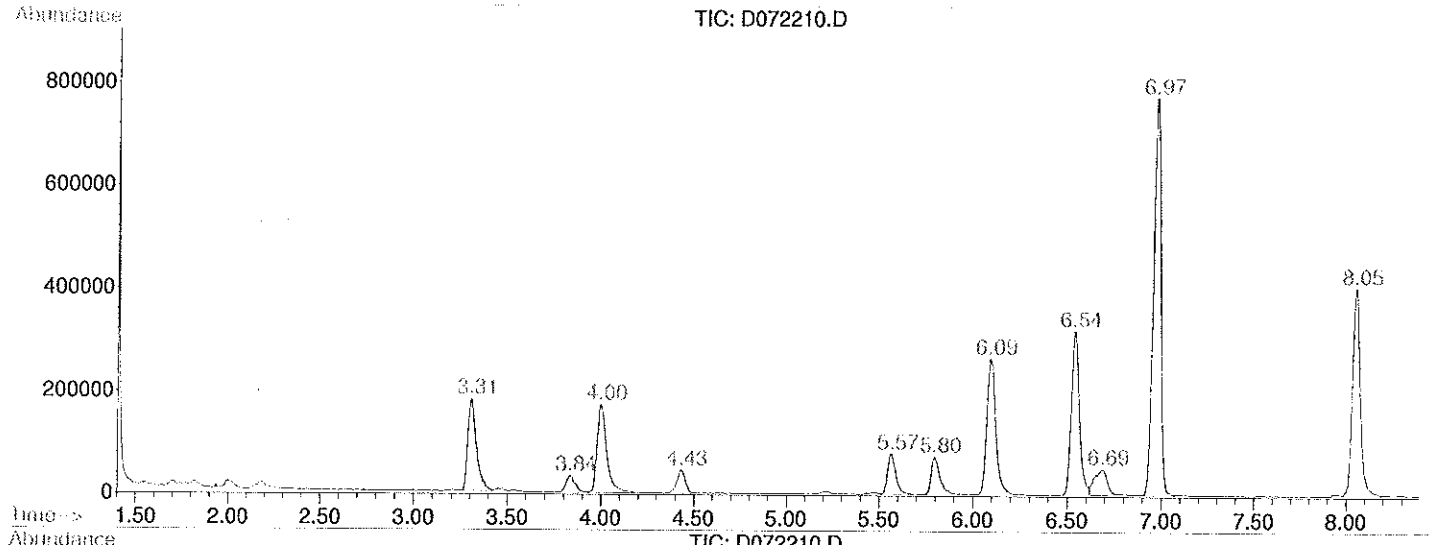
| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.306 | 310 | 318 | 338 | rBV2 | 180358 | 583378 | 24.34% | 3.735% |
| 2 | 3.835 | 392 | 406 | 418 | rBV5 | 33150 | 111953 | 4.67% | 0.717% |
| 3 | 3.998 | 422 | 433 | 464 | rVB2 | 172137 | 621827 | 25.94% | 3.981% |
| 4 | 4.431 | 490 | 505 | 515 | rBV2 | 46115 | 146308 | 6.10% | 0.937% |
| 5 | 5.567 | 684 | 694 | 712 | rVB2 | 78530 | 241382 | 10.07% | 1.546% |
| 6 | 5.796 | 721 | 732 | 753 | rBV2 | 74296 | 247113 | 10.31% | 1.582% |
| 7 | 6.090 | 769 | 781 | 807 | rBV2 | 265313 | 877094 | 36.60% | 5.616% |
| 8 | 6.536 | 844 | 855 | 868 | rBV | 319818 | 953444 | 39.78% | 6.105% |
| 9 | 6.686 | 869 | 880 | 895 | rVB5 | 49791 | 232455 | 9.70% | 1.488% |
| 10 | 6.975 | 914 | 928 | 944 | rVB | 772342 | 2127433 | 88.76% | 13.622% |
| 11 | 8.051 | 1094 | 1107 | 1131 | rVB2 | 402643 | 1215019 | 50.70% | 7.780% |
| 12 | 9.326 | 1307 | 1319 | 1332 | rBV | 877886 | 2396722 | 100.00% | 15.346% |
| 13 | 11.755 | 1711 | 1723 | 1743 | rBV | 767183 | 2087054 | 87.08% | 13.363% |
| 14 | 13.890 | 2067 | 2078 | 2093 | rBV | 625296 | 1693916 | 70.68% | 10.846% |
| 15 | 15.845 | 2391 | 2403 | 2427 | rBV | 900541 | 2083019 | 86.91% | 13.337% |

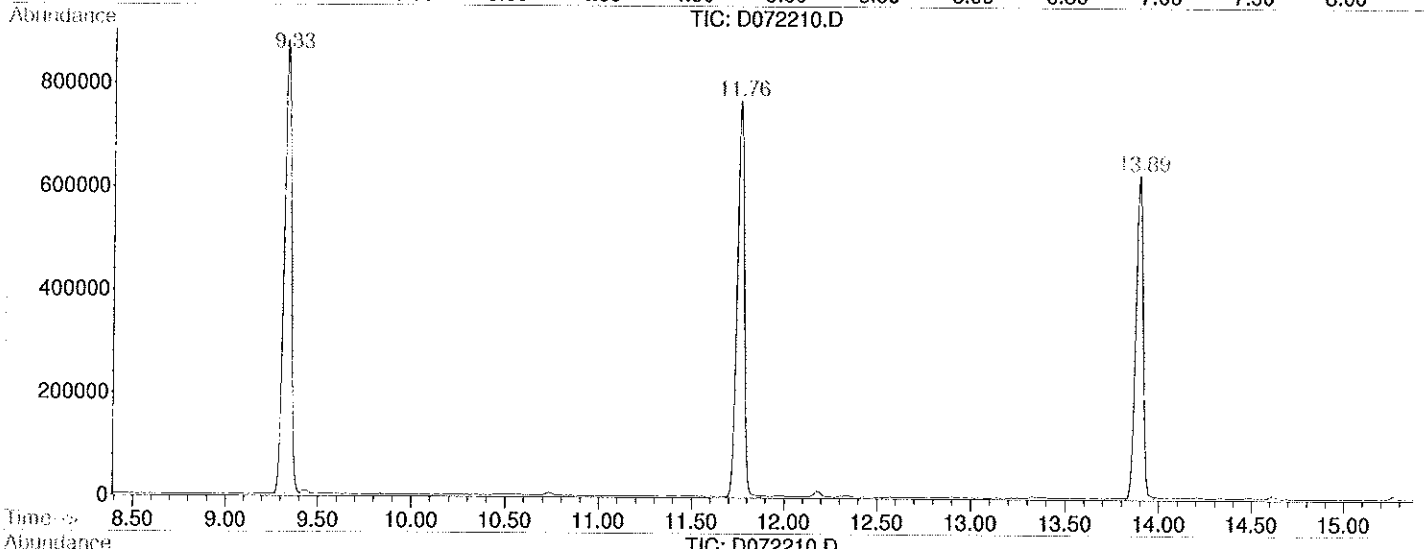
Sum of corrected areas: 15618117

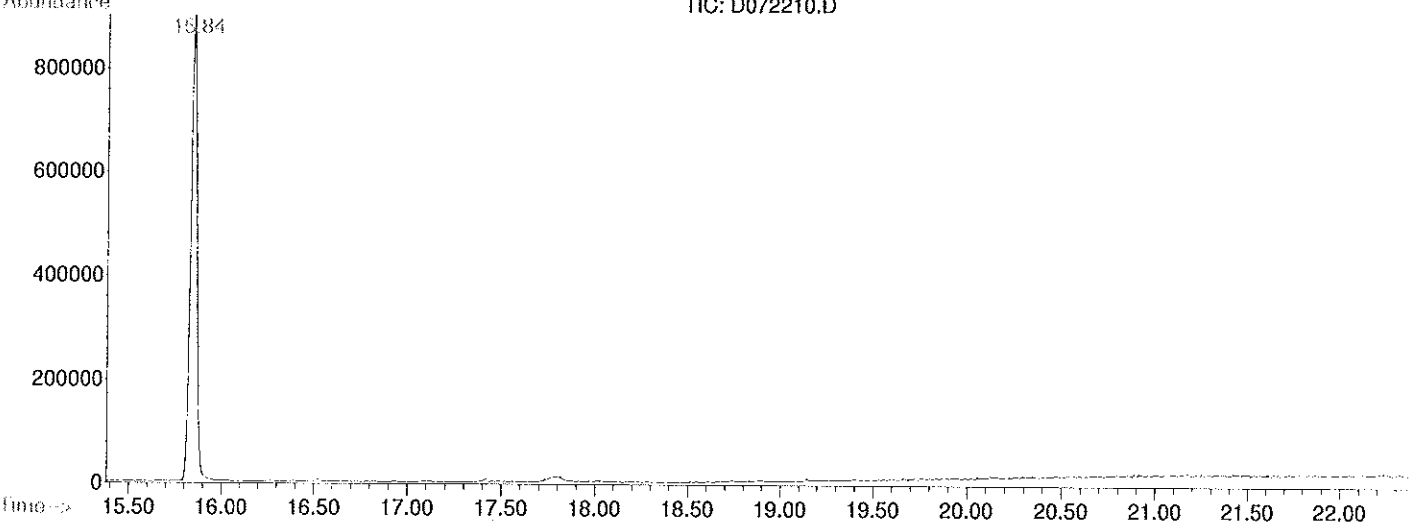
D072210.D VOA0603.M Fri Aug 01 14:25:14 2008 VOA4

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\D072208\D072210.D
Operator : CR
Acquired : 22 Jul 2008 1:22 pm using AcqMethod VOA-AQ
Instrument : VOA 4
Sample Name: ,SAMP,ME0807691-03A,1,
Misc Info : 8260+_W
Vial Number: 10
Quant File :VOA0603.RES (RTE Integrator)



# Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\D072208\D072210.D  Vial: 10
Acq On : 22 Jul 2008 1:22 pm  Operator: CR
Sample : ,SAMP,ME0807691-03A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

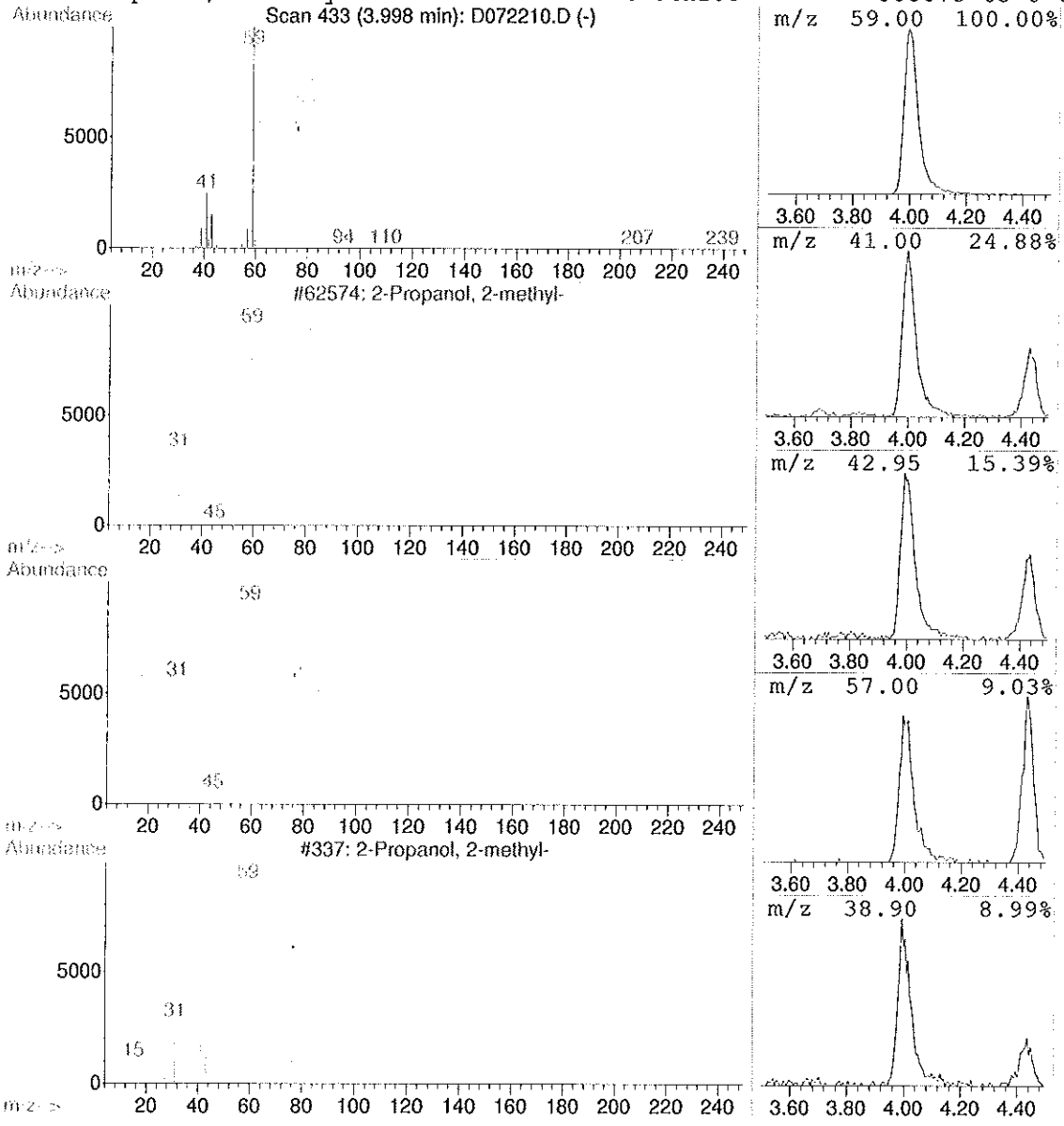
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 1 2-Propanol, 2-methyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.00 | 14.61 ug/L | 621827 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 2 | 3-Pentanol | 88 | C5H12O | 000584-02-1 | 64 |
| 3 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 64 |
| 4 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 64 |



Data File : C:\HPCHEM\1\DATA\D072208\D072210.D  Vial: 10
Acq On : 22 Jul 2008 1:22 pm  Operator: CR
Sample : ,SAMP,ME0807691-03A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

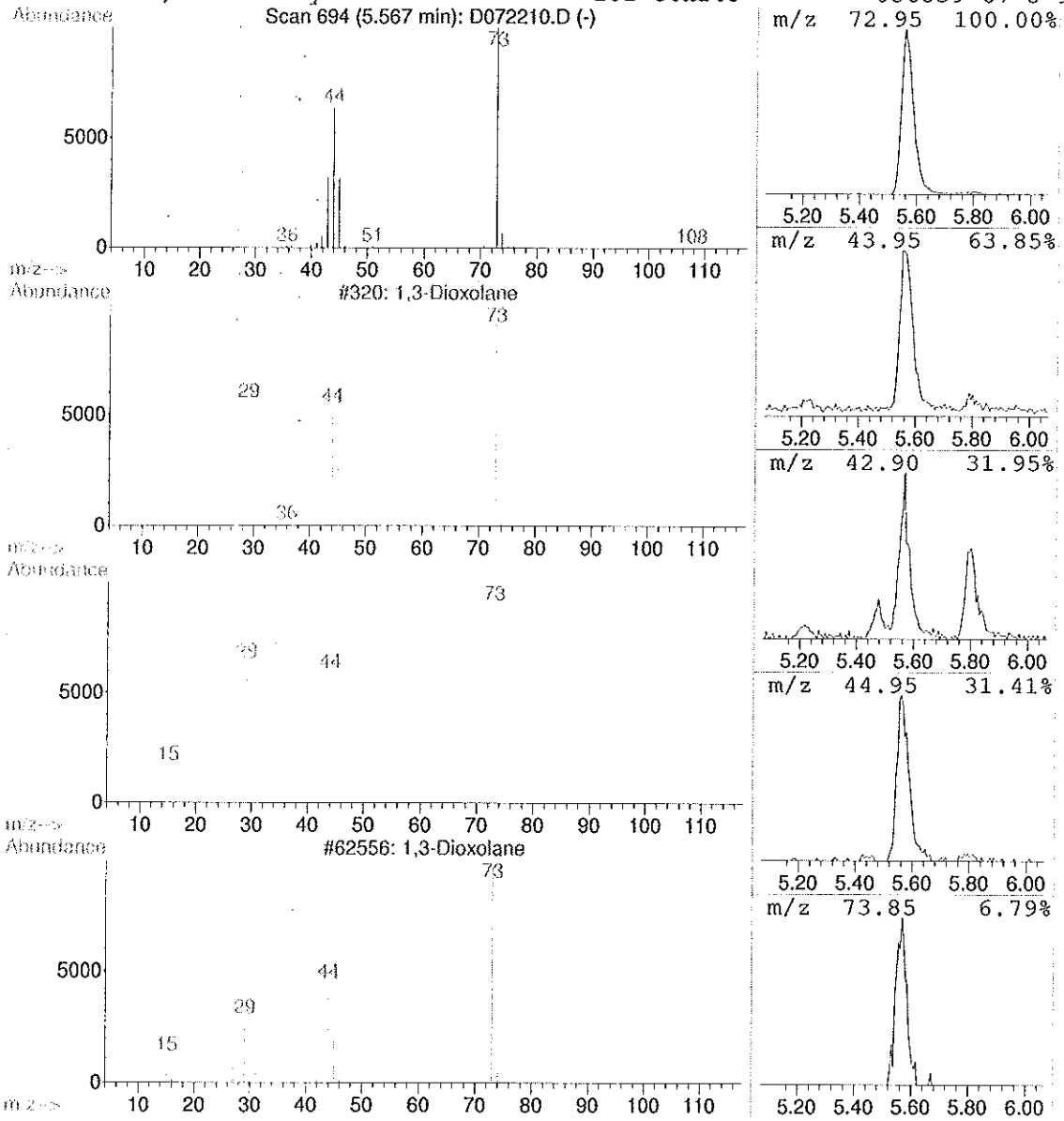
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 2 1,3-Dioxolane  Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.57 | 5.67 ug/L | 241382 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 86 |
| 2 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 78 |
| 3 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 72 |
| 4 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 9 |



Data File : C:\HPCHEM\1\DATA\D072208\D072210.D  Vial: 10
Acq On : 22 Jul 2008 1:22 pm  Operator: CR
Sample : ,SAMP,ME0807691-03A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

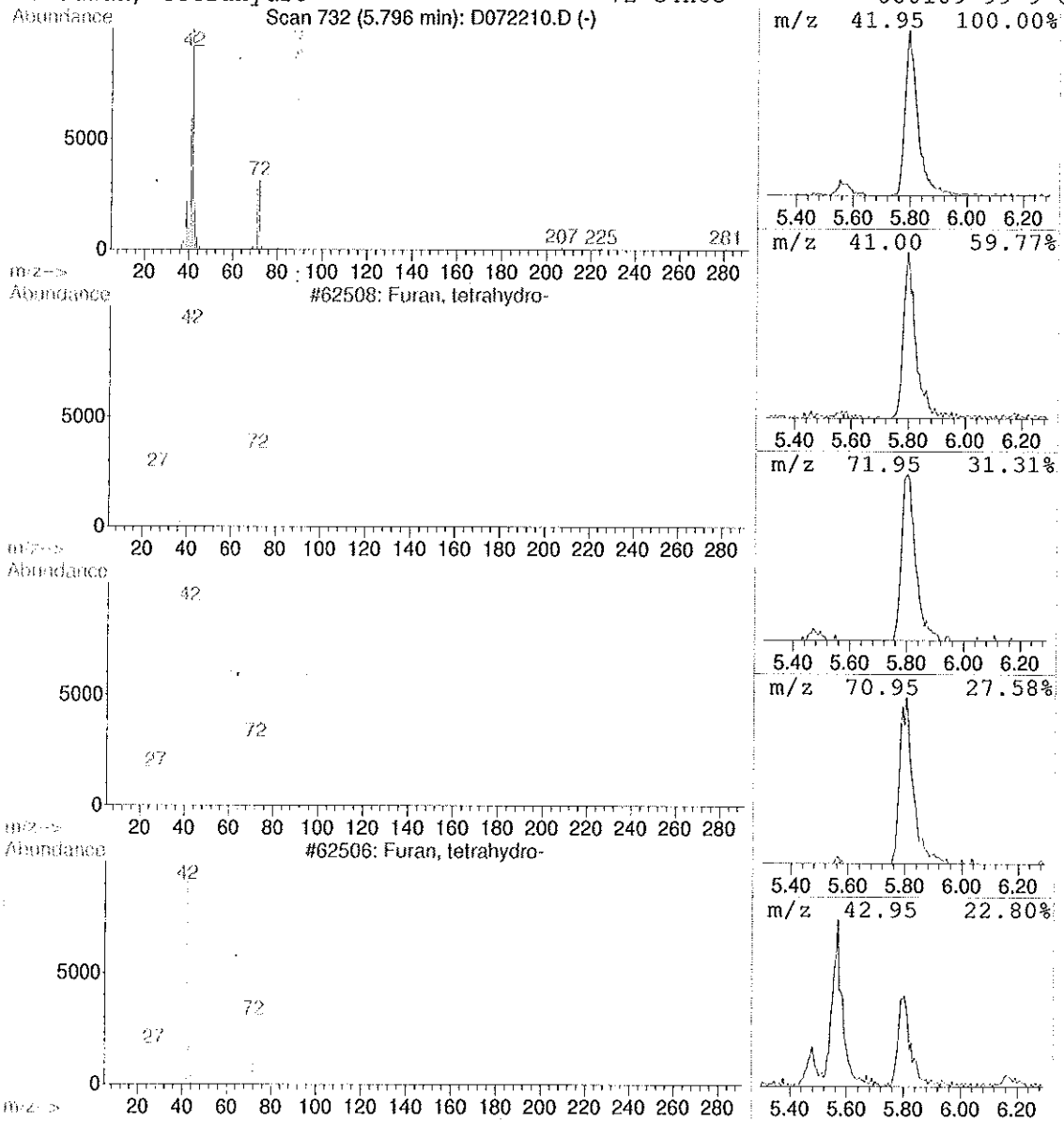
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 3 Furan, tetrahydro- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.80 | 5.81 ug/L | 247113 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 91 |
| 2 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 3 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |
| 4 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |



Data File : C:\HPCHEM\1\DATA\D072208\D072210.D  Vial: 10
Acq On : 22 Jul 2008 1:22 pm  Operator: CR
Sample : ,SAMP,ME0807691-03A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

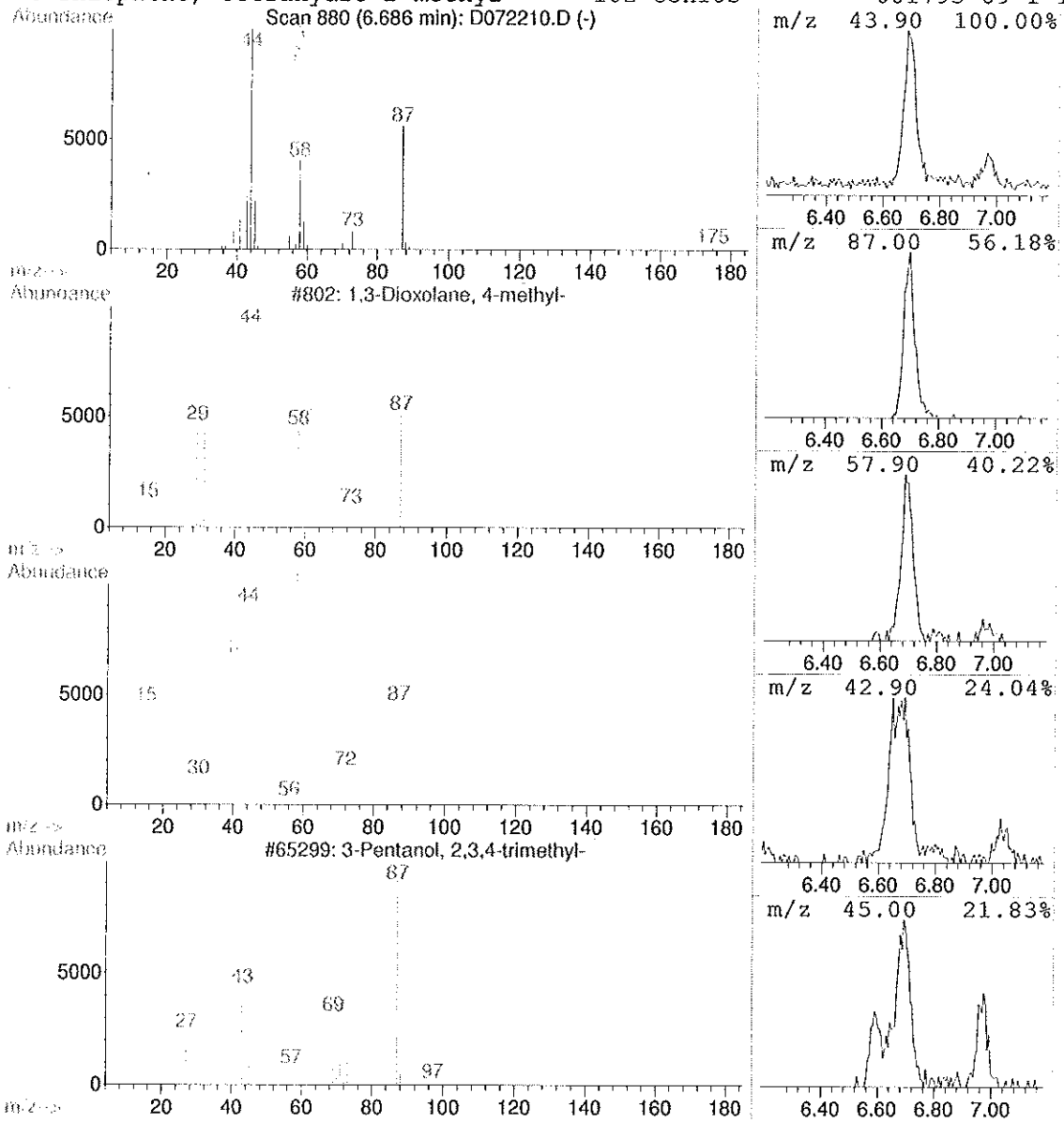
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 4 1,3-Dioxolane, 4-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.69 | 5.46 ug/L | 232455 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane, 4-methyl- | 88 | C4H8O2 | 001072-47-5 | 90 |
| 2 | Acetamide, N,N-dimethyl- | 87 | C4H9NO | 000127-19-5 | 53 |
| 3 | 3-Pentanol, 2,3,4-trimethyl- | 130 | C8H18O | 003054-92-0 | 10 |
| 4 | Thiophene, tetrahydro-2-methyl- | 102 | C5H10S | 001795-09-1 | 10 |



Tentatively Identified Compound (LSC) summary

Operator ID: CR  Date Acquired: 22 Jul 2008  1:22 pm
Data File: C:\HPCHEM\1\DATA\D072208\D072210.D
Name: ,SAMP,ME0807691-03A,1,
Misc: 8260+_W
Method: C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title: VOA ICAL 06/03/08
Library Searched: C:\DATABASE\nbs75k.L

| TIC Top Hit name | RT | EstConc | Units | Area | IntStd | ISRT | ISArea | ISConc |
|---|---|---|---|---|---|---|---|---|
| 2-Propanol, 2-methyl | 4.00 | 14.6 | ug/L | 621827 | ISTD01 | 6.97 | 2127430 | 50.0 |
| 1,3-Dioxolane | 5.57 | 5.7 | ug/L | 241382 | ISTD01 | 6.97 | 2127430 | 50.0 |
| Furan, tetrahydro- | 5.80 | 5.8 | ug/L | 247113 | ISTD01 | 6.97 | 2127430 | 50.0 |
| 1,3-Dioxolane, 4-met | 6.69 | 5.5 | ug/L | 232455 | ISTD01 | 6.97 | 2127430 | 50.0 |

D072210.D  VOA0603.M  Fri Aug 01 14:25:26 2008  VOA4

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072211.D Vial: 11
Acq On : 22 Jul 2008 1:58 pm Operator: CR
Sample : ,SAMP,ME0807691-04A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 15:05 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) fluorobenzene | 6.97 | 96 | 859384 | 50.00 | ug/L | -0.03 |
| 41) chlorobenzene-d5 | 11.75 | 117 | 596914 | 50.00 | ug/L | -0.04 |
| 69) 1,4-dichlorobenzene-d4 | 15.84 | 152 | 291412 | 50.00 | ug/L | -0.04 |
| **System Monitoring Compounds** | | | | | | |
| 26) dibromofluoromethane | 6.10 | 113 | 245478 | 53.87 | ug/L | -0.03 |
| 30) 1,2-dichloroethane-d4 | 6.54 | 65 | 311945 | 56.63 | ug/L | -0.03 |
| 44) toluene-d8 | 9.33 | 98 | 773075 | 51.01 | ug/L | -0.03 |
| 63) 4-bromofluorobenzene | 13.89 | 95 | 336490 | 52.56 | ug/L | -0.04 |
| **Target Compounds** | | | | | | Qvalue |
| 11) acetone | 3.32 | 43 | 42763 | 13.64 | ug/L | 87 |
| 18) hexane | 4.44 | 57 | 46101 | 3.77 | ug/L # | 97 |

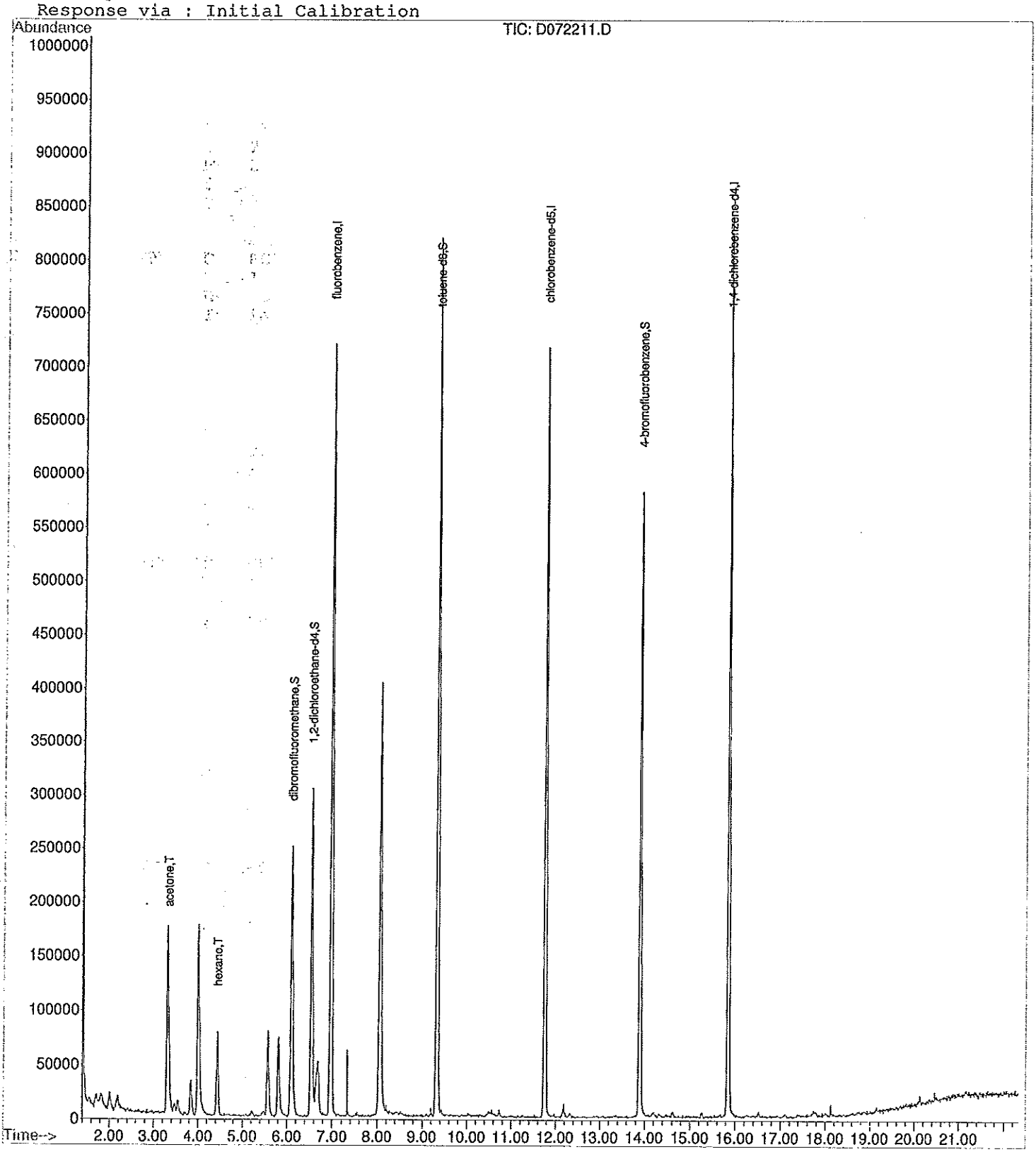
JN 7/22/08

7/23/08

(#) = qualifier out of range (m) = manual integration
D072211.D VOA0603.M Tue Jul 22 15:05:12 2008 VOA4

Data File : C:\HPCHEM\1\DATA\D072208\D072211.D Vial: 11
Acq On : 22 Jul 2008 1:58 pm Operator: CR
Sample : ,SAMP,ME0807691-04A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 15:05 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\D072208\D072211.D  Vial: 11
Acq On : 22 Jul 2008 1:58 pm  Operator: CR
Sample : ,SAMP,ME0807691-04A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Smoothing : ON  Filtering: 5
Sampling : 1  Min Area: 3 % of largest Peak
Start Thrs: 0.2  Max Peaks: 100
Stop Thrs : 0  Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

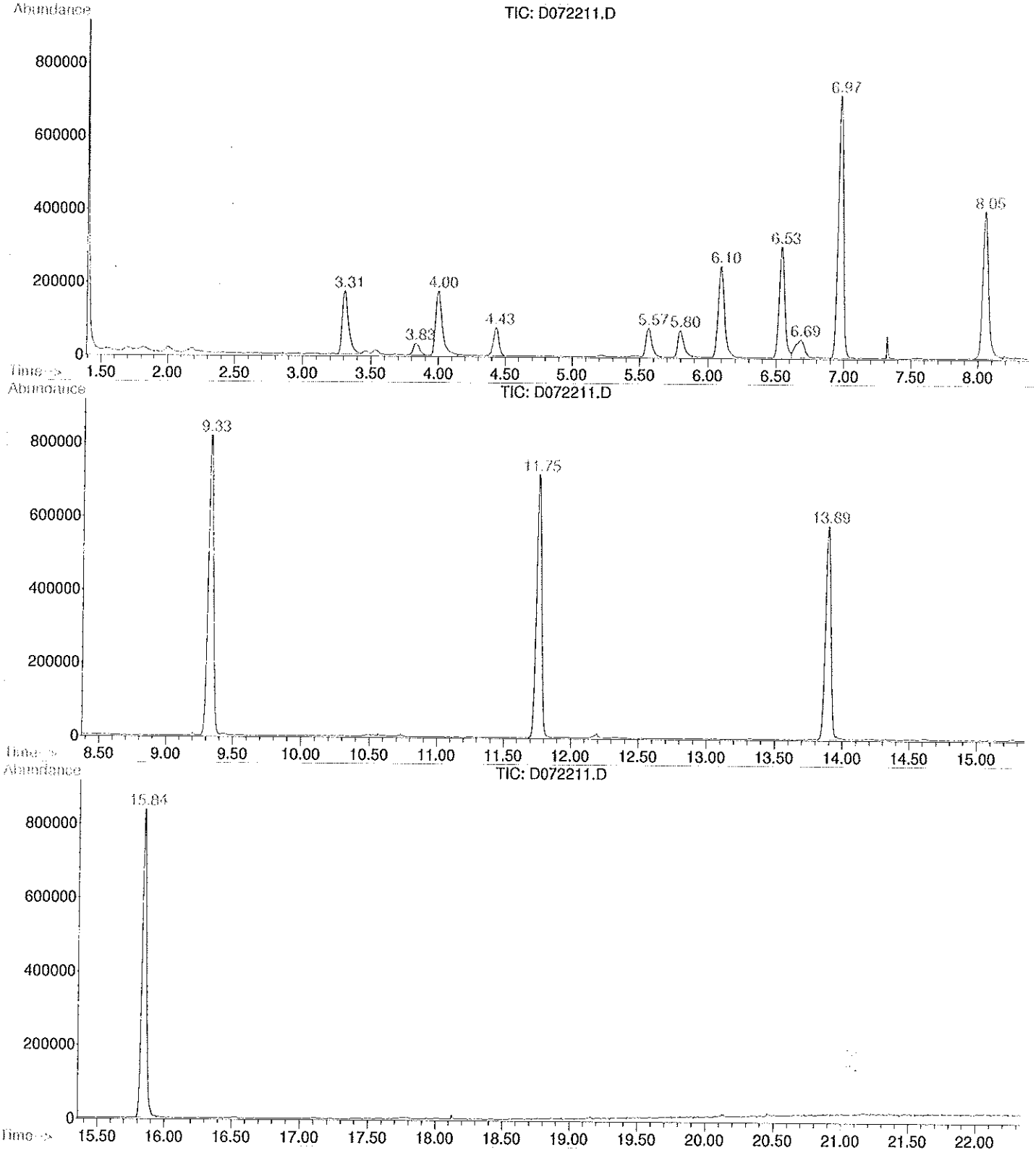
| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.305 | 309 | 319 | 339 | rBV3 | 172325 | 572246 | 25.49% | 3.856% |
| 2 | 3.835 | 396 | 407 | 420 | rBV3 | 32329 | 104875 | 4.67% | 0.707% |
| 3 | 4.003 | 424 | 435 | 459 | rBV3 | 175963 | 628326 | 27.98% | 4.233% |
| 4 | 4.430 | 494 | 506 | 518 | rBV3 | 76700 | 223293 | 9.94% | 1.504% |
| 5 | 5.566 | 685 | 695 | 713 | rVB2 | 77768 | 238606 | 10.63% | 1.608% |
| 6 | 5.801 | 721 | 734 | 748 | rBV3 | 73401 | 237472 | 10.58% | 1.600% |
| 7 | 6.096 | 772 | 783 | 802 | rBV | 248875 | 804992 | 35.85% | 5.424% |
| 8 | 6.535 | 839 | 856 | 869 | rBV | 304295 | 900376 | 40.10% | 6.066% |
| 9 | 6.685 | 869 | 881 | 898 | rVB6 | 49665 | 239901 | 10.68% | 1.616% |
| 10 | 6.968 | 916 | 928 | 948 | rVB | 718242 | 1957974 | 87.20% | 13.192% |
| 11 | 8.050 | 1094 | 1108 | 1130 | rBV2 | 402035 | 1212502 | 54.00% | 8.169% |
| 12 | 9.325 | 1307 | 1320 | 1334 | rBV | 818093 | 2245311 | 100.00% | 15.128% |
| 13 | 11.755 | 1713 | 1724 | 1740 | rBV | 716088 | 1943628 | 86.56% | 13.096% |
| 14 | 13.889 | 2067 | 2079 | 2102 | rBV2 | 580483 | 1590629 | 70.84% | 10.717% |
| 15 | 15.844 | 2395 | 2404 | 2421 | rBV | 836288 | 1941736 | 86.48% | 13.083% |

Sum of corrected areas: 14841867

D072211.D VOA0603.M Fri Aug 01 14:25:30 2008 VOA4

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\D072208\D072211.D
Operator : CR
Acquired : 22 Jul 2008 1:58 pm using AcqMethod VOA-AQ
Instrument : VOA 4
Sample Name: ,SAMP,ME0807691-04A,1,
Misc Info : 8260+_W
Vial Number: 11
Quant File :VOA0603.RES (RTE Integrator)




D072211.D VOA0603.M Fri Aug 01 14:25:32 2008 VOA4

# Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\D072208\D072211.D  Vial: 11
Acq On : 22 Jul 2008 1:58 pm  Operator: CR
Sample : ,SAMP,ME0807691-04A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

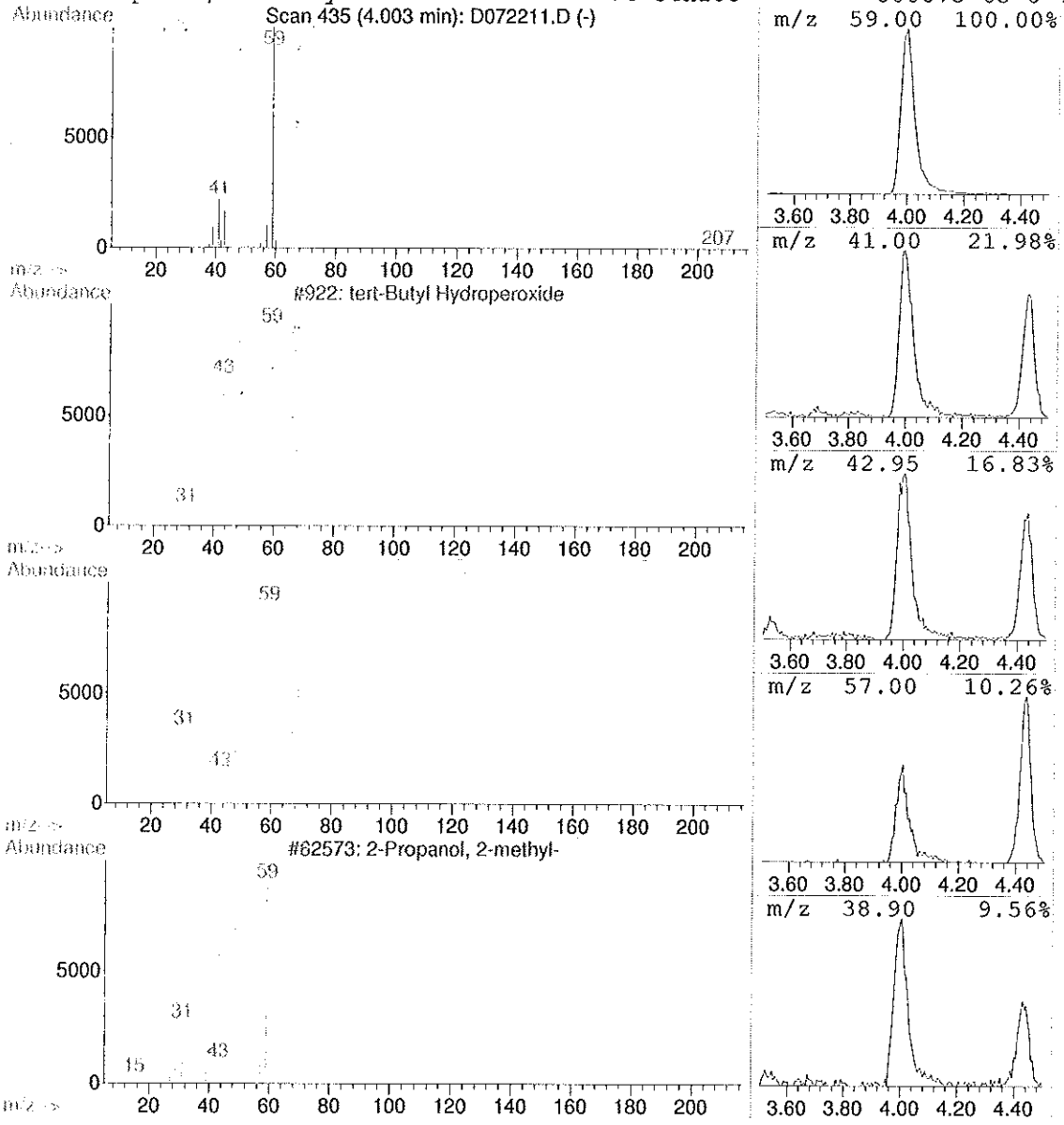
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 1 tert-Butyl Hydroperoxide Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.00 | 16.05 ug/L | 628326 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | tert-Butyl Hydroperoxide | 90 | C4H10O2 | 000075-91-2 | 78 |
| 2 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 3 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 4 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |



Data File : C:\HPCHEM\1\DATA\D072208\D072211.D Vial: 11
Acq On : 22 Jul 2008 1:58 pm Operator: CR
Sample : ,SAMP,ME0807691-04A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: RTEINT.P

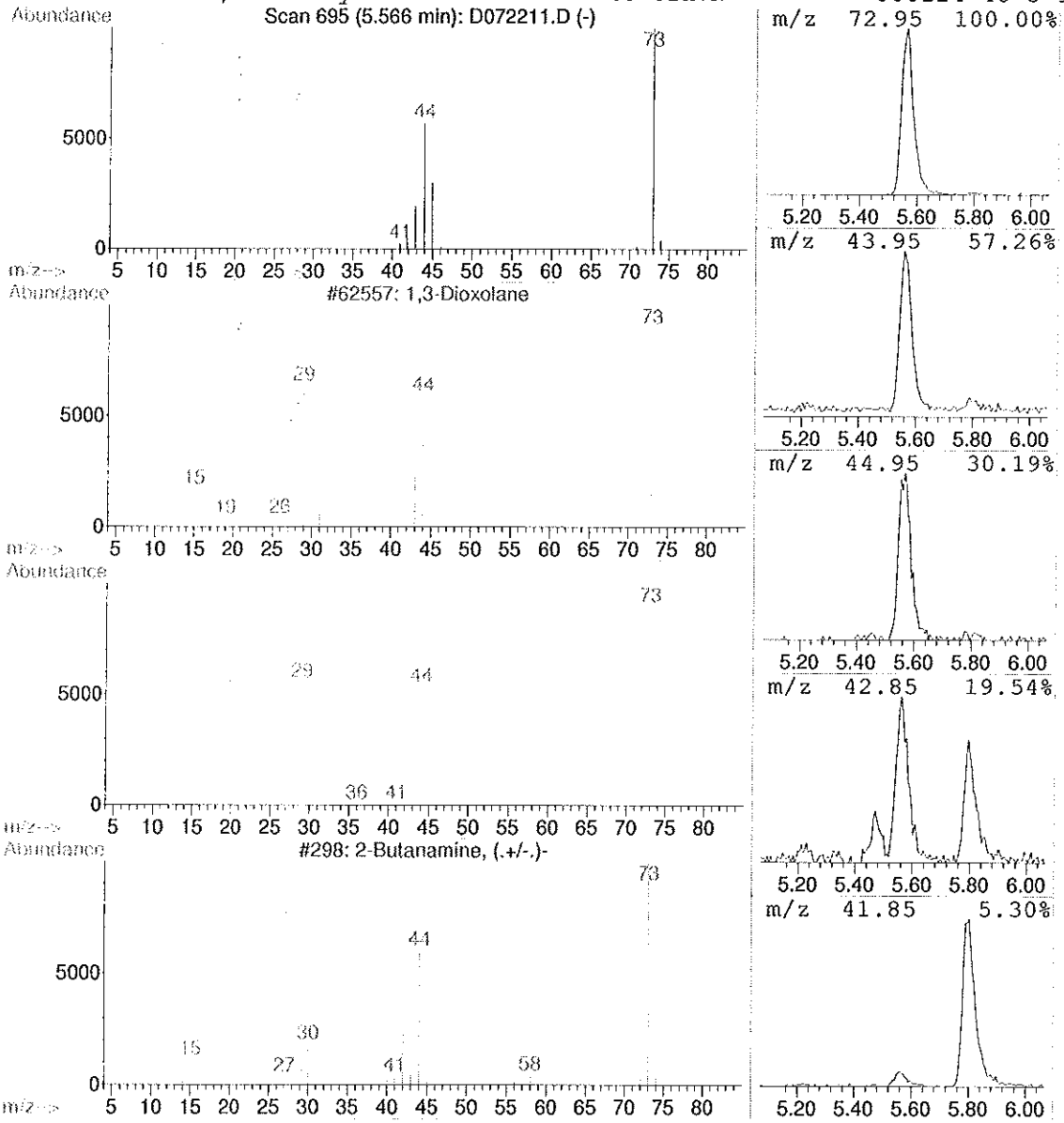
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 2 1,3-Dioxolane Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.57 | 6.09 ug/L | 238606 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 90 |
| 2 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 90 |
| 3 | 2-Butanamine, (.+/-.)- | 73 | C4H11N | 033966-50-6 | 9 |
| 4 | Methanamine, N-methyl- | 45 | C2H7N | 000124-40-3 | 9 |



Data File : C:\HPCHEM\1\DATA\D072208\D072211.D Vial: 11
Acq On : 22 Jul 2008 1:58 pm Operator: CR
Sample : ,SAMP,ME0807691-04A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: RTEINT.P

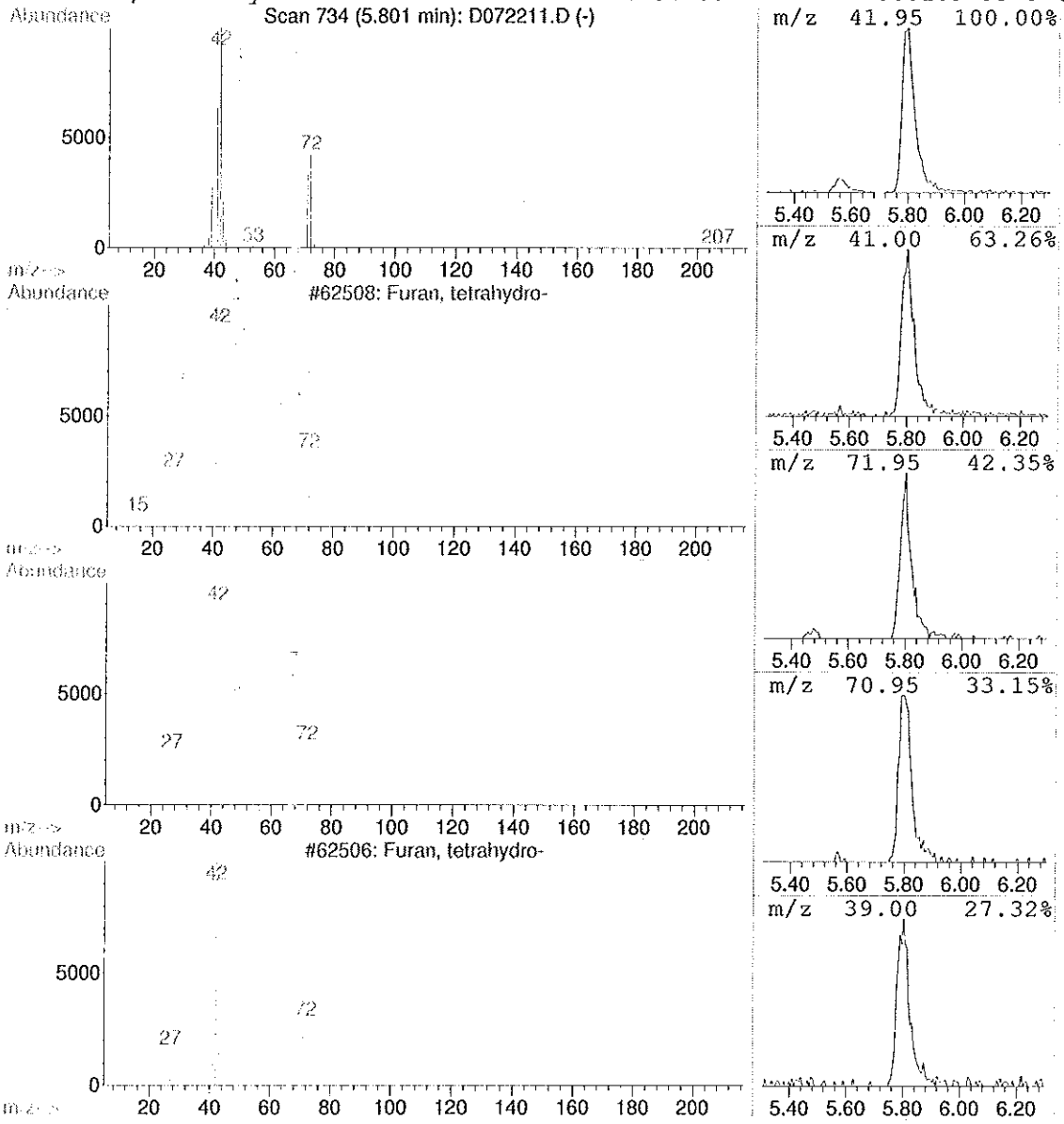
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 3 Furan, tetrahydro- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.80 | 6.06 ug/L | 237472 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 91 |
| 2 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 3 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 90 |
| 4 | Furan, tetrahydro- | 72 | C4H8O | 000109-99-9 | 86 |



Data File : C:\HPCHEM\1\DATA\D072208\D072211.D  Vial: 11
Acq On : 22 Jul 2008 1:58 pm  Operator: CR
Sample : ,SAMP,ME0807691-04A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

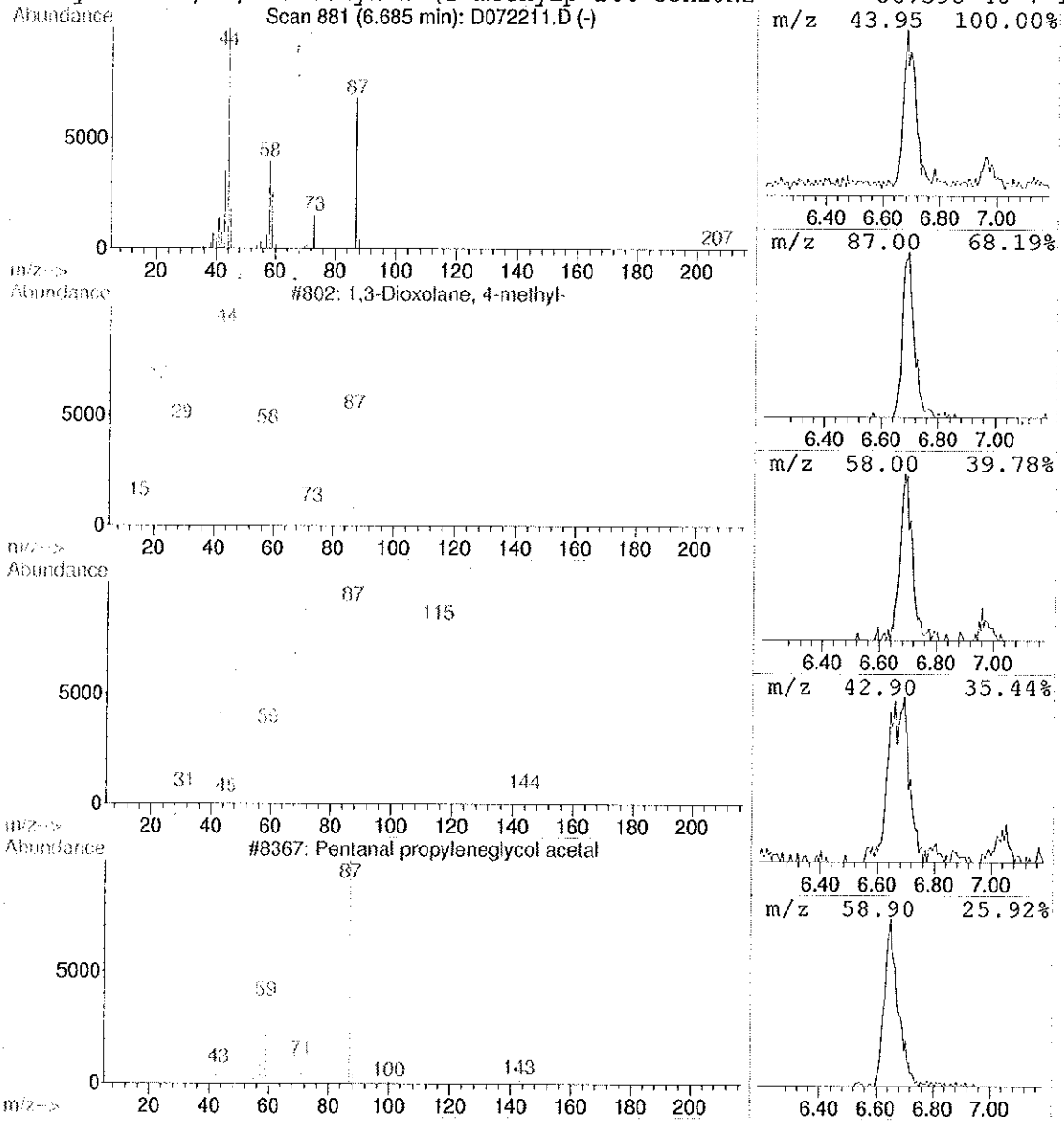
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 4 1,3-Dioxolane, 4-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.69 | 6.13 ug/L | 239901 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane, 4-methyl- | 88 | C4H8O2 | 001072-47-5 | 53 |
| 2 | Silane, tetraethyl- | 144 | C8H20Si | 000631-36-7 | 16 |
| 3 | Pentanal propyleneglycol acetal | 144 | C8H16O2 | 000000-00-0 | 12 |
| 4 | Hydrazine, 1,1-diethyl-2-(1-methylp | 144 | C8H20N2 | 067398-40-7 | 10 |



Tentatively Identified Compound (LSC) summary

Operator ID: CR  Date Acquired: 22 Jul 2008  1:58 pm
Data File: C:\HPCHEM\1\DATA\D072208\D072211.D
Name: ,SAMP,ME0807691-04A,1,
Misc: 8260+_W
Method: C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title: VOA ICAL 06/03/08
Library Searched: C:\DATABASE\nbs75k.L

| TIC Top Hit name | RT | EstConc | Units | Area | IntStd | ISRT | ISArea | ISConc |
|---|---|---|---|---|---|---|---|---|
| tert-Butyl Hydropero | 4.00 | 16.0 | ug/L | 628326 | ISTD01 | 6.97 | 1957970 | 50.0 |
| 1,3-Dioxolane | 5.57 | 6.1 | ug/L | 238606 | ISTD01 | 6.97 | 1957970 | 50.0 |
| Furan, tetrahydro- | 5.80 | 6.1 | ug/L | 237472 | ISTD01 | 6.97 | 1957970 | 50.0 |
| 1,3-Dioxolane, 4-met | 6.69 | 6.1 | ug/L | 239901 | ISTD01 | 6.97 | 1957970 | 50.0 |

D072211.D  VOA0603.M  Fri Aug 01 14:25:41 2008  VOA4

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\D072208\D072212.D Vial: 12
Acq On : 22 Jul 2008 2:34 pm Operator: CR
Sample : ,SAMP,ME0807691-05A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 15:05 2008 Quant Results File: VOA0603.RES

Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration
DataAcq Meth : VOA-AQ

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) fluorobenzene | 6.97 | 96 | 907664 | 50.00 | ug/L | -0.03 |
| 41) chlorobenzene-d5 | 11.76 | 117 | 630948 | 50.00 | ug/L | -0.03 |
| 69) 1,4-dichlorobenzene-d4 | 15.85 | 152 | 310303 | 50.00 | ug/L | -0.03 |
| **System Monitoring Compounds** | | | | | | |
| 26) dibromofluoromethane | 6.10 | 113 | 255696 | 53.13 | ug/L | -0.03 |
| 30) 1,2-dichloroethane-d4 | 6.54 | 65 | 322827 | 55.49 | ug/L | -0.03 |
| 44) toluene-d8 | 9.33 | 98 | 808211 | 50.46 | ug/L | -0.03 |
| 63) 4-bromofluorobenzene | 13.90 | 95 | 351984 | 52.01 | ug/L | -0.03 |
| **Target Compounds** | | | | | | Qvalue |
| 11) acetone | 3.33 | 43 | 60729 | 18.34 | ug/L | 96 |
| 18) hexane | 4.44 | 57 | 27790 | 2.15 | ug/L # | 99 |
| 31) methyl methacrylate | 8.05 | 41 | 21265 | 3.22 | ug/L # | 57 |

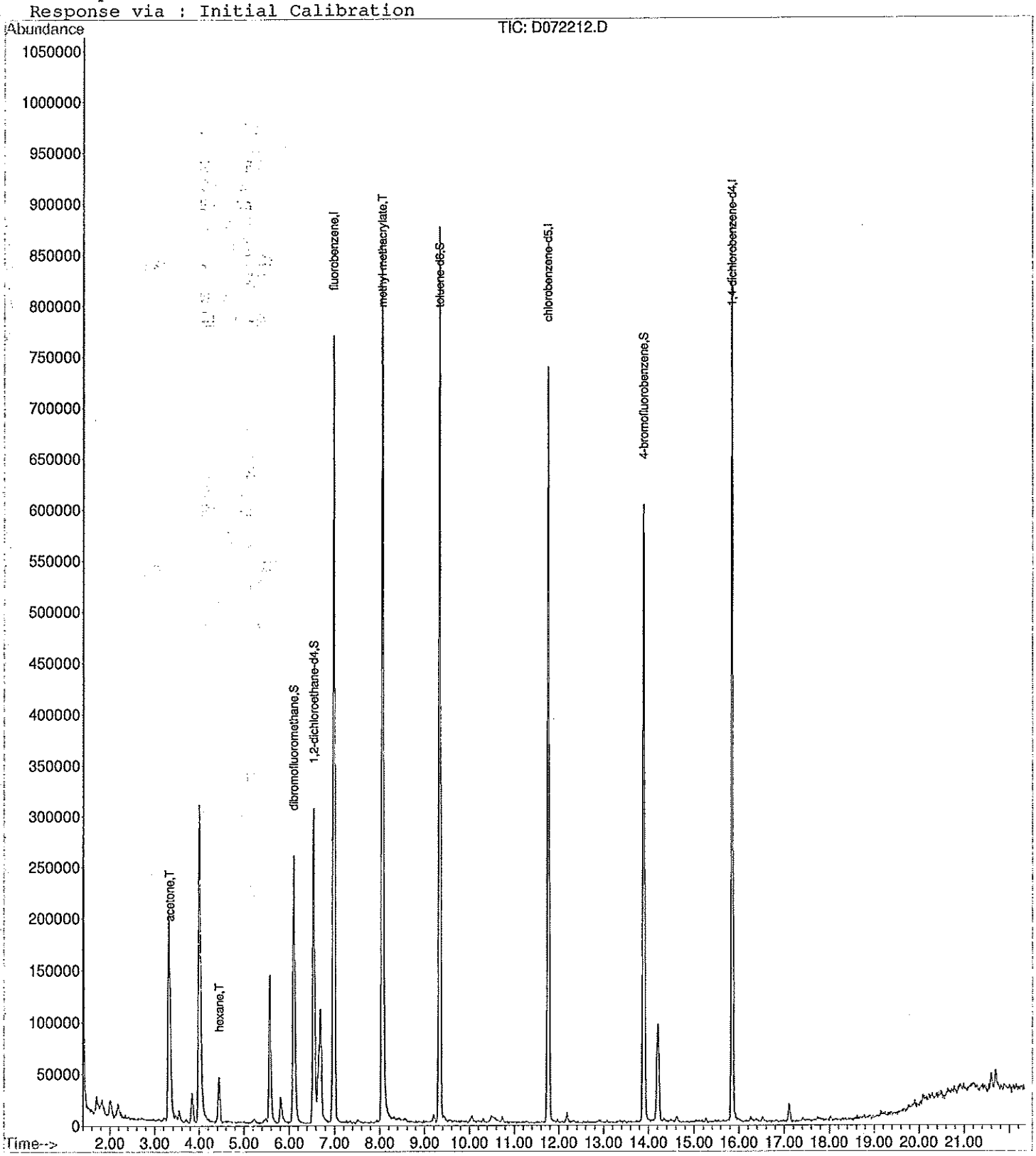
JN 7/22/08

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\D072208\D072212.D Vial: 12
Acq On : 22 Jul 2008 2:34 pm Operator: CR
Sample : ,SAMP,ME0807691-05A,1, Inst : VOA 4
Misc : 8260+_W Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 22 15:05 2008 Quant Results File: VOA0603.RES

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Last Update : Wed Jul 02 14:41:21 2008
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\D072208\D072212.D  Vial: 12
Acq On : 22 Jul 2008 2:34 pm  Operator: CR
Sample : ,SAMP,ME0807691-05A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Smoothing : ON  Filtering: 5
Sampling : 1  Min Area: 3 % of largest Peak
Start Thrs: 0.2  Max Peaks: 100
Stop Thrs : 0  Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

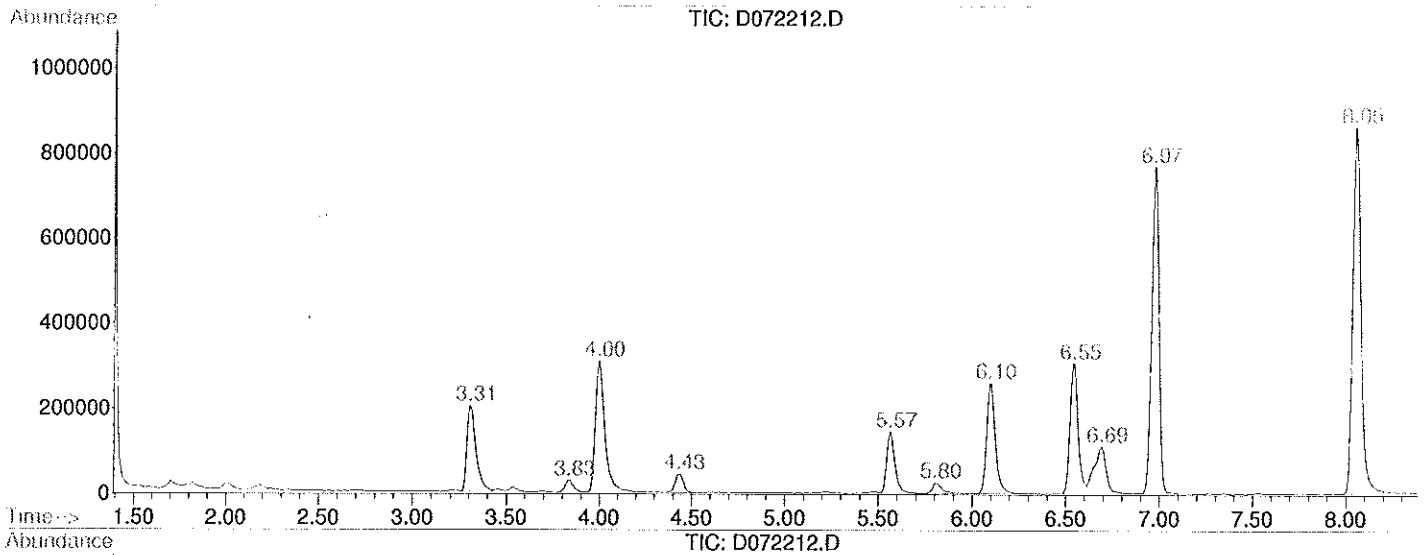
| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.305 | 311 | 319 | 339 | rBV2 | 200951 | 679919 | 26.15% | 3.796% |
| 2 | 3.835 | 397 | 407 | 420 | rBV4 | 28603 | 92681 | 3.56% | 0.517% |
| 3 | 3.997 | 424 | 434 | 467 | rBV | 307906 | 1118721 | 43.03% | 6.246% |
| 4 | 4.430 | 495 | 506 | 520 | rVB2 | 44053 | 140650 | 5.41% | 0.785% |
| 5 | 5.566 | 685 | 695 | 721 | rVB | 143222 | 439588 | 16.91% | 2.454% |
| 6 | 5.801 | 726 | 734 | 751 | rBV4 | 24834 | 86760 | 3.34% | 0.484% |
| 7 | 6.096 | 770 | 783 | 806 | rBV | 258659 | 839478 | 32.29% | 4.687% |
| 8 | 6.547 | 846 | 858 | 869 | rBV | 305190 | 928506 | 35.71% | 5.184% |
| 9 | 6.691 | 869 | 882 | 907 | rVB6 | 109117 | 493181 | 18.97% | 2.753% |
| 10 | 6.974 | 917 | 929 | 952 | rBV | 767452 | 2079592 | 79.98% | 11.610% |
| 11 | 8.050 | 1096 | 1108 | 1142 | rBV | 860535 | 2600104 | 100.00% | 14.516% |
| 12 | 9.331 | 1308 | 1321 | 1333 | rBV | 873480 | 2350837 | 90.41% | 13.124% |
| 13 | 11.761 | 1713 | 1725 | 1745 | rBV | 736382 | 2044377 | 78.63% | 11.414% |
| 14 | 13.895 | 2066 | 2080 | 2098 | rBV | 601131 | 1654207 | 63.62% | 9.235% |
| 15 | 14.208 | 2115 | 2132 | 2146 | rBV2 | 93077 | 324714 | 12.49% | 1.813% |
| 16 | 15.850 | 2395 | 2405 | 2423 | rBV | 882244 | 2038584 | 78.40% | 11.381% |

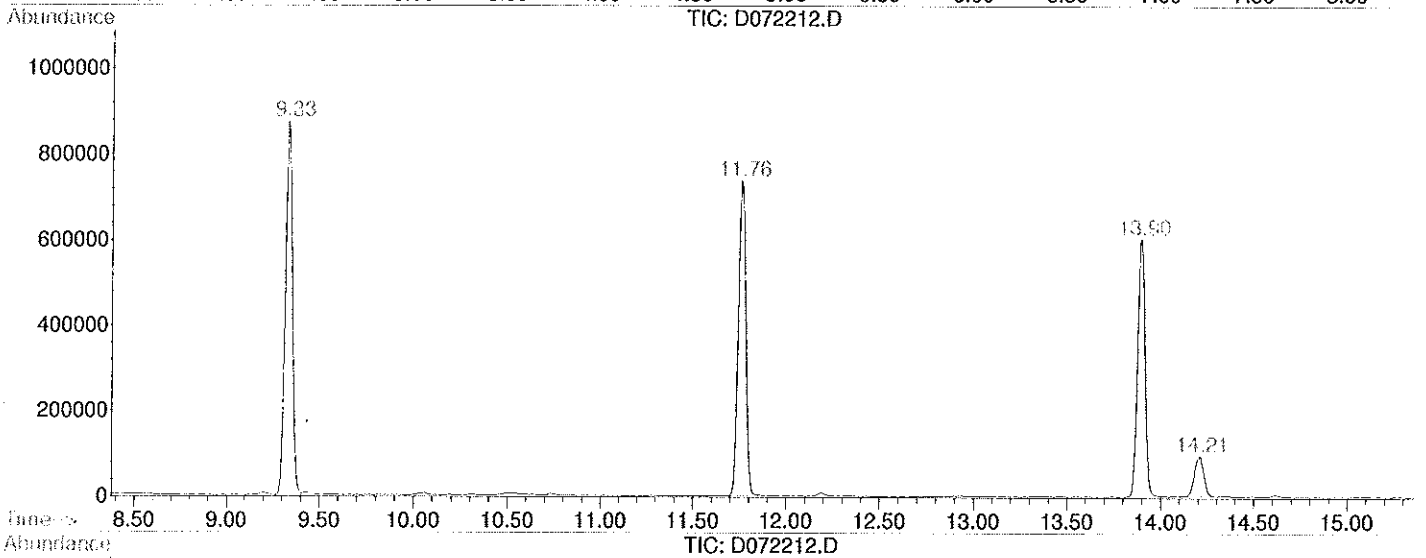
Sum of corrected areas: 17911899

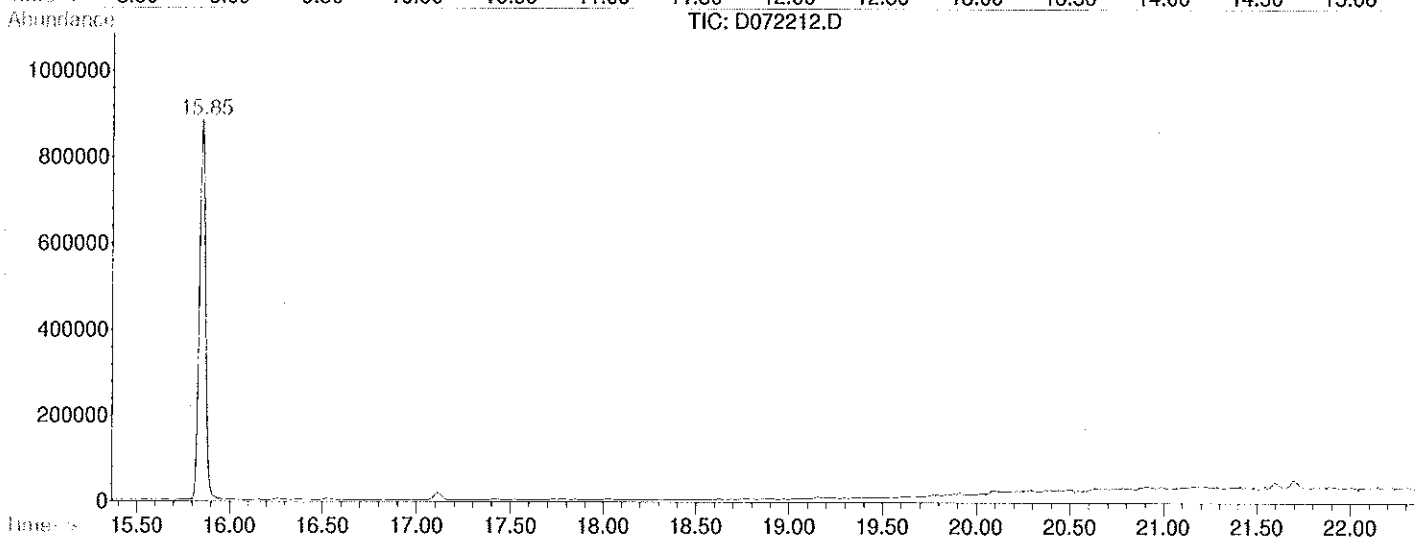
D072212.D VOA0603.M Fri Aug 01 14:25:46 2008 VOA4

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\D072208\D072212.D
Operator : CR
Acquired : 22 Jul 2008 2:34 pm using AcqMethod VOA-AQ
Instrument : VOA 4
Sample Name: ,SAMP,ME0807691-05A,1,
Misc Info : 8260+_W
Vial Number: 12
Quant File :VOA0603.RES (RTE Integrator)




D072212.D VOA0603.M Fri Aug 01 14:25:48 2008 VOA4

# Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\D072208\D072212.D  Vial: 12
Acq On : 22 Jul 2008 2:34 pm  Operator: CR
Sample : ,SAMP,ME0807691-05A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

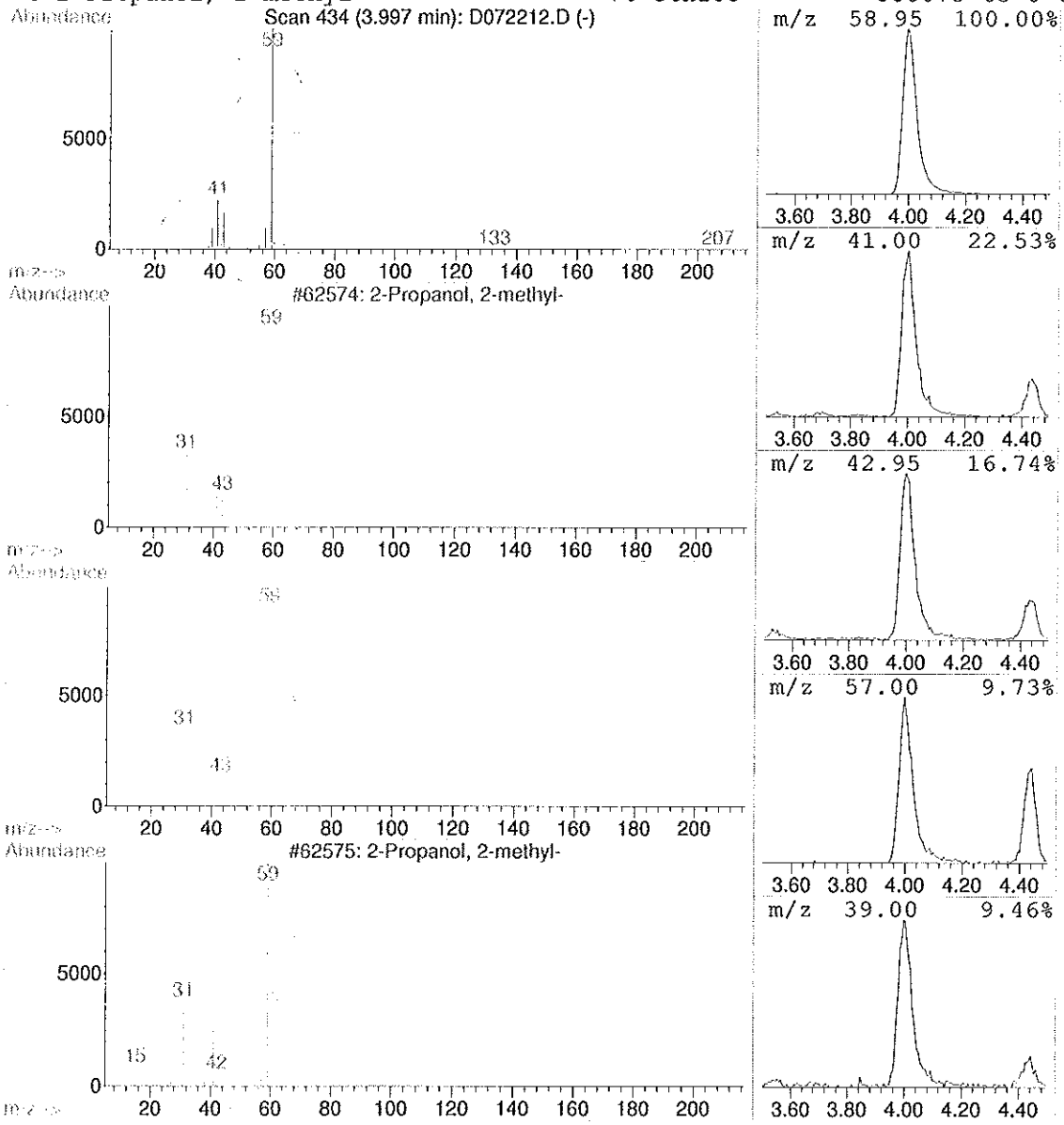
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 1 2-Propanol, 2-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.00 | 26.90 ug/L | 1118720 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 83 |
| 2 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 78 |
| 3 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 74 |
| 4 | 2-Propanol, 2-methyl- | 74 | C4H10O | 000075-65-0 | 64 |



Data File : C:\HPCHEM\1\DATA\D072208\D072212.D  Vial: 12
Acq On : 22 Jul 2008 2:34 pm  Operator: CR
Sample : ,SAMP,ME0807691-05A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

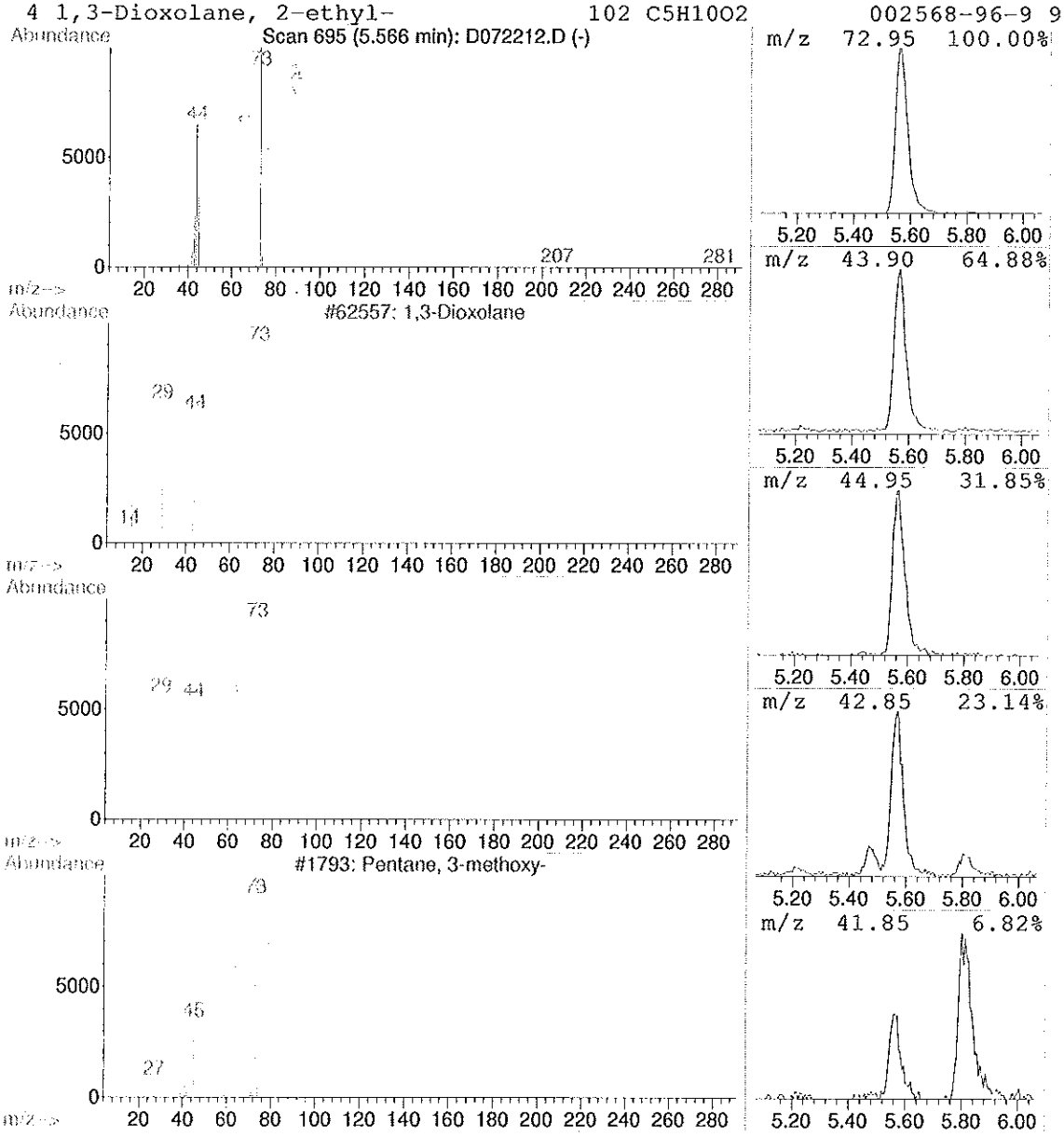
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 2 1,3-Dioxolane  Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.57 | 10.57 ug/L | 439588 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 90 |
| 2 | 1,3-Dioxolane | 74 | C3H6O2 | 000646-06-0 | 90 |
| 3 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 9 |
| 4 | 1,3-Dioxolane, 2-ethyl- | 102 | C5H10O2 | 002568-96-9 | 9 |



Data File : C:\HPCHEM\1\DATA\D072208\D072212.D  Vial: 12
Acq On : 22 Jul 2008 2:34 pm  Operator: CR
Sample : ,SAMP,ME0807691-05A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

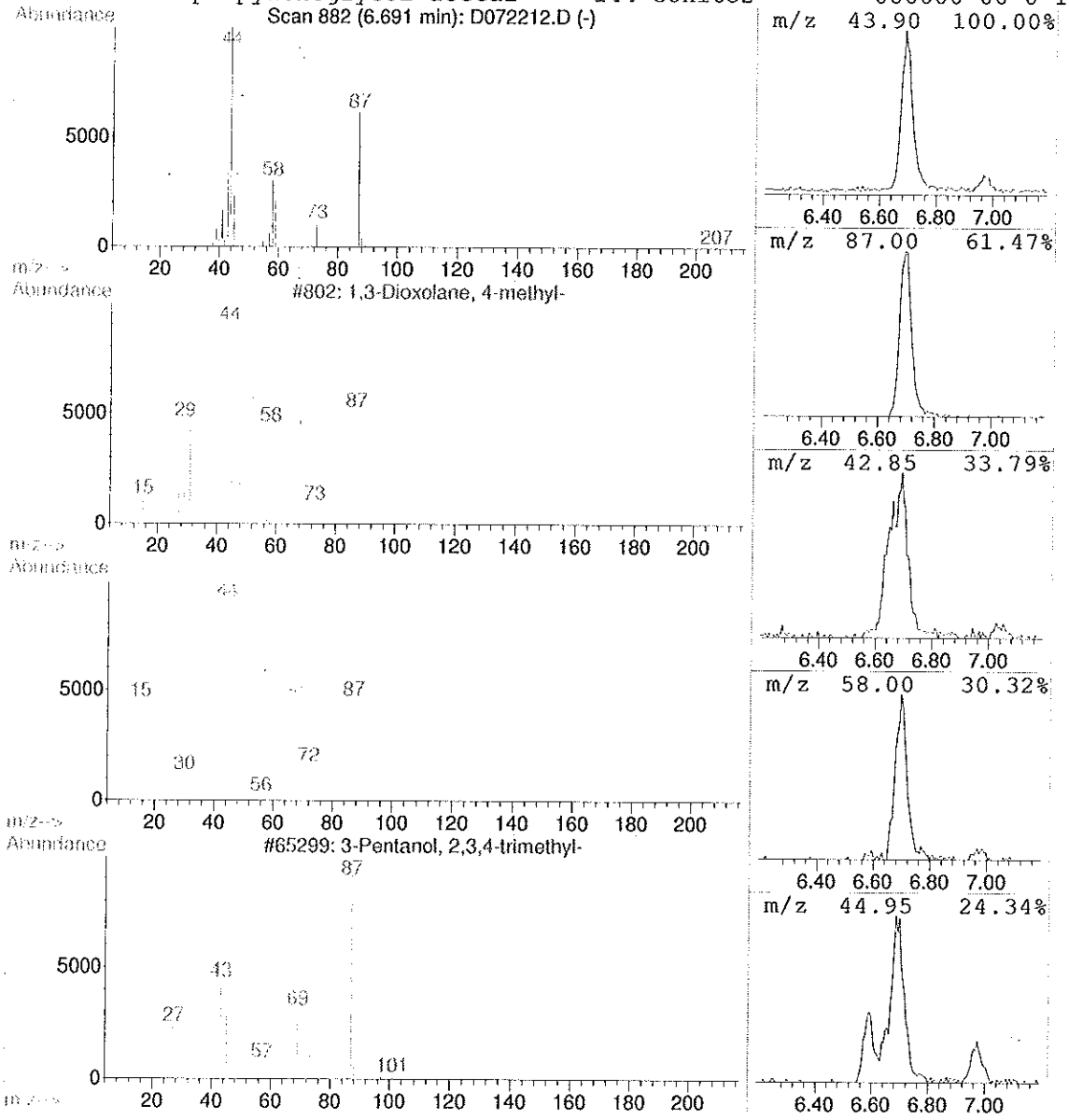
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 3 1,3-Dioxolane, 4-methyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.69 | 11.86 ug/L | 493181 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Dioxolane, 4-methyl- | 88 | C4H8O2 | 001072-47-5 | 59 |
| 2 | Acetamide, N,N-dimethyl- | 87 | C4H9NO | 000127-19-5 | 58 |
| 3 | 3-Pentanol, 2,3,4-trimethyl- | 130 | C8H18O | 003054-92-0 | 16 |
| 4 | Pentanal propyleneglycol acetal | 144 | C8H16O2 | 000000-00-0 | 16 |



Data File : C:\HPCHEM\1\DATA\D072208\D072212.D  Vial: 12
Acq On : 22 Jul 2008 2:34 pm  Operator: CR
Sample : ,SAMP,ME0807691-05A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

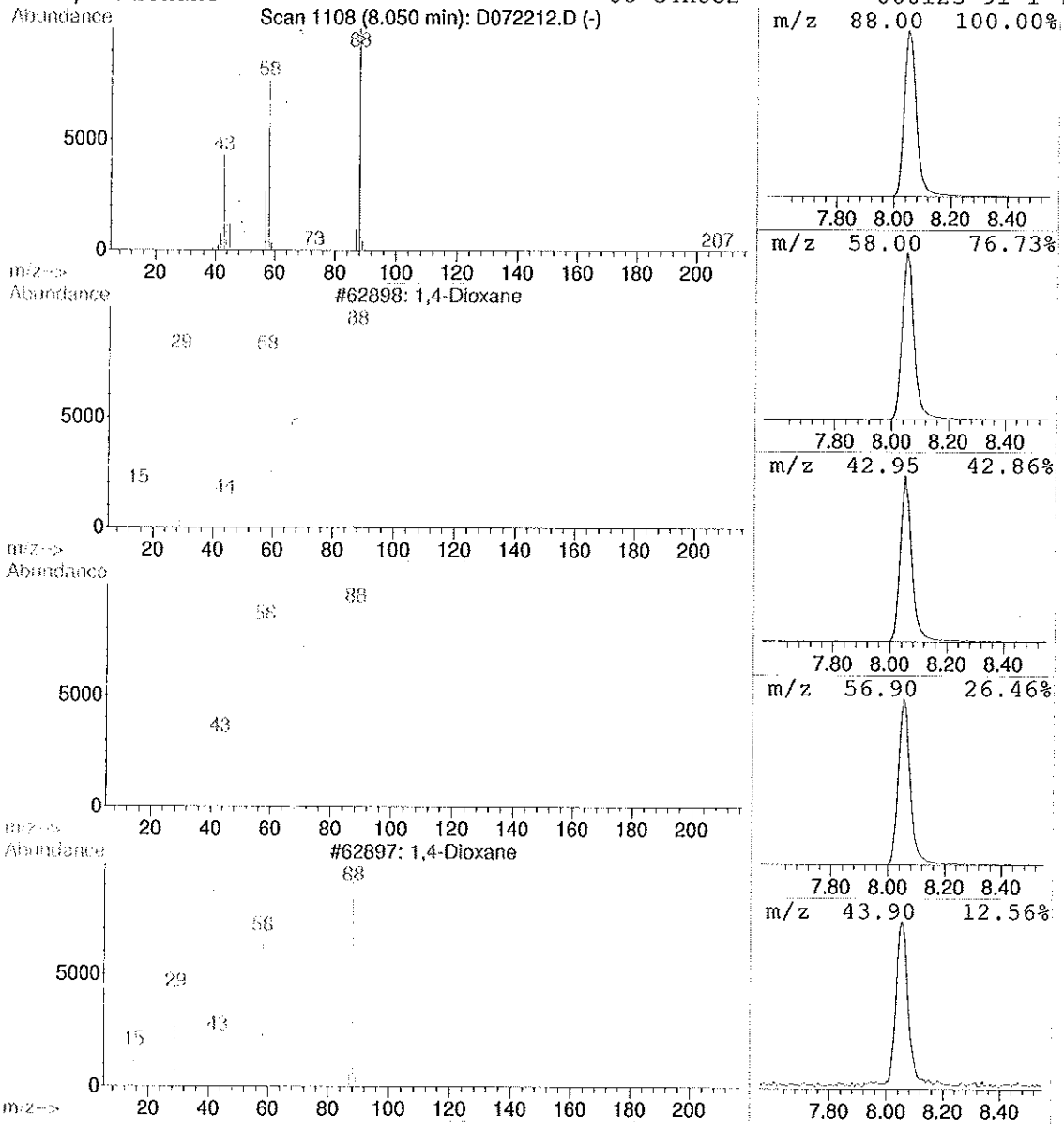
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 4 1,4-Dioxane  Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.05 | 62.51 ug/L | 2600100 | fluorobenzene | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 2 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 91 |
| 3 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 90 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 78 |



Data File : C:\HPCHEM\1\DATA\D072208\D072212.D  Vial: 12
Acq On : 22 Jul 2008 2:34 pm  Operator: CR
Sample : ,SAMP,ME0807691-05A,1,  Inst : VOA 4
Misc : 8260+_W  Multiplr: 1.00
MS Integration Params: RTEINT.P

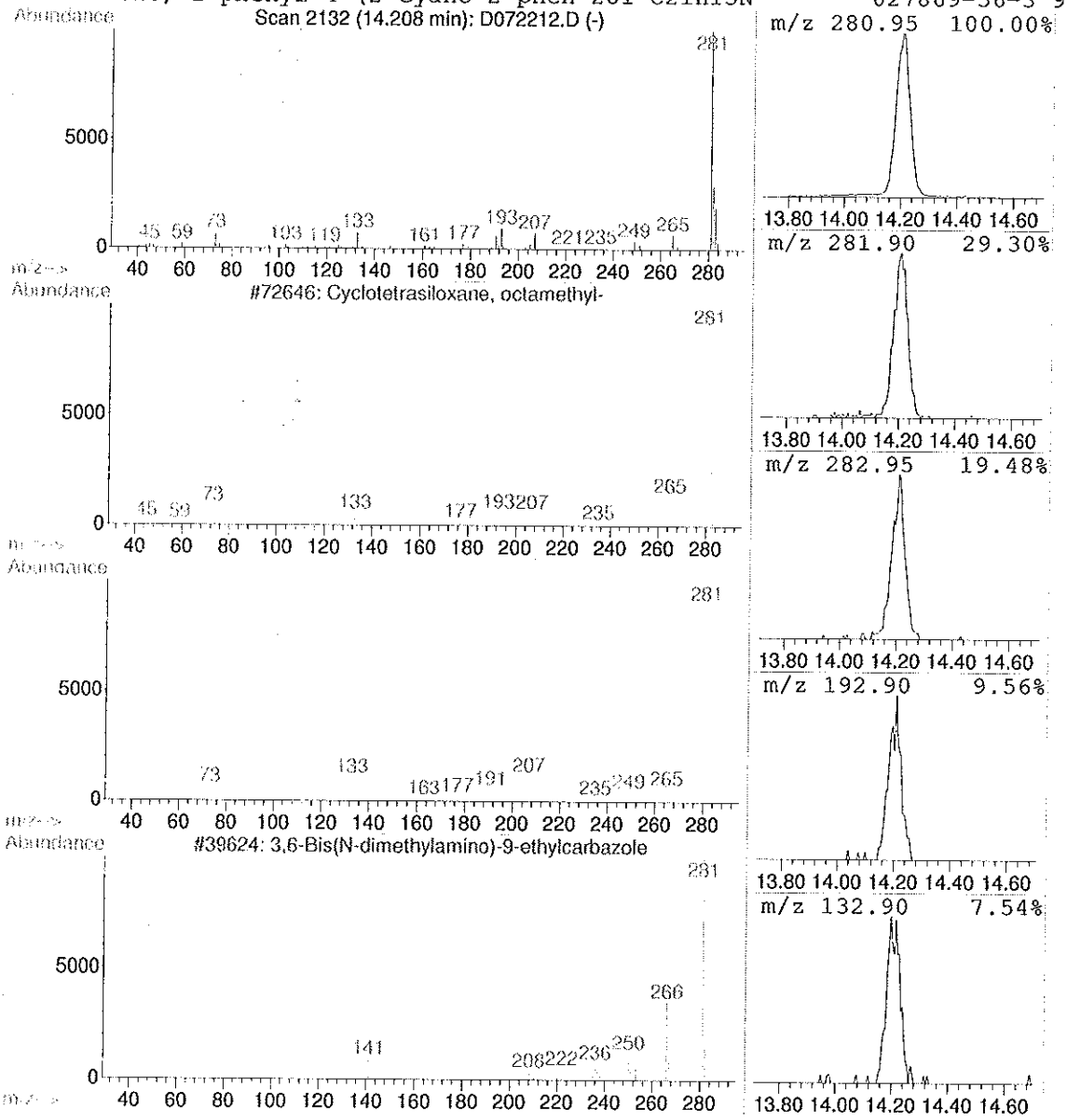
Quant Method : C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title : VOA ICAL 06/03/08
Library : C:\DATABASE\nbs75k.L

**********

Peak Number 5 Cyclotetrasiloxane, octamethyl Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.21 | 7.96 ug/L | 324714 | 1,4-dichlorobenzene-d4 | 15.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclotetrasiloxane, octamethyl- | 296 | C8H24O4Si4 | 000556-67-2 | 80 |
| 2 | Cyclotetrasiloxane, octamethyl- | 296 | C8H24O4Si4 | 000556-67-2 | 64 |
| 3 | 3,6-Bis(N-dimethylamino)-9-ethylcar | 281 | C18H23N3 | 057103-04-5 | 9 |
| 4 | Benzene, 1-phenyl-4-(2-cyano-2-phen | 281 | C21H15N | 027869-56-3 | 9 |



Tentatively Identified Compound (LSC) summary

Operator ID: CR  Date Acquired: 22 Jul 2008  2:34 pm
Data File: C:\HPCHEM\1\DATA\D072208\D072212.D
Name: ,SAMP,ME0807691-05A,1,
Misc: 8260+_W
Method: C:\HPCHEM\1\METHODS\VOA0603.M (RTE Integrator)
Title: VOA ICAL 06/03/08
Library Searched: C:\DATABASE\nbs75k.L

| TIC Top Hit name | RT | EstConc | Units | Area | IntStd | ISRT | ISArea | ISConc |
|---|---|---|---|---|---|---|---|---|
| 2-Propanol, 2-methyl | 4.00 | 26.9 | ug/L | 1118720 | ISTD01 | 6.97 | 2079590 | 50.0 |
| 1,3-Dioxolane | 5.57 | 10.6 | ug/L | 439588 | ISTD01 | 6.97 | 2079590 | 50.0 |
| 1,3-Dioxolane, 4-met | 6.69 | 11.9 | ug/L | 493181 | ISTD01 | 6.97 | 2079590 | 50.0 |
| 1,4-Dioxane | 8.05 | 62.5 | ug/L | 2600100 | ISTD01 | 6.97 | 2079590 | 50.0 |
| Cyclotetrasiloxane, | 14.21 | 8.0 | ug/L | 324714 | ISTD03 | 15.85 | 2038580 | 50.0 |

D072212.D  VOA0603.M  Fri Aug 01 14:25:59 2008  VOA4

# INJECTION LOG(S)

# Injection Log

Directory: C:\HPCHEM\1\DATA\D072208

| ine | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| | 1 | D072201.D | 1. | ,TUNE,BFB TUNE,1, | BFB | 22 Jul 2008 06:38 |
| | 2 | D072202.D | 1. | ,CCV,CCV-50ppb,1, | 8260_W | 22 Jul 2008 07:08 |
| | 3 | D072203.D | 1. | ,CCV,GRO 1000ppb,1, | GRO_W | 22 Jul 2008 07:44 |
| | 4 | D072204.D | 1. | ,MBLK,MB 7/22,1, | 8260+_W | 22 Jul 2008 08:31 |
| | 5 | D072205.D | 1. | ,LCS,LCS 20 PPB,1, | 8260+_W | 22 Jul 2008 09:06 |
| | 6 | D072206.D | 1. | ,SAMP,ME0807572-01A,1,RA, | 8260_S | 22 Jul 2008 10:59 |
| | 7 | D072207.D | 1. | ,SAMP,ME0807686-09A,50,RA, | BTEX+M_W | 22 Jul 2008 11:35 |
| | 8 | D072208.D | 1. | ,SAMP,ME0807691-01A,1, | 8260+_W | 22 Jul 2008 12:11 |
| | 9 | D072209.D | 1. | ,SAMP,ME0807691-02A,1, | 8260+_W | 22 Jul 2008 12:46 |
| 0 | 10 | D072210.D | 1. | ,SAMP,ME0807691-03A,1, | 8260+_W | 22 Jul 2008 13:22 |
| 1 | 11 | D072211.D | 1. | ,SAMP,ME0807691-04A,1, | 8260+_W | 22 Jul 2008 13:58 |
| 2 | 12 | D072212.D | 1. | ,SAMP,ME0807691-05A,1, | 8260+_W | 22 Jul 2008 14:34 |
| 3 | 13 | D072213.D | 1. | ,SAMP,ME0807572-01A,5,RA, | 8260_S | 22 Jul 2008 15:15 |
| 4 | 14 | D072214.D | 1. | ,MS,ME0807691-02AMS,1, | 8260+_W | 22 Jul 2008 15:51 |
| 5 | 15 | D072215.D | 1. | ,MSD,ME0807691-02AMSD,1, | 8260+_W | 22 Jul 2008 16:27 |
| 6 | 16 | D072216.D | 1. | ,TUNE,BFB TUNE,1, | BFB | 22 Jul 2008 16:58 |
| 7 | 17 | D072216A.D | 1. | ,TUNE,BFB TUNE,1, | BFB | 22 Jul 2008 17:16 |
| 8 | 17 | D072217.D | 1. | ,CCV,CCV-50ppb,1, | 8260_W | 22 Jul 2008 17:33 |
| 9 | 18 | D072218.D | 1. | ,CCV,GRO 1000ppb,1, | GRO_W | 22 Jul 2008 18:09 |
| 0 | 19 | D072219.D | 1. | ,SAMP,ME0807572-01A,2,RA, | 8260_S | 22 Jul 2008 19:32 |
| 1 | 20 | D072220.D | 1. | ,SAMP,ME0807722-02A,1, | 8260_W | 22 Jul 2008 20:08 |
| 2 | 21 | D072221.D | 1. | ,SAMP,ME0807875-03A,1, | BTEX+M_W | 22 Jul 2008 20:44 |
| 3 | 22 | D072222.D | 1. | ,SAMP,ME0807875-04A,1, | BTEX+M_W | 22 Jul 2008 21:20 |
| 4 | 23 | D072223.D | 1. | ,SAMP,ME0807875-05A,50, | BTEX+M_W | 22 Jul 2008 21:55 |
| 5 | 24 | D072224.D | 1. | ,SAMP,ME0807875-06A,10, | BTEX+M_W | 22 Jul 2008 22:31 |
| 6 | 25 | D072225.D | 1. | ,SAMP,ME0807875-07A,25, | BTEX+M_W | 22 Jul 2008 23:07 |
| 7 | 26 | D072226.D | 1. | ,SAMP,ME0807875-08A,1, | BTEX+M_W | 22 Jul 2008 23:43 |
| 8 | 27 | D072227.D | 1. | ,SAMP,ME0807875-09A,10, | BTEX+M_W | 23 Jul 2008 00:19 |
| 9 | 28 | D072228.D | 1. | ,SAMP,ME0807875-10A,1, | BTEX+M_W | 23 Jul 2008 00:55 |
| 0 | 29 | D072229.D | 1. | ,SAMP,ME0807875-12A,1, | BTEX+M_W | 23 Jul 2008 01:31 |
| 1 | 30 | D072230.D | 1. | ,SAMP,ME0807875-13A,10, | BTEX+M_W | 23 Jul 2008 02:07 |
| 2 | 31 | D072231.D | 1. | ,SAMP,ME0807875-14A,1, | BTEX+M_W | 23 Jul 2008 02:43 |

**LABORATORY DATA CONSULTANTS, INC.**
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

MWH Americas, Inc.
175 West Jackson Blvd, Suite 1900
Chicago, IL 60604-2814
ATTN: Mr. Justin Finger

August 28, 2008

SUBJECT: ACS Air Compliance, Data Validation

Dear Mr. Finger,

Enclosed is the final validation report for the fraction listed below. This SDG was received on August 27, 2008. Attachment 1 is a summary of the samples that were reviewed for each analysis.

**LDC Project # 19375:**

| SDG # | Fraction |
|---|---|
| ME0807691 | Volatiles |

The data validation was performed under EPA Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan, November 2001, Rev.0
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

1 Week Rush

Attachment 1

RTC PARCC

# LDC #19375 (MWH Americas, Inc.-Chicago IL / ACS-89)

| LDC | SDG# | DATE REC'D | (3) DATE DUE | VOA (8260B) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix: | Water/Soil | | | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S | W | S |
| A | ME0807691 | 08/27/08 | 09/18/08 | 4 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | ME0807691 | 08/27/08 | 09/18/08 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | T/LR | | | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

**ACS Air Compliance**
**Data Validation Reports**
**LDC# 19375**

Volatiles

LDC

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** ACS 89

**Collection Date:** July 16, 2008

**LDC Report Date:** August 27, 2008

**Matrix:** Water

**Parameters:** Volatiles

**Validation Level:** EPA Level III & IV

**Laboratory:** Microbac

**Sample Delivery Group (SDG):** ME0807691

**Sample Identification**

ACS-GW-TB01-31 RE
ACS-GW-EB01-31 RE
ACS-GW-DUP01-31 RE
ACS-GW-MW-59-31 RE
ACS-GW-MW-58-31 RE**
ACS-GW-EB01-31 REMS
ACS-GW-EB01-31 REMSD

**Indicates sample underwent EPA Level IV review

## Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

The review follows the Remedial Design/Remedial Action PRP - Lead Project Quality Assurance Project Plan (November 2001, Rev. 0) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

B Compound or analyte was positively detected in a sample and in an associated blank.

UB Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %RSD | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 6/3/08 | Acetone | 37.57 | All samples in SDG ME0807691 | J (all detects) UJ (all non-detects) | A |

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 6/3/08 | 2-Butanone | 0.037 (≥0.05) | All samples in SDG ME0807691 | J (all detects) UJ (all non-detects) | A |

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 7/22/08 | Acetone<br>Carbon disulfide<br>4-Methyl-2-pentanone<br>2-Hexanone | 25.3<br>32.8<br>27.3<br>29.5 | All samples in SDG ME0807691 | J (all detects)<br>UJ (all non-detects) | A |

All of the continuing calibration RRF values were within validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 7/22/08 | 2-Butanone | 0.031 (≥0.05) | All samples in SDG ME0807691 | J (all detects)<br>UJ (all non-detects) | A |

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

| Method Blank ID | Analysis Date | Compound TIC (RT in minutes) | Concentration | Associated Samples |
|---|---|---|---|---|
| MB7/22 | 7/22/08 | Acetone | 5.93 ug/L | All samples in SDG ME0807691 |

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

| Sample | Compound TIC (RT in minutes) | Reported Concentration | Modified Final Concentration |
|---|---|---|---|
| ACS-GW-TB01-31 RE | Acetone | 12 ug/L | 50UB ug/L |
| ACS-GW-EB01-31 RE | Acetone | 7.4 ug/L | 50UB ug/L |

| Sample | Compound TIC (RT in minutes) | Reported Concentration | Modified Final Concentration |
|---|---|---|---|
| ACS-GW-DUP01-31 RE | Acetone | 14 ug/L | 50UB ug/L |
| ACS-GW-MW-59-31 RE | Acetone | 14 ug/L | 50UB ug/L |
| ACS-GW-MW-58-31 RE** | Acetone | 18 ug/L | 50UB ug/L |

Sample ACS-GW-TB01-31 RE was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

| Trip Blank ID | Sampling Date | Compound | Concentration | Associated Samples |
|---|---|---|---|---|
| ACS-GW-TB01-31 RE | 7/16/08 | Methylene chloride<br>Acetone | 8 ug/L<br>12 ug/L | ACS-GW-EB01-31 RE<br>ACS-GW-DUP01-31 RE<br>ACS-GW-MW-59-31 RE<br>ACS-GW-MW-58-31 RE** |

Sample ACS-GW-EB01-31 RE was identified as an equipment blank. No volatile contaminants were found in this blank with the following exceptions:

| Equipment Blank ID | Sampling Date | Compound | Concentration | Associated Samples |
|---|---|---|---|---|
| ACS-GW-EB01-31 RE | 7/16/08 | Methylene chloride<br>Acetone | 7.1 mg/L<br>7.4 mg/L | ACS-GW-DUP01-31 RE<br>ACS-GW-MW-59-31 RE<br>ACS-GW-MW-58-31 RE** |

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

| Sample | Compound | Reported Concentration | Modified Final Concentration |
|---|---|---|---|
| ACS-GW-EB01-31 RE | Methylene chloride<br>Acetone | 7.1 ug/L<br>7.4 ug/L | 10UB ug/L<br>50UB ug/L |
| ACS-GW-DUP01-31 RE | Acetone | 14 ug/L | 50UB ug/L |
| ACS-GW-MW-59-31 RE | Acetone | 14 ug/L | 50UB ug/L |
| ACS-GW-MW-58-31 RE** | Acetone | 18 ug/L | 50UB ug/L |

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Compound | MS (%R) (Limits) | MSD (%R) (Limits) | RPD (Limits) | Flag | A or P |
|---|---|---|---|---|---|---|
| ACS-GW-EB01-31 REMS/MSD (ACS-GW-EB01-31 RE) | trans-1,3-Dichloropropene | 67.3 (69.9-130) | - | - | J (all detects) UJ (all non-detects) | A |

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

All internal standard areas and retention times were within QC limits.

## XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

## XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

## XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

## XIV. System Performance

The system performance was acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

## XV. Overall Assessment of Data

Data flags have been summarized at the end of the report if data has been qualified.

## XVI. Field Duplicates

Samples ACS-GW-DUP01-31 RE and ACS-GW-MW-59-31 RE were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

| Compound | Concentration (ug/L) | | RPD |
|---|---|---|---|
| | ACS-GW-DUP01-31 RE | ACS-GW-MW-59-31 RE | |
| Acetone | 14 | 14 | 0 |

## ACS 89
## Volatiles - Data Qualification Summary - SDG ME0807691

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| ME0807691 | ACS-GW-TB01-31 RE<br>ACS-GW-EB01-31 RE<br>ACS-GW-DUP01-31 RE<br>ACS-GW-MW-59-31 RE<br>ACS-GW-MW-58-31 RE** | Acetone | J (all detects)<br>UJ (all non-detects) | A | Initial calibration (%RSD) |
| ME0807691 | ACS-GW-TB01-31 RE<br>ACS-GW-EB01-31 RE<br>ACS-GW-DUP01-31 RE<br>ACS-GW-MW-59-31 RE<br>ACS-GW-MW-58-31 RE** | 2-Butanone | J (all detects)<br>UJ (all non-detects) | A | Initial calibration (RRF) |
| ME0807691 | ACS-GW-TB01-31 RE<br>ACS-GW-EB01-31 RE<br>ACS-GW-DUP01-31 RE<br>ACS-GW-MW-59-31 RE<br>ACS-GW-MW-58-31 RE** | Acetone<br>Carbon disulfide<br>4-Methyl-2-pentanone<br>2-Hexanone | J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (%D) |
| ME0807691 | ACS-GW-TB01-31 RE<br>ACS-GW-EB01-31 RE<br>ACS-GW-DUP01-31 RE<br>ACS-GW-MW-59-31 RE<br>ACS-GW-MW-58-31 RE** | 2-Butanone | J (all detects)<br>UJ (all non-detects) | A | Continuing calibration (RRF) |
| ME0807691 | ACS-GW-EB01-31 RE | trans-1,3-Dichloropropene | J (all detects)<br>UJ (all non-detects) | A | Matrix spike/Matrix spike duplicates (%R) |

## ACS 89
## Volatiles - Laboratory Blank Data Qualification Summary - SDG ME0807691

| SDG | Sample | Compound<br>TIC (RT in minutes) | Modified Final Concentration | A or P |
|---|---|---|---|---|
| ME0807691 | ACS-GW-TB01-31 RE | Acetone | 50UB ug/L | A |
| ME0807691 | ACS-GW-EB01-31 RE | Acetone | 50UB ug/L | A |
| ME0807691 | ACS-GW-DUP01-31 RE | Acetone | 50UB ug/L | A |
| ME0807691 | ACS-GW-MW-59-31 RE | Acetone | 50UB ug/L | A |
| ME0807691 | ACS-GW-MW-58-31 RE** | Acetone | 50UB ug/L | A |

## ACS 89
## Volatiles - Field Blank Data Qualification Summary - SDG ME0807691

| SDG | Sample | Compound | Modified Final Concentration | A or P |
|---|---|---|---|---|
| ME0807691 | ACS-GW-EB01-31 RE | Methylene chloride<br>Acetone | 10UB ug/L<br>50UB ug/L | A |
| ME0807691 | ACS-GW-DUP01-31 RE | Acetone | 50UB ug/L | A |
| ME0807691 | ACS-GW-MW-59-31 RE | Acetone | 50UB ug/L | A |
| ME0807691 | ACS-GW-MW-58-31 RE** | Acetone | 50UB ug/L | A |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB01-31 RE | **Work Order / ID:** | ME0807691-01 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 07:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

**VOLATILE ORGANICS** Method: **SW8260B** Prep Date/Time: Analyst: **CLR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | *12* | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 12:11 | SOURJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 07/22/08 12:11 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 07/22/08 12:11 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 12:11 | UJ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 07/22/08 12:11 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 12:11 | |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 07/22/08 12:11 | UJ |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 12:11 | UJ |
| Methylene chloride | A | *8* | 3.1 | 10 | J | µg/L | 1 | 07/22/08 12:11 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 12:11 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 12:11 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 07/22/08 12:11 | |
| *Surr: 4-Bromofluorobenzene* | S | 102 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 12:11 | |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-TB01-31 RE | **Work Order / ID:** | ME0807691-01 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 07:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 105 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 12:11 |
| *Surr: 1,2-Dichloroethane-d4* | S | 105 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 12:11 |
| *Surr: Toluene-d8* | S | 101 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 12:11 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB01-31 RE | **Work Order / ID:** | ME0807691-02 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 08:05 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

**VOLATILE ORGANICS** Method: **SW8260B** Prep Date/Time: Analyst: **CLR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | *7.4* | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 12:46 | 50 UBJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 07/22/08 12:46 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 07/22/08 12:46 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 12:46 | UJ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 07/22/08 12:46 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 12:46 | |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | UJ |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 07/22/08 12:46 | UJ |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 12:46 | UJ |
| Methylene chloride | A | *7.1* | 3.1 | 10 | J | µg/L | 1 | 07/22/08 12:46 | 10UB |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 12:46 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 12:46 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 07/22/08 12:46 | |
| *Surr: 4-Bromofluorobenzene* | S | 106 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 12:46 | |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-EB01-31 RE | **Work Order / ID:** | ME0807691-02 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 08:05 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 106 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 12:46 |
| *Surr: 1,2-Dichloroethane-d4* | S | 109 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 12:46 |
| *Surr: Toluene-d8* | S | 101 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 12:46 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP01-31 RE | **Work Order / ID:** | ME0807691-03 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 08:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** | |
| Acetone | A | *14* | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 13:22 | 50UBJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 07/22/08 13:22 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 07/22/08 13:22 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 13:22 | UJ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 07/22/08 13:22 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 13:22 | |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 07/22/08 13:22 | UJ |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 13:22 | UJ |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 07/22/08 13:22 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 13:22 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 13:22 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 07/22/08 13:22 | |
| *Surr: 4-Bromofluorobenzene* | S | 105 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 13:22 | |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-DUP01-31 RE | **Work Order / ID:** | ME0807691-03 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 08:45 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 107 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 13:22 |
| *Surr: 1,2-Dichloroethane-d4* | S | 109 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 13:22 |
| *Surr: Toluene-d8* | S | 101 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 13:22 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

**Client:** MWH, Inc.
**Client Project:** GW - ACS / Griffith, IN
**Client Sample ID:** ACS-GW-MW-59-31 RE
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0807691-04
**Collection Date:** 07/16/08 10:30
**Date Received:** 07/16/08 13:50

**VOLATILE ORGANICS** Method: **SW8260B** Prep Date/Time: Analyst: **CLR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | *14* | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 13:58 | 50UBJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 07/22/08 13:58 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 07/22/08 13:58 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 13:58 | UJ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 07/22/08 13:58 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 13:58 | |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 07/22/08 13:58 | UJ |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 13:58 | UJ |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 07/22/08 13:58 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 13:58 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 13:58 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 07/22/08 13:58 | |
| *Surr: 4-Bromofluorobenzene* | S | 105 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 13:58 | |

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8/28/08

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW-59-31 RE | **Work Order / ID:** | ME0807691-04 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 10:30 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 108 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 13:58 |
| *Surr: 1,2-Dichloroethane-d4* | S | 113 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 13:58 |
| *Surr: Toluene-d8* | S | 102 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 13:58 |

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

**Client:** MWH, Inc.
**Client Project:** GW - ACS / Griffith, IN
**Client Sample ID:** ACS-GW-MW-58-31 RE
**Sample Description:**
**Sample Matrix:** Aqueous

**Work Order / ID:** ME0807691-05
**Collection Date:** 07/16/08 11:40
**Date Received:** 07/16/08 13:50

**VOLATILE ORGANICS** Method: **SW8260B** Prep Date/Time: Analyst: **CLR**

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | *18* | 5.8 | 50 | Jb | µg/L | 1 | 07/22/08 14:34 | 50UBJ |
| Benzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Bromodichloromethane | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Bromoform | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Bromomethane | A | *ND* | 1.8 | 10 | | µg/L | 1 | 07/22/08 14:34 | |
| 2-Butanone | A | *ND* | 3.6 | 10 | | µg/L | 1 | 07/22/08 14:34 | UJ |
| Carbon Disulfide | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 14:34 | UJ |
| Carbon tetrachloride | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Chlorobenzene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Chloroethane | A | *ND* | 2.3 | 10 | | µg/L | 1 | 07/22/08 14:34 | |
| Chloroform | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Chloromethane | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 14:34 | |
| Dibromochloromethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,1-Dichloroethane | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,2-Dichloroethane | A | *ND* | 1.2 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,1-Dichloroethene | A | *ND* | 1.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| cis-1,2-Dichloroethene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| trans-1,2-Dichloroethene | A | *ND* | 1.1 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,2-Dichloropropane | A | *ND* | 1 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| cis-1,3-Dichloropropene | A | *ND* | 0.8 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| trans-1,3-Dichloropropene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Ethylbenzene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 2-Hexanone | A | *ND* | 2.4 | 10 | | µg/L | 1 | 07/22/08 14:34 | UJ |
| 4-Methyl-2-Pentanone | A | *ND* | 1.7 | 10 | | µg/L | 1 | 07/22/08 14:34 | UJ |
| Methylene chloride | A | *ND* | 3.1 | 10 | | µg/L | 1 | 07/22/08 14:34 | |
| Styrene | A | *ND* | 0.7 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,1,2,2-Tetrachloroethane | A | *ND* | 1.4 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Tetrachloroethene | A | *ND* | 1.3 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Toluene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,1,1-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,1,2-Trichloroethane | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Trichloroethene | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| Vinyl chloride | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 14:34 | |
| Total Xylenes | A | *ND* | 0.9 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,2,4-Trichlorobenzene | A | *ND* | 2 | 5.0 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,2-Dichlorobenzene | A | *ND* | 1 | 10 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,3-Dichlorobenzene | A | *ND* | 0.9 | 10 | | µg/L | 1 | 07/22/08 14:34 | |
| 1,4-Dichlorobenzene | A | *ND* | 0.7 | 10 | | µg/L | 1 | 07/22/08 14:34 | |
| *Surr: 4-Bromofluorobenzene* | S | 104 | 0 | 76.9-116 | | %REC | 1 | 07/22/08 14:34 | |

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8/7/08

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# ANALYTICAL RESULTS

**Date:** *Friday, July 25, 2008*

| | | | |
|---|---|---|---|
| **Client:** | MWH, Inc. | | |
| **Client Project:** | GW - ACS / Griffith, IN | | |
| **Client Sample ID:** | ACS-GW-MW-58-31 RE | **Work Order / ID:** | ME0807691-05 |
| **Sample Description:** | | **Collection Date:** | 07/16/08 11:40 |
| **Sample Matrix:** | Aqueous | **Date Received:** | 07/16/08 13:50 |

| Analyses | ST | Result | MDL | RL | Qual | Units | DF | Analyzed |
|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | Method: **SW8260B** | | | Prep Date/Time: | | | | Analyst: **CLR** |
| *Surr: Dibromofluoromethane* | S | 106 | 0 | 78.4-125 | | %REC | 1 | 07/22/08 14:34 |
| *Surr: 1,2-Dichloroethane-d4* | S | 111 | 0 | 74.2-136 | | %REC | 1 | 07/22/08 14:34 |
| *Surr: Toluene-d8* | S | 101 | 0 | 81.4-122 | | %REC | 1 | 07/22/08 14:34 |

**LABORATORY DATA CONSULTANTS, INC.**
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Project #19375
August 28, 2008

MWH Americas, Inc.
175 West Jackson Blvd, Suite 1900
Chicago, IL 60604-2814
ATTN: Mr. Justin Finger

SUBJECT: ACS GW Semi-Annual, Data Validation

Dear Mr. Finger,

**SUBJECT: Precision, Accuracy, Representativeness, Comparability, Completeness (PARCC) Summary Report for the ACS GW Semi-Annual Project**

Dear Mr Finger,

Enclosed is the Precision, Accuracy, Representativeness, Comparability, Completeness (PARCC) Summary Report for the ACS GW Semi-Annual Project.

We appreciate this opportunity to support MWH Americas, Ic. in the performance of this project. Please feel free to call me at (760) 634-0437 if you have any questions.

Sincerely,

ERauto

Erlinda T. Rauto
Operations Manager/Senior Chemist

V:\LOGIN\MWH\ACS\19375COVP.wpd

# PRECISION, ACCURACY, REPRESENTATIVENESS, COMPARABILITY, COMPLETENESS SUMMARY REPORT

## American Chemical Service

**8/28/08**

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Glossary

| | |
|---|---|
| CRDL | Contract Required Detection Limit |
| CRQL | Contract Required Quantitation Limit |
| DQO | Data Quality Objectives |
| LCS/LCSD | Laboratory Control Sample / Laboratory Control Sample Duplicate |
| MS/MSD | Matrix Spike / Matrix Spike Duplicate |
| PARCC | Precision,Accuracy,Representativeness,Comparability, Completeness |
| QAPP | Quality Assurance Project Plan |
| QA/QC | Quality Assurance / Quality Control |
| RPD | Relative Percent Difference |
| RRF | Relative Response Factor |
| RL | Reporting Limit |
| SDG | Sample Delivery Group |
| ug/Kg | Micrograms per Kilogram |
| ug/L | Micrograms per Liter |
| USEPA | United States Environmental Protection Agency |
| VOC | Volatile Organic Compound |
| %D | Percent Difference |
| %R | Percent Recovery |
| %RSD | Percent Relative Standard Deviation |

# PRECISION, ACCURACY, REPRESENTATIVENESS, COMPARABILITY, COMPLETENESS SUMMARY REPORT
## American Chemical Service

## 1.0 INTRODUCTION

Remedial design/ remedial action was conducted at the American Chemical Service, Inc. NPL Site in Griffith, Indiana. This part of the site investigation for Lower Aquifer included the collection and analyses of 5 groundwater samples including quality control (QC) samples and dilutions. The analyses were performed by the following methods:

Volatile Organic Compounds by EPA SW 846 Method 8260B

Analytical services were provided by Microbac who performed analyses on the groundwater samples. The samples were grouped into sample delivery groups (SDGs) of up to 20 field samples received by the laboratory. The environmental samples are associated with QA/QC samples designed to document the data quality of the entire SDG or a sub-group of samples within an SDG. Table I is a cross-reference table listing each sample, analysis, SDG, collection date, laboratory sample number, and matrix. All shaded samples in Table I were reviewed under EPA Level 4 guidelines.

Approximately ten percent of the analytical data were validated according to EPA Level 4 data validation procedures and ninety percent of the analytical data were validated according to EPA Level 3 data validation procedures. The analytical data were evaluated for quality assurance and quality control (QA/QC) based on the following documents: *The Remedial Design/ Remedial Action PRP-Lead Project at the American Chemical Service, Inc. NPL Site, Griffith, Indiana Quality Assurance Project Plan,* November 2001, *Contract Laboratory Program National Functional Guidelines for Organic Data Review*, October 1999, and the *EPA SW 846 Third Edition, Test Methods for Evaluating Solid Waste.*

This report summarizes the QA/QC evaluation of the data according to precision, accuracy, representativeness, completeness, and comparability (PARCC) relative to the project data quality objectives (DQOs). This report provides a quantitative and qualitative assessment of the data and identifies potential sources of error, uncertainty, and bias that may affect the overall usability.

The PARCC summary report evaluates and summarizes the results of QA/QC data validation for the entire sampling program. Each analytical fraction has a separate section for each of the PARCC criteria. These sections interpret specific QC deviations and their effects on both individual data points and the analyses as a whole. Section 4 presents a summary of the PARCC criteria by comparing quantitative parameters with acceptability criteria defined in the project DQO's. Qualitative PARCC criteria are also summarized in this section.

### Precision and Accuracy of Environmental Data

Environmental data quality depends on sample collection procedures, analytical methods and instrumentation, documentation, and sample matrix properties. Both sampling procedures and laboratory analyses contain potential sources of uncertainty, error, and/or bias, which affect the overall quality of a measurement. Errors in sample data may result from incomplete equipment decontamination, inappropriate sampling techniques, sample heterogeneity, improper filtering, and improper preservation. The accuracy of analytical results is dependent on selecting appropriate analytical methods, maintaining equipment properly, and complying with QC

requirements. The sample matrix also is an important factor in the ability to obtain precise and accurate results within a given media.

Environmental and laboratory QA/QC samples assess the effects of sampling procedures and evaluate laboratory contamination, laboratory performance, and matrix effects. QA/QC samples include: trip blanks, equipment rinsate blanks, field duplicates, method blanks, laboratory control samples (LCSs), surrogate spikes, matrix spike/matrix spike duplicates (MS/MSDs), and laboratory duplicates.

Before conducting the PARCC evaluation, the analytical data were validated according to the *Remedial Design/ Remedial Action PRP-Lead Project at the American Chemical Service, Inc. NPL Site, Griffith, Indiana Quality Assurance Project Plan*, November 2001, and the Functional Guidelines for Organic Data Review (USEPA 1999) and EPA SW 846 Third Edition, Test Methods for Evaluating Solid Waste. Samples not meeting the project procedures manual and the Functional Guideline acceptance criteria were qualified with a flag, an abbreviation indicating a deficiency with the data. The following are flags used in data validation.

J Estimated The associated numerical value is an estimated quantity. The analyte was detected but the reported value may not be accurate or precise. The "J" qualification indicates the data fell outside the QC limits, but the exceedance was not sufficient to cause rejection of the data.

R Rejected The data is unusable (the compound or analyte may or may not be present). Use of the "R" qualifier indicates a significant variance from functional guideline acceptance criteria. Either resampling or reanalysis is necessary to determine the presence or absence of the rejected analyte.

UB Analyte was not detected at or above the indicated concentration due to blank contamination. The "UB" flag is used to qualify any result detected in an environmental sample at a concentration less than 10 times the value of the concentration in any associated blank for common laboratory contaminants and less than 5 times the concentration in any associated blank for all other contaminants

B Analyte was positively detected in a sample and in an associated blank. The "B" flag is used to to qualify any result detected in an environmental sample at a concentration greater than 10 times the value of the concentration in any associated blank for common laboratory contaminants and greater than 5 times the concentration in any associated blank for all other contaminants

UJ Estimated/Nondetected Analyses were performed for the compound or analyte, but it was not detected and the sample quantitation or detection limit is an estimated quantity due to poor accuracy or precision. This qualification is also used to flag possible false negative results in the case where low bias in the analytical system is indicated by low calibration response, surrogate, internal standard, or other spike recovery.

Once the data are reviewed and qualified according to the *Remedial Design/ Remedial Action PRP-Lead Project at the American Chemical Service, Inc. NPL Site, Griffith, Indiana Quality Assurance Project Plan,* November 2001 and the functional guidelines, the data set is then evaluated using PARCC criteria. PARCC criteria provide an evaluation of overall data usability. The following is a discussion of PARCC criteria as related to the project DQOs.

**Precision** is a measure of the agreement or reproducibility of analytical results under a given set of conditions. It is a quantity that cannot be measured directly but is calculated from percent recovery data. Precision is expressed as the relative percent difference (RPD):

$$RPD = (D1-D2)/\{1/2(D1+D2)\} \times 100$$

Where D1 and D2 are the reported concentrations for sample and duplicate analyses. Precision is primarily assessed by calculating an RPD from the percent recoveries of the spiked compounds for each sample in the MS/MSD pair. In the absence of an MS/MSD pair, a laboratory duplicate or LCS/LCSD pair can be analyzed as an alternative means of assessing precision. In some cases, samples from multiple SDGs were within one QC batch and therefore are associated with the same laboratory QC samples. An additional measure of sampling precision was obtained by collecting and analyzing field duplicate samples, which were compared using the RPD result as the evaluation criteria.

MS and MSD samples are field samples spiked by the laboratory with target analytes prior to preparation and analysis. These samples measure the overall efficiency of the analytical method in recovering target analytes from an environmental matrix. A LCS is similar to an MS/MSD sample in that the LCS is spiked with the same target analytes prior to preparation and analysis. However, the LCS is prepared using a controlled interference-free matrix instead of a field sample aliquot. Laboratory reagent water is used to prepare aqueous LCS. Non-aqueous LCSs are prepared using solid media approved by the American Society for Testing and Materials (ASTM) for their homogeneity. The LCS measures laboratory efficiency in recovering target analytes from either a solid or aqueous matrix in the absence of matrix interferences.

Laboratory and field sampling precision are further evaluated by calculating RPDs for aqueous field sample duplicate pairs. The sampler collects two field samples at the same location and under identically controlled conditions. The laboratory then analyzes the samples under identical conditions.

An RPD outside the numerical QC limit in either MS/MSD samples or LCS/LCSD indicates imprecision. Imprecision is the variance in the consistency with which the laboratory arrives at a particular reported result. Thus, the actual analyte concentration may be higher or lower than the reported result.

Possible causes of poor precision include sample matrix interference, improper sample collection or handling, inconsistent sample preparation, and poor instrument stability. In some duplicate pairs, results maybe reported in either the primary or duplicate samples at levels below the reporting limit or non-detected. Since these values are considered to be estimates, RPD exceedances from these duplicate pairs do not suggest a significant impact on the data quality.

**Accuracy** is a measure of the agreement of an experimental determination and the true value of the parameter being measured. It is used to identify bias in a given measurement system. Recoveries outside acceptable QC limits may be caused by factors such as instrumentation, analyst error, or matrix interference. Accuracy is assessed through the analysis of MS, MSD, LCS, and samples containing surrogate spikes. In some cases, samples from multiple SDGs were within one QC batch and therefore are associated with the same laboratory QC samples. Surrogate spikes are either isotopically labeled compounds or compounds that are not typically detected in the samples. Surrogate spikes are added to every blank, environmental sample, MS/MSD, and standard, for volatile organic (VOC) and bis-2-chloroethyl ether analyses.

Percent recovery (%R) is calculated using the following equation:

$$\%R = (A-B)/C \times 100$$

where:
A = measured concentration in the spiked sample
B = measured concentration of the spike compound in the unspiked sample
C = concentration of the spike

The percent recovery of each analyte spiked in MS/MSD samples, LCS, and surrogate compounds added to environmental samples is evaluated with the acceptance criteria specified by the previously noted documents. Spike recoveries outside the acceptable QC accuracy limits provide an indication of bias, where the reported data may overestimate or underestimate the actual concentration of compounds detected or quantitation limits reported for environmental samples.

**Representativeness** is a qualitative parameter that expresses the degree to which the sample data are characteristic of a population. It is evaluated by reviewing the QC results of blank samples and holding times. Positive detects of compounds in the blank samples identify compounds that may have been introduced into the samples during sample collection, transport, preparation, or analysis. The QA/QC blanks collected and analyzed are method blanks, field blanks and trip blanks.

A method blank is a laboratory grade water or solid matrix that contains the method reagents and has undergone the same preparation and analysis as the environmental samples. The method blank provides a measure of the combined contamination derived from the laboratory source water, glassware, instruments, reagents, and sample preparation steps. Method blanks are prepared for each sample of a similar matrix extracted by the same method at a similar concentration level.

Trip blanks are used to identify possible volatile organic contamination introduced into the sample during transport. A trip blank is a sample bottle filled in the laboratory with reagent-grade water and preserved to a pH less than 2 with hydrochloric acid. It is transported to the site, stored with the sample containers, and returned unopened to the laboratory for analysis.

Contaminants found in both the environmental sample and a blank sample are assumed to be laboratory artifacts if the concentration in the environmental sample is less than 10 times the blank value for common laboratory contaminants; methylene chloride, acetone and 2-butanone or 5 times the blank value for other laboratory contaminants.

Holding times are evaluated to assure that the sample integrity is intact for accurate sample preparation and analysis. Holding times will be specific for each method and matrix analyzed. Holding time exceedances can cause loss of sample constituents due to biodegradation, precipitation, volatization, and chemical degradation.

**Comparability** is a qualitative expression of the confidence with which one data set may be compared to another. It provides an assessment of the equivalence of the analytical results to data obtained from other analyses. It is important that data sets be comparable if they are used in conjunction with other data sets. The factors affecting comparability include the following: sample collection and handling techniques, matrix type, and analytical method. If these aspects of sampling and analysis are carried out according to standard analytical procedures, the data are considered comparable. Comparability is also dependent upon other PARCC criteria,

because only when precision, accuracy, and representativeness are known can data sets be compared with confidence.

**Completeness** is defined as the percentage of acceptable sample results compared to the total number of sample results. Completeness is evaluated to determine if an acceptable amount of usable data were obtained so that a valid scientific site assessment can be completed. Completeness equals the total number of sample results for each fraction minus the total number of rejected sample results divided by the total number of sample results multiplied by 100. As specified in the project DQOs, the goal for completeness for target analytes in each analytical fraction is 95 percent.

Percent completeness is calculated using the following equation:

$$\%C = (T - R)/T \times 100$$

where:
%C = percent completeness
T = total number of sample results
R = total number of rejected sample results

Completeness is also determined by comparing the planned number of samples per method and matrix as specified in the FSP or QAPP, with the number determined above.

The following sections present a review of QC data for each analytical method.

## 2.0 VOLATILE ORGANIC COMPOUNDS

A total of 5 groundwater samples were analyzed for volatile organic compounds (VOC) by EPA SW 846 Method 8260B. All volatile data were assessed to be valid since none of the 190 total results were rejected based on QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

### 2.1 Precision and Accuracy

#### 2.1.1 Instrument Calibration

Initial and continuing calibration results provide a means of evaluating accuracy within a particular SDG. Relative response factor (RRF), percent relative standard deviation (%RSD), and percent difference (%D) are the three major parameters used to measure the effectiveness of instrument calibration. RRF is a measure of the relative spectral response of an analyte compared to its internal standard. %RSD is an expression of the linearity of instrument response. %D is a comparison of a continuing calibration instrumental response with its initial response. %RSD and %D exceedances suggest routine instrumental anomalies, which typically impact all sample results for the affected compounds.

Twenty five volatile results were qualified as detected estimated (J) and non-detected estimated (UJ). The relative standard deviation in the initial calibrations and/or percent difference between the initial calibration mean relative response factors and the continuing calibration relative response factors for acetone, carbon disulfide, 4-methyl-2-pentanone and 2-hexanone were outside the acceptance criteria of 30 and 25 percent, respectively. The affected samples are identified in the data validation reports.

The relative response factors for 2-butanone was above the acceptance criteria of 0.05 in the initial calibration and/or the continuing calibration standards. Ten results were qualified detected estimated (J) and non-detected estimated (UJ).

### 2.1.2 Surrogates

No data were qualified based on surrogate nonconformances.

### 2.1.3 MS/MSD Samples

One trans-1,3-dichloropropene result was qualified detected estimated (J) and non-detected estimated (UJ) based on MS/MSD nonconformances. For those SDGs with MS/MSD results, the recoveries were evaluated against the acceptance criteria.

### 2.1.4 LCS Samples

No data were qualified based on LCS nonconformances. For those SDGs with LCS results, the recoveries were evaluated against the acceptance criteria.

### 2.1.5 Internal Standards

No data were qualified based on internal standard nonconformances. The recoveries and retention times were evaluated against the acceptance criteria.

### 2.1.6 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs for the compounds. The associated data validation narratives provided details regarding criteria exceeded. Sample data were not qualified on the basis of field duplicate precision.

### 2.1.7 Compound Quantitation and Target Identification

All compound quantitation and target compound identifications were found to be acceptable.

## 2.2 Representativeness

### 2.2.1 Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All holding times were met.

### 2.2.2 Blanks

Method blanks, equipment and trip blanks were collected and analyzed to evaluate representativeness. The concentration for an individual target compounds in any of the two types of QA/QC blanks were used for data qualification.

If contaminants were detected in a blank, corrective actions were made for the chemical analytical data during data validation. The corrective action consisted of amending the laboratory reported results for organic compounds based on the following criteria. The validation qualifier codes used in the blank summary tables are described below.

Results Below the RL If a sample result for the blank contaminant was less than the RL and less than 10 times the blank value for common contaminants or 5 times the blank value for other contaminants, the sample result was amended as a non-detected at the RL for the target compound and qualified with UB

Results Above the RL If a sample result for the blank contaminant was greater than the sample RL and less than 10 times the blank value for common contaminants or 5 times the blank value for other contaminants, the sample result for the blank contaminant was amended as a non-detect at the concentration reported in the sample results and qualified with UB.

If a sample result for the blank contaminant was greater than 10 times the blank value for common contaminants or 5 times the blank value for other contaminants, the result was not amended and qualified with B.

#### 2.2.2.1 Method Blanks

No QC issues were associated with the method blanks for this analysis.

#### 2.2.2.2 Trip Blanks

As a result of trip blank contamination, acetone and methylene chloride was qualified as non-detected (UB) in four samples. The details regarding the qualification of results are provided in the data validation reports.

#### 2.2.2.3 Field Blanks

As a result of field blank contamination, acetone was qualified as non-detected (UB) in three samples. The details regarding the qualification of results are provided in the data validation reports.

### 2.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the method detection limits attained were at or below the reporting limit. Target compounds detected below the reporting limits flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

### 2.4 Completeness

The completeness level attained for volatile organic field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

## 3.0 VARIANCES IN ANALYTICAL PERFORMANCE

The laboratory used standard analytical method for volatile analyses throughout the project. No systematic variances in analytical performance were noted according to the laboratory SOW.

## 4.0 SUMMARY OF PARCC CRITERIA

The validation reports present the PARCC results for all SDGs. Each PARCC criterion is discussed in detail in the following sections.

### 4.1 Precision and Accuracy

Precision and accuracy were evaluated using data quality indicators such as MS/MSD, LCS, and surrogates. The precision and accuracy of the data set were considered acceptable after integration of qualification of estimated results as specifically noted in the data validation reports.

### 4.2 Representativeness

All samples for each method and matrix were evaluated for holding time compliance. All samples were associated with a method blank in each individual SDG. The representativeness of the project data is considered acceptable after qualification for blank contamination.

### 4.3 Comparability

Sampling frequency requirements were met in obtaining duplicates and necessary field blanks. The laboratory used standard analytical methods for their analyses. The analytical results were reported in correct standard units. Holding times, sample preservation, and sample integrity were within QC criteria. The overall comparability is considered acceptable.

### 4.4 Completeness

Of the 190 total analytes reported, none of the sample results were rejected. The completeness for all SDGs is as follows:

| Parameter/Method | Total Analytes | No. of Rejects | %Completeness |
|---|---|---|---|
| Volatiles | 190 | 0 | 100 |
| **Total** | **190** | **0** | **100** |

The completeness percentage based on rejected data met the 95 percent DQO goal.

# Appendix D

# Pumping Data from Lower Aquifer Monitoring Wells

# Pumping Data for Lower Aquifer Monitoring Well MW10C

| MW10C | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 11/15/02 | 0.5 | 1,580 | --- | --- |
| 12/03/02 | 0.5 | 1,580 | 18 | 0 |
| 12/21/02 | 0.5 | 1,580 | 18 | 0 |
| 12/27/02 | 0.5 | 1,580 | 6 | 0 |
| 01/03/03 | 0.5 | 1,580 | 7 | 0 |
| 01/10/03 | 0.5 | 1,580 | 7 | 0 |
| 01/16/03 | 0.5 | 1,580 | 6 | 0 |
| 01/24/03 | 0.5 | 1,580 | 8 | 0 |
| 01/31/03 | 0.5 | 1,580 | 7 | 0 |
| 02/14/03 | 0.5 | 2,210 | 14 | 45 |
| 02/20/03 | 0.5 | 2,210 | 6 | 0 |
| 02/27/03 | 0.5 | 2,210 | 7 | 0 |
| 03/07/03 | 1 | 5,840 | 8 | 454 |
| 03/13/03 | 1 | 9,350 | 6 | 585 |
| 03/21/03 | 1 | 22,470 | 8 | 1,640 |
| 03/28/03 | 1 | 32,930 | 7 | 1,494 |
| 04/04/03 | 1 | 40,800 | 7 | 1,124 |
| 04/11/03 | 1 | 40,810 | 7 | 1 |
| 04/17/03 | 1 | 42,750 | 6 | 323 |
| 04/25/03 | 1 | 63,370 | 8 | 2,578 |
| 05/02/03 | 1 | 81,750 | 7 | 2,626 |
| 05/29/03 | 1 | 156,790 | 27 | 2,779 |
| 06/13/03 | 1 | 180,950 | 15 | 1,611 |
| 06/20/03 | 1 | 192,880 | 7 | 1,704 |
| 07/03/03 | 1 | 242,300 | 13 | 3,802 |
| 07/11/03 | 1 | 272,930 | 8 | 3,829 |
| 07/25/03 | 2 | 285,410 | 14 | 891 |

| MW10C | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 08/01/03 | 2 | 313,850 | 7 | 4,063 |
| 08/08/03 | 2 | 335,510 | 7 | 3,094 |
| 08/15/03 | 2 | 364,550 | 7 | 4,149 |
| 10/03/03 | 2 | 387,450 | 49 | 467 |
| 10/31/03 | 2 | 388,270 | 28 | 29 |
| 11/07/03 | 2 | 414,050 | 7 | 3,683 |
| 11/21/03 | 2 | 454,920 | 14 | 2,919 |
| 12/05/03 | 2 | 496,910 | 14 | 2,999 |
| 12/12/03 | 2 | 519,610 | 7 | 3,243 |
| 12/26/03 | 2 | 571,330 | 14 | 3,694 |
| 01/02/04 | 2 | 597,570 | 7 | 3,749 |
| 01/09/04 | 2 | 622,910 | 7 | 3,620 |
| 01/16/04 | 2 | 649,150 | 7 | 3,749 |
| 01/22/04 | 2 | 671,460 | 6 | 3,718 |
| 02/12/04 | 2 | 695,330 | 21 | 1,137 |
| 02/20/04 | 2 | 725,160 | 8 | 3,729 |
| 02/27/04 | 2 | 751,020 | 7 | 3,694 |
| 03/19/04 | 2 | 832,820 | 21 | 3,895 |
| 04/02/04 | 2 | 864,160 | 14 | 2,239 |
| 04/16/04 | 2 | 916,440 | 14 | 3,734 |
| 04/23/04 | 2 | 942,880 | 7 | 3,777 |
| 04/30/04 | 2 | 969,850 | 7 | 3,853 |
| 05/14/04 | 2 | 1,018,210 | 14 | 3,454 |
| 06/04/04 | 2 | 1,032,860 | 21 | 698 |
| 06/18/04 | 2 | 1,086,740 | 14 | 3,849 |
| 07/02/04 | 2 | 1,140,680 | 14 | 3,853 |
| 07/09/04 | 2 | 1,155,710 | 7 | 2,147 |

| MW10C | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 07/16/04 | 2 | 1,176,790 | 7 | 3,011 |
| 07/30/04 | 2 | 1,177,420 | 14 | 45 |
| 09/17/04 | 0 | 1,343,810 | 49 | 3,396 |
| 10/01/04 | 0 | 1,343,810 | 14 | 0 |
| 10/15/04 | 0 | 1,343,810 | 14 | 0 |
| 11/05/04 | 2 | 1,357,770 | 21 | 665 |
| 11/18/04 | 2 | 1,374,910 | 13 | 1,318 |
| 12/03/04 | 0 | 1,383,070 | 15 | 544 |
| 12/10/04 | 2 | 1,382,350 | 7 | -103 |
| 12/31/04 | 2 | 1,387,670 | 21 | 253 |
| 01/21/05 | 0 | 1,390,950 | 21 | 156 |
| 02/25/05 | 2 | 1,406,420 | 35 | 442 |
| 03/04/05 | 2 | 1,422,220 | 7 | 2,257 |
| 03/11/05 | 2 | 1,438,120 | 7 | 2,271 |
| 03/18/05 | 2 | 1,453,770 | 7 | 2,236 |
| 03/25/05 | 2 | 1,463,610 | 7 | 1,406 |
| 04/01/05 | 2 | 1,463,620 | 7 | 1 |
| 04/08/05 | 2 | 1,471,410 | 7 | 1,113 |
| 04/15/05 | 2 | 1,482,000 | 7 | 1,513 |
| 04/22/05 | 2 | 1,495,950 | 7 | 1,993 |
| 04/29/05 | 2 | 1,508,600 | 7 | 1,807 |
| 05/13/05 | 2 | 1,528,470 | 14 | 1,419 |
| 05/20/05 | 2 | 1,540,490 | 7 | 1,717 |
| 05/27/05 | 2 | 1,553,460 | 7 | 1,853 |
| 06/03/05 | 2 | 1,567,280 | 7 | 1,974 |
| 06/17/05 | 2 | 1,575,070 | 14 | 556 |
| 06/24/05 | 2 | 1,579,860 | 7 | 684 |

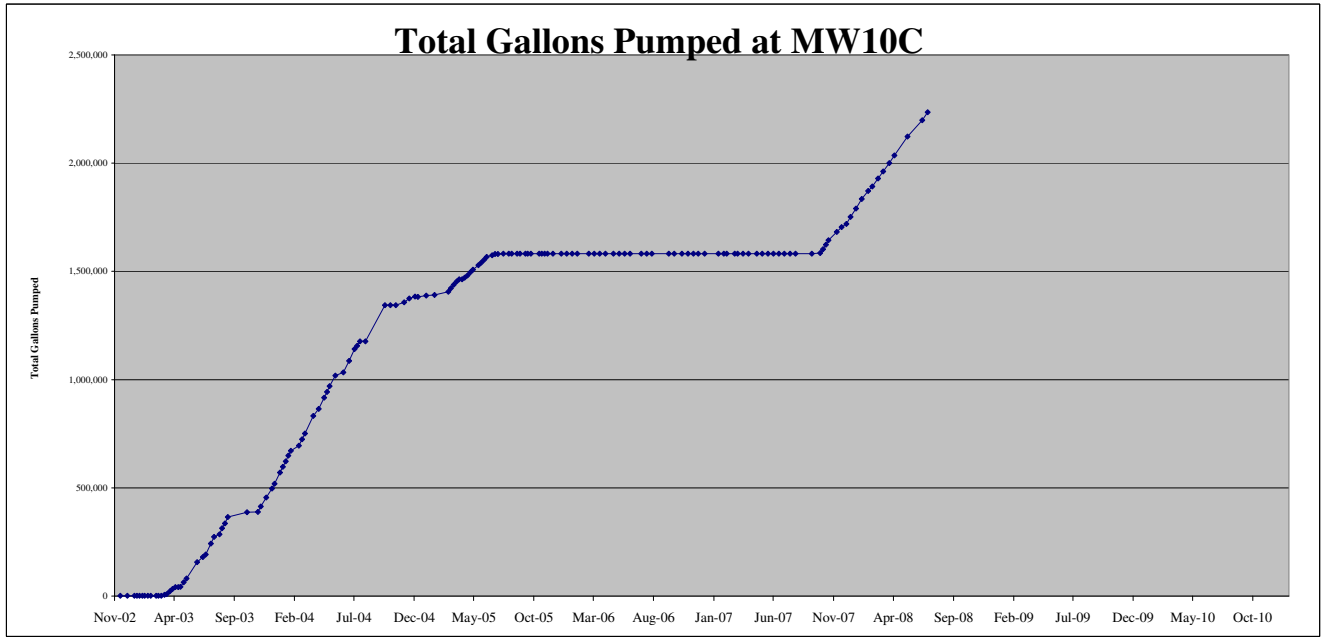
| MW10C | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 07/01/05 | 0 | 1,579,860 | 7 | 0 |
| 07/15/05 | <1 | 1,581,440 | 14 | 113 |
| 07/29/05 | 0 | 1,581,440 | 14 | 0 |
| 08/05/05 | 0 | 1,581,440 | 7 | 0 |
| 08/19/05 | 0 | 1,581,440 | 14 | 0 |
| 08/26/05 | 0 | 1,581,440 | 7 | 0 |
| 09/09/05 | 0 | 1,581,440 | 14 | 0 |
| 09/15/05 | 0 | 1,581,440 | 6 | 0 |
| 09/23/05 | 0 | 1,581,440 | 8 | 0 |
| 10/14/05 | 0 | 1,581,440 | 21 | 0 |
| 10/21/05 | 0 | 1,581,440 | 7 | 0 |
| 10/28/05 | 0 | 1,581,440 | 7 | 0 |
| 11/04/05 | 0 | 1,581,440 | 7 | 0 |
| 11/18/05 | 0 | 1,581,440 | 14 | 0 |
| 12/09/05 | 0 | 1,581,440 | 21 | 0 |
| 12/23/05 | 0 | 1,581,440 | 14 | 0 |
| 01/06/06 | 0 | 1,581,440 | 14 | 0 |
| 01/19/06 | 0 | 1,581,440 | 13 | 0 |
| 02/17/06 | 0 | 1,581,440 | 29 | 0 |
| 03/03/06 | 0 | 1,581,440 | 14 | 0 |
| 03/17/06 | 0 | 1,581,440 | 14 | 0 |
| 03/31/06 | 0 | 1,581,440 | 14 | 0 |
| 04/21/06 | 0 | 1,581,440 | 21 | 0 |
| 05/05/06 | 0 | 1,581,440 | 14 | 0 |
| 05/19/06 | 0 | 1,581,440 | 14 | 0 |
| 06/02/06 | 0 | 1,581,440 | 14 | 0 |
| 06/30/06 | 0 | 1,581,440 | 28 | 0 |

| MW10C | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 07/14/06 | 0 | 1,581,440 | 14 | 0 |
| 07/27/06 | 0 | 1,581,440 | 13 | 0 |
| 09/08/06 | 0 | 1,581,440 | 43 | 0 |
| 09/22/06 | 0 | 1,581,440 | 14 | 0 |
| 10/12/06 | 0 | 1,581,440 | 20 | 0 |
| 10/27/06 | 0 | 1,581,440 | 15 | 0 |
| 11/10/06 | 0 | 1,581,440 | 14 | 0 |
| 11/22/06 | 0 | 1,581,440 | 12 | 0 |
| 12/08/06 | 0 | 1,581,440 | 16 | 0 |
| 01/12/07 | 0 | 1,581,440 | 35 | 0 |
| 01/26/07 | 0 | 1,581,440 | 14 | 0 |
| 02/02/07 | 0 | 1,581,440 | 7 | 0 |
| 02/23/07 | 0 | 1,581,440 | 21 | 0 |
| 03/02/07 | 0 | 1,581,440 | 7 | 0 |
| 03/16/07 | 0 | 1,581,440 | 14 | 0 |
| 03/30/07 | 0 | 1,581,440 | 14 | 0 |
| 04/20/07 | 0 | 1,581,440 | 21 | 0 |
| 05/04/07 | 0 | 1,581,440 | 14 | 0 |
| 05/18/07 | 0 | 1,581,440 | 14 | 0 |
| 06/01/07 | 0 | 1,581,440 | 14 | 0 |
| 06/15/07 | 0 | 1,581,440 | 14 | 0 |
| 06/29/07 | 0 | 1,581,440 | 14 | 0 |
| 07/13/07 | 0 | 1,581,440 | 14 | 0 |
| 07/27/07 | 0 | 1,581,440 | 14 | 0 |
| 09/07/07 | <2 | 1,581,807 | 42 | 9 |
| 09/28/07 | <2 | 1,585,550 | 21 | 178 |
| 10/05/07 | 2 | 1,603,180 | 7 | 2,519 |

| MW10C | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 10/12/07 | 2 | 1,623,290 | 7 | 2,873 |
| 10/19/07 | 2 | 1,643,400 | 7 | 2,873 |
| 11/09/07 | 2 | 1,682,440 | 21 | 1,859 |
| 11/21/07 | 2 | 1,704,390 | 12 | 1,829 |
| 12/03/07 | 2 | 1,719,420 | 12 | 1,253 |
| 12/14/07 | 2 | 1,751,210 | 11 | 2,890 |
| 12/28/07 | 2 | 1,790,930 | 14 | 2,837 |
| 01/11/08 | 2 | 1,834,390 | 14 | 3,104 |
| 01/28/08 | 2 | 1,871,320 | 17 | 2,172 |
| 02/07/08 | 2 | 1,892,750 | 10 | 2,143 |
| 02/22/08 | 2 | 1,929,780 | 15 | 2,469 |
| 03/06/08 | 2 | 1,962,570 | 13 | 2,522 |
| 03/21/08 | 2 | 1,999,850 | 15 | 2,485 |
| 04/03/08 | 2 | 2,035,300 | 13 | 2,727 |
| 05/07/08 | 2 | 2,122,610 | 34 | 2,568 |
| 06/13/08 | 2 | 2,198,190 | 37 | 2,043 |
| 06/27/08 | 2 | 2,234,860 | 14 | 2,619 |

GPM - Gallons per minute

* Lower aquifer extraction system in MW10C was re-started in September 2007 but was not pumping for the entire time between previous measurement



# Pumping Data for Lower Aquifer Monitoring Well MW56

| MW56 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 11/15/02 | 1 | 10,620 | --- | --- |
| 12/03/02 | 1 | 31,620 | 18 | 1,167 |
| 12/21/02 | 1.5 | 50,130 | 18 | 1,028 |
| 12/27/02 | 1.5 | 54,870 | 6 | 790 |
| 01/03/03 | 1.5 | 63,460 | 7 | 1,227 |
| 01/10/03 | 1.5 | 70,130 | 7 | 953 |
| 01/16/03 | 1.5 | 77,380 | 6 | 1,208 |
| 01/24/03 | 1.5 | 84,840 | 8 | 933 |
| 01/31/03 | 2 | 105,400 | 7 | 2,937 |
| 02/14/03 | 2 | 147,310 | 14 | 2,994 |
| 02/20/03 | 2 | 166,550 | 6 | 3,207 |
| 02/27/03 | 2 | 190,130 | 7 | 3,369 |
| 03/07/03 | 2 | 215,980 | 8 | 3,231 |
| 03/13/03 | 2 | 236,440 | 6 | 3,410 |
| 03/21/03 | 2 | 261,380 | 8 | 3,118 |
| 03/28/03 | 2 | 279,930 | 7 | 2,650 |
| 04/04/03 | 2 | 299,360 | 7 | 2,776 |
| 04/11/03 | 2 | 327,490 | 7 | 4,019 |
| 04/17/03 | 2 | 348,540 | 6 | 3,508 |
| 04/25/03 | 2 | 373,590 | 8 | 3,131 |
| 05/02/03 | 2 | 395,770 | 7 | 3,169 |
| 05/29/03 | 2 | 486,640 | 27 | 3,366 |
| 06/13/03 | 2 | 514,120 | 15 | 1,832 |
| 06/20/03 | 2 | 526,930 | 7 | 1,830 |
| 07/03/03 | 2 | 565,650 | 13 | 2,978 |
| 07/11/03 | 2 | 589,150 | 8 | 2,938 |
| 07/25/03 | 2 | 598,780 | 14 | 688 |

| MW56 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 08/01/03 | 2 | 620,210 | 7 | 3,061 |
| 08/08/03 | 2 | 636,400 | 7 | 2,313 |
| 08/15/03 | 2 | 657,820 | 7 | 3,060 |
| 10/03/03 | 2 | 657,850 | 49 | 1 |
| 10/31/03 | 2 | 690,420 | 28 | 1,163 |
| 11/07/03 | 2 | 709,130 | 7 | 2,673 |
| 11/21/03 | 2 | 738,920 | 14 | 2,128 |
| 12/05/03 | 2 | 770,530 | 14 | 2,258 |
| 12/12/03 | 2 | 787,800 | 7 | 2,467 |
| 12/26/03 | 2 | 827,060 | 14 | 2,804 |
| 01/02/04 | 2 | 846,960 | 7 | 2,843 |
| 01/09/04 | 2 | 866,310 | 7 | 2,764 |
| 01/16/04 | 2 | 886,330 | 7 | 2,860 |
| 01/22/04 | 2 | 903,320 | 6 | 2,832 |
| 02/12/04 | 2 | 921,350 | 21 | 859 |
| 02/20/04 | 2 | 943,660 | 8 | 2,789 |
| 02/27/04 | 2 | 962,930 | 7 | 2,753 |
| 03/19/04 | 2 | 1,024,620 | 21 | 2,938 |
| 04/02/04 | 2 | 1,049,020 | 14 | 1,743 |
| 04/16/04 | 2 | 1,090,960 | 14 | 2,996 |
| 04/23/04 | 2 | 1,113,640 | 7 | 3,240 |
| 04/30/04 | 2 | 1,135,930 | 7 | 3,184 |
| 05/14/04 | 2 | 1,175,970 | 14 | 2,860 |
| 06/04/04 | 2 | 1,247,530 | 21 | 3,408 |
| 06/18/04 | 2 | 1,291,550 | 14 | 3,144 |
| 07/02/04 | 2 | 1,335,500 | 14 | 3,139 |
| 07/09/04 | 2 | 1,358,500 | 7 | 3,286 |

| MW56 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 07/16/04 | 2 | 1,376,990 | 7 | 2,641 |
| 07/30/04 | 2 | 1,419,610 | 14 | 3,044 |
| 09/17/04 | 0 | 1,519,670 | 49 | 2,042 |
| 10/01/04 | 0 | 1,519,670 | 14 | 0 |
| 10/15/04 | 2 | 1,527,850 | 14 | 584 |
| 11/05/04 | 2 | 1,566,020 | 21 | 1,818 |
| 11/18/04 | 2 | 1,596,200 | 13 | 2,322 |
| 12/03/04 | 2 | 1,631,330 | 15 | 2,342 |
| 12/10/04 | 2 | 1,639,050 | 7 | 1,103 |
| 12/31/04 | 2 | 1,646,830 | 21 | 370 |
| 01/21/05 | 2 | 1,646,880 | 21 | 2 |
| 02/25/05 | 2 | 1,663,450 | 35 | 473 |
| 03/04/05 | 2 | 1,680,530 | 7 | 2,440 |
| 03/11/05 | 2 | 1,697,570 | 7 | 2,434 |
| 03/18/05 | 2 | 1,714,240 | 7 | 2,381 |
| 03/25/05 | 2 | 1,731,870 | 7 | 2,519 |
| 04/01/05 | 2 | 1,739,870 | 7 | 1,143 |
| 04/08/05 | 2 | 1,751,960 | 7 | 1,727 |
| 04/15/05 | 2 | 1,769,170 | 7 | 2,459 |
| 04/22/05 | 2 | 1,784,480 | 7 | 2,187 |
| 04/29/05 | 2 | 1,799,460 | 7 | 2,140 |
| 05/13/05 | 2 | 1,826,680 | 14 | 1,944 |
| 05/20/05 | 2 | 1,841,400 | 7 | 2,103 |
| 05/27/05 | 2 | 1,857,330 | 7 | 2,276 |
| 06/03/05 | 2 | 1,871,780 | 7 | 2,064 |
| 06/17/05 | 2 | 1,900,740 | 14 | 2,069 |
| 06/24/05 | 2 | 1,916,160 | 7 | 2,203 |

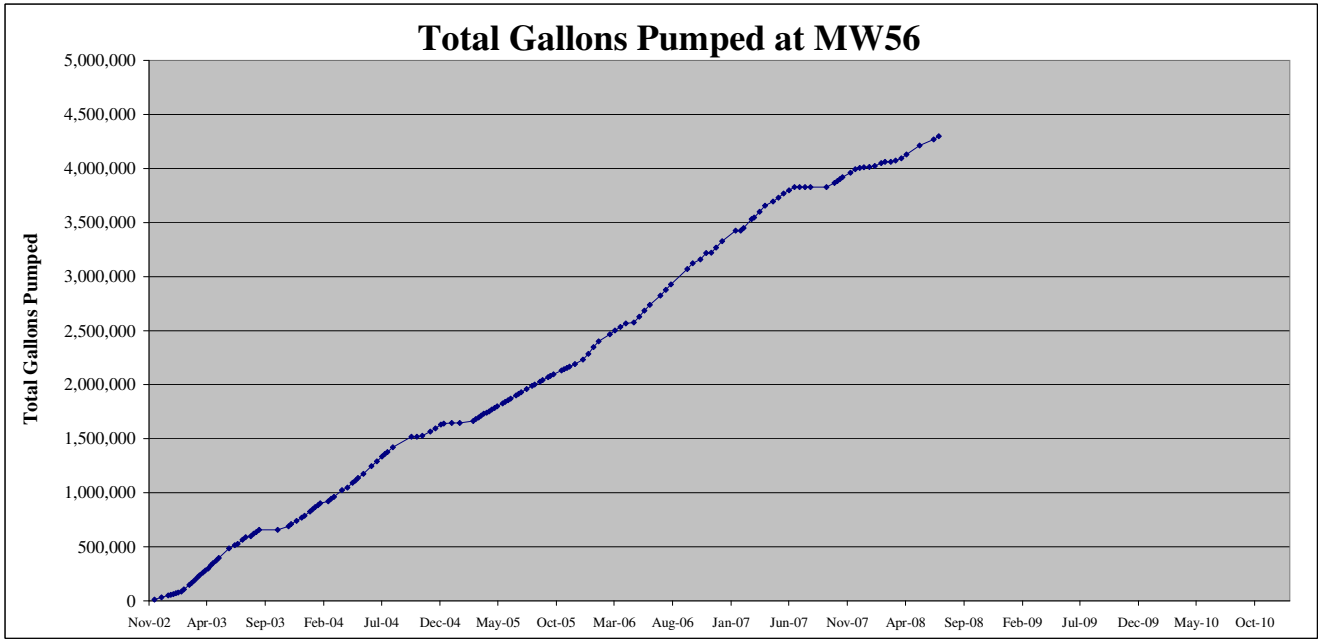
| MW56 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 07/01/05 | 2 | 1,931,420 | 7 | 2,180 |
| 07/15/05 | 2 | 1,960,260 | 14 | 2,060 |
| 07/29/05 | 2 | 1,987,950 | 14 | 1,978 |
| 08/05/05 | 2 | 2,001,660 | 7 | 1,959 |
| 08/19/05 | 2 | 2,028,380 | 14 | 1,909 |
| 08/26/05 | 2 | 2,042,200 | 7 | 1,974 |
| 09/09/05 | 2 | 2,069,090 | 14 | 1,921 |
| 09/15/05 | 2 | 2,081,920 | 6 | 2,138 |
| 09/23/05 | 2 | 2,094,760 | 8 | 1,605 |
| 10/14/05 | 2 | 2,132,300 | 21 | 1,788 |
| 10/21/05 | 2 | 2,144,310 | 7 | 1,716 |
| 10/28/05 | 2 | 2,155,830 | 7 | 1,646 |
| 11/04/05 | 2 | 2,168,050 | 7 | 1,746 |
| 11/18/05 | 2 | 2,190,910 | 7 | 3,266 |
| 12/09/05 | 2 | 2,231,120 | 21 | 1,915 |
| 12/23/05 | 2 | 2,286,340 | 14 | 3,944 |
| 01/06/06 | 2 | 2,347,510 | 14 | 4,369 |
| 01/19/06 | 2 | 2,402,140 | 13 | 4,202 |
| 02/17/06 | 2 | 2,467,430 | 29 | 2,251 |
| 03/03/06 | 2 | 2,501,260 | 14 | 2,416 |
| 03/17/06 | 2 | 2,533,240 | 14 | 2,284 |
| 03/31/06 | 2 | 2,566,870 | 14 | 2,402 |
| 04/21/06 | 2 | 2,575,140 | 21 | 394 |
| 05/05/06 | 2 | 2,628,830 | 14 | 3,835 |
| 05/19/06 | 2 | 2,685,230 | 14 | 4,029 |
| 06/02/06 | 2 | 2,738,660 | 14 | 3,816 |
| 06/30/06 | 2 | 2,824,520 | 28 | 3,066 |

| MW56 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 07/14/06 | 2 | 2,877,020 | 14 | 3,750 |
| 07/27/06 | 2 | 2,928,510 | 13 | 3,961 |
| 09/08/06 | 2 | 3,069,650 | 43 | 3,282 |
| 09/22/06 | 2 | 3,122,020 | 14 | 3,741 |
| 10/12/06 | 2 | 3,159,420 | 20 | 1,870 |
| 10/27/06 | 2 | 3,216,640 | 15 | 3,815 |
| 11/10/06 | 2 | 3,220,980 | 14 | 310 |
| 11/22/06 | 2 | 3,266,940 | 12 | 3,830 |
| 12/08/06 | 2 | 3,328,080 | 16 | 3,821 |
| 01/12/07 | 2 | 3,424,900 | 35 | 2,766 |
| 01/26/07 | 2 | 3,424,900 | 14 | 0 |
| 02/02/07 | 2 | 3,447,920 | 7 | 3,289 |
| 02/23/07 | 2 | 3,530,690 | 21 | 3,941 |
| 03/02/07 | 2 | 3,546,020 | 7 | 2,190 |
| 03/16/07 | 2 | 3,599,810 | 14 | 3,842 |
| 03/30/07 | 2 | 3,655,880 | 14 | 4,005 |
| 04/20/07 | 2 | 3,693,760 | 21 | 1,804 |
| 05/04/07 | 2 | 3,731,250 | 14 | 2,678 |
| 05/18/07 | 2 | 3,768,820 | 14 | 2,684 |
| 06/01/07 | 2 | 3,798,270 | 14 | 2,104 |
| 06/15/07 | 0 | 3,826,840 | 14 | 2,041 |
| 06/29/07 | 0 | 3,826,840 | 14 | 0 |
| 07/13/07 | 0 | 3,826,840 | 14 | 0 |
| 07/27/07 | 0 | 3,826,840 | 14 | 0 |
| 09/07/07 | <2 | 3,828,850 | 42 | 48 |
| 09/28/07 | 2 | 3,865,270 | 21 | 1,734 |
| 10/05/07 | 2 | 3,882,760 | 7 | 2,499 |

| MW56 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 10/12/07 | 2 | 3,901,380 | 7 | 2,660 |
| 10/19/07 | 2 | 3,920,520 | 7 | 2,734 |
| 11/09/07 | 2 | 3,960,430 | 21 | 1,900 |
| 11/21/07 | 2 | 3,992,210 | 12 | 2,648 |
| 12/03/07 | 2 | 4,005,510 | 12 | 1,108 |
| 12/14/07 | 2 | 4,009,810 | 11 | 391 |
| 12/28/07 | 2 | 4,014,870 | 14 | 361 |
| 01/11/08 | 2 | 4,022,150 | 14 | 520 |
| 01/28/08 | 2 | 4,048,470 | 17 | 1,548 |
| 02/07/08 | 2 | 4,060,580 | 10 | 1,211 |
| 02/22/08 | 0 | 4,060,580 | 15 | 0 |
| 03/06/08 | 2 | 4,074,680 | 13 | 1,085 |
| 03/21/08 | 2 | 4,095,600 | 15 | 1,395 |
| 04/03/08 | 2 | 4,128,690 | 13 | 2,545 |
| 05/07/08 | 2 | 4,211,650 | 34 | 2,440 |
| 06/13/08 | 2 | 4,268,310 | 37 | 1,531 |
| 06/27/08 | 2 | 4,297,740 | 14 | 2,102 |

GPM - Gallons per minute

* Lower aquifer extraction system in MW56 was re-started in September 2007 but was not pumping for the entire time between previous measurement



# Pumping Data for Lower Aquifer Monitoring Well MW30

| MW30 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 09/07/07 | 2 | 1,060 | --- | --- |
| 09/28/07 | 2 | 37,990 | 21 | 1,759 |
| 10/05/07 | 2 | 56,600 | 7 | 2,659 |
| 10/12/07 | 2 | 77,710 | 7 | 3,016 |
| 10/19/07 | 2 | 98,930 | 7 | 3,031 |
| 11/09/07 | 2 | 144,050 | 21 | 2,149 |
| 11/21/07 | 2 | 164,660 | 12 | 1,718 |
| 12/03/07 | 2 | 178,990 | 12 | 1,194 |
| 12/14/07 | 2 | 208,960 | 11 | 2,725 |
| 12/28/07 | 2 | 248,450 | 14 | 2,821 |
| 01/11/08 | 2 | 293,240 | 14 | 3,199 |
| 01/28/08 | 2 | 332,980 | 17 | 2,338 |
| 02/07/08 | 2 | 351,980 | 10 | 1,900 |
| 02/22/08 | 2 | 383,530 | 15 | 2,103 |
| 03/06/08 | 2 | 412,790 | 13 | 2,251 |
| 03/21/08 | 2 | 455,330 | 15 | 2,836 |
| 04/03/08 | 2 | 491,970 | 13 | 2,818 |
| 05/07/08 | 2 | 550,200 | 34 | 1,713 |
| 06/13/08 | 2 | 635,670 | 37 | 2,310 |
| 06/27/08 | 2 | 673,190 | 14 | 2,680 |

| MW30 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| MW30 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

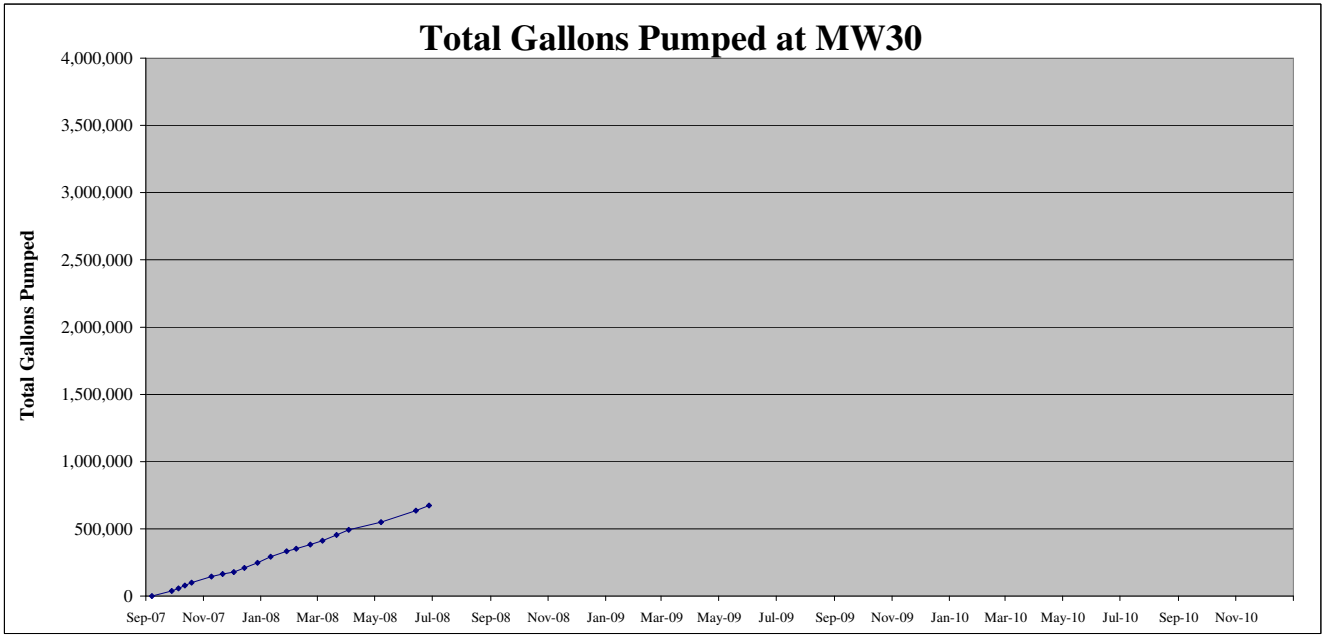
| MW30 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| MW30 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| MW30 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

GPM - Gallons per minute

Lower aquifer extraction system in MW30 was started in September 2007.



# Pumping Data for Lower Aquifer Monitoring Well MW53

| MW53 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 09/07/07 | 5 | 1,000 | --- | --- |
| 09/28/07 | 5 | 102,310 | 21 | 4,824 |
| 10/05/07 | 5 | 148,680 | 7 | 6,624 |
| 10/12/07 | 5 | 200,950 | 7 | 7,467 |
| 10/19/07 | 5 | 253,560 | 7 | 7,516 |
| 11/09/07 | 5 | 350,480 | 21 | 4,615 |
| 11/21/07 | 5 | 389,000 | 12 | 3,210 |
| 12/03/07 | 5 | 428,570 | 12 | 3,298 |
| 12/14/07 | 5 | 510,910 | 11 | 7,485 |
| 12/28/07 | 2 | 569,240 | 14 | 4,166 |
| 01/11/08 | 2 | 612,550 | 14 | 3,094 |
| 01/28/08 | 5 | 650,950 | 17 | 2,259 |
| 02/07/08 | 5 | 708,230 | 10 | 5,728 |
| 02/22/08 | 5 | 802,350 | 15 | 6,275 |
| 03/06/08 | 5 | 891,030 | 13 | 6,822 |
| 03/21/08 | 5 | 991,190 | 15 | 6,677 |
| 04/03/08 | 5 | 1,084,170 | 13 | 7,152 |
| 05/07/08 | 5 | 1,311,500 | 34 | 6,686 |
| 06/13/08 | 5 | 1,541,060 | 37 | 6,204 |
| 06/27/08 | 5 | 1,640,340 | 14 | 7,091 |

| MW53 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| MW53 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

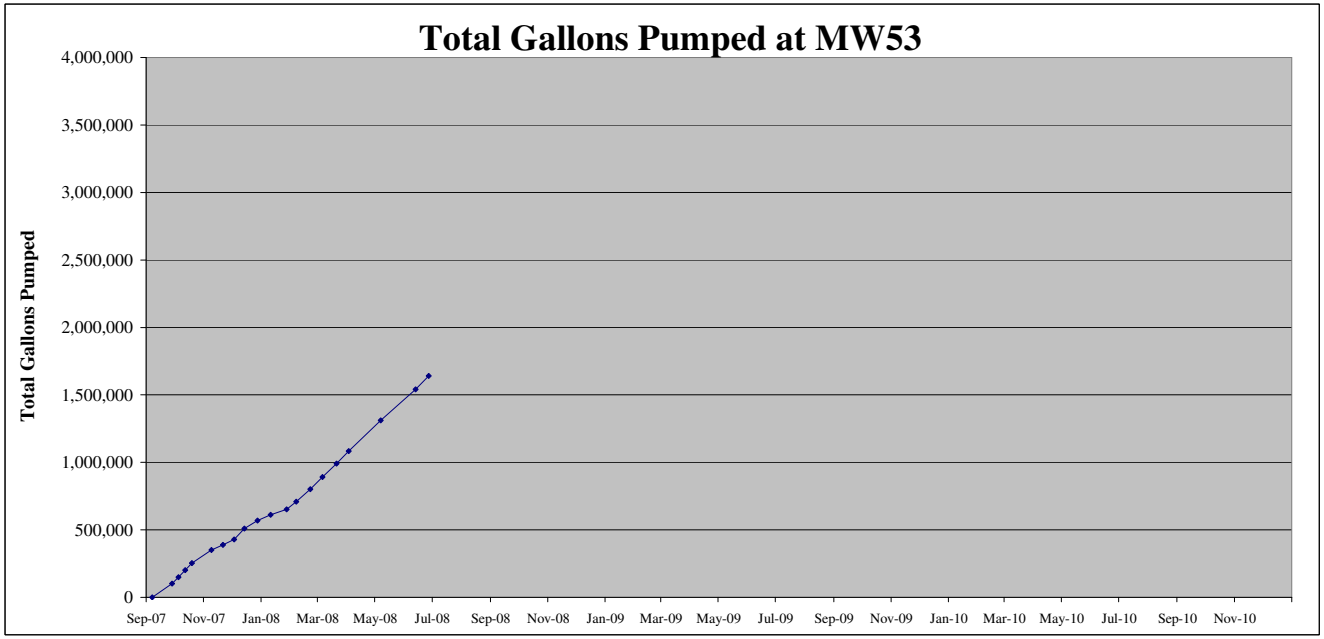
| MW53 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| MW53 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| MW53 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

GPM - Gallons per minute

Lower aquifer extraction system in MW30 was started in September 2007.



# Pumping Data for Lower Aquifer Monitoring Well LA12

| LA12 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 09/07/07 | 0 | 740 | --- | --- |
| 09/28/07 | 0 | 740 | 21 | 0 |
| 10/05/07 | 0 | 740 | 7 | 0 |
| 10/12/07 | 0 | 740 | 7 | 0 |
| 10/19/07 | 0 | 740 | 7 | 0 |
| 11/09/07 | 0 | 740 | 21 | 0 |
| 11/21/07 | 0 | 740 | 12 | 0 |
| 12/03/07 | 0 | 740 | 12 | 0 |
| 12/14/07 | 0 | 740 | 11 | 0 |
| 12/28/07 | 0 | 740 | 14 | 0 |
| 01/11/08 | 0 | 740 | 14 | 0 |
| 01/28/08 | 0 | 740 | 17 | 0 |
| 02/07/08 | 0 | 740 | 10 | 0 |
| 02/22/08 | 0 | 740 | 15 | 0 |
| 03/06/08 | 0 | 740 | 13 | 0 |
| 03/21/08 | 0 | 740 | 15 | 0 |
| 04/03/08 | 0 | 740 | 13 | 0 |
| 05/07/08 | 0 | 740 | 34 | 0 |
| 06/13/08 | 0 | 740 | 37 | 0 |
| 06/27/08 | 0 | 740 | 14 | 0 |

| LA12 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA12 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

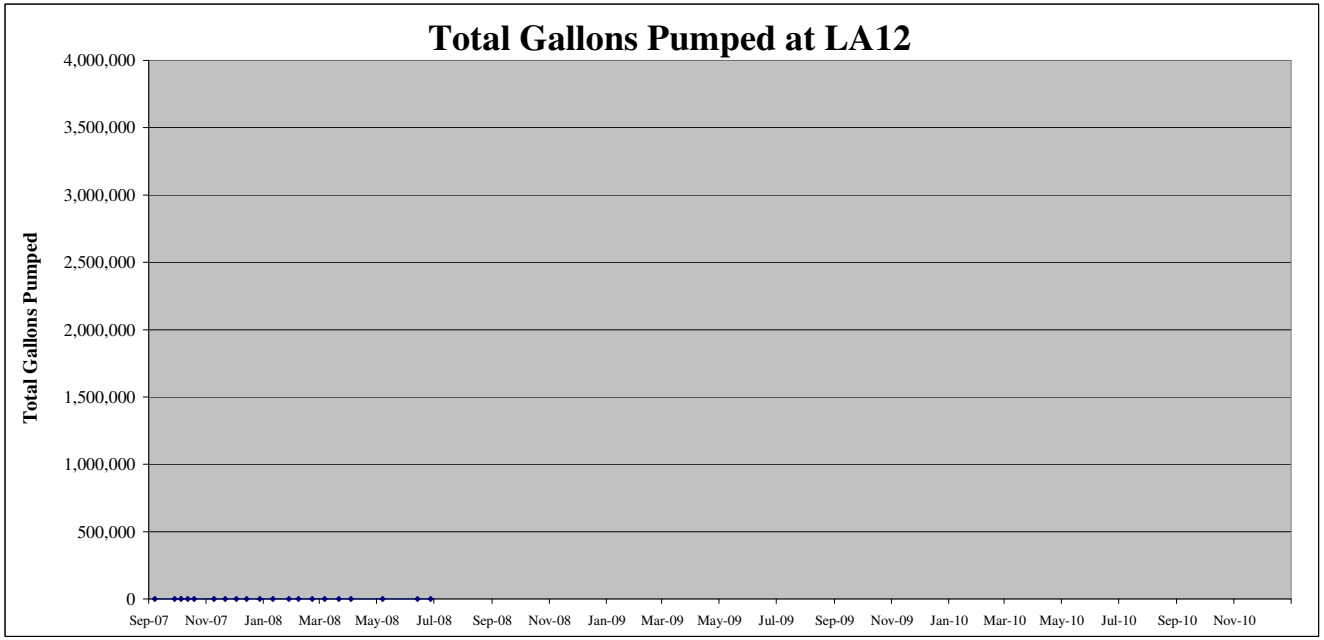
| LA12 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA12 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA12 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

GPM - Gallons per minute

Lower aquifer extraction system in MW30 was started in September 2007.



# Pumping Data for Lower Aquifer Monitoring Well LA13

| LA13 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 09/07/07 | 0 | 0 | --- | --- |
| 09/28/07 | 0 | 0 | 21 | 0 |
| 10/05/07 | 0 | 0 | 7 | 0 |
| 10/12/07 | 0 | 0 | 7 | 0 |
| 10/19/07 | 0 | 0 | 7 | 0 |
| 11/09/07 | 0 | 0 | 21 | 0 |
| 11/21/07 | 0 | 0 | 12 | 0 |
| 12/03/07 | 0 | 0 | 12 | 0 |
| 12/14/07 | 0 | 0 | 11 | 0 |
| 12/28/07 | 0 | 0 | 14 | 0 |
| 01/11/08 | 0 | 0 | 14 | 0 |
| 01/28/08 | 0 | 0 | 17 | 0 |
| 02/07/08 | 0 | 0 | 10 | 0 |
| 02/22/08 | 0 | 0 | 15 | 0 |
| 03/06/08 | 0 | 0 | 13 | 0 |
| 03/21/08 | 0 | 0 | 15 | 0 |
| 04/03/08 | 0 | 0 | 13 | 0 |
| 05/07/08 | 0 | 0 | 34 | 0 |
| 06/13/08 | 0 | 0 | 37 | 0 |
| 06/27/08 | 0 | 0 | 14 | 0 |

| LA13 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA13 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

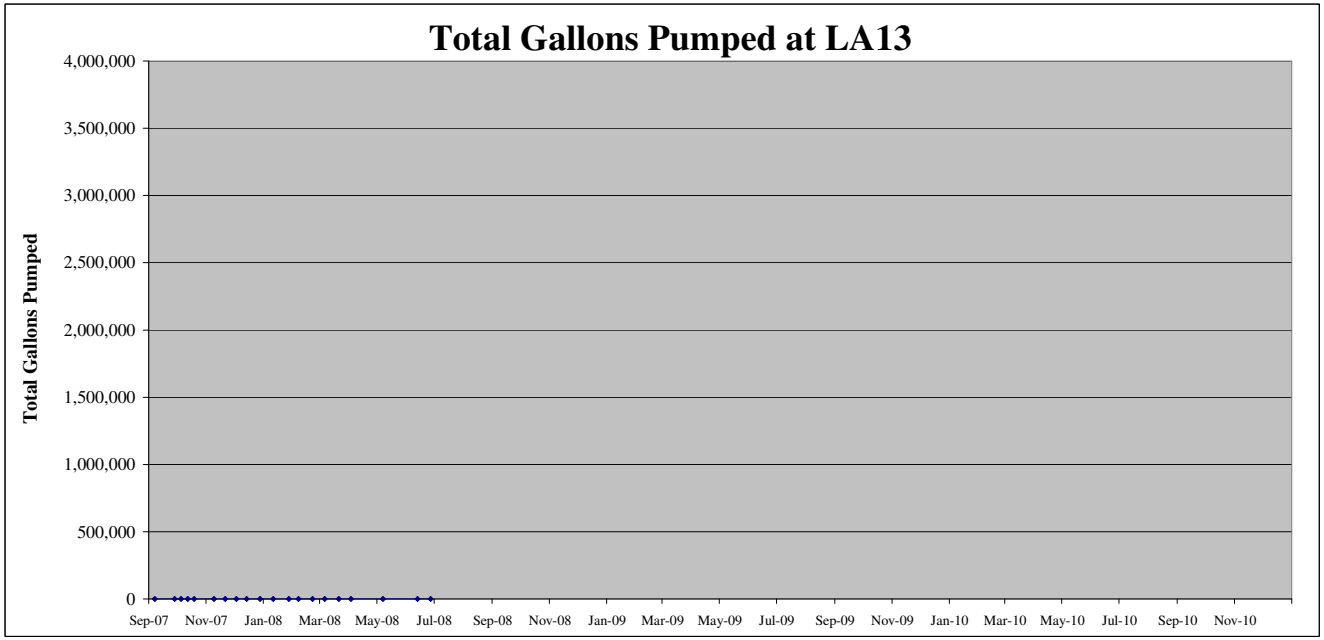
| LA13 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA13 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA13 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

GPM - Gallons per minute

Lower aquifer extraction system in MW30 was started in September 2007.



# Pumping Data for Lower Aquifer Monitoring Well LA14

| LA14 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 09/07/07 | 5 | 1,280 | --- | --- |
| 09/28/07 | 5 | 78,730 | 21 | 3,688 |
| 10/05/07 | 5 | 117,780 | 7 | 5,579 |
| 10/12/07 | 5 | 165,640 | 7 | 6,837 |
| 10/19/07 | 5 | 212,980 | 7 | 6,763 |
| 11/09/07 | 5 | 303,580 | 21 | 4,314 |
| 11/21/07 | 5 | 342,410 | 12 | 3,236 |
| 12/03/07 | 5 | 378,330 | 12 | 2,993 |
| 12/14/07 | 5 | 452,820 | 11 | 6,772 |
| 12/28/07 | 2 | 502,280 | 14 | 3,533 |
| 01/1/08 | 2 | 545,460 | 14 | 3,084 |
| 01/28/08 | 5 | 580,650 | 17 | 2,070 |
| 02/07/08 | 5 | 634,540 | 10 | 5,389 |
| 02/22/08 | 5 | 722,140 | 15 | 5,840 |
| 03/06/08 | 5 | 804,610 | 13 | 6,344 |
| 03/21/08 | 5 | 901,700 | 15 | 6,473 |
| 04/03/08 | 5 | 1,002,550 | 13 | 7,758 |
| 05/07/08 | 5 | 1,252,830 | 34 | 7,361 |
| 06/13/08 | 5 | 1,479,680 | 37 | 6,131 |
| 06/27/08 | 5 | 1,576,230 | 14 | 6,896 |

| LA14 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA14 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

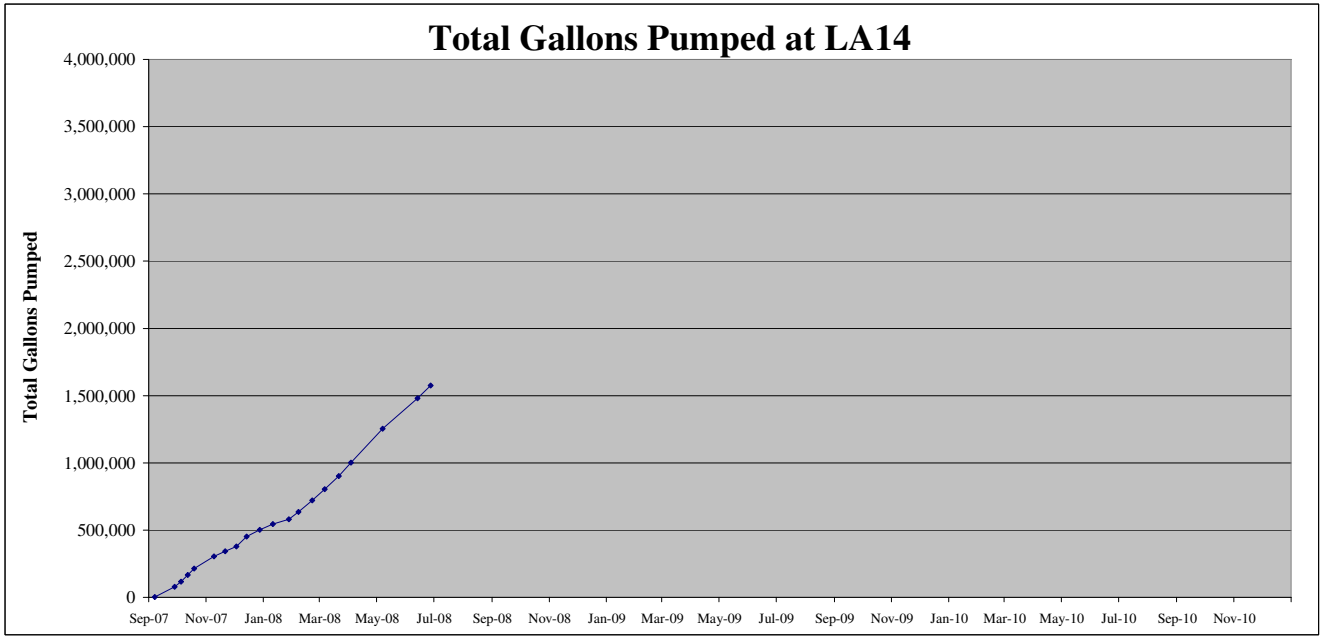
| LA14 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA14 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA14 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

GPM - Gallons per minute

Lower aquifer extraction system in MW30 was started in September 2007.



# Pumping Data for Lower Aquifer Monitoring Well LA15

| LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 09/07/07 | 0 | 0 | --- | --- |
| 09/28/07 | 0 | 0 | 21 | 0 |
| 10/05/07 | 0 | 0 | 7 | 0 |
| 10/12/07 | 0 | 0 | 7 | 0 |
| 10/19/07 | 0 | 0 | 7 | 0 |
| 11/09/07 | 0 | 0 | 21 | 0 |
| 11/21/07 | 0 | 0 | 12 | 0 |
| 12/03/07 | 0 | 0 | 12 | 0 |
| 12/14/07 | 0 | 0 | 11 | 0 |
| 12/28/07 | 0 | 0 | 14 | 0 |
| 01/11/08 | 0 | 0 | 14 | 0 |
| 01/28/08 | 0 | 0 | 17 | 0 |
| 02/07/08 | 0 | 0 | 10 | 0 |
| 02/22/08 | 0 | 0 | 15 | 0 |
| 03/06/08 | 0 | 0 | 13 | 0 |
| 03/21/08 | 0 | 0 | 15 | 0 |
| 04/03/08 | 0 | 0 | 13 | 0 |
| 05/07/08 | 0 | 0 | 34 | 0 |
| 06/13/08 | 0 | 0 | 37 | 0 |
| 06/27/08 | 0 | 0 | 14 | 0 |

| LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

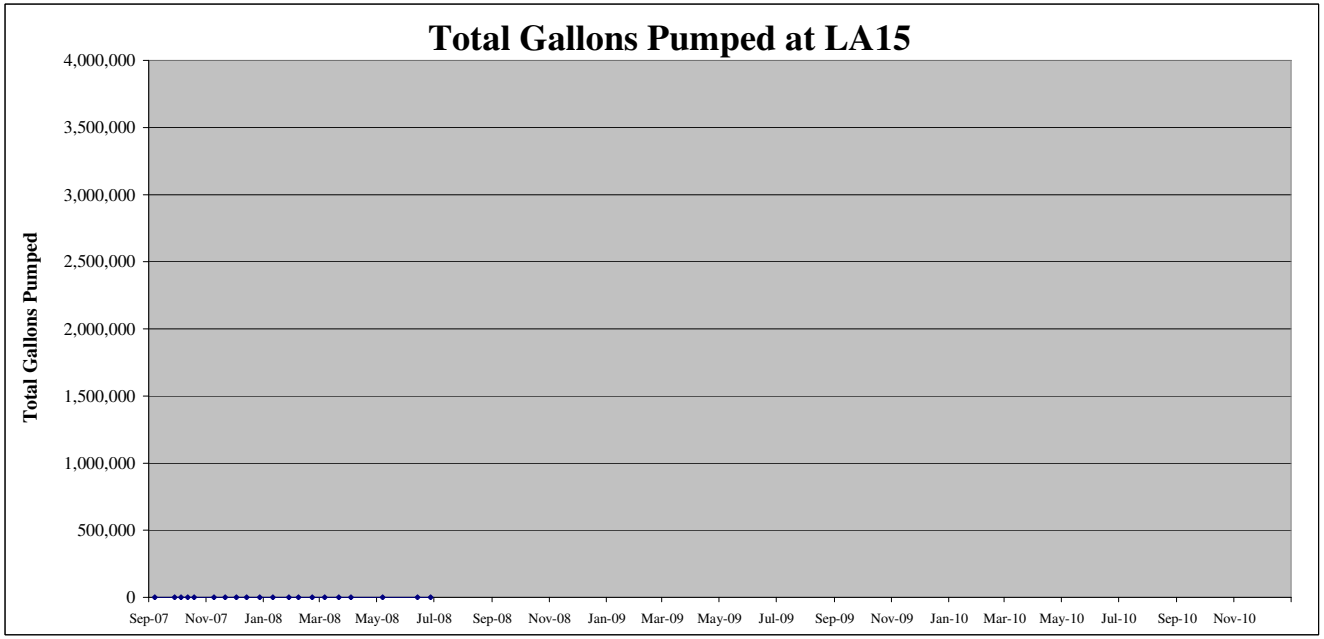
| LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

| LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |

GPM - Gallons per minute

Lower aquifer extraction system in MW30 was started in September 2007.



# Combined Pumping Data for Lower Aquifer Monitoring Wells MW10C, MW56, MW30, MW53, LA12, LA13, LA14, and LA15

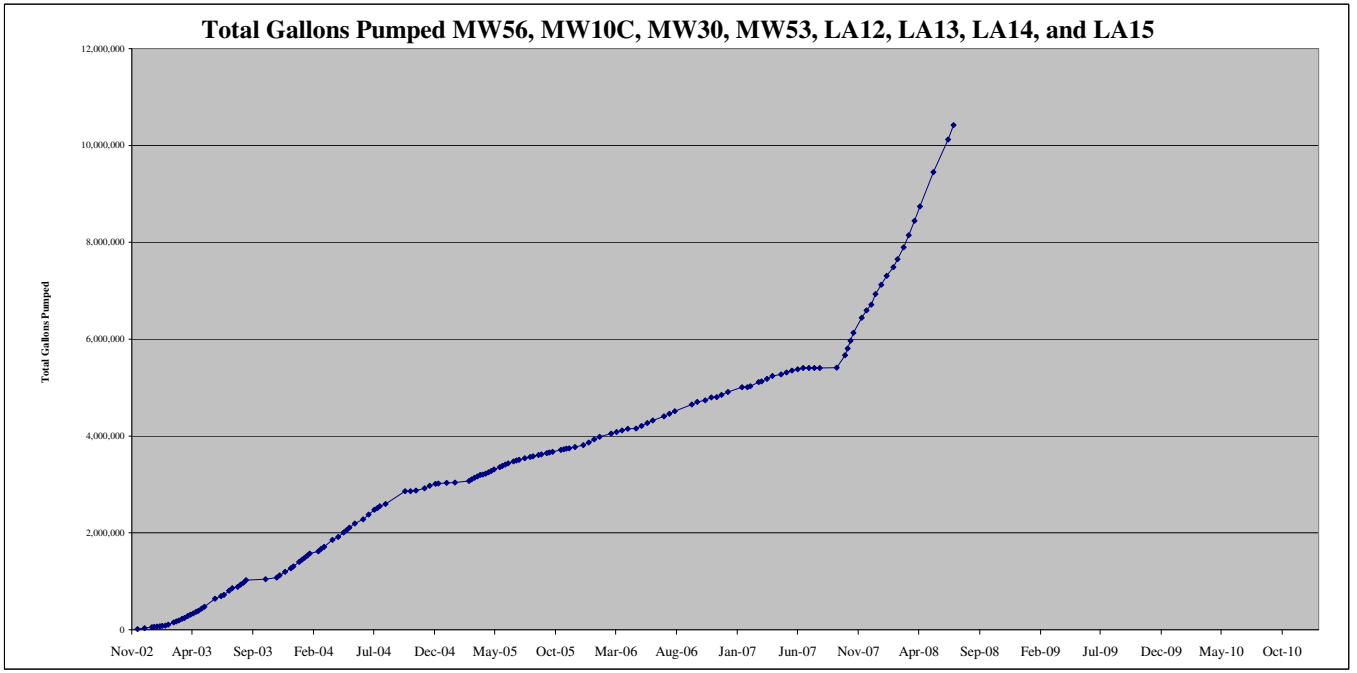
| MW56, MW10C, MW30, MW53, LA12, LA13, LA14, and LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 11/15/02 | 1.5 | 12,200 | --- | --- |
| 12/03/02 | 1.5 | 33,200 | 18 | 1,167 |
| 12/21/02 | 2 | 51,710 | 18 | 1,028 |
| 12/27/02 | 2 | 56,450 | 6 | 790 |
| 01/03/03 | 2 | 65,040 | 7 | 1,227 |
| 01/10/03 | 2 | 71,710 | 7 | 953 |
| 01/16/03 | 2 | 78,960 | 6 | 1,208 |
| 01/24/03 | 2 | 86,420 | 8 | 933 |
| 01/31/03 | 2.5 | 106,980 | 7 | 2,937 |
| 02/14/03 | 2.5 | 149,520 | 14 | 3,039 |
| 02/20/03 | 2.5 | 168,760 | 6 | 3,207 |
| 02/27/03 | 2.5 | 192,340 | 7 | 3,369 |
| 03/07/03 | 3 | 221,820 | 8 | 3,685 |
| 03/13/03 | 3 | 245,790 | 6 | 3,995 |
| 03/21/03 | 3 | 283,850 | 8 | 4,758 |
| 03/28/03 | 3 | 312,860 | 7 | 4,144 |
| 04/04/03 | 3 | 340,160 | 7 | 3,900 |
| 04/11/03 | 3 | 368,300 | 7 | 4,020 |
| 04/17/03 | 3 | 391,290 | 6 | 3,832 |
| 04/25/03 | 3 | 436,960 | 8 | 5,709 |
| 05/02/03 | 3 | 477,520 | 7 | 5,794 |
| 05/29/03 | 3 | 643,430 | 27 | 6,145 |
| 06/13/03 | 3 | 695,070 | 15 | 3,443 |
| 06/20/03 | 3 | 719,810 | 7 | 3,534 |
| 07/03/03 | 3 | 807,950 | 13 | 6,780 |
| 07/11/03 | 3 | 862,080 | 8 | 6,766 |
| 07/25/03 | 4 | 884,190 | 14 | 1,579 |

| MW56, MW10C, MW30, MW53, LA12, LA13, LA14, and LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 08/01/03 | 4 | 934,060 | 7 | 4,607 |
| 08/08/03 | 4 | 971,910 | 7 | 5,407 |
| 08/15/03 | 4 | 1,022,370 | 7 | 7,209 |
| 10/03/03 | 4 | 1,045,300 | 49 | 468 |
| 10/31/03 | 4 | 1,078,690 | 28 | 1,193 |
| 11/07/03 | 4 | 1,123,180 | 7 | 6,356 |
| 11/21/03 | 4 | 1,193,840 | 14 | 5,047 |
| 12/05/03 | 4 | 1,267,440 | 14 | 5,257 |
| 12/12/03 | 4 | 1,307,410 | 7 | 5,710 |
| 12/26/03 | 4 | 1,398,390 | 14 | 6,499 |
| 01/02/04 | 4 | 1,444,530 | 7 | 6,591 |
| 01/09/04 | 4 | 1,489,220 | 7 | 6,384 |
| 01/16/04 | 4 | 1,535,480 | 7 | 6,609 |
| 01/22/04 | 4 | 1,574,780 | 6 | 6,550 |
| 02/12/04 | 4 | 1,616,680 | 21 | 1,995 |
| 02/20/04 | 4 | 1,668,820 | 8 | 6,518 |
| 02/27/04 | 4 | 1,713,950 | 7 | 6,447 |
| 03/19/04 | 4 | 1,857,440 | 21 | 6,833 |
| 04/02/04 | 4 | 1,913,180 | 14 | 3,981 |
| 04/16/04 | 4 | 2,007,400 | 14 | 6,730 |
| 04/23/04 | 4 | 2,056,520 | 7 | 7,017 |
| 04/30/04 | 4 | 2,105,780 | 7 | 7,037 |
| 05/14/04 | 4 | 2,194,180 | 14 | 6,314 |
| 06/04/04 | 4 | 2,280,390 | 21 | 4,105 |
| 06/18/04 | 4 | 2,378,290 | 14 | 6,993 |
| 07/02/04 | 4 | 2,476,180 | 14 | 6,992 |
| 07/09/04 | 4 | 2,514,210 | 7 | 5,433 |

| MW56, MW10C, MW30, MW53, LA12, LA13, LA14, and LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 07/16/04 | 4 | 2,553,780 | 7 | 5,653 |
| 07/30/04 | 4 | 2,597,030 | 14 | 3,089 |
| 09/17/04 | 0 | 2,863,480 | 49 | 5,438 |
| 10/01/04 | 0 | 2,863,480 | 14 | 0 |
| 10/15/04 | 0 | 2,871,660 | 14 | 584 |
| 11/05/04 | 2 | 2,923,790 | 21 | 2,482 |
| 11/18/04 | 2 | 2,971,110 | 13 | 3,640 |
| 12/03/04 | 0 | 3,014,400 | 15 | 2,886 |
| 12/10/04 | 2 | 3,021,400 | 7 | 1,000 |
| 12/31/04 | 4 | 3,034,500 | 21 | 624 |
| 01/21/05 | 2 | 3,037,830 | 21 | 159 |
| 02/25/05 | 4 | 3,069,870 | 35 | 915 |
| 03/04/05 | 4 | 3,102,750 | 7 | 4,697 |
| 03/11/05 | 4 | 3,135,690 | 7 | 4,706 |
| 03/18/05 | 4 | 3,168,010 | 7 | 4,617 |
| 03/25/05 | 4 | 3,195,480 | 7 | 3,924 |
| 04/01/05 | 4 | 3,203,490 | 7 | 1,144 |
| 04/08/05 | 4 | 3,223,370 | 7 | 2,840 |
| 04/15/05 | 4 | 3,251,170 | 7 | 3,971 |
| 04/22/05 | 4 | 3,280,430 | 7 | 4,180 |
| 04/29/05 | 4 | 3,308,060 | 7 | 3,947 |
| 05/13/05 | 4 | 3,355,150 | 14 | 3,364 |
| 05/20/05 | 4 | 3,381,890 | 7 | 3,820 |
| 05/27/05 | 4 | 3,410,790 | 7 | 4,129 |
| 06/03/05 | 4 | 3,439,060 | 7 | 4,039 |
| 06/17/05 | 4 | 3,475,810 | 14 | 2,625 |
| 06/24/05 | 4 | 3,496,020 | 7 | 2,887 |

| MW56, MW10C, MW30, MW53, LA12, LA13, LA14, and LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 07/01/05 | 2 | 3,511,280 | 7 | 2,180 |
| 07/15/05 | 2 | 3,541,700 | 14 | 2,173 |
| 07/29/05 | 2 | 3,569,390 | 14 | 1,978 |
| 08/05/05 | 2 | 3,583,100 | 7 | 1,959 |
| 08/19/05 | 2 | 3,609,820 | 14 | 1,909 |
| 08/26/05 | 2 | 3,623,640 | 7 | 1,974 |
| 09/09/05 | 2 | 3,650,530 | 14 | 1,921 |
| 09/15/05 | 2 | 3,663,360 | 6 | 2,138 |
| 09/23/05 | 2 | 3,676,200 | 8 | 1,605 |
| 10/14/05 | 2 | 3,713,740 | 21 | 1,788 |
| 10/21/05 | 2 | 3,725,750 | 7 | 1,716 |
| 10/28/05 | 2 | 3,737,270 | 7 | 1,646 |
| 11/04/05 | 2 | 3,749,490 | 7 | 1,746 |
| 11/18/05 | 2 | 3,772,350 | 7 | 3,266 |
| 12/09/05 | 2 | 3,812,560 | 21 | 1,915 |
| 12/23/05 | 2 | 3,867,780 | 14 | 3,944 |
| 01/06/06 | 2 | 3,928,950 | 14 | 4,369 |
| 01/19/06 | 2 | 3,983,580 | 13 | 4,202 |
| 02/17/06 | 2 | 4,048,870 | 29 | 2,251 |
| 03/03/06 | 2 | 4,082,700 | 14 | 2,416 |
| 03/17/06 | 2 | 4,114,680 | 14 | 2,284 |
| 03/31/06 | 2 | 4,148,310 | 14 | 2,402 |
| 04/21/06 | 2 | 4,156,580 | 21 | 394 |
| 05/05/06 | 2 | 4,210,270 | 14 | 3,835 |
| 05/19/06 | 2 | 4,266,670 | 14 | 4,029 |
| 06/02/06 | 2 | 4,320,100 | 14 | 3,816 |
| 06/30/06 | 2 | 4,405,960 | 28 | 3,066 |

| MW56, MW10C, MW30, MW53, LA12, LA13, LA14, and LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 07/14/06 | 2 | 4,458,460 | 14 | 3,750 |
| 07/27/06 | 2 | 4,509,950 | 13 | 3,961 |
| 09/08/06 | 2 | 4,651,090 | 43 | 3,282 |
| 09/22/06 | 2 | 4,703,460 | 14 | 3,741 |
| 10/12/06 | 2 | 4,740,860 | 20 | 1,870 |
| 10/27/06 | 2 | 4,798,080 | 15 | 3,815 |
| 11/10/06 | 2 | 4,802,420 | 14 | 310 |
| 11/22/06 | 2 | 4,848,380 | 12 | 3,830 |
| 12/08/06 | 2 | 4,909,520 | 16 | 3,821 |
| 01/12/07 | 2 | 5,006,340 | 35 | 2,766 |
| 01/26/07 | 2 | 5,006,340 | 14 | 0 |
| 02/02/07 | 2 | 5,029,360 | 7 | 3,289 |
| 02/23/07 | 2 | 5,112,130 | 21 | 3,941 |
| 03/02/07 | 2 | 5,127,460 | 7 | 2,190 |
| 03/16/07 | 2 | 5,181,250 | 14 | 3,842 |
| 03/30/07 | 2 | 5,237,320 | 14 | 4,005 |
| 04/20/07 | 2 | 5,275,200 | 21 | 1,804 |
| 05/04/07 | 2 | 5,312,690 | 14 | 2,678 |
| 05/18/07 | 2 | 5,350,260 | 14 | 2,684 |
| 06/01/07 | 2 | 5,379,710 | 14 | 2,104 |
| 06/15/07 | 0 | 5,408,280 | 14 | 2,041 |
| 06/29/07 | 0 | 5,408,280 | 14 | 0 |
| 07/13/07 | 0 | 5,408,280 | 14 | 0 |
| 07/27/07 | 0 | 5,408,280 | 14 | 0 |
| 09/07/07 | 16 | 5,414,737 | 42 | 154 |
| 09/28/07 | 16 | 5,670,590 | 21 | 12,183 |
| 10/05/07 | 16 | 5,809,740 | 7 | 19,879 |

| MW56, MW10C, MW30, MW53, LA12, LA13, LA14, and LA15 | | | | |
|---|---|---|---|---|
| Measurement Date | Flow Rate (GPM) | Total Gallons Pumped | Days Between Measurements | Gallons per Day |
| 10/12/07 | 16 | 5,969,710 | 7 | 22,853 |
| 10/19/07 | 16 | 6,130,130 | 7 | 22,917 |
| 11/09/07 | 16 | 6,441,720 | 21 | 14,838 |
| 11/21/07 | 16 | 6,593,410 | 12 | 12,641 |
| 12/03/07 | 16 | 6,711,560 | 12 | 9,846 |
| 12/14/07 | 16 | 6,934,450 | 11 | 20,263 |
| 12/28/07 | 10 | 7,126,510 | 14 | 13,719 |
| 01/11/08 | 10 | 7,308,530 | 14 | 13,001 |
| 01/28/08 | 16 | 7,485,110 | 17 | 10,387 |
| 02/07/08 | 16 | 7,648,820 | 10 | 16,371 |
| 02/22/08 | 14 | 7,899,120 | 15 | 16,687 |
| 03/06/08 | 16 | 8,146,420 | 13 | 19,023 |
| 03/21/08 | 16 | 8,444,410 | 15 | 19,866 |
| 04/03/08 | 16 | 8,743,420 | 13 | 23,001 |
| 05/07/08 | 16 | 9,449,530 | 34 | 20,768 |
| 06/13/08 | 16 | 10,123,650 | 37 | 18,219 |
| 06/27/08 | 16 | 10,423,100 | 14 | 21,389 |

GPM - Gallons per minute